



Life is for sharing.

2012 Corporate Responsibility Report

We take responsibility.

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## About this report.

Telekom has provided extensive information to the general public about its objectives, its activities and the progress made in the relevant economic, ecological and social areas as part of corporate responsibility (CR) reporting since 1996.

The title "We take responsibility" is used for the fifth consecutive time since it is an expression of Telekom's long-term commitment to CR. It is our intention to become a leader in our industry as a responsible company. In this undertaking, the report is a central communication tool that informs our internal as well as external stakeholders of the progress we have made on this path between March 2012 and February 2013, and of the goals we are setting for the future.

### Additional sources for CR-relevant content.

In addition to this online 2012 CR Report, we also provide information on our corporate responsibility activities in our [Annual Report](#), in our [Human Resources Report](#) and in our [Data Privacy Report](#). We report on Telekom's current CR activities on the Telekom Group's website under the heading "[Responsibility](#)". The international subsidiaries provide information about their CR commitment on their Internet portals and in their own publications.

In order to reduce the complexity of our report, we have often provided links to other internal and external websites. For example, the information provided by the international subsidiaries is available through the subsidiaries' [profile pages](#) in the 2012 CR Report.

### Reporting period, scope of application and target groups.

The 2012 CR Report is a Group report that includes many international subsidiaries in which Telekom holds a majority stake. Any deviations are marked accordingly. This report ties in with the 2011 CR Report. The reporting period for the various topics spans from March 01, 2012 to February 28, 2013. All quantitative data and indicators refer to the 2012 calendar year. Any deviations are marked accordingly. This CR report is aimed at our [stakeholders](#). These include analysts and investors, CR ranking and rating agencies as well as non-governmental organizations. However, it also addresses other stakeholders such as clients, employees, and representatives from the worlds of science, research, education and politics.

### Looking back on Deutsche Telekom's CR reporting.

Deutsche Telekom has been reporting on its sustainability activities in various publications since 1996. From 2003 through 2006 we published a combined annual HR and Sustainability Report. An interim report issued in 2007 formed the transition to our current CR reporting. Since 2008 the Telekom Group has been publishing a comprehensive CR Report each year, which enabled us to satisfy our stakeholders' increased need for information on economic, ecological and social issues.

### Online reporting since 2010.

We have been publishing our CR Report exclusively online since the 2010/2011 reporting year to meet the increasing requirements and changing user preferences of our stakeholders. The online 2012 CR Report has

been available since June 19, 2013 in German and English. We give readers who are not familiar with the concept of CR an effective introduction to the report on the start page. Service functions such as the download section, search and dialog functions as well as interactive indicator views facilitate individual use. The "Find out more" button can be used to call up background information on many topics that go beyond the presentation of the current developments.

Together with this online report we are also publishing an e-paper with a summary of selected developments in the reporting period. The e-paper is entitled, "We take responsibility. An overview of corporate responsibility in 2012." The international subsidiaries can use an online tool to add information on their respective CR activities to the report and then use the report for their own CR communication.

The next CR report will be published in Q2 of 2014.

### "We Care" CR app.

We released the "We Care" CR application in 2012 as a supplement to Telekom's online CR report. The app is available as a free download for the smartphone operating systems Android and Apple iOS  as well as for tablets. This innovative presentation of our CR commitment provides an introduction to this complex topic—in a simple and entertaining, yet also self-critical way. Some of the content from the CR report has been integrated under its own section in the app and is updated every year. Our goal in providing the "We Care" app is to get a broad target group excited about the topic of corporate responsibility and encourage them to participate.

### Selection of the main topics for the CR Report 2012.

We conducted a multiple-phase materiality process in Q1 of 2013 to help us select our reporting topics. This is an integral part of our annual CR reporting. The process is a tool to help identify the topics with maximum relevance for our internal and external stakeholders .

### Structure of the current online report.

The online 2012 CR Report has been designed as a progress report that focuses on the key developments of the reporting period. The reader can access the six main sections of the report by using the navigation bar:

- Networks
- Customers
- Society
- Employees
- Suppliers
- Climate & environment

The six sections mentioned above are supplemented by three others:

- The Strategy and management section describes the management of CR processes and the Group-wide integration of Telekom's CR strategy.
- The majority of the subsidiaries whose CR activities are described in this report are presented on profile pages. These can be found below the National companies menu item.
- In the Facts and figures section, consolidated and commented indicators provide information about our progress in the past few years.

## Assurance engagement.

Selected KPIs in the 2012 CR Report from Germany as well as from our international subsidiaries T-HT Hrvatski Telekom (Croatia), Magyar Telekom (Hungary), OTE and Cosmote (Greece) and T-Mobile USA were audited by the auditing firm PricewaterhouseCoopers (PwC) as part of an assurance engagement.

The following sections were also audited:

- [Strategy and management](#)
- [Suppliers](#)
- [Facts and figures](#)

The independent assurance report can be found under the [assurance report](#) menu item.

All reviewed content of this report are marked with and will remain effective until the next CR report is published. Individual sections of the report that were subject to the audit of our 2012 Annual Report have been labeled accordingly.

## Implementation of high international reporting standards.

Telekom's 2012 CR Report fully complies with the guidelines (G3) of the Global Reporting Initiative (GRI). This also applies to the GRI Telecommunications Sector Supplement in the 2003 pilot version that is applicable to companies in the telecommunication industry. Compliance with both catalogs of requirements was reviewed by the GRI, which awarded [the highest application level, "A+"](#).

This CR Report also serves as a COP (communication on progress) from Telekom as part of the United Nations Global Compact . The [Global Compact COP](#) provides an overview of specific measures used to put the Global Compact principles into practice.





## Statement by the Chairman of the Board of Management.



René Obermann, Chairman of the Board of Management, Bonn, Germany.

**Dear Readers,**

Deutsche Telekom recognizes its responsibility for the environment and society. That is why we have been reporting on our corporate responsibility activities for years now in a comprehensive, transparent format. We have been doing this voluntarily and not as the result of legal reporting requirements, such as the legislation currently being prepared by the EU.

As this report impressively illustrates, we assume responsibility in many areas. I would like to discuss two of these areas in more detail because of their considerable importance for society and for us as a company: climate protection and access to high-speed networks.

Information and communications technology (ICT) is not necessarily the first thing that comes to mind when you think about climate protection. However, digital life and work contribute significantly to creating a low-carbon society. The SMARTer2020 study, which was presented in Doha in 2012 and in which Telekom played a key role, shows that ICT has the potential to reduce CO<sub>2</sub> emissions worldwide by 16.5 percent. That is around ten times the total amount of greenhouse gas emissions in Germany.

We develop innovative applications and technologies to tap this potential, helping our customers reduce their carbon footprint. Video conferencing, to name just one small example, can replace many of our customers' business trips. Smart energy management helps our customers reduce their electricity consumption.

We are pursuing our own ambitious climate protection goals as well. We are switching our networks over to the more energy-efficient Internet Protocol, initiating a generational shift in mobile communications technology and improving the energy efficiency of our data centers. We are also pointing the way when it comes to mobility with our company fleet. The average CO<sub>2</sub> emissions produced by all new Telekom cars in Germany have been reduced from 125 g/km in 2011 to 120 g/km. That means that we have already achieved the levels that the European Union has set for 2015 as part of its climate protection goals.

Our involvement in climate protection is not an isolated effort but rather a central component of a comprehensive strategy. With this strategy, we resolutely put the principles of the United Nations' Global Compact [■](#) into practice. We made an official commitment to these principles in 2000, the year the Global Compact [■](#) was introduced. Our efforts are focused on those areas where we feel we can contribute the most to the sustainable development of our society. These include climate protection as well as our action areas "Connected life and work [■](#)" and "Connecting the unconnected."

To achieve progress in these areas we need to provide high-speed network access to as many people as possible with innovative, energy-efficient technologies for more sustainable products and services. To do this, we continue to increase our investment in the expansion of state-of-the-art broadband networks, even when the market trend points the other way. Our investment over the next three years will total at almost EUR 30 billion.

With our new vision "Deutsche Telekom—My first choice for connected life and work," we plan to put customer experience in the limelight even more than before. Not only do we want to provide our customers with transparent

information, we also want to engage in dialog with them. We listen. And not only when talking about new devices and technologies but also, and more importantly, when it comes to issues that affect our communities.

But find out for yourself. Form your own opinions about our efforts to promote climate protection, sustainable ways of living and working, online safety and social cohesion.

I hope you will find this report both informative and inspiring.

Sincerely,

René Obermann

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## Statement by the Chief Human Resources Officer.



Marion Schick, Board member responsible for Human Resources, Bonn, Germany.

### Dear Readers,

Dynamic markets are offering new business opportunities all over the world. The technological shift and increasingly individualistic lifestyles are triggering new customer needs—constant change is the only constant.

It is up to Telekom to find effective solutions to these challenges and to help design the transformation process. Our human resources departments make an important contribution to our efforts. The focal point of the work they do is shifting—from cultural transformation to supporting a transformation culture. We provide a framework that inspires and motivates our employees, gives them the space they need and provides them with opportunities to develop their individual skills and potential. We promote an environment in which people experience constant change as a chance instead of a threat—and where they have the courage to assume responsibility for our company's success. But we do not lose sight of long-term challenges, making the Deutsche Telekom Group one of the leading forces in the sustainable development of the environment, our society and the world of business.

Our new Human Resources Strategy, which we approved in early 2013, was designed to help us meet these challenges. Based on our vision, "HR accelerates the success of the company and its employees," we contribute significantly in this area so that our employees and organizational units are able to do their best for our company in a constantly changing environment. One key pillar in putting our new HR strategy into practice was to set up the Group Transformational Change & Corporate Responsibility unit. The purpose of this new unit is to advance our corporate culture in terms of innovation, transformation, entrepreneurship and social responsibility. By interweaving these topics, we are able to strengthen our employees' capacity to think and act responsibly and independently.

Our employees' sense of responsibility can already be seen in the fact that they are heavily involved in their communities. They volunteer at day care centers and schools, give courses on Internet and cell-phone use to seniors and participate in activities to protect the environment. One excellent example of our employees' involvement is our "Responsibility wins" trainee competition, in which 700 apprentices and cooperative university students submitted more than 80 community and environmental projects. The abundance and quality of this year's submissions shows that our trainees are interested in more than just professional advancement. The entire company benefits from their enthusiasm and from their creativity.

However, as the Board Member responsible for Human Resources, I also believe it is important to maintain fair working conditions and to guarantee basic human rights beyond our corporate borders. We adopted social, community-based values and principles in our Social Charter <sup>1</sup> in 2003. This charter demands compliance with internationally recognized social standards, which our business partners are also required to observe. The objective behind our sustainable procurement strategy is to make sure that the companies involved in our supply chain are in compliance with our defined social and environmental minimum standards. We ask suppliers about their commitment and involvement in sustainability topics before entering into a business relationship with them. When necessary, we request additional, specific information over the course of the business relationship.

We also conduct regular audits in the form of "social audits" at our suppliers on site to monitor compliance with our sustainability criteria. We work together with our suppliers as a reliable partner during these audits and provide

them with support when needed. There are several escalation phases that go into effect if discrepancies arise. Our primary objective is to collaborate closely with our suppliers in order to come up with solutions that are in line with our sustainability standards.

"We take responsibility" is more than just the title of our CR Report. To us, "We take responsibility" is an expression of our comprehensive CR approach that goes beyond short-term goals and that includes every single Deutsche Telekom employee.

Marion Schick

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## Group profile.

Deutsche Telekom is one of the world's leading integrated telecommunications companies, with approximately 132 million mobile customers, 32 million fixed-network lines and almost 17 million broadband lines in around 50 countries. We offer consumers as well as corporate and business customers a comprehensive portfolio of products and services in the areas of fixed-line/broadband, mobile communications, Internet and Internet TV as well as other innovative solutions for connected life and work. We were able to generate revenues of EUR 58.2 billion with a staff of some 230,000 employees worldwide in the financial year 2012.

The Group is expressly committed to its corporate responsibility and bases its actions on economic as well as social and ecological criteria. In line with our goal of becoming a global leader in connected life and work, we plan to lead the way in corporate responsibility (CR) too.

### Group structure and operating segments.

Telekom's organizational and management structure comprises the operating segments Germany, Europe, United States, Systems Solutions as well as Group Headquarters & Shared Services [i](#).

#### The organizational structure at a glance



- **Germany:** The Germany operating segment comprises all fixed-network and mobile activities in Germany. In addition, it provides wholesale telecommunications services for the Group's other operating segments. Continued demand for broadband products in the fixed network and mobile communications has driven revenues in these fields. We have held our own well in the market in the face of regulatory interventions and intense competition by focusing on value in the fixed-line sector. Our mobile customer base developed positively despite intense competition. Revenue at the operating segment in 2012 was 2 percent lower than the previous year, with the decrease being only half as much as that for 2011.
- **Europe:** The Europe operating segment comprises all fixed-network and mobile operations of the international subsidiaries in Greece, Romania, Hungary, Poland, the Czech Republic, Croatia, the Netherlands, Slovakia, Austria, Bulgaria, Albania, the F.Y.R.O. Macedonia, and Montenegro, as well as the Everything Everywhere joint venture in the UK. In addition, various international subsidiaries also offer ICT solutions to business customers. The Europe operating segment also includes the International Carrier Sales & Solutions unit, which mainly provides wholesale telecommunications services for the Group's other operating segments. In 2012, our Europe operating segment showed robust development in terms of the customer base despite intense competition and the still strained economic situation in most of the countries in this segment. Our Europe operating segment generated total revenue of EUR 14.4 million in 2012, down 4.7 percent compared with the prior-year level.
- **USA:** The United States operating segment combines all mobile activities in the U.S. market. Total revenue for

the United States operating segment was EUR 15.4 billion in the financial year 2012, an increase of 3.8 percent compared to EUR 14.8 billion in 2011, which was due to fluctuations in the currency exchange rate. In U.S. dollars, total revenue declined by 4.1 percent year-on-year due primarily to a decrease in service revenues partially offset by an increase in equipment revenues associated with T-Mobile USA's Value plans. The business combination of T-Mobile USA and competitor MetroPCS was announced on October 3, 2012. The transaction was completed on April 30, 2013. The new company, in which Deutsche Telekom holds a 74 percent share, has been listed on the New York Stock Exchange under the name T-Mobile US since May 1, 2013.

**▪ Systems Solutions:** The Systems Solutions operating segment bundles business with ICT products and solutions for large multinational corporations under the T-Systems brand. In the financial year 2012, order entry at the segment increased substantially year-on-year by 18 percent. This was due to the conclusion of major new deals, such as those with the Catalan government, Shell, Clariant, BP, Daimler, British American Tobacco and the Swiss industrial group Georg Fischer.

#### **Group Headquarters & Shared Services**

Group Headquarters & Shared Services  comprises all Group units that cannot be allocated directly to one of the operating segments. Group Headquarters is responsible for strategic and cross-segment management functions. The Shared Services  unit, which provides services primarily in Germany, is responsible for all other operating functions not directly related to the operating segments' core business activities. In addition to typical services such as financial accounting, human resources services, and operational procurement, Shared Services  also includes Vivento, which is responsible for providing employees with new employment opportunities as part of the workforce restructuring program, Real Estate Services, and the Mobility Solutions unit, a full-service provider of fleet management and mobility services.

### Business development in 2012.

Net revenue in the 2012 financial year was EUR 58.2 billion, slightly down by 0.8 percent compared with the prior year. Intense competition, price changes imposed by regulatory authorities, and the strained economic situation in most countries in our Europe operating segment had a negative effect. Net exchange rate effects of around EUR 1.1 billion on the proportion of net revenue generated internationally, especially from the translation of U.S. dollars into euros, had a positive impact on net revenue.

Our United States and Systems Solutions operating segments both increased their revenue on a euro basis, whereas our Europe and Germany operating segments recorded a decrease in revenue.

#### **Adjusted EBITDA.**

The adjusted EBITDA of EUR 18 billion achieved in fiscal year 2012 means a decrease of 3.8 percent compared to the prior year. Net exchange rate effects of EUR 0.3 billion, especially from the translation of U.S. dollars into euros, had a positive effect on the development of adjusted EBITDA. With these results, we achieved the target we originally communicated for the year.

#### **Net profit/loss.**

We recorded a net loss of around EUR 5.3 billion, primarily due to the recognition of an impairment loss in connection with the agreed business combination of T-Mobile USA and MetroPCS. Tax income for the financial year amounted to EUR 1.5 billion.

#### **Free cash flow and net debt.**

Free cash flow of the Group amounted to EUR 6.2 billion, EUR 0.2 billion less than in the prior year.

Net debt decreased by EUR 3.3 billion or 8.1 percent compared with the end of 2011 to EUR 36.9 billion.

For detailed information about the Group's performance and Telekom's financial data, please refer to the [2012 Annual Report](#).

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## Rankings, ratings & awards.

We are very pleased about being listed in renowned sustainability rankings and ratings and about the numerous awards and certifications we have received during the reporting period. Our subsidiaries were also recognized for their CR commitment in various areas. You can find an overview of this on the profile pages of the [National companies](#).

### SRI rankings and ratings.

#### **SAM rating and Dow Jones Sustainability Indexes:**

The annual sustainability rating by [Sustainable Asset Management \(SAM\)](#) gave Telekom the maximum number of points in the Stakeholder [Management](#) category in 2012. The SAM rating is decisive for inclusion in the Dow Jones World and Europe sustainability indexes, in which Telekom is listed just like in previous years.

#### "Prime" rating by [oekom research](#):

Since 1993, ratings agency [oekom research](#) has been assessing and comparing national and international companies, thus providing guidance for sustainable investment in Europe. Just like in previous years, Telekom received a "Prime" rating.

#### "ASPI" by [Vigeo](#):

[Vigeo](#) is one of the leading rating agencies for CR analyses in Europe. Vigeo's SRI index products include the indexes ESI (Ethibel Sustainability Index) and ASPI (Advanced Sustainable Performance Indices). The latter rates 120 of Europe's leading sustainability performers. Telekom was listed in ASPI in 2012.

#### "FTSE4Good Index":

Inclusion in the [FTSE4Good Index](#) is based on a company's performance in the CR ratings of renowned ratings agencies imug and EIRIS. As in previous years, Deutsche Telekom was included in this important SRI index.

#### "STOXX Global ESG Leaders Index":

The STOXX Global ESG Leaders Index was launched in spring 2011 as a new index product of the German Stock Exchange. Inclusion in this index depends on a company's performance in the established CR rating by the company Sustainalytics. Telekom has been listed in this index product from the beginning.

#### "Newsweek-Green-Rankings":

The U.S. magazine Newsweek published its annual [Green Rankings](#) for the fourth time in a row in 2012. Green Rankings ranks the global as well as the U.S. top 500 companies based on their environmental footprint as well as their management and reporting practices. Telekom came in 41st at the global level. The company was rated seventh in the telecommunications industry and fifth among German companies.

#### "DAXglobal Sarasin Sustainability Germany Index EUR":

The [DAX global Sarasin Sustainability Germany Index](#) was introduced in July 2007. This index lists the 100 largest and most liquid German stocks—based on free-float market capitalization—that were classified as sustainable according to the Sarasin Sustainability Matrix. Over 40 DAX-listed companies are also found in this index. Telekom continues to be a part of the "Sarasin Investment Universe."

#### "CEERIUS":

CEERIUS (Central and Eastern European Responsible Investment Universe) was founded by the Vienna Stock Exchange in 2009 and lists the most sustainable companies in the region. Our Hungarian subsidiary, Magyar Telekom, has been listed in CEERIUS consistently since 2009.

### Awards and certificates.

## Networks.

1st place in network test conducted by the industry portal CHIP Online

1st place in network test conducted by the trade journal "connect"

1st place in the Internet & Telephony category in the trade journal "connect"

Selected by the readers of the trade journal "connect" for the Mobile Network Operator of the Year award

## Costumers.

"Telekom helps" receives first place in the AllFacebook Stats study

German CSR Award for the "We Care" CR app (special award for "Innovation")

German "Goldener Funke" business communication award for the We Care app

Gold for the We Care app in the "Digital applications" category at the Econ Award for Corporate Communications

2012 Ethical Corporation Responsible Business Award in the "Best consumer engagement" category

## Society.

The "Yes I can!" initiative receives the UN Decade Education for Sustainable Development award for the second time

1st prize in the U21 category of the regional competition for the German Bürgerpreis prize for the SOS-Kinderdorf trainee project

## Employees.

First place in the HR Social Media Activities of DAX 30 Companies

2nd place in the general ranking for Online Talent Communication (2013) and in the sub-categories, "Social media communication" and "Online application."

2012 Golden Career's Best Recruiter in the media/advertising/telecommunications industry as well as in the "Social web activities" category

2012 German CSR Award in the category "Gender diversity to promote men and women in mixed (management) teams"

Max Spohr publisher's award

Named "Disabled-friendly employer" by the LVR Rhineland Regional Council



## GRI index

Telekom's CR reporting is based on the requirements defined by the [Global Reporting Initiative \(GRI\)](#). Telekom's CR Report 2012 fully complies with the GRI guidelines (G3). This also applies to the GRI Telecommunications Sector Supplements (applicable to companies in the telecommunications industry) in the pilot version of 2003. Conformance with both requirements catalogs was checked by GRI, which issued the highest application level A+ for it.

The GRI index below indicates the scope to which we take the GRI indicators into account and the places in this year's CR Report where the corresponding information is available. The index also contains references to GRI-relevant text passages in other Telekom publications. The GRI index also states why Telekom does not report on individual GRI indicators.

Additional indicators that we have taken into account in the CR Report 2012, but whose fulfillment is not compulsory for level A+, are printed in grey.

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## Profile.

### Indicator Reference

#### Status

#### 1. Strategy and analysis

##### 1.1 Statement from the most senior decision-maker



[Foreword by the Chairman of the Board of Management](#)

##### 1.2 Key impacts, risks and opportunities



[Group Profile](#)

[Risk and opportunities management](#)

[Annual Report 2012 > Corporate governance report](#)

[Annual Report 2012 > Risk and opportunities management](#)

#### 2. Organizational profile

##### 2.1 Name of the organization



[Group Profile](#)

Deutsche Telekom AG

##### 2.2 Brands, products and/or services



[Group profile](#)

##### 2.3 Organizational structure



[Group Profile](#)

[2012 Annual Report > Group organization](#)

[Telekom worldwide](#)

##### 2.4 Headquarters location



[Imprint](#)

##### 2.5 Countries in operation



National companies

[2012 Annual Report > Group organization](#)

## 2.6 Nature of ownership

Group Profile

[2012 Annual Report > Group organization](#)

[Telekom worldwide](#)

## 2.7 Markets served

Group Profile

[2012 Annual Report > Group organization](#)

[2012 Annual Report > The economic environment](#)

## 2.8 Scale of the organization

Group Profile

[2012 Annual Report > Overview of the 2012 financial year](#)

[2012 Annual Report > Development of business in the Group](#)

[2012 Annual Report > Employees](#)

## 2.9 Significant changes regarding size, structure, or ownership

Group Profile

[2012 Annual Report > Development of business in the Group](#)

[2012 Annual Report > Development of Business at Deutsche Telekom AG](#)

[2012 Annual Report > HR development](#)

## 2.10 Awards received

[Rankings, ratings & awards](#)

[National Companies](#)

## 3. Report parameters

### 3.1 Reporting period

[About this report](#)

### 3.2 Date of most recent previous report

[About this report](#)

### 3.3 Reporting cycle

## About this report

### 3.4 Contact point for questions

#### Imprint /Contact form

Birgit Klesper,

Senior Vice President Group Transformational Change & Corporate Responsibility

### 3.5 Process for defining report content

#### About this report

#### Stakeholder expectations

### 3.6 Boundary of the report

#### About this report

#### Group Profile

#### Deutsche Telekom's stakeholders

#### The topics of our stakeholders

### 3.7 Limitations on the scope or boundary of the report

#### About this report

### 3.8 Joint ventures, subsidiaries, and outsourced operations

#### 2012 Annual Report > Group organization

#### Telekom worldwide

### 3.9 Data measurement techniques

#### About this report

#### CR key performance indicators

#### Independent assurance report

#### Facts & figures

#### CR-Governance

Telekom has an internal reporting and indicator management system that allows us to incorporate the entire Group, i.e., all international subsidiaries and all strategic business areas, in almost every topic area.

Since early 2010, we have been using a CR database to systematically collect and manage relevant data for our CR reporting activities.

### 3.10 Effects of re-statement of information provided in earlier reports

## User help

If information from previous reports is re-stated in the 2012 CR Report in a modified form, this will be indicated in the relevant places.

### 3.11 Significant changes in the scope, boundary, or measurement methods



[About this report](#)

[Facts & figures](#)

### 3.12 GRI Content Index



Included

### 3.13 External assurance



[About this report](#)

[Independent assurance report](#)

## 4. Governance, Commitments and Engagement

### 4.1 Governance structure



[CR governance](#)

[2012 Annual Report > The Board of Management](#)

[2012 Annual Report > Corporate governance report](#)

### 4.2 Indication whether chairperson is also executive officer



[2012 Annual Report 2011 > The Board of Management](#)

### 4.3 Independent members at the board



[2012 Annual Report 2011 > The Board of Management](#)

### 4.4 Mechanisms for shareholders and employees to provide recommendations to the board



[CR governance](#)

[Socially responsible investment](#)

[2012 Annual Report > Supervisory Board's report](#)

[2012 Annual Report > Corporate governance report](#)

## 4.5 Linkage between executive compensation and organization's performance

[2012 Annual Report > Corporate governance report](#)

## 4.6 Processes to avoid conflicts of interest at the board

[2012 Annual Report > Corporate governance report](#)

## 4.7 Expertise of board members on sustainability topics

[CR governance](#)

## 4.8 Statements of mission, codes of conduct, and principles

[Values and Guiding Principles](#)

[CR program](#)

[Stakeholder involvement](#)

[Mobile communications & health](#)

[Consumer protection](#)

[Climate protection](#)

[Environmental management](#)

[Climate-friendly mobility](#)

[Sustainable procurement strategy](#)

[Basics for product development & product design](#)

[Protecting minors](#)

## 4.9 Procedures for board governance on management of sustainability performance

[Strategie and management](#)

As part of Corporate Communications and thanks to the Board Representative for Sustainability and Climate Protection, the CR unit is firmly integrated in the Chairman's department. Sustainability performance is managed by means of targets.

## 4.10 Process for evaluation of the board's sustainability performance

[2012 Annual Report > Corporate governance report](#)

The Telekom Board of Management is responsible for the operational management of the Group and strives to constantly improve the company's sustainability performance.

## 4.11 Precautionary approach

[Compliance](#)

## Risk & opportunities management

### 2012 Annual Report > Corporate governance report

Risk management, compliance management and the CR KPIs provide approaches for proactive action at Telekom.

#### 4.12 External charters, principles, or other initiatives

Stakeholder involvement

Network & infrastructure expansion

Consumer protection

Protecting minors

Mobile communications and health

Environmentally friendly network infrastructure

International cooperation

Climate protection initiatives

Environmental management

#### 4.13 Memberships in associations

Broad-based involvement: memberships and collaborations

#### 4.14 Stakeholder groups

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Stakeholder involvement

#### 4.15 Stakeholder identification and selection

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Stakeholder involvement

#### 4.16 Approaches to stakeholder engagement

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Stakeholder involvement

Encouraging consumer dialog

Transparency

Corporate volunteering

International collaboration

#### 4.17 Topics and concerns raised by stakeholders

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Stakeholder management

Socially responsible investment

Government relations & regulatory issues

Mobile communications & health

Customer satisfaction

Supply chain management

Cooperation with employee representatives throughout Germany and internationally

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## Economic performance indicators.

### Indicator Reference Status

[Disclosure on management approach](#)



#### Economic performance

[Group Profile](#)

[2012 Annual Report > Group strategy](#)

[2012 Annual Report > Management of the Group > Finance strategy](#)

[2012 Annual Report > Management of the Group > Value management and performance management system](#)

#### Market presence

[Regional added value](#)

#### Indirect economic impacts

[Regional added value](#)

[Networks & infrastructure expansion](#)

[EC1 Direct economic value generated and distributed](#)



[Net value added](#)

[Corporate volunteering & corporate giving](#)

[2012 Annual Report > Financial data of the Group](#)

The net value added of Telekom shows how company performance is distributed among the various stakeholders, for example in the form of wages or taxes.

[EC2 Financial implications due to climate change](#)



[Action areas](#)

[Climate & environment](#)

[Climate protection](#)

[Environmentally friendly network infrastructure](#)

[Upgrading networks](#)

[Replacing outdated 2G network technology](#)

[Heat Power Buisness project](#)

[ComGreen](#)

[Green data centers](#)

[Basics für development & product design](#)

[Sustainable Product Portfolio program completed successfully](#)

[Policies for sustainable product design](#)

[Climate and environmentally friendly products & services](#)

## 2012 Annual Report > Corporate responsibility > Our commitment to social responsibility

In its annual statement for the Carbon Disclosure Program, Telekom makes a qualitative and quantitative assessment of the consequences that the progressing climate change will have on Deutsche Telekom as far as possible.

### **EC3 Coverage of the organization's defined benefit plan**

Company pension scheme

### **EC4 Financial government assistance**

#### 2012 Annual report > Notes to the consolidated statement of financial position

The German federal government holds shares in Deutsche Telekom.

### **EC5 Entry level wage compared to local minimum wage**

Deutsche Telekom is committed to fair pay

Despite some necessary adjustments to market level, entry-level salaries of our employees are still attractive compared to the sector average, especially in Germany.

### **EC6 Locally-based suppliers**

Procurement volumes and regions

Implementing the sustainable procurement strategy

As an ICT company, Telekom relies on suppliers from around the world. That is why we do not have Group-wide policies giving priority to local suppliers at our locations.

### **EC7 Local hiring**

The prerequisite for customer-centric products, solutions and services—that means for Telekom's current and future business success—is having highly qualified personnel. For this reason, the selection of personnel at Telekom is not based on nationality or proximity to place of work but on the qualifications and skills of the candidates. To enable the cross-border transfer of expertise and skills and internationally harmonized global personnel development demanded of a global player, Human Resources (HR) develops the necessary structures, processes and measures within the HR strategy.

### **EC8 Infrastructure investment and services for public benefit**

Network and infrastructure expansion

Telekom net added value

Research investments in Germany

Connect the unconnected

Education - the foundation of a sustainable society

[engagement@telekom](mailto:engagement@telekom.de)

[Education](#)

[Sponsorship](#)

## EC9 Indirect economic impacts



[Network expansion](#)

[Barrier-free products & services](#)

[Connect the unconnected](#)



# Environmental performance indicators.

## Indicator Reference Status

Environmental performance indicators

### Materials

The amount of materials we use such as raw materials, supplies and semi-finished products is very small for Telekom as a service company and is therefore not relevant.

### Energy

[Climate Change Group](#)

[Climate protection](#)

[Climate protection initiatives](#)

[Energy management](#)

### Water

[Environmental management](#)

### Biodiversity

[Biodiversity](#)

### Emissions, effluents and waste

[Climate Change Group](#)

[Waste management & disposal](#)

[Resource efficiency in the workplace](#)

[Climate protection](#)

### Products and services

[Climate and environmentally friendly products and services](#)

[2012 Annual report > Innovation and product development](#)

### Compliance

[Environmental management](#)

[2012 Annual report > Risk and opportunities management](#)

### Transport

[Climate-friendly mobility](#)

### Overall

[Climate & environment](#)

[Environmentally friendly network infrastructure](#)

[Climate protection](#)

EN1 Volume of materials used

The amount of materials we use such as raw materials, supplies and semi-finished products is very small for Telekom as a service company and is therefore not relevant.

## EN2 Recycled materials

Because the amount of materials we use is very small for Telekom as a service company and is therefore insignificant, the share of recycled material is not relevant to this report.

## EN3 Direct primary energy consumption

Energy

Total energy consumption

## EN4 Indirect primary energy consumption

Energy

Total energy consumption

A breakdown by renewable and non-renewable energy sources is not relevant for Telekom as the purchase of RECS (Renewable Energy Certificate System) certificates means electricity consumption in Germany is covered—directly or indirectly—entirely from renewable energy sources in 2012. In virtually all other countries, the proportion of renewable and non-renewable energy is in line with the electricity mix in the relevant country.

## EN5 Energy conservation

Power Off task force

Heat Power Business project

Cloud computing

Conservating resources with state-of-the-art printer

Energy management

Energy

Total energy consumption

## EN6 Initiatives for energy-efficiency and renewable energy

Code of Conduct on Energy Consumption of Broadband Equipment

Replacing outdated 2G network technology

Cloud computing

Improving energy efficiency and compensating for CO<sub>2</sub> emissions

## EN7 Initiatives for reducing indirect energy consumption

Climate Change Group

Low-power mode on the rad to green DSL

## Improving energy efficiency and compensating for CO<sub>2</sub> emissions

### Energy management

### Involvement in the Global e-Sustainability Initiative

### Climate friendly mobility

### Using recycled paper

## EN8 Total water withdrawal



### Water consumption

Water consumption is not linked to provision of services to customers. The main source of water, which is used for sanitary facilities and the watering of outdoor areas, is the public drinking water supply system. No other sources are used.

## EN9 Effect of water withdrawal



To our knowledge our water consumption has no major impact on the environment.

## EN10 Water recycled and reused



Water recycling facilities are not installed in significant numbers.

## EN11 Land assets in or adjacent to protected areas



We financed compensation measures to restore natural habitats under nature conservation regulations In the reporting period.

## EN12 Impacts on biodiversity



### Biodiversity

Possible impacts on biodiversity, such as the impact of laying cable or of electromagnetic fields, are regulated by law in Germany. Aside from this, our business activities only have an indirect impact on biodiversity. We have a greater potential to help protect biodiversity through our climate protection activities.

## EN13 Habitats protected or restored



### Biodiversity

We financed compensation measures to restore natural habitats under nature conservation regulations In the reporting period.

## EN14 Strategies for biodiversity



### Biodiversity

Possible impacts on biodiversity, such as the impact of laying cable or of electromagnetic fields, are regulated by law in Germany. Aside from this, our business activities only have an indirect impact on biodiversity. We have a greater potential to help protect biodiversity through our climate protection activities.

#### EN15 Endangered species

This indicator is not relevant to Telekom.

#### EN16 Greenhouse gas emissions

CO<sub>2</sub> emissions

Total CO<sub>2</sub> emissions (Scope 1&2)

#### EN17 Other greenhouse gas emissions

CO<sub>2</sub> emissions from business trips (Scope 3)

#### EN18 Initiatives to reduce greenhouse gas emissions

Climate and environmentally friendly products & services

Supply chain management

Climate protection

Energy management

Environmentally friendly network infrastructure

Environmental management

Climate-friendly mobility

2<sup>nd</sup> & 3<sup>rd</sup> generation mobile communications

#### EN19 Emissions of ozone-depleting substances

Telekom is not a manufacturing enterprise. Therefore, this indicator is not relevant to Telekom.

#### EN20 NOx, SOx and other air emissions

Telekom is not a manufacturing enterprise. Therefore, this indicator is not relevant to Telekom.

CO<sub>2</sub> emissions are calculated according to the Greenhouse Gas (GHG) Protocol. No disclosures beyond CO<sub>2</sub> emissions (e.g., on NOx, SOx or other air emissions) are possible.

#### EN21 Water discharge

Water consumption

Since we participate in the public water supply, water withdrawal is nearly equal to water discharge.

#### EN22 Waste by type and disposal method

Waste volume

Waste management & disposal

Recycling 9,000 metric tons of cable

Expert manage systematic network upgrade

Upgrading networks

Disposal methods are regulated by law. We have almost all of our technical waste recycled because of the valuable metals it contains. Disposal of domestic waste depends strongly on each individual country. While domestic waste is almost entirely incinerated and disposed of thermally in western countries like Germany, Austria and the Netherlands, most domestic waste is still sent to landfills in Eastern European countries.

#### EN23 Significant spills



Since Telekom does not manufacture any products, this indicator is not relevant.

#### EN24 Waste deemed hazardous under the terms of the Basel Convention



Since Telekom does not transport any waste, this indicator is not relevant.

#### EN25 Impacts of discharges and runoff on biodiversity



This indicator is not relevant for Telekom, as no direct discharges of water take place.

#### EN26 Initiatives to mitigate environmental impacts



Sustainable Product Portfolio program

Policies for sustainable product design

Reducing in end-device packaging

Paper-free documentation

Environmentally friendly network infrastructure

Resource efficiency at the workplace

Energy

CO<sub>2</sub> emissions

#### EN27 Packaging materials



Used cell-phone collection

Phone and cell-phone recycling

Customers can return all of their packaging to Telekom in Germany in accordance with the Packaging Ordinance. In its international units, the company deals with packaging materials according to the legislation in the country concerned. Accordingly, a complete description is not possible at this juncture.

#### EN28 Sanctions for non-compliance with environmental regulations



We have an umbrella certificate according to ISO 14001  since the end of June 2009, which ensures that there are no violations of environmental regulations Group-wide. No significant breaches became known in the reporting period.

## EN29 Environmental impacts of transport

Climate-friendly mobility

Mobility

Energy

CO<sub>2</sub> emissions

Logistics and transport services are provided by service providers at Telekom. The environmental impacts of transportation are influenced by the contractual arrangements with the service providers.

## EN30 Environmental protection expenditures

12,139 metric tons of CO<sub>2</sub> compensated for by certificates

Investments in environmental protection that exceed compensating for greenhouse gas emissions are not compiled centrally at present.



[Home](#) > [About this report](#) > [GRI index](#) > Social performance indicators

## Social performance indicators.

### Indicator Reference Status

#### Social performance indicators: Labor practices and decent work

##### Disclosure on management approach



###### Employment

[Corporate culture](#)

[Performance & development](#)

[Employee involvement & satisfaction](#)

[Workforce & organizational restructuring](#)

[2012 Annual Report > Employees > HR Strategy](#)

###### Labor/management relations

[Performance & development](#)

[Workforce and organizational restructuring](#)

[Compensation](#)

[Employee involvement and satisfaction](#)

###### Occupational health and safety

[Health & safety](#)

###### Training and education

[2012 Annual Report > Employees > HR Strategy](#)

###### Diversity and equal opportunity

[Diversity & equal opportunities](#)

[Demography as an opportunity](#)

[Corporate culture](#)

##### LA1 Workforce by employment type and region



[Workforce](#)

##### LA2 Employee turnover



Telekom compiles data on natural fluctuation for Group Headquarters, the operating segments in Germany and Europe:

**Fluctuation rate**

Natural fluctuation at Telekom in Germany:	-1.95%
Group headquarters and Shared Services <a href="#">i</a> :	-4.06%
T-Systems International in Germany:	-2.28%
Germany operating segment:	-1.16%
Europe operating segment in Germany:	-1.21%
<b>Natural fluctuation in Europe segment (not including Germany):</b>	<b>-8.68%</b>

## Staff leaving the company (FTE [i](#))

Natural fluctuation at Telekom in Germany:	2,375.82
Group Headquarters and Shared Services <a href="#">i</a> :	886.78
T-Systems International in Germany:	675.65
Germany operating segment:	807.38
Europe operating segment in Germany:	6.00
<b>Natural fluctuation in Europe segment (not including Germany):</b>	<b>4,993.81</b>

Natural fluctuation figures include termination of the employment by the employer or the employee as well as termination of the employment as a result of retirement or incapacity to work. To calculate the fluctuation rate, we divide the total number of employment contracts terminated (FTEs) by the total number of employees (FTEs) at the end of the previous year.

Our annual workforce structure report does not state the number of retired employees. We therefore cannot provide a breakdown of natural fluctuation according to gender and age.

## LA3 Benefits to full-time employees

### Company pension schemes

[2012 Annual Report > Employees](#)

## LA4 Employees with collective bargaining agreements

In Germany Telekom has agreed most of the conditions of employment for its employees with its employee representatives on the basis of collective bargaining. There are exceptions for executives and a few small subsidiaries not covered by collective agreements. At an international level, Telekom aligns its activities to the culture of co-determination existing in each country, which gives us a different landscape for collective agreements at each of our international subsidiaries. The responsibility for negotiating and signing collective agreements lies with the management of the relevant national company.

78,894 out of 118,840 employees with permanent employment contracts were covered by collective agreements in 2012. This is a share of 66.4 percent.

## LA5 Minimum notice period(s) regarding operational changes

The relevant works councils are informed on significant operational changes and involved according to the legally applicable provisions such as the German Works Constitution Act [*Betriebsverfassungsgesetz*].

In addition, there is a regular exchange with the employee representatives, both on the national and international level. We established a Global Employee Relations Management (ERM) unit at Group level in 2010. It provides guidance and promotes an exchange of experiences for building the diverse employee relationships in various countries. It is also a central contact for all international employee and employer committees and the labor unions.

#### LA6 Workforce represented in joint health and safety committees

Telekom has various committees on occupational safety and health involving both employee and employer representatives.

#### LA7 Occupational diseases, lost days, and number of fatalities

##### Employee health

#### LA8 Training on serious diseases

##### Health & safety

By setting up universal standards and guidelines throughout the Group, we anchored this key topic firmly in our company and management structures as early as 2007. Employees can utilize advisory and training services, as well as preventive medical check-ups, as part of our health management.

#### LA9 Trade union agreements on health and safety

Industrial safety issues are also addressed in negotiations with the employee representatives.

#### LA10 Training per employee

Our employees spent an average of around 36 hours attending training events in 2012.

A breakdown by employee category is not relevant for Telekom as the training and development offers are open to all employees equally.

#### LA11 Programs for lifelong learning

##### Time-off with and without pay

##### Performance & development

##### Demography as an opportunity

##### Workforce & organizational restructuring

##### Vivento: Assisting with workforce restructuring at Deutsche Telekom in Germany.

#### LA12 Regular performance and career development reviews

##### Performance management as a basis for transparency and comparability

All employee groups that take part in the target agreement process receive a variable salary component based among other things on their service performance. For all executives, service targets are part of the medium to long-term, pay-related targets (variable pay). All other employees in service functions receive variable pay based on their service performance.

Percentage of employees who receive regular performance assessments and development plans:

**Performance assessment**

for all employees: 86 percent

for executives: 99 percent

for employees not covered by collective agreements: 96 percent

**Development plan**

for all employees: 93 percent

No data on development planning is available for employee groups in the categories "executives" and "employees not covered by collective agreements." However, we can assume that all employees who receive a performance assessment (99 percent of executives and 96 percent of employees not covered by collective agreements) also received a development plan.

## LA13 Composition of governance bodies

Gender as a cornerstone of diversity

2012 Annual Report > Members of the Supervisory Board of Deutsche Telekom AG in 2012

## LA14 Gender pay disparity

Deutsche Telekom is committed to fair pay

**Social performance indicators: Human rights**

### Disclosure on management approach

**practices**

Respect for human rights as an ingrained practice

Laying down principles and taking responsibility for the supply chain

**Non-discrimination**

Respect for human rights as an ingrained practice

Values & Guiding Principles

Compliance

Social Charter: Complying with minimum standards

Participation in the German Global Compact Network

Social audits

**Freedom of association and collective bargaining**

Respect for human rights as an ingrained practice

Social Charter: Complying with minimum standards

Participation in the German Global Compact Network

Social audits

## **Child labor**

Respect for human rights as an ingrained practice

Social Charter: Complying with minimum standards

Participation in the German Global Compact Network

## **Forced and compulsory labor**

Respect for human rights as an ingrained practice

Social Charter: Complying with minimum standards

Participation in the German Global Compact Network

'Social audits'

## **Security practices**

Respect for human rights as an ingrained practice

## **Indigenous rights**

This aspect is not relevant for Telekom.

## **HR1 Investment agreements**

Laying down principles and taking responsibility for the supply chain

Supply chain management

Social audits

Sustainable procurement

Deutsche Telekom requires all of its suppliers to comply with the Group-wide Code of Conduct and the policies contained in the Social Charter <sup>[1]</sup>. These are based on the values set forth in the UN Global Compact <sup>[2]</sup>, the guidelines of the International Labour Organization (ILO) and the OECD guidelines for multinational companies.

The Social Charter <sup>[3]</sup> contains policies on

- human rights and working conditions,
- environmental protection,
- equal opportunity,
- occupational health and safety and
- the right to set up or join a trade union.

The principles described in the Charter apply to all Telekom business units worldwide. In the Charter, which is an integral part of our General Purchasing Terms and Conditions, we require all suppliers to comply with these basic principles as far as possible.

## **HR2 Supplier screening on human rights**

Expanding the Sustainable Procurement CR KPI

2012 audits result

Sustainable Procurement CR KPI

Telekom uses the Sustainable Procurement CR KPI to record the supplier share of our procurement volume that has been checked for compliance with human rights on the basis of voluntary information or social audits.

## **HR3 Training on human rights**

- Employee training for strengthening compliance.
- Internet portals for prevention and advice.
- New online training tool for buyers
- Participation in the German Global Compact Network

Within the framework of our sustainable procurement strategy, we offer training courses for buyers and joint workshops with suppliers. The new CR e-learning tool will also introduce CR and the associated human rights issues to a wide range of employees.

Intranet-based e-learning programs are also available to all employees in Compliance Management. These are supplemented by risk-specific on-site training.

Quantitative information on this indicator is not available at present as the majority of training programs are completed on a self-study basis on the intranet.

#### HR4 Incidents of discrimination

There was no confirmed incident of discrimination in the reporting period.

The Code of Conduct and the Group-wide Diversity Policy ban discrimination on the basis of gender, age, disability, ethnic origin, religious beliefs and sexual orientation. The "Tell me!" portal was set up as an inbox to submit information regarding violations of the codex, in case discrimination occurs despite the standardized processes.

#### HR5 Freedom of association and collective bargaining

We are not aware of any incidents of this nature.

Deutsche Telekom recognizes the fundamental right to freedom of association and the right to collective bargaining within the scope of national regulations and existing agreements. These basic rights form an integral part of the Social Charter <sup>[i](#)</sup>, are binding for the entire Group, and must be confirmed in writing annually by the Group companies.

- Social Charter: Complying with minimum standards

- Employee Relations Policy

- Accompanying measures for the Employee Relations Policy

- First collective agreement at T-Mobile USA.

- Respect for human rights as an ingrained practice

- Cooperation with employee representatives throughout Germany and internationally

#### HR6 Child labor

- Respect for human rights as an ingrained practice

- Social Charter: Complying with minimum standards

- 2012 audit results

- Work and ethics

We work to counter risks relating to child labor by auditing selected strategic and particularly high-risk suppliers.

## HR7 Forced labor

Respect for human rights as an ingrained practice

Social Charter: Complying with minimum standards

2012 audit results

Work and ethics

We work to counter risks relating to child labor by auditing selected strategic and particularly high-risk suppliers.

## HR8 Training for security personnel

As a global player, we insist that all our companies and all our suppliers around the world comply with internationally accepted social standards.

We have committed ourselves to this policy in our Social Charter <sup>[1]</sup>, which is a constituent of the Telekom Code of Conduct. We check for compliance on an annual basis, holding audits in the form of declarations of compliance issued by the management of individual Group units.

## HR9 Violations of rights of indigenous people

This indicator is not relevant to Telekom.

## Social Performance Indicators: Society

### Disclosure on management approach

**Community**

Stakeholder involvement

2012 Annual Report > Risk and opportunities management

As part of its risk management, Telekom aims to allay concerns in the general public by means of an objective, scientifically sound and transparent information policy, both at the beginning and at the end of a business initiative.

**Corruption**

Compliance

**Public policy**

Government relations and regulatory issues

**Anti-competitive behavior**

Compliance

**Compliance**

Compliance

Data privacy

## SO1 Impacts on communities

Mobile communications and health

## 2012 Annual Report > Risk and opportunities management

Telekom employs an integrated risk and opportunity management system to systematically leverage its opportunities without losing sight of the related risks. This system not only considers legal and financial aspects, but also social and environmental risks.

As part of its risk management, Telekom aims to allay concerns in the general public by means of an objective, scientifically sound and transparent information policy, both at the beginning and at the end of a business initiative.

Telekom is the only company in the world that has an international policy on electromagnetic fields (EMF) for its mobile communications segment, which sets out minimum standards for information campaigns, transparency, participation and the promotion of research.

### SO2 Corruption risks

The systematic prevention of white-collar crime is a top priority at Telekom. Compliance with legislation in this area is a requirement that applies to the entire Group, in all countries and to every member of staff. Any emerging fraud risks are systematically analyzed and any cases are documented.

We conducted compliance risk assessments with a special view to corruption risks for 116 of 239 fully consolidated companies during the reporting period. We also monitor another 43 companies in a two-year cycle. This corresponds to a rate of 67 percent based on the number of all fully consolidated companies. Most of the companies that were not included in compliance risk assessments have no business operations or are not personalized.

### SO3 Anti-corruption training

Deutsche Telekom once again conducted an awareness program to communicate key anti-corruption topics in 2012.

More than 1,700 managers and experts in Germany, from the Board of Management, top management and employees from other selected areas, completed custom anti-corruption training programs in 2012. These face-to-face events, which will continue in 2013, cover the main anti-corruption regulations, using case studies to deepen understanding. The compliance team worked with the various areas in advance to develop specialist case studies so that training courses could be tailored to the specific needs of each area.

Telekom addresses other employee groups with its anti-corruption e-learning module. This e-learning program is designed to teach employees, who were selected on the basis of exposure to risk, about the contents of our Anti-Corruption and Benefits Policies and to help them recognize typical corruption risks in their daily work environment and respond accordingly. Almost 16,000 employees in Germany received this risk group-specific training between September and December 2012. This corresponds to a rate of 15 percent. We are rolling out the e-learning program internationally in 2013.

### SO4 Actions taken in response to incidents of corruption

#### Investigations of suspected corruption

In order to be able to intervene quickly when corruption is suspected, we have set up contacts in all organizational units and publicize these in a suitable manner.

Potential breaches of internal guidelines, laws or codes of conduct can be reported via the entry portal “Tell me!.” All stakeholder groups—employees, business partners, customers, shareholders and other stakeholders—can approach us via this portal, anonymously if preferred.

## SO5 Lobbying

[Government relations and regulatory issues](#)

[Mobile communications and health](#)

## SO6 Donations to political parties and politicians

It is of paramount concern to Telekom that its relationships with political decision-makers should be characterized by transparency and trust. This also extends to our refusal to support the work of any political party with donations.

## SO7 Legal actions for anticompetitive behavior

[2012 Annual Report > Risk and opportunities management > Risks](#)

## SO8 Sanctions for non-compliance with laws and regulations

[2012 Annual Report > Risk and opportunities management > Risks](#)

### Social performance indicators: Product responsibility

#### Disclosure on management approach

**Customer health and safety**

[Basics for product development & product design](#)

**Product and service labelling**

[Mobile communications & health](#)

[Protecting minors](#)

**Marketing communications**

Standards for advertising are devised at the national level, in particular by means of self-regulation by the advertising industry, and therefore vary greatly from country to country. Telekom complies fully with all the legal and self-regulatory rules in the telecommunications industry in all company units. This concerns in particular the protection of children and young people and compliance with data protection. Telekom and its international subsidiaries have made major contributions to the development of two global, voluntary commitments by the industry:

(a) „[GSMA Code of Conduct against Mobile Spam](#)“ (2006) and

(b) „[GSMA Mobile Advertising Program](#)“ .

**Customer privacy**

[Compliance](#)

[Data privacy](#)

## 2012 Data Privacy Report

### **Compliance**

Compliance

Data privacy

### PR1 Health and safety impacts along product life cycle

EMF policy

E-health

### PR2 Non-compliance with health and safety standards

#### 2012 Annual Report > Risk and opportunities management

Currently, Group Headquarters is not aware of any significant violation of health standards.

### PR3 Product information

Mobile communications & health

Protecting minors

www.t-mobile.de > SAR levels

### PR4 Non-compliance with product information standards

#### 2012 Annual Report > Risk and opportunities management

Currently, Group Headquarters is not aware of any significant violation of health standards.

### PR5 Customer satisfaction

#### 2012 Annual Report > Risk and opportunities management

### PR6 Marketing communication standards

Internet portal for prevention and advice

Mobile communications and health

Protecting minors

E-health

Our commitment to protecting our consumers is based on our Code of Conduct, which was adopted in 2007. It also applies to all of Telekom's sales partners.

Standards for advertising are devised at the national level, in particular by means of self-regulation by the advertising industry, and therefore vary greatly from country to country. Telekom complies fully with all the legal and self-regulatory rules in the telecommunications industry in all company units. This concerns in particular the protection of children and young people and compliance with data protection. Telekom and its international

subsidiaries have made major contributions to the development of two global, voluntary commitments by the industry:

- (a) „GSMA Code of Conduct against Mobile Spam“ (2006) and
- (b) „GSMA Mobile Advertising Program“.

## PR7 Non-compliance with marketing communication standards

Investigations of suspected corruption

2012 Annual Report > Risk and opportunities management

## PR8 Complaints regarding customer privacy

Compliance

Data privacy

2012 Data Privacy Report

## PR9 Sanctions for non-compliance with product and service related regulations

2012 Annual Report > Risk and opportunities management



## GRI Telecommunications Sector Supplement.

### Indicator Reference

#### Status

#### Investments

##### IO1 Capital investment in infrastructure broken down by region



Network and infrastructure expansion

##### IO2 Costs for extending non-profitable services to remote areas and low-income groups; description of statutory provisions



This indicator is not relevant to Telekom.

### Health and Safety

##### IO3 Practices to ensure health and safety of personnel involved in infrastructure installation



Progress in implementing HSE management

A health, safety and environmental management system will be rolled out across the Group based on the OHSAS 18001 <sup>i</sup> and DIN ISO EN 14001 standards.

The direct customers are those local business units that are integrating the end-to-end management system into their structures. Employees benefit from the system, as systematic occupational health and safety management alongside quality and environmental management makes workflows easier and minimizes health risks and factors that are harmful to the environment.

Communication on health, safety and the environment exists throughout all levels of the company.

##### IO4 Compliance with ICNIRP standards on handset radiation



Transparency

Mobile communications and health

##### IO5 Compliance with ICNIRP standards on base station



Transparency

Mobile communications and health

##### IO6 Actions with respect to SAR values of handsets



EMF policy

## Infrastructure

IO7 Actions with regard to siting of transmission masts

Network and infrastructure expansion

EMF policy

IO8 Number of stand-alone and shared sites

Telekom records the number of radio sites used individually or shared. In future the number of shared locations is to be further increased.

## Providing Access

### Access to telecommunications products and services: Bridging the digital divide

PA1 Strategies and actions in low population density areas

Network and infrastructure expansion

Setting up the LTE network in Germany

PA2 Strategies and actions to overcoming barriers to access and use

CR Strategy

Network and infrastructure expansion

Media skills

Barrier-free products and services

PA3 Strategies and actions to ensure the availability and reliability of products and services

Network and infrastructure expansion

Research and innovation

Network upgrading

Health and safety standards and management system.

PA4 Level of availability and market shares for products and services

Network and infrastructure expansion

2012 Annual Report

PA5 Number and types of products and services made available to low and no income sectors of the population

## Barrier-free products and services

PA6 Programs and actions to provide and maintain services in emergency situations

Health & safety standards and management systems

Disaster relief

## **Access to content**

PA7 Strategies and actions to manage human rights issues relating to access and use of telecommunications products and services

Protecting minors

Ensuring compliance with human rights is an integral part of Deutsche Telekom's corporate policy.

## **Customer relations**

PA8 Strategies and actions to publicly communicate on EMF-related issues

Information

Transparency

Mobile communication and health

PA9 Investments in activities in electromagnetic field research

Mobile communications and health

Mobile Communications and Safety

PA10 Initiatives to ensure clarity of charges and rates

Supporting independent research

PA11 Initiatives to inform customers about responsible, efficient and environmentally preferable product use

Customer communication

Climate and environmentally friendly products and services

## **Technical applications**

### **Resource efficiency**

TA1 Examples of resource efficiency of telecommunications products and services

Climate and environmentally friendly products and services

Research and innovation

Environmentally friendly network infrastructure

## TA2 Examples of replacing physical objects through telecommunications

Resource efficiency in the workplace

Climate and environmentally friendly products and services

Barrier-free products and services

Research and innovation

## TA3 Changes in customer behavior caused by use of the above products and services

Climate and environmentally friendly products and services

E-health

## TA4 Impacts of use of the above products and services and lessons learned for future development

Climate protection

Environmentally friendly network infrastructure

Basics for product development and product design

## TA5 Practices relating to intellectual property rights

2012 Annual Report > Innovation and product development

2012 Annual Report > Other disclosures



Life is for sharing.

2012 Corporate Responsibility Report

We take responsibility.

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## GRI Application Level check.

**Statement: GRI Application Level check.**

Statement as [PDF-download](#)



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[Home](#) > [About this report](#) > Global Compact Communication on Progress

## Global Compact Communication on Progress.

This CR Report also serves as a COP <sup>[1]</sup> (communication on progress) from Deutsche Telekom as part of the United Nations Global Compact <sup>[1]</sup>. The table refers to the text passages where we provide information about our commitment to implementing the ten principles of the Global Compact <sup>[1]</sup> in this CR Report and in other Group publications.

Deutsche Telekom is a co-initiator of [Global Compact LEAD](#) and in 2012 is the only German company represented in the initiative's steering committee.



Principle 1: Support and respect the protection of internationally proclaimed human rights.

Values and Guiding Principles

Compliance

Data privacy

Government relations and regulatory issues

Mobile communications and health

Basics for product development and product design

HR responsibility

Corporate culture

Health & Safety

Compensation

Diversity and equal opportunities

Sustainable procurement strategy

Supply chain management

Social audits

Employee health

Sustainable Procurement CR KPI

Social performance indicators: Human rights

[Data Privacy and Data Security](#)

[Annual Report 2012 > HR strategy](#)

[Annual Report 2012 > Group strategy](#)

**Principle 2: No complicity in human rights abuses.**

Values and Guiding Principles  
Compliance  
Government relations and regulatory issues  
Mobile communications and health  
HR responsibility  
Sustainability procurement strategy  
Supplier selection  
Supply chain management  
Sustainable Procurement CR KPI  
Social performance indicators: Human rights

**Principle 3: Uphold freedom of association and the right to collective bargaining.**

Values and Guiding Principles  
Compliance  
HR responsibility  
Employee involvement and satisfaction  
Sustainable procurement strategy  
Supply chain management

**Principle 4: Elimination of all forms of forced and compulsory labor.**

Values and Guiding Principles  
Compliance  
Government relations & regulatory issues  
HR responsibility  
Sustainable procurement strategy  
Supplier selection  
Social audits

[Annual Report 2012 > From value chain to value cycle](#)

**Principle 5: Abolition of child labor.**

Values and Guiding Principles  
Compliance  
Government relations & regulatory issues  
Corporate culture  
HR responsibility  
Diversity and equal opportunities  
Sustainable procurement strategy  
Supplier selection

## Supply chain management

Principle 6: Eliminate discrimination in respect of employment and occupation.

Values and Guiding Principles

Compliance

Employee recruitment

Compensation

Social performance indicators: Human rights

Social performance indicators: Labor practices and decent work

[Annual Report 2012 > Diversity management and health & safety management](#)

[Annual Report 2012 > Corporate governance report](#)

Principle 7: Support a precautionary approach to environmental challenges.

CR strategy

Key performance indicators

CR governance

Government relations and regulatory issues

Risk and opportunities management

2nd & 3rd generation mobile communications

Environmentally friendly network infrastructure

Basics for product development and product design

Climate and environmentally friendly products & services

Customer communication

Phone and cell phone recycling

Research and innovation

Sustainable procurement strategy

Laying down principles and taking responsibility for the supply chain

Supplier selection

Supply chain management

International collaboration

Climate protection

Environmental management

Climate-friendly mobility

Biodiversity

Energy

CO<sub>2</sub> emissions

Used cell-phone collection and waste volume

Other environmental data

[Annual Report 2012 > Risk and opportunity management system](#)

Principle 8: Undertake initiatives to promote greater environmental responsibility.

Values and Guiding Principles  
CR strategy  
Key performance indicators  
CR governance  
Government relations and regulatory issues  
Environmentally friendly network infrastructure  
Basics for product development and product design  
Climate and environmentally friendly products & services  
Customer communication  
Phone and cell phone recycling  
Research and innovation  
Sustainable procurement strategy  
Laying down principles and taking responsibility for the supply chain  
Supplier selection  
Supply chain management  
International collaboration  
Climate protection  
Environmental management  
Climate-friendly mobility  
Biodiversity  
Environmental indicators  
Waste management and disposal

[T-Mobile > SAR-Werte](#)  
[Annual Report 2012 > Environmental and climate protection](#)  
[Annual Report 2012 > Risk and opportunity management system](#)

Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

CR strategy  
Key performance indicators  
CR governance  
Basics for product development and product design  
Climate and environmentally friendly products and services  
Customer communication  
Phone and cell phone recycling  
Research and innovation  
Environmentally friendly network infrastructure  
Climate protection  
Environmental management  
Climate-friendly mobility  
Sustainable procurement strategy  
Group-wide rules for procuring raw materials  
Supplier selection  
Supply chain management

[Annual Report 2012 > Innovation and product development](#)

Principle 10: Work against corruption in all its forms, including extortion and bribery.

CR strategy

Compliance

Risk and opportunities management

Data privacy

Government relations and regulatory issues

Sustainability procurement strategy

2012 audit results

Social Performance Indicators: Society

[Annual Report 2012 > Corporate governance report](#)

[Annual Report 2012 > Risk and opportunity management system](#)



## Independent assurance report.

### To Deutsche Telekom AG, Bonn, Germany

We have been engaged to perform a moderate assurance engagement<sup>[1]</sup> in respect of observing the AA1000 <sup>[2]</sup> AccountAbility Principles (Type 2 engagement) and in respect of selected sustainability information in the 2012 Corporate Responsibility Report (the "CR Report") of Deutsche Telekom AG, Bonn (the "Company"). Our assurance engagement related to selected individual disclosures and selected complete German pages from the Group's 2012 Corporate Responsibility Report website with information from the reporting year 2012. In cases where our review covers the entire content of the pages, as in the Suppliers and Strategy sections, these pages are marked with the symbol . Individual disclosures reviewed by us, such as information under the heading "Facts and figures" or individual qualitative information in the Climate and Environment, Society, Customers and Employees sections are marked directly with the symbol . Any unmarked pages or disclosures referred to from the web pages were not the subject of the assurance engagement.

### Management's responsibility

It is the responsibility of the Company's management

- to comply with the principles of inclusivity, materiality and responsiveness as defined in the AccountAbility Principles Standard (2008) (the "AA1000 <sup>[1]</sup> AccountAbility Principles"), and
- to prepare the sustainability information in the CR Report in accordance with the criteria set out in the Sustainability Reporting Guidelines Vol. 3.1 (pp. 7 to 17) of the Global Reporting Initiative (GRI).

This responsibility includes the conception, implementation and maintenance of systems and processes for ensuring compliance with the AA1000 <sup>[1]</sup> AccountAbility Principles and preparation of the CR Report using assumptions and estimations for individual CR disclosures that are appropriate under the given circumstances.

### Practitioner's responsibility

Our responsibility is to express an opinion, based on our assurance procedures, as to whether any matters have come to our attention that cause us to believe that, in all material respects,

- the systems and processes set up by the Company are not suitable for compliance with the AA1000 <sup>[1]</sup> AccountAbility Principles of inclusivity, materiality and responsiveness, or
- the disclosures and pages of the CR Report marked with the symbol  have not been prepared in compliance with the criteria of the Sustainability Reporting Guidelines Vol. 3.1 (pp. 7 to 17) of the GRI. These selected disclosures can be found in the sections "Strategy and management," "Suppliers" and "Facts and figures" in the CR Report.

We have also been commissioned to make recommendations on the further development of sustainability management and CR reporting.

We conducted our independent assurance engagement in accordance with the AA1000 <sup>[1]</sup> Assurance Standard (AA 1000AS) 2008, as well as in accordance with the International Standard on Assurance Engagements (ISAE) 3000.

These standards require that we comply with ethical requirements and that we plan and perform the assurance engagement with due regard for the principle of materiality so as to allow us to express our conclusion with

moderate assurance, the level of assurance requested by Deutsche Telekom. We are independent within the meaning of section 3.2 of AA1000AS (2008). As a result of our specialist knowledge and experience of non-financial assurance engagements, sustainability management and social and environmental topics, we have the necessary expertise to carry out this assurance engagement.

In a moderate assurance engagement the evidence-gathering procedures are more limited than in a high assurance engagement<sup>[i]</sup>, and therefore less assurance is obtained than in a high assurance engagement.

The procedures selected depend on the practitioner's judgment. We conducted our work at Group Headquarters level in Bonn and at the level of selected subsidiaries, particularly at T-Mobile USA Inc., Bellevue, Washington (U.S.), OTE A.E, Athens, Greece, Cosmote Mobile Telecommunications S.A, Athens, Greece, Magyar Telekom Plc., Budapest, Hungary, and Croatian Telekom Inc. Zagreb, Croatia.

The procedures we carried out in terms of adherence to the AA1000  AccountAbility Principles included:

- Inquiries of the relevant contacts in the Stakeholder  Engagement & Stakeholder  Dialog and Corporate Responsibility areas;
- Examination of the relevant documentation regarding stakeholder dialog, further communication with stakeholders and participative formats at Group Headquarters level and at the level of selected international subsidiaries;
- Examination of the relevant documentation regarding pinpointing and prioritization of sustainability topics, CR categories and identified stakeholder expectations at Group Headquarters level and at the level of selected international subsidiaries;
- Inquiries of selected departments with a focus on the employees and suppliers stakeholders and acquisition of sample evidence from selected projects relating to sustainability and stakeholder management that serves as additional proof that the AA1000  AccountAbility Principles are being observed in the organization.

In connection with the sustainability information in the CR Report marked with , we have conducted, among others, the following review procedures:

- Inquiries of the management and of employees responsible for reporting CR information and charged with the creation of the CR Report;
- Examination of the relevant documentation on the implementation and working of the relevant systems and processes for the collection and analysis of the disclosures in the CR Report marked with ;
- Analytical assessment of selected CR disclosures;
- Inspection of selected sites and performance of site-specific inquiries as well as data and plausibility checks;
- Review of the presentation and investigation as regards the coverage of the RECS certificates for the electricity requirements of the Telekom Group in Germany;
- Obtaining random samples as evidence for the accuracy of the details marked with the symbol , e.g., by inspecting internal documents, contracts, invoices/reports from external service providers, and by analyzing data based on IT system reports.

## Key findings and conclusions

Findings with regard to the AA1000  AccountAbility Principle of **inclusivity**:

- Stakeholder  management is controlled at Group level by the central CR Communication & Stakeholder  Management function within the Corporate Responsibility department. This department has also been driving the Stakeholder  Engagement Strategy project. The project aims to design focused relationships between the company and its stakeholders and to systematically implement a stakeholder management system and stakeholder engagement throughout the Group.
- The principles of stakeholder engagement at Deutsche Telekom AG have been defined in accordance with the AA

## 1000 AccountAbility Principles.

- It was found that Deutsche Telekom has established processes that facilitate exchange with stakeholders and support the involvement of stakeholders in decision-making processes. At the level of selected departments, stakeholders are actively involved in projects.
- At international level, the involvement of stakeholders is organized at subsidiary level. Central functions at Group level regularly exchange information with the international subsidiaries. It was found that stakeholders are regularly involved (e.g., through inquiries, workshops or dialog formats) at the level of selected subsidiaries. The international roll-out of the Stakeholder  Engagement Strategy was initiated during the reporting period (workshop of the international CR Manager Network in April 2012).

Findings with regard to the AA1000  AccountAbility Principle of **materiality**:

- As part of the materiality process, key CR topics are systematically identified with the input of internal and external stakeholders and shown in the materiality matrices within Deutsche Telekom AG's CR Report. Issues relating to Deutsche Telekom AG's three CR action areas were evaluated as part of the materiality process. The three action areas are key pillars of the CR strategy with direct relevance to Deutsche Telekom's core business.
- As part of central stakeholder involvement, the expectations of individual stakeholder groups are determined in a targeted way and evaluated, and can then be taken into account in CR reporting, further CR communication, and the strategic alignment of the CR department.
- Internationalizing the materiality process was Deutsche Telekom AG's first step in harmonizing the identification of key CR issues in the various international subsidiaries. A manual was created for this which provides guidance to the international subsidiaries.

Findings with regard to the AA1000  AccountAbility Principle of **responsiveness**:

- Our random sample inquiries and the evidence we have acquired show that the processes for responding to stakeholder queries are running correctly.
- It was found that the principles of the GRI were being used, which are suitable for CR reporting.
- Communication with stakeholder groups is carried out via various channels, with a good balance of topics.

Based on our moderate assurance engagement, nothing has come to our attention that causes us to believe that, in all material respects, the systems and processes established by the Company are unsuitable for fulfilling the AA 1000  AccountAbility Principles of inclusivity, materiality and responsiveness.

Furthermore, nothing has come to our attention that causes us to believe that, in all material respects, the disclosures and pages of the CR Report for calendar year 2012 marked with the symbol  have not been prepared in accordance with the criteria of the Sustainability Reporting Guidelines Vol. 3.1 (pp. 7 to 17) of the GRI.

## **Additional information—Recommendations**

Without qualifying the conclusions of our engagement set out above, we make the following recommendations for the further development of sustainability management and CR reporting:

- Further development of stakeholder management, in particular:
- Continuation of the systematic implementation of the central stakeholder management approach at international level and in the area of supply chain management.
- Further harmonization and standardization of the materiality analysis to further increase the level of comparability.
- Expansion of the Group-wide management function for sustainability, e.g.:
- There should be increased standardization and documentation of processes for recording and determining CR data upstream of centralized data recording.
- Definition of internal control processes for all key indicators in a documented format.

Düsseldorf, May 24, 2013

PricewaterhouseCoopers

Aktiengesellschaft

Wirtschaftsprüfungsgesellschaft

Hendrik Fink

Aissata Touré

Wirtschaftsprüfer (German Public Auditors)

[i] "Moderate assurance" as defined by AA1000AS (2008) is the same as "limited assurance" as defined by ISAE 3000 [i].

[ii] "High assurance" as defined by AA1000AS (2008) is the same as "reasonable assurance" as defined by ISAE 3000 [i].

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## User help.

We have included different service features to make it easier for you to read and use this CR Report. Below is a description of how to use these service features.

### Main text.

#### Drop-down headings.

The text contained in this CR Report has been structured with drop-down headings to make the content easier to navigate. If you would like to learn more about a certain topic, you can open the text by clicking on the appropriate heading. You can close the text by clicking on the heading again. This feature lets you open the text for several headings, one after the other.

Alternatively, you can select the "Open all lists" function located in the service box on the right-hand side below the header "This section" to make all of the text visible and then hide it again.

If more information is available about a topic, "Find out more" will appear below the main text. If you click on this link, you can view more background information.

#### Indicator graphics.

Selected indicators for the Group as well as for Telekom in Germany are depicted in illustrations. The upper right-hand corner of specific graphics contains a field that you can use to access the interactive subsidiary benchmarking tool. As a special feature for energy consumption indicators, there is a drop-down function that allows you to choose between display in MWh and Joules.

### Service features in the right margin.

#### This chapter.

In order to enable barrier-free access to the report content as far as possible, we integrated the "Read page out loud" option under "This section".

We also included the following features:

- "Open all lists"—all of the text on the relevant page will become visible; clicking on this function again will hide the text
- "Print this page"—prints the current view
- "Save this page"—saves the current view as PDF
- "Read page out loud"—the text of the page will be read out loud
- "Send to info cart"—this feature allows you to collect individual pages while reading and place them into the Info cart
- "View info cart"—this link will take you to the info cart, providing you with an overview of the pages you have selected. You can download individual pages or several pages at one time as a PDF. You also have the option of saving all selected files on your computer as a compressed ZIP file. You need to have ZIP software installed on your computer to unzip the files. Cookies need to be activated on your browser in order to use this function.

## **My bookmarks.**

You can mark up to five pages of the CR Report in the right-hand column under "My bookmarks" and access them with a single click. Cookies need to be activated on your browser in order to use this function.

## **Contact.**

**Under the "Contact" heading we offer you various options for getting in touch with the right contact person for your questions and suggestions.**

## **Service.**

This is where you will find the Download  Center, where you can download the entire report as well as individual sections as a PDF file. In addition, links will take you to the most important CR publications of recent years. In addition to the report, you can also access the "We take responsibility. An overview of corporate responsibility in 2012." (CR 2012 overview) e-paper online or download it as a PDF file. The e-paper will provide you with insight into selected areas in which we made progress during the reporting period.

Also in the right margin you will find a link to more detailed information about our interactive CR app, We Care.

## **Interactive indicators.**

Under "Interactive indicators" you have the option of directly selecting the interactive subsidiary benchmarking tool.

### Interactive subsidiary benchmarking tool.

The interactive subsidiary benchmarking tool allows you to compare the Group's indicators over the course of several years or between selected subsidiaries. The data can be viewed in the form of tables, line diagrams or bar charts. To compare individual Group subsidiaries, switch from "Indicators per company" to "Compare subsidiaries" in the upper left-hand corner of the window. The illustrations also include important background information on the development of specific values for the years 2009 to 2012. These are marked with the icon in the tables. You can view the background information by hovering your mouse over the symbol. This option has been designed to make significant changes easier to trace. In addition, the relevance for various reporting standards is specified under each indicator.

### Service features in the left margin.

## **Social media.**

Social network functions have been activated for the CR Report pages. You will find the links at the lower end of the menu column. Clicking on the icon of the respective network will allow you to directly access the Telekom offer available at that network.

### Upper service bar.

## **Glossary.**

The glossary contains definitions of the most important terms used in the CR Report. These are marked with the icon in the text. You can view the definition of a term by hovering your mouse over the symbol. You can also access the glossary in the upper service bar and view all terms individually.

## **Overview.**

The "Overview" feature provides an overview of the structure and all the content of the CR Report.

## **Search function.**

You can search for specific information in the CR Report by clicking on the magnifying glass icon, entering the search term and clicking on the arrow.

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## Strategy & management.

Content verified by PwC

### #TRANSPARENT

“We Care” app illustrates Telekom’s CR activities.

#### Find out more

Deutsche Telekom's strategic goal is to become a global leader in connected life and work. For us, this means taking on a leading role when it comes to assuming social responsibility as well. We intend to assume a leading role in the industry in terms of corporate responsibility and to lay the foundation for long-term corporate success now with our CR strategy. In order to illustrate and monitor our progress throughout the entire Group, we have been integrating our international subsidiaries in our consolidated CR KPI data collection process since 2011. We also systematically involve our stakeholder groups in our CR activities and developed a strategy for stakeholder involvement in 2011. We regularly ask them about their expectations as part of a multiple phase materiality process. In 2012, Telekom introduced new, effective stakeholder management tools based on the internationally-recognized AA1000 standard. These tools instruct our employees on how to work with stakeholders at different levels and motivate them to take stakeholder concerns into consideration in their activities in order to benefit our company.



## Vision.

Our CR vision is based on the motto "We take responsibility." It expresses a philosophy that goes beyond short and medium-term goals and calls for the alignment of all our business activities with sustainability principles. The CR vision provides a long-term, Group-wide orientation framework and emphasizes our commitment to promoting sustainable development. Based on the CR strategy, our vision includes all action areas that are at the core of our commitment.

### Our CR-Vision:

"Deutsche Telekom is a driving force internationally for sustainable action, it sets the standard for connected life and work, it sets an example in integrating people into the information society, and it is a leader on the way to climate-friendly society."



## Values & Guiding Principles.

Deutsche Telekom is continually working on establishing a value-oriented corporate culture throughout the Group that is characterized by responsible and sustainable behavior. Our Guiding Principles and our Code of Conduct, which are based on these values, form the foundation of our corporate activities—both in our cooperation with external target groups as well as within the company itself. Campaigns like our Guiding Principles Day help us establish and further develop a value-oriented corporate culture.

### Guiding Principles for the entire Group.

Our corporate culture is based on the Guiding Principles that were introduced Group-wide in January 2009. These principles represent our values and convictions and guide our actions, which are driven by our sense of responsibility.

#### Deutsche Telekom's five Guiding Principles:

- Customer delight and simplicity drive our action.
- Respect and integrity guide our behavior.
- Team together—Team apart
- Best place to perform and grow
- I am T—count on me.

In 2010, we began establishing the Guiding Principles throughout the Group at all Deutsche Telekom Group subsidiaries in four phases. The Guiding Principles are now available in 19 languages and apply in 34 countries and at 50 international subsidiaries.

Our Guiding Principles are a component of our HR work and are very important when it comes to reliable collaboration and the ability to delight our customers. That is why it is important for us to know how well our Guiding Principles are established with our employees. We conduct regular employee surveys to find out how our employees apply our Guiding Principles every day at work. We also conduct pulse checks to assess employee satisfaction and how well they understand our corporate strategy. We asked employees to answer a special question about the Guiding Principles during each of the four implementation phases. In 2012, we conducted our fourth pulse check survey after completing the implementation process in the T-Systems market areas as well as in Germany and most of the EU countries. We asked employees to respond with yes or no to the statement "I feel that the Guiding Principles are an integral part of the daily work routing." In April 2012, 61 percent of the employees surveyed responded positively to the statement. This result had increased to 63 percent by the following October.

Initial results met our target expectations. However, it was also apparent that there is still room for improvement in how we communicate the Guiding Principles to our employees. Because of this, an entire array of measures have been scheduled for 2013:

- The Guiding Principles will be discussed in greater depth in areas with survey results of less than 60 percent.
- We are planning to conduct discussion panels with managers focusing on our corporate strategy and values, e.g., in the "Talking straight" format, which is well established at T-Systems.
- The Chairman of the Board of Management as well as the board members for Human Resources and Finance will address video messages to our employees about the Guiding Principles.
- All business topics will be communicated in connection with the Guiding Principles. As to our first Guiding Principle, we focus on the aspect of simplicity, which we want to communicate more actively.
- We are planning to celebrate the fifth anniversary of the Guiding Principles Group-wide in late 2013.

### Guiding Principles Day to promote corporate values.

In order to make practicing the Guiding Principles a matter of course, a Guiding Principles Day is held every year at all Group units. Every employee in the company is called upon to think about the Guiding Principles and come up with ideas on how to implement them in day-to-day work.

Deutsche Telekom held its third Guiding Principles Day on September 26, 2012. Employees were asked to contribute to this day with their own ideas and all our Board of Management members played an active part. Reinhard Clemens, Board member for Business Customers / T-Systems, discussed the project status and progress to date with the cross-area De-Mail team, for example. Claudia Nemat, Board member for Europe and Technology, discussed corporate culture in a blog. Chairman of the Board of Management, René Obermann, also discussed the Guiding Principles with our employees in a blog.

Marion Schick, Telekom AG Board member for Human Resources, addressed a video message to our employees, talking about her expectations for the Guiding Principles and summarizing the experiences from the past two years since we first introduced the Guiding Principles. She participated in a discussion on the Guiding Principles with René Obermann and other employees in the Telekom Social Network. Marion Schick welcomed employees from Telekom Laboratories and T-Systems at a get-together at the Berlin Representative Office. The purpose of the get-together was to discuss the Guiding Principles openly and honestly. Participants addressed challenges such as handling complex, non-standardized processes with confidence. Model solutions were also presented at the event, such as how to structure conferences more effectively.

The day began throughout the Group with countless activities that showed how the Guiding Principles can be lived every day at Telekom. Our employees presented creative ideas for implementing the Guiding Principles as well as examples of their volunteer activities at many locations in Germany and abroad. Proceeds from sales campaigns went to support the "Yes, I can!" Telekom initiative or were donated to support other social projects. Employees from the Macedonian, Polish and Montenegrin subsidiaries participated in different art and photography activities. Employees at T-Mobile held a

"looking-over-your-shoulder" campaign to increase awareness of how others work.

As usual, many trainees also participated in the Guiding Principles Day. In Munich, they worked together to design a flyer on the Guiding Principles in six languages. Trainees in Erfurt put on a play based on Snow White called "T-White." Our young colleagues in Magdeburg took time during their vocational training to tell their classmates about the significance of the Guiding Principles Day. Employees in Hamburg released balloons into the world with postcards attached to them containing the Guiding Principles and personal messages to ring out their Guiding Principles Day.

Guiding Principles Day is a permanent feature at Telekom throughout the Group. We will hold our next Guiding Principles Day on September 25, 2013.

### Group-wide implementation of the Code of Conduct.

Our Code of Conduct has served as a reference for clear rules of conduct for our daily work since 2006. The Code of Conduct applies to all Telekom employees worldwide. It connects compliance with laws and regulations with our requirements for ethical behavior and the Guiding Principles.

#### Code of Conduct

Due to the increased aspiration of society for compliant and legally unimpeachable behavior and the launch of the Guiding Principles at the beginning of 2009, we revised our Code of Conduct in 2010. In June 2011, we successfully completed the implementation of the revised Code of Conduct in Germany. We help our employees comply with the Code of Conduct by offering a multimedia training package for managers and the Code of Conduct Interactive online tool. We also continued the implementation process at our international units. All of our fully consolidated Group subsidiaries had successfully introduced the Code of Conduct by the end of 2012. We monitored the implementation process until the end of 2012 via the pulse check.



## CR strategy.

Deutsche Telekom aims to position itself as a global leader for connected life and work. At the same time, we are striving to become a leader in our industry when it comes to assuming social and ecological responsibility.

With our Group-wide CR strategy, we have committed ourselves to following a sustainable corporate policy. The CR strategy is based on our Group strategy and also provides a framework for international subsidiaries when it comes to implementing CR in their areas of responsibility. We use CR key performance indicators (CR KPIs) to regularly measure our CR performance. This lets us assess how effectively the strategy is being implemented and whether or not we are achieving our goal of becoming a leader in this area.

"Leading the way" project incorporated into systematic GAP analyses.

In 2010, our central CR department developed a list of criteria for integrating CR into central business processes within the scope of its "Leading the way" project. The criteria catalog takes the challenges specific to the ICT industry into account and is in line with existing corporate goals and the CR strategy. It significantly contributes to permanently entrenching CR in our core business and establishing the sustainability principles throughout the entire Group.

The "Leading the way" project will be incorporated into systematic GAP analyses in 2013. We use these analyses to review our progress in terms of assuming a leading role in the industry. During the analyses, we identify problem areas within the scope of dialog with our stakeholders and our membership in Global Compact Lead as well as based on an analysis of our rating results.



## Action areas.

Technological progress as well as time and location-independent communication are fundamentally changing our lives. Deutsche Telekom is working to facilitate connected life and work, connecting the unconnected, and achieving a low carbon society with sustainable products, solutions and initiatives, e.g., initiatives on climate protection. Our customers and employees, suppliers, investors, our environment and society are just some of the stakeholders that benefit from Telekom's involvement in these three CR action areas, all of which are directly connected to our core business.

### Video: We take responsibility



#### We take responsibility ...

... for connected life and work.

We are helping shape the change in the increasingly digitalized work and living environment. Deutsche Telekom supports cultural change with innovative products and solutions toward greater self-determination and quality of life both in our professional and personal lives. Our goal is to be a driving force for sustainable life and work.

... for connecting the unconnected.

Irrespective of their social or economic opportunities, we try to get as many people as possible involved in the development of the society they live in. With this in mind, we promote numerous community initiatives and support projects for media skills development.

... for a low carbon society.

Global warming and its consequences are one of the greatest challenges facing mankind. We have launched large-scale initiatives to reduce our own emissions for the long term. At the same time we are also empowering our customers and partners to make their contribution to climate protection with our solutions.

Download : "Protecting the climate, cutting costs" brochure Sustainable solutions in information and communications technology"



## CR key performance indicators.

In order to manage its CR performance, Telekom uses seven key performance indicators (CR KPIs) that apply throughout the Group. These help us to systematically and transparently optimize our services on an ongoing basis. We are currently involved in international discussions with the aim of defining targets for our CR KPIs.

The CR KPIs are divided into two categories:

- KPIs with targets standardized Group-wide, and
- KPIs with specific targets per international subsidiary.

### CR KPIs mandatory as of 2012.

Since January 1, 2012 all international subsidiaries have been obliged to determine their CR KPIs. The indicators that were still "voluntary" in the previous year are now mandatory.

The CR KPIs have a role similar to the financial KPIs that are used in the Annual Report. Among other things, they lay the foundation for us to be able to integrate our financial and CR reporting processes in the future. At the same time, they document our will to embed CR more firmly in Deutsche Telekom's core business. Telekom recorded the following CR KPIs in 2012:

- [Socially Responsible Investment \(SRI\)](#) CR KPI
- [CR Employee Satisfaction](#) CR KPI
- [Sustainable Procurement](#) CR KPI
- [CO<sub>2</sub> Emissions](#) CR KPI
- [Energy Consumption](#) CR KPI
- [Social Commitment](#) CR KPI
- [Used Cell-Phone Collection](#) CR KPI

We made the recording process for essential CR KPI data more systematic during the reporting period. We generally only record the Sustainable Investment and Sustainable Procurement indicators centrally; we use the employee survey to collect data for the CR Employee Satisfaction KPI. We used our central [CR data collection system](#) to calculate the values of the other four CR KPIs in 2012. We included all of our international subsidiaries in this process. However, we were not able to record comprehensive data for the Used Cell-Phone Collection and Social Commitment CR KPIs because not all of our international subsidiaries have begun conducting cell-phone collection campaigns and some of them have a different, country-specific definition of social commitment. However, we were able to considerably expand the data collection for both KPIs compared to the previous year. In 2012, we included three new international subsidiaries in data collection for our Used Cell-Phone Collection CR KPI and two new international subsidiaries for our Social Commitment CR KPI.

In view of our future plans to integrate our CR and annual reporting processes, we will be increasing the number of integrated processes used to record our CR and financial data and increasingly collaborate with the financial department when collecting CR KPI data. We published the Sustainable Procurement CR KPI for the first time in our 2012 Annual Report during this integration process.

## CR KPIs with Group-wide targets.

We collect consolidated data for the entire Group for the following three CR KPIs:

- We use our Sustainable Investment (SRI) CR KPI to measure our progress when it comes to sustainable investment. This KPI indicates the share of Deutsche Telekom AG stock that is owned by investors who show concern for environmental, social and governance criteria in their investment strategies.
- The CR Employee Satisfaction CR KPI reflects our employees' satisfaction with Telekom's CR commitment. It is based on the employee survey, which we conduct every two years for each individual company.
- The Sustainable Procurement CR KPI measures the share of procurement volume we obtain from suppliers where one or several companies of the corporate group have been audited for compliance with our social and environmental standards. This also includes audits carried out with upstream suppliers. The CR KPI indicates the share of the total procurement volume that was subject to self-assessments, pre-qualification and/or audits.

We will not be using the Green Products CR KPI, which we announced in 2011, to measure the sustainability of our product portfolio for the time being due to the restructuring activities taking place at Group Headquarters. When it comes to green products, Group Headquarters will focus on strategic guidance and providing information on local implementation at the Group subsidiaries.

## CR KPIs with country-specific targets.

Individual targets at the regional level apply to four of the seven CR KPIs. We take local as-is situations and the specific developments of each international subsidiary into consideration when planning targets.

- We use the CO<sub>2</sub> Emissions CR KPI to record the reduction in CO<sub>2</sub> emissions compared to 2008. Our goal is to reduce our CO<sub>2</sub> emissions by 30 percent compared to the levels recorded in 2008 by 2020.
- The Energy Consumption CR KPI, which we use to measure our power consumption, is based on the Monetary Power Efficiency Indicator (MPEI). It shows the amount of electricity consumed compared to net revenue.
- We use the Social Commitment CR KPI to measure the success of our social commitment based on how Telekom's CR activities are perceived by the public.
- The Used Cell-Phone Collection CR KPI compares the mobile devices that were collected, measured in piece numbers, with the number of customers that Group company has.

Although recording the four CR KPIs mentioned above is mandatory for all international subsidiaries, not all of them were able to provide the information we needed to calculate the Used Cell-Phone Collection and Social Commitment KPIs. Some of our international subsidiaries have not yet set up a cell-phone recycling program or have a country-specific definition of "social commitment." However, we were able to record data for these two KPIs from a greater number of subsidiaries during the reporting period.

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## Socially responsible investment.

Content verified by PwC

As a global player, Deutsche Telekom focuses on generating sustainable added value. It is our general goal to keep our medium and long-term capital costs at as low as possible. Sustainable investments play an especially important role in this.

In 2012, 12 percent of our T-Shares were held by investors who take SRI criteria into account, at least partially in their investment decisions. Two percent of T-Shares were held by investors who give priority to SRI aspects when managing their funds.

We plan to steadily increase the number of shares held by investors who at least partially take sustainability criteria into account in their investment decisions, which is why we use the Socially Responsible Investment (SRI) CR KPI.

### Position in rankings and ratings asserted.

Just like in preceding years, the quantity, scope and depth of detail of existing rating requests increased in 2012. Deutsche Telekom deliberately decides to take part in ratings that are relevant to sustainability-oriented stakeholders, especially investors.

As in previous years, during the reporting period our T-Shares were listed in the most important indices and rankings for socially responsible investment (SRI). These include the Dow Jones sustainability indices, World and Europe, the FTSE4Good Index and the StoxxGlobalESG Leaders Index. As another bonus, we improved our company's results in several ratings. For instance, we were once again commended as a Prime Company by rating agency Oekom in the reporting year, and climbed within the Swiss SAM agency rating by another three points to 82 points (of a maximum of 100). The following table provides an overview of T-Share listings in the leading sustainability indexes.





## Internationalization.

Our desire to be at the top of our industry as a responsible company calls for all units at the Group to work together and coordinate their activities. To help this process, we have created a strong control system at our various subsidiaries that we use to realize our key CR targets worldwide. Three strategic CR action areas from our CR strategy provide us with orientation. The majority of the some 20 international subsidiaries currently represented in the CR Manager Network have incorporated these action areas into their local strategy in the meantime.

### International cooperation in the CR Manager Network.

The CR managers from the different business areas and international subsidiaries are responsible for operational implementation of the CR strategy. The international CR Manager Network was established in 2008 to intensify Group-wide collaboration. Around 20 international subsidiaries were members of the network in 2012. At regular meetings and

 teleconferences, CR managers discuss current topics and best practice examples. The international subsidiaries also work together in working groups focusing on specific topics.

In 2012, the network focused primarily on developing a strategic approach to reducing waste and increasing resource efficiency at the Group. The network also focused on the international roll-out of the engagement@telekom program at our international subsidiaries and continued to work on integrating our CR and annual reports.

#### **CR manager meetings**

Telekom held two CR manager network meetings during the reporting period:

The ninth CR manager meeting took place in Bonn on April 23rd and 24th. In addition to the focal points mentioned above, the managers learned more about the work being done by the international Climate Change Working Group and the Product Carbon Footprint project. Participants also discussed Telekom's stakeholder involvement strategy at several workshops. The results of the workshops were used to draw up a "Guide to

 successful stakeholder

engagement."

T-Systems Austria hosted

the tenth CR manager

meeting in Vienna on

November 19th and 20th.

In addition to the priority

topics to be discussed by

the network, there were

also two guest speakers

on the agenda. A

representative of the

European Commission

presented the new EU

CSR directive. The second

guest speaker gave a talk

on corporate strategies

and sustainability. They

compared leading

companies in terms of

motivators, strategic intent,

communication approach

and innovative thinking to

better illustrate the

business benefit of

sustainability.

#### **2012 Earth Hour**

On March 31, 2012,

several international

subsidiaries conducted

numerous activities,

participating in a symbolic

act to raise awareness of

the needs of our planet,

2012 Earth Hour. Telekom

was a part of it on five

continents when the lights

were turned off for 60

minutes at numerous

buildings and popular

sights in the name of

climate protection.

Telekom's activities

included having the lights

turned off at the

Fernsehturm Berlin and

holding cultural events

such as the unplugged concert organized by Magyar Telekom on the Budapest Chain Bridge. Based on time zone, T-Systems Malaysia was the first to turn off their lights at 8:30 p.m. MYT. T-Mobile US was the last 16 hours later at 8:30 p.m. PST in California.

CR is becoming increasingly important at many of our international subsidiaries.

### New CR Managers appointed in USA, Czech Republic and Poland

The practical implementation of Deutsche Telekom's CR strategy is undertaken throughout the Group by suitably qualified CR personnel. To this end, several subsidiaries appointed new CR managers in the course of 2012.

- T-Mobile USA, Inc. appointed a new Program Manager for CR & Supplier Diversity and a Senior Program Manager for Diversity and Inclusion
- T-Systems Slovakia brought in a new CR manager to work in the Corporate Communications Department and manage all CR activities.
- The Polish subsidiary PTC created new positions in their Corporate Communications Bureau and appointed a Corporate Responsibility Chief Specialist and a Corporate Responsibility Senior Specialist.

### New CR Boards set up in Austria, Czech Republic, Poland and Romania

The growing importance of CR within the Deutsche Telekom Group was underlined by the establishment of CR Boards in several countries.

- At T-Systems Czech Republic a dedicated CR Board was set up within the Marketing Department.
- T-Mobile Austria has also set up a CR board. It is comprised of representatives from all company areas.
- Polish subsidiary PTC established a CR Board composed of the heads or managers of the departments most involved in CR – Corporate Communications, HR, Marketing & Sales, IT & Network, Facility Management, Procurement, Finance, Legal & Compliance, and Strategy & Regulatory – and an employees' representative.
- The significance of the Internal Communications & CR Office of Cosmote Romania has been enhanced since April 2012 in that the Corporate Affairs Department, which includes the CR Office, now reports directly to the CEO of Cosmote Romania.

### T-Systems Iberia: reorganization of CR Committee and CR Masterplan

The CR Master Plan and the CR Committee were reorganized at the start of 2013. During the new Committee's first year in office, it is meeting every two months to oversee a number of important changes in the implementation of CR at T-Systems Iberia.

New CR organizational structure at OTE and Cosmote.

In Greece, OTE and Cosmote have introduced a new organizational structure to reflect their common CR approach. In practice, this involves the OTE Group Corporate Communications Department, which includes the

Corporate Responsibility Sub-Department as well as the Corporate Responsibility Section and the Environmental Management Section for Fixed and Mobile Telephony. The new organizational structure was also strengthened through the establishment of a joint OTE-Cosmote CR Team with 50 members acting as ambassadors across all the companies' operations for which a management-action plan was drawn up based on the specific strategy of "education-participation-amusement". In another important move a new OTE-Cosmote Environmental Committee was set up and work began on developing a common environmental strategic framework for OTE and Cosmote. The OTE-Cosmote CR strategy is tied in to the companies' core business strategy with the three major business objectives linked to specific CR projects or initiatives. Last but not least, CR KPIs have been embedded into the personnel evaluation and personal operational targets for specific colleagues from the interdepartmental OTE-Cosmote CR team. This particularly applies to colleagues involved in the environmental management system.

At Romtelecom, the Romanian subsidiary of the OTE Group, a significant start has been made in aligning CR activities with the OTE Group's CR Strategy. Although Romtelecom, does not have a cross-departmental structure to formally coordinate CR activities, which mainly involve sponsorships, they are managed centrally by the company's Corporate Communications Department and in individual cases by those responsible for the activity in question, e.g. HR when employees are involved.

### First ISO 26000 CR audit in Poland.

During the reporting period Deutsche Telekom's subsidiary PTC became the first Polish company and also the first T-Mobile company to be audited on the basis of ISO 26000. This involved the company's internal practices being checked and evaluated by an independent auditor. Internally and externally, 33 stakeholders and 54 employees were interviewed in the course of this ISO 26000-based CR audit process. As a result, it has been possible to draw up a stakeholders' map, determine the expectations of employees and stakeholders, and communicate in no uncertain terms to the general public that CR is an important issue for PTC.

### CR program at T-Systems Slovakia.

In the reporting period T-Systems Slovakia put the Deutsche Telekom Group's CR strategy into practice in a variety of ways. The company runs several long-term cooperation projects with educational institutions to further develop the education of high-potential ICT talents and bring ICT education closer to the market needs. The products implemented in 2012 included an ICT program for elementary schools and an intensification of cooperation with secondary schools. In the volunteering field T-Systems Slovakia endeavored to increase its employees' involvement in their local community by organizing three volunteering activities in 2012: participation in three initiatives:

- The Earth Day (April) and Our City Košice (June)
- Support for disadvantaged people through cooperation with NGOs and
- Assistance for animals in need, again in cooperation with NGOs.

Another key CR goal is to create a healthy work-life balance for employees and reduce the company's CO<sub>2</sub> emissions. To this end, T-Systems Slovakia encouraged flexible working hours and mobile working habits, promoted phone, data and video conferencing, parking slots for bikes, replaced old IT equipment with more energy-efficient new devices, improved its waste management system, reduced the number of plastic glasses used, and enhanced printing efficiency through networking and pin-code printing.

### T-Mobile Czech Republic CR event.

During the reporting period T-Mobile Czech was involved in a number of CR conferences. In April 2012 the company partnered a conference entitled "Creating Shared Value as Corporate Strategy", which was held at Bayer. The participants – representatives from big companies that are leaders in their field – discussed current social issues in the Czech Republic and various CR-related topics. In January 2013 the company participated in a conference on corporate social responsibility entitled "Business's Answers to Social Issues". Held under the auspices of the US Embassy in the Czech Republic, the conference was staged for the fourth year in succession. The attendees, all top managers, discussed business opportunities arising from social and environmental issues and the resultant benefits for Czech society. The conference brought together more than a hundred representatives of business and non-profit organizations.

### Globul participates in CR forums.

Globul, the OTE Group's Bulgarian subsidiary, participated in a number of CR Forums during the reporting period:

- Green Economy Forum in April 2012
- Balkan Green Economy Forum in June 2012
- Green Business Forum in July 2012
- Business with a Cause in December 2012.

### T-Mobile Austria provides information.

T-Mobile Austria participated in the European Alpbach Forum in 2012, making contributions on economic issues and presenting projects sponsored by the T-Mobile environment and sustainability fund TU. The European Alpbach Forum holds a convention each year at the Tyrolean mountain village of Alpbach with 2,000 to 3,000 international guests from the worlds of business, science and politics. From August 16 to September 1, 2012, participants discussed current issues and interdisciplinary approaches under the slogan, "Future and youth."

### Hrvatski Telekom stakeholder dialog.

For the fifth year in succession, Hrvatski Telekom staged its stakeholder dialog conference in October 2012 entitled "Growing through knowledge", this conference invites the world's leading experts, visionaries and thinkers to share their knowledge and progressive ideas. At the 2012 conference Dr. Michio Kaku, a prominent physicist and futurologist, discussed how science would change our daily lives in future decades, while Sarah Lacy, a globally renowned author on innovation and entrepreneurship, talked about inspirational entrepreneurs all over the world and visionaries who prioritize innovativeness. The impact of the conference was heightened through the use of blogs and Twitter.

### Magyar Telekom dialog.

Since 1997, Magyar Telekom has been organizing an annual Sustainability Roundtable Discussion for domestic governmental and non-governmental organisations, scientific institutes, Group member companies, etc. The Sustainability Roundtable Discussion organized in June 2012 aimed to conduct an open dialogue with Magyar Telekom stakeholders to promote an understanding of the demands made on the Magyar Telekom Group, discuss the problems arising, and provide a suitable background for thinking together and co-operating in

building a sustainable future.

### **Fifth Sustainability Day in Hungary**

The 5th Sustainability Day organized in September 2012 by Magyar Telekom was attended by 1,200 people. Its aim was to present new and unorthodox ideas and solutions relating to sustainable development that had evolved over the past year. The panel discussions focused active citizens in a societal context, sustainable settlements in environment terms, the green economy and green festivals. One of the special features of the event was that a slammer improvised some rhymes about the above topics. Besides panel discussions, there were many exciting programs, exhibitions, break-up sessions and concerts for those attending – young and old. The most eye-catching symbol of the event was a monumental 1.5-ton Green Wall, five meters square, which was decorated by the visitors on the spot. The Day finished with an after-event party, the proceeds of which were spent on planting trees.

### **Bulgaria and Croatia: CR reporting pioneers.**

Most of Deutsche Telekom's subsidiaries publish their own sustainability reports. In many cases these companies are playing a pioneering role in sustainability reporting in their respective country.

#### **Croatia: decisive step forward in CR reporting.**

For the very first time, Hrvatski Telekom (T-HT), Deutsche Telekom's Croatian subsidiary, had its Sustainability Report 2011 approved by the Global Reporting Initiative (GRI). The Report was prepared by applying the GRI guidelines and audited by PriceWaterhouseCoopers. GRI subsequently confirmed the B+ reporting level.

#### **Globul: The only Bulgarian company to publish a CR report.**

Under the Globul brand, the Bulgarian mobile communications provider, Cosmo Bulgaria Mobile EAD (a wholly owned subsidiary of Cosmote), is the only company in Bulgaria to publish an annual CR report that has been approved by the Global Reporting Initiative (GRI).



## CR governance.

Telekom has created an integrated governance structure for CR in order to closely link strategic management and operational implementation throughout the Group. The Deutsche Telekom Board of Management carries general responsibility for CR. The Group has developed this structure to make sure that all subsidiaries integrate sustainability into their business activities, emphasizing its commitment to society.

### CR-Governance



Deutsche Telekom began establishing a new unit known as Transformational Change & Corporate Responsibility, which will report to the CHRO, in January 2013. Its job within the new management structure is to further develop our existing corporate culture, placing a special focus on innovation, individual autonomy, entrepreneurship and social responsibility. The CR area was integrated into this unit in January 2013.

Telekom plans to use its new Group Transformational Change & Corporate Responsibility unit to face the challenges of a rapidly changing society. Its aim is to take advantage of the opportunities that come with this transformation, e.g., in terms of demography, and to get Telekom ready for future challenges such as sustainable innovation. To this end, Telekom continues to expand its role as a driving force for change and renewal. The company is relying on the courage to change, on new forms of connected collaboration and on business initiatives and has committed itself to being accountable to its stakeholders.

The HR Leadership Team (HR LT) was added to the corporate governance structure at the start of 2013. The Leadership Team is a consulting and decision-making committee for the Human Resources Board of Management area that, due to our current business structure, addresses topics including relevant aspects of corporate responsibility. The committee is responsible for engaging in dialog with the Group Board of Management and determines whether or not a Board of Management resolution needs to be made regarding selected topics. This does not replace the Group Board of Management's responsibilities but complements them. The HR LT makes decisions regarding Group-wide policies, guidelines and significant CR activity-related matters as well as the department's strategic direction. The committee is comprised of managers from the level directly below the Chief Human Resources Officer and meets every two months. The meetings are chaired by the Chief Human Resources Officer (CHRO).

### CR Board: Group-wide management of the CR strategy.

The members of the CR Board met twice in 2012 to discuss the latest developments at the Group, in society at large and in the markets in which Telekom is active. The CR Board addressed a number of topics at the meetings. In April, members discussed topics such as Telekom's climate protection strategy, sustainable procurement, the engagement@telekom program and questions concerning HSE management.

December's agenda focused on online protection of minors and CR challenges in the supply chain.

The CR Board is comprised of the following heads of those corporate areas that play a key role in steering and implementing CR throughout the Group:

- Corporate Communications
- Diversity
- Procurement
- Public and Regulatory Affairs
- Brand Management
- Chairman's Office
- Deutsche Telekom FoundationTechnology
- Corporate Responsibility

The broad organizational reach of the CR Board guarantees that the CR strategy is in line with the Group and brand strategy as well as with our corporate values.

### The CR department as a central unit.

The CR department is responsible for strategic CR management and CR communication. During the reporting period, the CR department coordinated and managed implementation of the CR strategy in all business areas and at the international subsidiaries. At Group level, the CR department has an integrating role in collaboration with all relevant departments. The department plans and implements projects and processes dealing with climate and environment, supply chain management, social commitment and stakeholder involvement.

In 2012, Telekom began reorganizing the Group's administration to make it more flexible and efficient. We are planning to cut back our previous, heterogeneous structure, parts of which have grown organically over time, and organize it into three, clearly separate functional areas: Group headquarters as a creative motivator, Group service as a service provider and finance and HR management. Many responsibilities will be handed over to the local German and international service units or to newly-created cross-country units in other European countries.

One of the departments affected by this new structure is the CR department. In the future, the department will be able to focus more on its core competences in strategically steering CR, and the Group and will primarily address the revision, communication and implementation of policies and guidelines.

### Development of Group-wide CR controlling.

We continued the CR KPI target determination process during the reporting period. In doing so, we laid the foundation for central CR controlling processes. These processes are based on the CR data collection system, which we have been using since 2009, and serve as a tool in reporting activities and in managing CR activities throughout the Group.

With the help of our central CR data collection system, we plan to guarantee a

transparent CR reporting process throughout the entire Group. The system supports standardized, mandatory processes at the Group and subsidiary levels. All CR data and CR KPIs are validated in a multiple-phase process and consolidated centrally. This gives us a better understanding of the quantitative developments of strategic and operational CR topics and makes it easier to monitor deviations from set targets. The software also enables Group-internal benchmarks. We hold regular feedback sessions in the [CR Manager Network](#) to help us continue to improve our CR data collection system. At the CR manager meeting in Vienna in November 2012, members discussed goals and indicator targets. We also regularly inform the Telekom management of any new developments in our data collection process.

In Q2 2012, we started collecting data for the Energy Consumption and CO<sub>2</sub> Emissions CR KPIs each quarter in order to provide us with a better overview of the development of important indicators. This will help us control processes more reliably and more effectively steer our [energy management](#) and our [climate protection measures](#). In view of our future plans to integrate our CR and annual reporting processes, we will also be increasing the number of integrated processes used to record our CR and financial data and increasingly collaborate with the financial department in our CR controlling activities.

### International CR Manager Network.

The CR managers from the different business areas and international subsidiaries are responsible for operational implementation of the CR strategy. The international CR Manager Network was established in 2008 to intensify Group-wide collaboration. Around 20 international subsidiaries were members of the network in 2012.

The international subsidiaries engage in intensive dialog within the scope of the CR Manager Network. Waste and resource management as well as engagement@telekom were the focal points in 2012. Participants discuss other current topics and best practice examples and work together in work groups on specific topics at the semi-annual network meetings and in additional teleconferences.

Two CR manager meetings took place during the reporting period:

- The ninth CR manager meeting on April 23rd and 24th in Bonn
- The tenth CR manager meeting hosted by T-Systems Austria in Vienna on November 19th and 20th

### Climate Change Group.

Telekom founded the Climate Change Group in order to contribute to an environmentally friendly society. The group is comprised of internal energy and climate experts and consults with external specialists as the occasion demands. The purpose of the Climate Change Group is to work to effectively minimize energy consumption and CO<sub>2</sub> emissions at Telekom. To do this, the group acts as an ambassador throughout the Group, raising awareness of [ambitious climate protection goals](#) and measures. It is also responsible for developing a Group-wide climate protection target and presenting it to the Board of Management for approval. The Climate Change Group also develops tools for centrally managing, monitoring and communicating climate protection projects and provides the

framework for planning and conducting climate protection measures. The group is headed by the Board Representative for Climate Protection and Sustainability.

The Climate Change Group holds regular meetings where it addresses the implementation of the Group's climate protection goals in Germany and incorporating the global Group subsidiaries into the Climate Change Group Internationalization project. The goal of the project is to implement the climate protection strategy at our international subsidiaries. Although we have not yet fully completed this process at our European subsidiaries, we began introducing the project on other continents in 2012. Nine T-Systems offices including the ones in Brazil, North America, Mexico, South Africa and China participated. The first step was to collect reference values from 2008 for all areas, just like we did in Europe. The next step will be to identify specific measures and create a prognosis for target values in 2020. By participating in the project, our international subsidiaries are laying the foundation to be able to share experiences, permanently improve their energy efficiency and create a Group-wide climate protection target, one of the key focal points on the Climate Change Group's agenda for 2013.

The group is also planning to address influential factors that could play a role in our ability to achieve our climate protection goals. These include:

- New business areas with green products and solutions that have the potential to reduce our customers' CO<sub>2</sub> emissions
  - A sustainable value-added chain structure
  - Technological and energy policy developments in our market segments
-



## CR program.

Content verified by PwC

In its CR program, Telekom specifies mandatory targets to be implemented throughout the Group in the relevant processes of its core business. In this program we define specific measures and a timeline for implementation. We also provide information on the implementation status in the CR program.

Detailed information on the [CR key performance indicators](#), which we use to quantify our performance in each area, is provided in the CR Report.

### Highlights in the reporting period:

- Ranked at the top among the DAX companies with around 9,300 trainee position offers
- Introduction of the We Care corporate responsibility app
- Successful pilot of our internal product carbon footprint calculation policy tested on our top product, Entertain
- Active participation in the pioneering SMARTER2020 study, which identifies key areas in the ICT industry where CO<sub>2</sub> emissions can be reduced

The current 2012/2013 CR program.

[CR-programm 2012/2013](#)



## Stakeholder involvement.

By using targeted measures to get our stakeholders involved, we can build long-term, trust-based relationships and increase understanding for our concerns and activities. Last but not least, dialog with our stakeholders is also a source of inspiration for innovation processes and a basis for new cooperations or strategic partnerships. This is especially important with regard to our sustainability goals, which we will only be able to achieve together with partners from politics, society, science and industry.

### Implementation of stakeholder involvement strategy.

To be successful, it is vital that we intensify stakeholder involvement. The only way to tackle many of the challenges we face is to work together, e.g., managing a sustainable supply chain. We therefore set great store by lasting and trusting relationships with our stakeholders. With this in mind, we developed a new strategy in 2011. Our aim is to take the issues put forward by our stakeholders seriously and to ensure that top quality standards are applied in our stakeholder involvement approach. In this, we are guided first and foremost by the three AA1000 <sup>i</sup> principles developed by the non-governmental AccountAbility organization: materiality, inclusivity and responsiveness. Our activities in 2012 included drawing up a guideline for our staff. This "Guide to successful stakeholder engagement" contains valuable practical advice, recommendations and tools. After conducting an audit, the PricewaterhouseCoopers auditing firm confirmed during the reporting period that there is moderate assurance that our systems and processes are suitable for the involvement of interest groups in compliance with AA1000 <sup>i</sup>.

### Network meeting to share best practices in 2012.

An important pillar in our stakeholder involvement strategy is our semi-annual, internal network meetings. These meetings give all interested employees from different departments a platform where they can share experiences dealing with stakeholders and discuss best practice examples as well as plan and conduct joint activities.

The views and expectations voiced by our internal and external stakeholders had a considerable influence on the design of the strategy. As a result, the strategy adopted by Deutsche Telekom in December 2011 is based on the following three pillars:

**1. Our strategic profile:** The strategic profile designates relevant stakeholder groups and defines how the Group wants to fashion its relationship to these stakeholders. In addition to providing information and engaging in dialog, we are increasingly focused on participatory formats which customers, employees, NGOs and other stakeholders can use to get involved and make contributions. To this end, we are offering options to participate in discussing topics and finding solutions in the different action areas of our CR strategy.

**2. Internal skills development and service:** We are developing an infrastructure that will help our employees implement the strategy in practice. Internal network meetings

help to exchange experiences in dealing with stakeholders, to discuss practical examples and to plan and implement joint activities. We offer a guide to provide our employees with orientation when implementing stakeholder formats.

**3. Development of a stakeholder management system:** We are creating transparency in all corporate processes relevant to stakeholder relationships. In this vein, we are documenting our stakeholder activities and monitoring the development of relevant stakeholder topics. In addition, we have been testing our materiality process designed to handle our stakeholders' feedback since 2011 and will gradually integrate it into the evaluation process.

### Principles for working with stakeholders.

Deutsche Telekom came up with six principles for working with stakeholders and communicated them internally in 2012 to help our employees better implement our stakeholder involvement strategy. The first principle with top priority requires our employees to pay respect to the interests of our stakeholders and take these into consideration when making company business decisions. Employees are also required to actively include interest groups using participative formats, to focus on key stakeholder topics and to take a balanced approach to dealing with different stakeholder interests. Moreover, stakeholders are to be provided with extensive information on all relevant activities.

The principles were developed during a participative process involving internal and external stakeholders. After conducting an audit, the PricewaterhouseCoopers auditing firm confirmed during the reporting period that there is moderate assurance that our policies are suitable for the involvement of interest groups in compliance with AA1000 <sup>1</sup>.

In addition to publishing our principles for working with stakeholders, we drafted a concise statement when developing our strategy. This statement was designed to help our employees implement the principles:

- **Valuing our stakeholders:** We listen to our stakeholders and provide them with transparent information about our activities.
- **Getting our stakeholders involved:** We address relevant topics and engage in dialog and collaborations with our stakeholders.
- **Understanding our stakeholders:** We take the concerns of stakeholders seriously and take appropriate steps in response to them.

### AA1000 as a guidance.

We consulted the AA1000 <sup>1</sup> standard when developing our stakeholder involvement strategy. This is an internationally recognized body of rules and regulations for auditing sustainability management and CR reporting. At the end of 2011, accounting firm PricewaterhouseCoopers (PwC) issued a moderate assurance report, which confirms that Deutsche Telekom heeds the AA1000 <sup>1</sup> AccountAbility principles in its CR processes and systems ("Type 1 audit"). The assurance engagement also took into account the stakeholder involvement strategy. The 2011 CR Report, which was published in 2012, was also the subject of a moderate assurance engagement by PwC based on the AA

1000  principles. This means that we achieved our target of having a [type 2 audit](#) conducted in 2012.

## Guide for successful stakeholder involvement.

We developed a guide for successful stakeholder involvement in 2012 to provide our employees with orientation on how to best work with our stakeholders. The guide provides answers to numerous questions on how to implement our principles in every-day-work and shows our employees how they can use these to benefit our company and to achieve their own project goals.

The guide is structured into five steps ranging from setting a goal to selecting a suitable participative format, providing readers with instructions on how to get the relevant stakeholders involved successfully. The guide contains tips on how to determine the appropriate extent of stakeholder involvement and how to select the relevant stakeholder groups. Employees can use the guide as a reference when developing their project agenda. It also introduces several formats for getting stakeholders involved in detail including crowd sourcing and establishing a strategic partnership. In addition, the guide provides numerous tips for working with stakeholders and lists contacts that our employees can turn to for support in their stakeholder involvement activities.

### **Recognition for stakeholder involvement.**

Telekom received a very high ranking in the stakeholder involvement category in key CR rankings in 2012. The Swiss agency SAM even gave Telekom the highest score. We consider this a confirmation that our efforts are paying off and will keep following the charted course.



## Stakeholder expectations.

Precise knowledge of our stakeholders' interests and views is a basic prerequisite for an informed design of stakeholder relationships. This concerns the topics that our stakeholders consider important on the one hand, and their expectations of successful communication with us on the other hand.



CR commitment recognized by experts and the general public.

To be able to effectively structure our CR activities, it is important to determine how these are perceived and assessed by our stakeholders. We conduct regular reviews to help us do this.

In 2012, we conducted a study in the summer and one in the fall within the scope of our CR market research activities. We used computer-aided phone interviews to ask 1,000 randomly selected, German-speaking individuals about responsible behavior and social involvement in general as well as at Telekom. We conducted an additional 301 interviews with CR experts in the summer as well.

In general, the results showed that the general public places less importance on social commitment than they did the year before. Results decreased from 58 to 50 percent. Both

rounds of the survey, however, confirmed that both the general public and CR experts consider Telekom to be the leader when it comes to CR. The results of the CR leadership indicator on responsible behavior increased significantly compared to 2011 and continued the positive trend between the summer and fall of 2012. The results exceeded our targets for 2012. Our analysis of the trend showed that the environmentally-friendly disposal of cell phones, the provision of training measures, the expansion of our high-speed networks as well as data privacy and security are important topics for Telekom's reputation.

The results provided us with valuable information on how to structure the content of our CR activities and further develop our CR communication and CR KPIs.

## The topics of our stakeholders.

We used a graded materiality process to identify the focal topics of our stakeholders at the start of 2013. Participants were initially asked to rate a series of topics for each of our three CR action areas based on their importance for the specified goals. We provided them with six possible responses ranging from "extremely important" to "not important" or "no response." We expanded our list of topics in 2013 to include the demographic shift. We did not make any changes to our action areas or goals from 2012. This made it easier to compare the results with those from the previous year. We also asked the participants to rate Telekom's communication activities. We gave them five of Telekom's central statements on sustainability. We asked them to select those that they associated with Telekom. They were then asked to evaluate what meaning that message had in terms of Telekom's social commitment. Participants were also asked to rate stakeholder satisfaction with information provided by Deutsche Telekom and the sources used by the company to provide that information.

### Top topics

Most employees and external stakeholders identified the same five most important topics. There were only small differences as to the classification of the topics:

In the "Connected life and work" action area, employee results were the same as in 2012. They gave first place to "Work-life balance" and second and third place went to "Data privacy and data security" and "Network and infrastructure expansion." Our external stakeholder groups gave a similar rating. However, they put "Data privacy and data security" in first place. Second and third place went to "Work-life balance" and "Network and infrastructure expansion." Just like the previous year, employees rated the topics "Educational commitment for children and young people", "Network and infrastructure development in rural regions" and "Responsible employer" in first, second and third place in the "Connect the unconnected" action area. External stakeholders gave "Educational commitment for children and young people," "Network and infrastructure development in rural regions," and "Protection of children and young people" the top three ratings. However, unlike our employees, our external stakeholders rated "Protection of children and young people" as being more important than the "Responsible employer" topic. Our employees also gave the topics in the "Climate-friendly society" action area the same rating as in the previous year. "Use of renewable energy" came in first, "Environmentally and climate-friendly network infrastructure" in second and "Recycling and disposal" in third place. Our external stakeholders also gave first place to "Environmentally and

"climate-friendly network infrastructure" just like they did in 2012, followed by "Use of renewable energy" and "Recycling and disposal," which moved up to third place from its fourth place ranking in the previous year.

### Evaluating our communication activities

As to Telekom's communication activities the same weightings were identified internally as well as externally. Both stakeholder groups most strongly identified Telekom with the statements "Deutsche Telekom products support mobile work anytime and anywhere" and "Deutsche Telekom provides people with modern and secure communication technologies." The two groups gave third place to the statement, "Deutsche Telekom is steadily reducing its CO<sub>2</sub> emissions." Both stakeholder groups rated "Mobile work anytime and anywhere" and "Secure communication technologies" as the most important focal points for Telekom's CR commitment.

### Sources of information

According to the stakeholders surveyed, the three most important sources of information are our intranet and online websites, the CR Report and contact to employees at the Group. More than a fourth of our external stakeholders also emphasized the importance of Telekom's stakeholder dialog activities.

### The following matrices illustrate the results for the different topics:



### Next steps

The results of the survey will be used to identify focal points for the reporting process and to structure Telekom's stakeholder involvement strategy around the expectations of our stakeholders. Because the survey showed that there was little change in the most important topics for Telekom compared to last year, we consider a process revision for the year to come.

In general, the results showed that 51.5 percent of our employees and 42.3 percent of our external stakeholders feel that we meet all or most of their communication expectations. We feel that this confirms the effectiveness of our efforts but also see this feedback as motivation to be even better in the future.

### Stakeholder expectations regarding dialog with us.

Within the scope of developing our strategy, we asked our target groups about their expectations regarding our dialog activities to help us better structure our stakeholder relationships for all parties involved. The results clearly showed that we need to methodically include our stakeholders in our efforts to achieve the "quality leadership" to which we aspire. The majority of our stakeholders expect

- Mandatory rules
- Practical opportunities to help co-design our activities
- Goals that are clearly defined at the start of each dialog process
- Information on how the results are being implemented

The evaluation also showed that our involvement principles largely fulfill our stakeholders' expectations. We particularly feel that our stakeholders agree with our conviction that

stakeholder involvement requires dialog on an equal footing.

## Systematic topic monitoring.

Within the scope of our CR management activities, we carefully track the development of the topics that our interest groups rate highly. We continued to expand our CR topic monitoring activities in 2012 within the scope of our stakeholder involvement strategy and developed new survey tools to help us systematically identify stakeholder positions. We constantly screen the activities, research projects, publications and statements made by relevant NGOs as part of our CR topic monitoring activities. We summarize the results every two months in our internal newsletter, the NGO Radar. This new tool enables compliance with a key requirement in the AA1000 <sup>i</sup> standard.

The employee surveys, which are conducted every two years, form another pillar of our CR topic monitoring activities. In 2012, as in previous years, we included CR-related aspects in the survey as well.

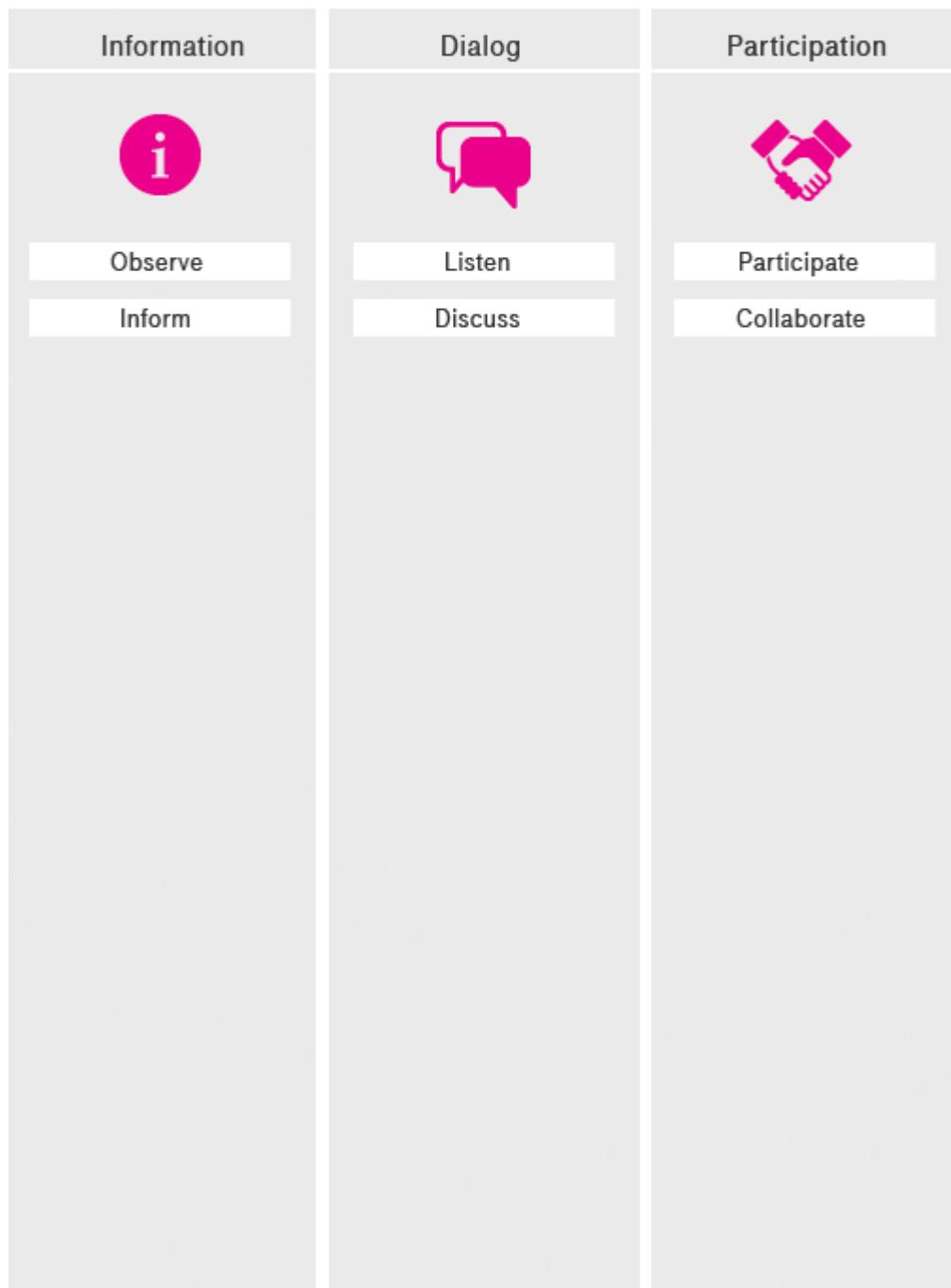


## Formats of involvement.

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The type and extent of our stakeholder involvement is based on the results of a case-related relevance analysis. The more relevant a stakeholder group is to the topic or project concerned, the more intense the stakeholder involvement will be. Depending on the intensity, we make a distinction between three types of involvement: information, dialog and participation.

## Degree of stakeholder involvement



### Raising employee awareness.

After focusing our dialog approach on the topic of Green ICT in 2011, we decided to focus on our employees in our dialog activities in 2012. Because the only way to make sure that we really take responsibility throughout the Group is to get our employees excited about the CR program and encourage them to practice CR every day. We conducted the following measures to encourage this development:

**"Sustainability for breakfast."** In order to inspire our staff for the idea of sustainability and to show them how, by taking small steps, they can make their own contribution toward sustainability, we launched a "Sustainability for breakfast" action campaign in 2012. A CR team has regularly distributed breakfast boxes to staff at our sites in Germany since late October 2012. These boxes contain not only a tasty breakfast but

also "easily digestible" information about our main sustainability themes—from the engagement@telekom platform to environmental protection at the workplace, climate protection and finally the "Yes, I can!" initiative. We reached more than 7,000 employees in six cities with our campaign in the fall of 2012 alone.

#### **CR group in internal social network.**

In 2012, we set up a CR group in our Telekom Social Network (TSN) whose task is to position the topic of CR more effectively in the company's internal communication activities. On Volunteer Day, we used the network to inform our employees about the company's activities and to get more employees involved.

**Guide for successful stakeholder involvement.** In 2012, we published material containing practical tips, recommendations and tools to help encourage our employees to get stakeholders involved in their areas. In addition to our reporting activities, this decision was another step in implementing the AA1000 requirements regarding stakeholder involvement.

Broad-based involvement: memberships and collaborations. ▶

## **Business and industry associations**

[American Chamber of Commerce Germany](#)

[Bundesvereinigung der Deutschen Arbeitgeberverbände \(BDA, Confederation of German Employers' Associations\)](#)

[BITKOM industry association](#)

[Deutscher Industrie- und Handelskammertag \(DIHK, Association of German Chambers of Industry and Commerce\)](#)

[European Telecommunications Network Operators Association \(ETNO\)](#)

[Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e. V. \(Econsense, Forum for Sustainable Development of German Business\)](#)

[GSM Association \(GSMA\)](#)

[International Chamber of Commerce \(ICC\)](#)

[Bundesverband der Deutschen Industrie \(BDI\) e. V. \(Federation of German Industry\)](#)

## **Climate protection and environmental organizations**

[B.A.U.M e. V. \(German environmental management association\)](#)

[Global e-Sustainability Initiative \(GeSI\)](#)

[2°—German CEOs for Climate Protection initiative.](#)

[European Round Table of Industrialists \(ERT\)](#)

[European School of Management and Technology \(Sustainability Roundtable\)](#)

[Global Compact](#)

[Global Compact LEAD](#)

[Caring for Climate](#)

[Joint Audit Cooperation \(JAC\)](#)

## **Selected collaborations with humanitarian and social aid organizations**

[Bundesnetzwerk bürgerschaftliches Engagement \(BBE, German National Network for Civil Society\) \(membership and Demography working group\)](#)

[CCCD – WIE \(Corporate Volunteering working group, Evaluation working group\)](#)

[Aktion Deutschland Hilft e.V. \(alliance of German aid organizations\)](#)

[DRK \(German Red Cross\)](#)

[DKMS Deutsche Knochenmarkspenderdatei gemeinnützige Gesellschaft mbH \(German Bone Marrow Donor Center\)](#)

[Bundesverband Deutsche Tafel e.V. \(German Food Bank Federation\)](#)

[Lebenshilfe e.V. aid organization](#)

[SOS-Kinderdorf e.V. \(SOS Children's Villages\)](#)

[Nummer gegen Kummer youth counseling line](#)

[Telefonseelsorge \(Crisis counseling helpline\)](#)

[Deutsche Telekom Foundation](#)

["Yes, I can!" initiative](#)

[Bundesarbeitsgemeinschaft der Seniorenorganisationen \(BAGSO, German association of organizations for seniors\)](#)

[Deutschland Stiftung Integration \(German Foundation for Integration\)](#)

[Ein Herz für Kinder children's charity](#)

[TeachToday](#)

[Code of Responsible Conduct for Business](#)





## Compliance.

Telekom's business is based on the principles of integrity and respect. Compliance, which is understood as the lawfulness of corporate activities, therefore plays a significant role in the Group's business activities. Telekom is clearly committed to the ethical principles set out in the Guiding Principles and in the Code of Conduct.

All compliance management activities are in line with legal regulations and with Telekom's Privacy Code of Conduct, a policy on handling personal data at the Deutsche Telekom Group.

Download [Privacy Code of Conduct](#)

### Compliance management certified.

The key elements of the compliance management system are as follows:

- Establishment of a compliance organization in all major Group units
- Risk-based derivation of a compliance program and its consistent implementation through policies, training and consulting offers, and communication measures
- Conducting compliance controls and compliance due diligence
- Appropriate response to breaches of compliance

The Group's compliance organization was certified by independent auditors on December 31, 2010 in terms of adequate implementation of specified minimum requirements and implementation specifications. Recertification is planned by 2013.

### Responsibility for compliance organization at the top management level.

Responsibility for the compliance management system lies with the top management level at Telekom. In line with the high relevance of the topic, a separate Board of Management department for Data Privacy, Legal Affairs and Compliance was created in 2008.

Group-wide structures for efficient compliance management have been in place since 2005. The compliance organization is comprised of the Chief Compliance Officer, the Compliance Committee and central as well as local compliance organizations. The Group Compliance Management department holds central responsibility. It develops Group-wide standards, tools and processes to guarantee compliant conduct at the company.

#### **Compliance Committee provides internal consulting.**

The Compliance Committee consists of executives from the following areas:

- Compliance
- Legal affairs

- Data protection
- Internal Audit 
- Human Resources
- Security

The Compliance Committee helps the compliance organization design and conduct a compliance program. It also encourages company departments that deal with compliance topics to share experiences and information with each other.

### **Compliance Officer plays key role in compliance management.**

The Chief Compliance Officer reports to the Group Board of Management member for Data Privacy, Legal Affairs and Compliance. He plays a key role in setting up the compliance management system and maintaining it over the long term. The Compliance Officer reports directly to the Board Member for Data Privacy, Legal Affairs and Compliance and has the right, in consultation with said Board member, to send reports to Deutsche Telekom AG's Board of Management as well as the Audit  Committee. According to the German Corporate Governance Code, the Audit  Committee is responsible for compliance issues.

### **International collaboration improved.**

Different legal practices and cultural values in the various countries where Deutsche Telekom is active represent a significant compliance challenge. In line with the Group's international structure, strategic issues are discussed with an International Compliance Advisory Team and a shared vision is defined. The team is a "trend-setter" of sorts, as it provides incentives for designing and implementing balanced compliance structures at the Deutsche Telekom Group.

We have been promoting Group-wide cooperation for years with the International Compliance Days, an annual meeting of the representatives of all compliance organizations of the international subsidiaries. On April 25 and 26, 2012, around 120 representatives from 26 countries came to Bonn at the invitation of the central Compliance department to attend the eighth annual meeting. There, they discussed new initiatives to advance the compliance management system. Participants also discussed how the systems' rules and policies can be integrated even better in daily work routine. Telekom is preparing another International Compliance Day in Bonn in April 2013 to continue the successful collaboration.

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The Group Board of Management and the respective bodies of the affiliated companies must ensure an appropriate compliance organization. The Group Compliance Management (GCM) unit supports these bodies in this task. The legal basis for this are contracts between the Telekom Group and its direct subsidiaries, the Intra Group Compliance Agreements, which define the rights and obligations of both parties.

### **Compliance policies revised and implemented.**

The Group Policy on Avoiding Corruption and Other Conflicts of Interest (or Anti-Corruption Policy) and the Group Policy on the Acceptance and Granting of Benefits

(or Benefits Policy) were revised in 2011.

The Anti-Corruption Policy serves as an overarching policy and a link between the Code of Conduct and the detailed rules of the more specific policies which regulate the acceptance and granting of undue benefits, sponsoring, donations, benefits extended in the political sphere, dealing with consultants, the ban on insider trading and anti-competitive agreements. In addition, it defines the organizational obligations and measures to prevent corruption and other conflicts of interest. The Benefits Policy governs how to handle gifts, entertainment and invitations to events in business relationships.

This policy are now in effect and mandatory throughout the Group. It was approved by all German Group units and announced in 2012. At the international level, the process will involve greater outlay because we first had to check whether the policies complied with relevant national laws. Still, almost all international units introduced the policy in 2012. The process will be completed in 2013. The introduction is being accompanied by communication and training campaigns.

### Employee training for strengthening compliance.

During the reporting period, Telekom in Germany conducted various training and awareness programs to communicate our key anti-corruption topics:

More than 1,700 managers and experts in Germany, from the Board of Management, top management and employees from other selected areas, completed custom anti-corruption training programs in 2012. These face-to-face events, which will continue in 2013, cover the main anti-corruption regulations, using case studies to deepen understanding. The compliance team worked with the various areas in advance to develop specialist case studies so that training courses could be tailored to the specific needs of each area.

Telekom addresses other employee groups with its anti-corruption e-learning module. The module is designed in particular to familiarize them with the content of the [Anti-Corruption and Benefits Policies](#), help them recognize typical corruption risks in day-to-day work, and provide guidance on how to deal with them correctly. Almost 16,000 employees in Germany received this risk group-specific training between September and December 2012. The e-learning course will subsequently be adapted as necessary and introduced at the international subsidiaries. The face-to-face training courses and e-learning sessions are scheduled to be completed over the course of 2013.

The "Bearing compliance in mind" e-learning module is targeted at all Telekom employees in Germany as an ongoing campaign. All new employees will be required to complete the module as well. The module communicates the most important compliance requirements and conduct guidelines in terms of our Guiding Principles, our Code of Conduct, current legal regulations and internal policies. Employees learn where to report compliance breaches and where to ask for help with questions relating to compliance or the Code of Conduct.

### Internet portals for prevention and advice.

## **Ask me!**

In order to prevent compliance risks, we set up the "Ask me!" portal in 2008. Here employees can ask compliance-relevant questions, for example regarding the Code of Conduct or laws and internal policies. "Ask me!" offers reliable information that employees can apply in their daily work routines.

## **Tell me!**

We are dependent on the input of our employees, business partners, customers and other stakeholders when it comes to investigating violations of internal policies, laws or codes of conduct. "Tell me!" is a portal that is also accessible to external parties, which can be used to report misconduct via e-mail, phone and fax.

## **Investigations of suspected corruption.**

Telekom employs a zero tolerance policy when it comes to corruption. Violations are systematically investigated and prosecuted in order to create maximum transparency.

### **Review of irregularities in T-Systems International's sponsorship activities.**

An internal investigation that was triggered by an anonymous tip gave rise to the suspicion that an arrangement violating compliance regulations had been made in the context of the business relationship between T-Systems International GmbH and a major car manufacturer to reward sponsorship involvement by awarding future contracts for IT services. Due to this, T-Systems International GmbH immediately terminated employment of the responsible sales manager and an external consultant and sent the internal report to the prosecutor's office responsible for further review. On the basis of the report, the public prosecutor initiated a preliminary criminal investigation, which resulted in charges being brought to the Regional Court in Stuttgart. The regional court gathered additional evidence during the interim proceedings and initiated the main proceedings in March 2013. Dates have not yet been set for the trial.

## **Major ongoing litigation.**

Deutsche Telekom is party to several proceedings both in and out of court with government agencies, competitors, and other parties. The proceedings mentioned in the 2012 Annual Report are of particular importance from Deutsche Telekom's point of view.

## **Respect for human rights as an ingrained practice.**

Respecting human rights is part of the fabric of Deutsche Telekom and a principle that is entrenched at our company worldwide. Our Code of Conduct, which applies Group-wide, stipulates our requirements for ethical conduct. The Social Charter <sup>[1]</sup> adopted in 2003 defines Group-wide regulations regarding how to deal with employees and suppliers. The Charter is based on the principles of the United Nations Global Compact <sup>[1]</sup>, the conventions of the International Labour Organization (ILO) and the Organization for Economic Co-operation and Development (OECD). The head of Group Relations Management is responsible for all matters dealing with human rights issues at Deutsche

Telekom. This position has existed in this form since late 2012.

Telekom publishes an annual social performance report in which we assess all of our Group companies' compliance with the provisions set forth in the Social Charter [\[1\]](#). We added two special questions on the observance of internationally recognized human rights to our annual survey for the 2012 report. None of the responses indicated non-compliance with the Social Charter [\[2\]](#).

In addition to human rights issues, we are committed to guaranteeing official employee rights on all of our markets on the basis of our Social Charter [\[3\]](#) and are involved in developing measures that in part exceed national legislation in the respective countries. Minimum standards for dealing with our employees are also defined by the Telekom Diversity Policy, whose aim is to prevent discrimination based on gender, age, disabilities, ethnic origin, religious beliefs and sexual orientation.

We also require our suppliers to comply with the ethical, social and environmental standards defined in our Social Charter [\[4\]](#) and to observe basic human rights. We conduct regular social audits to determine whether our strategic suppliers, including those that present a particularly high risk, are in compliance with these requirements.

The European Commission is currently preparing regulations for certain industries specifying how to address human rights. These rules will be based on the UN Guiding Principles on Business and Human Rights. Deutsche Telekom was involved in a committee of experts that helped structure these rules for the ICT industry and participated in the final draft review process in December 2012.

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Life is for sharing.

2012 Corporate Responsibility Report

We take responsibility.

Home > [Strategy & management](#) > Risk & opportunities management

Content verified by PwC

## Risk & opportunities management.

Telekom's corporate environment is becoming increasingly complex and dynamic.

Technological developments, state regulation and intensifying competition require a systematic, anticipatory management approach to risks and opportunities.

The [Group-wide risk and opportunities management system](#) is a key strategic tool in our corporate management processes. It helps us identify and evaluate negative effects and the potential of current and future trends at an early stage and control their consequences.

Deutsche Telekom's [2012 Annual Report](#) provides extensive information on current opportunities and risks that are also relevant in terms of corporate responsibility.

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## Data privacy.

Millions of customers entrust Telekom with their data. In order to live up to this responsibility, we place the highest priority on protecting our customers' private data. We developed an extensive catalog of measures and created a separate Board of Management department for Data Privacy, Legal Affairs and Compliance to handle the topic at the highest management level of our company. We undergo regular audits conducted by an external data privacy advisory council as well as independent certification bodies.

Making our data privacy measures transparent to the public is a principle of utmost importance for us. We are the first DAX-30 company to publish an annual data privacy report, which documents all processes at the Group that are relevant to data privacy. We have been publishing an integrated report on data privacy and data security since 2011.

### Download the 2012 Data Privacy and Data Security Report

With an enhanced format, our new data privacy and data security report aims to make complex topics easier for readers. The text alternates between short statements, vibrant interviews, background reports and commentaries, thereby meeting different informational needs. Contributors include Telekom specialists as well as external experts such as the Chairman of the Munich Security Conference and a member of the Chaos Computer Club.

In addition to publishing our annual report, we also report on all events relating to data theft and data misuse that have been reported to the relevant investigation authorities, present up-to-date measures for improving data privacy and provide important tips for the secure handling of personal data at <http://www.telekom.com/dataprotection>.

### Putting data privacy into practice—an award for the winner.

One of Telekom's key objectives is to raise awareness of how to handle personal data responsibly on an ongoing basis. Telekom publishes an annual data privacy report to gauge the level of data protection at the Group. The report includes information on internal communication measures, internal audits and changes in the regulatory landscape.

Our employees recognize the need for data privacy measures and collaborate closely across departments to cover all data privacy requirements. The general opinion is that data privacy can only be successful when everyone works together.

#### **The 2012 Data Privacy Award goes to T-Systems Austria.**

Telekom traditionally combines its evaluation of the basic data privacy audit with presenting awards to the international subsidiaries with the best results. The winner of the latest award was announced in Bonn by the Board Member for Data Privacy, Legal Affairs and Compliance on January 28, 2013, European Data Privacy Day, at an internal ceremony. First place for the 2012 Data Privacy Award went to T-Systems Austria,

followed by T-Systems Poland and T-Systems Czech Republic.

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## Government relations & regulatory issues.

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As a globally active company with a strong presence in Europe, Deutsche Telekom acts as a discussion partner for governments, parliaments, authorities and NGOs on all issues related to ICT and innovation. Headquartered in Germany, we receive special attention from German domestic institutions. We also have a representative office in Brussels, where we engage in dialog with the institutions of the European Union as well as with other associations and organizations. We engage in active dialog with similar institutions in countries in which Deutsche Telekom is active, particularly in the European markets and in the United States.

Politicians and government authorities influence the development and availability of the network infrastructure, technologies and services that are required for future ICT solutions such as cloud computing. Not only does this directly impact the competitiveness of telecommunications companies, it also impacts business in general, which relies on having a fast network infrastructure as well as state-of-the-art telecommunications services. In addition to economic factors, networks and services are of considerable importance for maintaining a sense of community in society. Decision-makers from parliaments, authorities and governments need the exchange of ideas with representatives of society and companies to help them tackle these challenges. Communication was also key during the preparation phase of the new Telecommunications Act, which was approved and went into effect during the reporting period. That is why Deutsche Telekom engages in active, ongoing dialog with interested stakeholders from politics and the general public.

Our partners from parliaments, governments and non-profit organizations need to uphold their independence and integrity. This principle is codified in Telekom's employee guidelines which were revised in early 2011. For example, they prohibit donations to political institutions in Germany as well as non-transparent attempts to exercise influence. These guidelines make sure that we base our political communication on facts, expertise, credibility and integrity. Deutsche Telekom is also registered with all the required information in the public transparency register for lobbyists in Brussels. This is the basis for recipients to experience information provided by Telekom as authentic and trustworthy, so that it can be assimilated in opinion-building processes in the political arena and society.

### Broadband network regulation to encourage investment.

High-speed Internet is an important growth engine. Increasing productivity, sales markets for new services and new, more sustainable ways of working and living depend on modern transmission technologies with high data rates. That is why the lawmakers need to improve the requirements for investing in these broadband technologies, creating a broad basis for long-term prosperity.

Deutsche Telekom has been making a contribution to this area for years by investing heavily in the infrastructure for fixed-line and mobile Internet. The high-speed Internet is

giving rise to further expectations and demands by society that again require further investments. For example, we need to guarantee user security in the global networks and continue to increase confidence in the services being offered. At Deutsche Telekom, we take these challenges seriously. However, these need to be supported by future-thinking regulatory policies that promote investment in the next generation broadband network.

The only way to achieve this is to provide stronger investment incentives and better planning security for the industry. The EU Commission is planning to approve decisive framework conditions in this area. However, it is important that these are also implemented by the EU member states and incorporated into the daily activities of the regulatory authorities for telecommunications. They include:

- Increasing planning and legal security for investors before network expansion begins
- Giving market solutions priority above regulation
- Establishing regionally differentiated regulation that takes the competitive situation in the various regions into account
- Better options for allocating risk fairly among investors and competitors looking for access to their infrastructure
- Using synergies by facilitating the shared use of existing infrastructure in all network sectors

### Protecting the open Internet.

The topic of network neutrality continues to get a lot of attention from the public. More specifically, people are worried that the Internet they know today may be restricted in the future. Services that used to be freely accessible would only be available for a fee or possibly not at all. However, Deutsche Telekom is committed to preserving an open Internet. Content and services will continue to be accessible online in the future based on the "best effort" principle.

Deutsche Telekom continues to expand its transmission capacities as well as its infrastructure so that we are able to cope with our customers' increasing data traffic and constantly upgrade our network. This is the only way for us to meet our customers' increasing demands and live up to the requirements of online content and application providers to provide their services in high quality in the future as well.

Telecommunications networks cannot be operated without network management.

That is why Deutsche Telekom is developing business models based on the "best effort" Internet principle that online businesses can use to offer innovative services that pose specific demands on transmission quality and quality of service. We do not monitor any of our customers' content but focus on managing the rapidly growing number of different types of online data flows. Deutsche Telekom supports the freedom of the Internet and does not influence user or provider content in any way. Telekom will continue to take a non-discriminatory approach to marketing services with different quality-of-service levels in competition with other network operators. Differentiating quality-of-service levels also makes an important contribution to financing broadband network expansion in the medium and long term. It gives consumers greater choice and guarantees a high quality level.

Deutsche Telekom supports the European obligations to provide transparent information

on quality of service. They give national regulatory authorities the opportunity to define minimum quality requirements for services and to make the provision of certain information to consumers mandatory. Combined with general competition law, these legal provisions constitute an effective way to ensure an open Internet and give consumers a choice between different quality-of-service levels provided by one or several telecommunications providers. During the reporting period, Deutsche Telekom collaborated intensively with other mobile communications providers to develop measures to improve transparency regarding the bandwidths available to customers in the respective mobile networks. The companies are also involved in an intensive exchange with the German Federal Network agency for this purpose. This collaboration will be continued in 2013.

## Encouraging consumer dialog.

One of Deutsche Telekom's aims is to become the most highly regarded service company in the industry. That is why we gave high priority to consumer-related topics in 2012 as well. We further strengthened internal functions dealing with consumer relations in order to improve exchange between Deutsche Telekom's product and service development areas and our external stakeholders from politics and the general public.

Central topics in legislation and in stakeholder dialog as well as efforts to create voluntary regulations for the industry beyond legal provisions included:

- Improving consumer data privacy, e.g., in the online advertising business
- Improving extensive protection of minors, irrespective of the technology used, at the national and EU level
- Improving customer service standards
- Improving customer privacy in telecommunications, e.g., when switching providers for fixed-line and mobile connections

In the interest of consumers, we supported self-regulation for the online advertising business in Germany in the area of usage-based online advertising (targeting) in 2012. Targeting means consumers' online behavior is analyzed and ads are specifically selected to meet their interests. In order to strengthen consumer rights in this area, we support increased transparency and informational self-determination by enabling consumers to lodge objections beyond sector boundaries. Since 2012 we have been involved in the related initiative being conducted by DDOW, a voluntary self-control organization that promotes data privacy in online advertising in Germany.

We also rely on self-regulation and providing information to protect the private sphere of consumers when it comes to geodata services. To this end, we helped set up an information platform for Selbstregulierung Informationswirtschaft e.V., an association for self-regulation in the information business. People can use the information and objections platform, "Data privacy code for geodata services" to directly block images online that show their city, street or house.

Deutsche Telekom continued to make significant progress in 2012 for consumers wishing to switch fixed-line providers in collaboration with other network operators. The goal is to make it easier for consumers to switch providers without any service interruptions. We

were even able to launch the new switch-over processes, which apply to all mobile network providers, throughout the entire market in late 2012. These processes now enable number portability from customers' current mobile communications contracts. In all these areas, Telekom stands for a constructive and solution-oriented approach that is geared to both the consumers' interests and the interests of our company.

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## Regional added value.

As a responsible corporate citizen, Telekom considers it its obligation to promote regional added value and social stability at our company sites. We generated revenues of EUR 58.2 billion globally in the financial year 2012 with 232,342 employees (2012 annual average). Almost 56 percent of revenues were generated outside of Germany. We contribute significantly to the economic development in the various regions through salaries, taxes and procurement.

### Telekom net added value.

Telekom publishes the net added value generated for the Group each year. These figures show how different stakeholders benefit from corporate performance. By paying wages and salaries and contributions to pension schemes, for example, we contributed substantially to regional purchasing power and a secure future at our locations. Our net added value remained largely constant in 2012 at EUR 31.2 billion compared to EUR 31.1 billion in the previous year. This figure shows that economic development at our company sites is closely connected to long-term business success.

### Connect the unconnected.

We have been focusing our investments on full-coverage expansion of fast and stable networks over the past few years and continued to do so during the reporting period. With our network expansion, we are laying the foundation for everyone to be able to participate in the information and knowledge society. Our cash CAPEX □, a KPI that summarizes our investment in equipment and systems, came to EUR 3.4 billion for Germany in 2012. Of this, we invested EUR 1.0 billion in intangible assets (without goodwill) and EUR 2.4 billion in property, plant and equipment. We paid EUR 0.7 billion in taxes in 2012.

In the context of the "Yes, I can!" association, we also supported initiatives in Germany that promote projects for children and young people in social hotspots, increasing their confidence in their own skills. We also offer customized solutions to provide people from disadvantaged backgrounds with access to new communications technologies and media. These include:

- Subsidized rates for people with low incomes or disabilities
- Extensive activities to promote media skills
- Promoting the integration of people from disadvantaged backgrounds

Telekom helps bridge the digital divide by supporting equal opportunities for all to participate in education, knowledge and communications. In doing so, the Group helps to strengthen the economic standing and quality of life as well as competitiveness at its locations and in its markets.

## Education—the foundation of a sustainable society.

Telekom makes a significant contribution to promoting young people's skills in the areas of technology and natural sciences through its training activities and its own foundation.

The [Deutsche Telekom Foundation](#), which was established by Deutsche Telekom AG, continues to be very active in helping maintain and improve the German educational landscape. The foundation is currently one of the largest German corporate foundations with funding capital of EUR 150 million. It is dedicated to improving education levels in the STEM <sup>i</sup> subjects (science, technology, engineering, and mathematics) throughout Germany. Since 2012, the foundation has been focusing on encouraging small children's interest in natural science and technology. The Deutsche Telekom Foundation and the [Little Scientists' House foundation](#) held the "Inquisitive minds" competition for day care centers in 2012.

In the 2012/2013 academic year, the total number of [apprentices and students](#) came to around 9,300, including some 1,200 students on cooperative degree courses. This makes Deutsche Telekom one of the largest providers of vocational training programs in Germany.

## Research investments in Germany.

The development of innovative ICT solutions is a key growth driver not only for our industry but also for many other sectors. The Telekom Group's central research and development unit, [Telekom Innovation Laboratories \(T-Labs\)](#), is an internationally important player in this area. In addition to our German locations in Berlin, Bonn and Darmstadt, we also run institutes in Tel Aviv and Los Altos, California. In 2012, some 400 Telekom experts and researchers studied [fast, secure and sustainable communication solutions](#) at T-Labs <sup>i</sup>. The focus of their work in 2012 was on medium-term topics such as developing technologies that enable up-to-date differentiation options and identifying new business avenues.

T-Labs <sup>i</sup> also finances university chair positions and cooperates with Berlin universities as well as with a number of other universities and institutes worldwide. Together with other partners from the industry as well as start-ups, T-Labs <sup>i</sup> helps bring the worlds of research and business together and secures the transfer of know-how into Telekom. Telekom's research and development budget totaled around EUR 100 million in 2012.





Life is for sharing.

2012 Corporate Responsibility Report

We take responsibility.

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[Home](#) > Networks

## Networks.

### #OUTSTANDING

Telekom recognized  
for its network quality.

[Find out more](#)

We are pursuing full-area broadband infrastructure expansion on all of our markets with technologies like vectoring, which accelerates data transfer in existing DSL networks. High-speed Internet and reliable mobile communications connections are key when it comes to giving everyone the chance to participate in society – a goal that we have committed ourselves to within the scope of our CR action area, "Connect the unconnected." The current megatrend of using virtualized IT infrastructures with cloud computing also requires broadband network access. That's why we are providing more and more areas that previously had no coverage with fourth generation mobile communications technology (4G) as a fixed-line alternative with high data rates.

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## Network & infrastructure expansion.

Digital networking is one of the main trends in the modern information society. Full broadband coverage is becoming a key requirement for participating in society. That is why we focus our efforts on using new technologies to connect areas that previously had no coverage as part of the CR action area "Connect the unconnected."

Today, as a result of high-performance standards, top data transmission speeds are provided even in remote areas:

- ADSL and ADSL2+
- VDSL
- GPRS/UMTS and HSDPA/HSUPA
- LTE

The network infrastructure is at the heart of our business. As Germany's largest provider of telecommunications services, Telekom sets up and operates networks that meet the high demands of the gigabit society. Telekom continues to rely on a combination of wireless and fixed-line technologies, with an emphasis on the high-speed LTE mobile communications network and the new VDSL vectoring technology. The Group's extensive, integrated network strategy, which was adopted in 2012, describes the steps that Telekom is planning to take in the medium term along the road to the network of the future. The main objectives are growth, efficiency and quality.

### Network expansion in line with political goals.

Telekom supports the EU Commission and the German government's network expansion goals. We plan to provide high-speed Internet access to as many households as possible mainly in rural areas of Germany that do not yet have coverage. In this context we use VDSL as an important starting point for even more convenient ICT solutions in the future.

The European Commission passed a Digital Agenda in May 2010 as part of its Europe 2020 strategy in order to create the necessary conditions for economic growth in Europe. This agenda specifies that all Europeans will be able to surf online at speeds of at least 30 Mbit/s by the year 2020. Connections enabling at least 100 Mbit/s should be available to half of all European households by that year

In line with the EU's digital agenda, the German government decided to pursue a similar goal with its broadband strategy, which it passed in 2009. It requires network access with speeds of at least 50 Mbit/s for all households by 2014, giving priority to infrastructure expansion in rural areas. Deutsche Telekom is one of the most important partners of the broadband strategy and is making a significant contribution in helping the German government achieve its broadband goals.

### Network expansion strategy relies on broadband investments.

Providing high bandwidths is a key component of Telekom's network expansion strategy. We once again made extensive investments in this area in 2012, including investments in fiber-optic networks, new mobile communications technologies and IT processes. Telekom in Germany has been the largest investor for years

now when it comes to providing broadband access. We purchased LTE frequencies in 2010, laying the foundation for further investment in fast, mobile Internet. These frequencies, which used to be used for television and radio broadcasting, are now available for providing full broadband coverage.

In the fixed network, the fastest transmission speeds can be achieved with fiber-to-the-home (FTTH) technology. However, laying the cables and providing FTTH to each household can be very costly because of the required civil engineering works, especially in rural areas. Costs can be reduced with fiber-to-the-curb (FTTC) technology where fiber-optic systems are only installed up to the cable distribution boxes. With vectoring millions of households in Germany can get high-performing broadband connections without FTTH expansion and at a reasonable costs—provided that the German Federal Network Agency approves the use of vectoring technology. The innovative hybrid technology, which we are planning to introduce, will transmit data traffic via vectoring and LTE in the future, combining the advantages of both networks. From 2014 this will enable download speeds of up to 200 Mbit/s and upload speeds of up to 90 Mbit/s.

Telekom is planning to invest around six billion euros in the fiber-optic network by 2020 to support its network expansion strategy. It is also planning to expand its fiber-optic network to cover around 65 percent of households by 2016. Up to 85 percent of the German population should have access to the new LTE wireless technology by 2016, with data transmission rates of up to 150 megabits per second (Mbit/s).

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The Group will be able to tap into significant growth opportunities with its network expansion strategy. Our business model relies on the following key elements:

### **1. The network factory.**

Our business is based on the network infrastructure and this will remain so. To update the infrastructure, we are planning to change entirely over to all-IP  technology in the next few years. Fixed and mobile networks will be fully integrated. The aim will not only be to provide high bandwidths but also top quality and the best possible service experience to our customers.

### **2. Toolkit of standard services.**

The second component consists of modern, highly efficient and standardized IT systems. Telekom currently operates thousands of IT systems. The plan is to reduce, simplify and update these systems. This will save money while improving the quality, flexibility and speed of our services.

### **3. Content and services for customers.**

The third component of the strategy are enabling services that make it possible for providers in areas such as healthcare, energy and media distribution to expand their services and tailor them more to their customers' needs with the help of ICT. This way we help our customers grow by making their services more efficient and focusing on their customers' needs.

We are combining our network and IT capabilities to create a toolkit of standard services. This applies to our own products as well as to the option of integrating our services into third-party services, such as those provided by companies and software developers, by using standardized interfaces. This toolkit will be a springboard for new business models and sales opportunities. With it, we will enable our partners to develop innovative solutions while participating in the process at the same time.

Telekom helps business customers bring their content and services to the customer. For example, Telekom provides its partners with state-of-the-art billing models, installs modern access management systems and guarantees high service quality.

## More Broadband for Germany project.

Telekom also continued its cooperation with local governments in 2012, responding to calls to bid in the context of the [More Broadband for Germany](#) project. In those areas where broadband expansion may not be economically feasible for us as a company, support from public funding is a viable option. For example, communities could provide existing conduits that are not in use, perform the civil engineering work required or make a financial contribution. More than 4,000 communities and over one million households have been receiving broadband infrastructure through these means since 2008. We entered into 830 cooperation projects with communities to expand the broadband infrastructure in 2012 alone, making it possible to give more than 280,000 households access to the broadband network. We are planning to team up with communities for additional projects of similar size and scope in 2013. Since 2011, Telekom has also been building up VDSL <sup>1</sup> technology with bandwidths of up to 50 Mbit/s in rural areas on the basis of such cooperation projects.

### Plans to accelerate broadband network expansion.

In view of the planned reorientation of the EU's regulatory policies, which was announced in July 2012, Telekom is considering pushing broadband expansion in Germany in the next few years. By increasingly extending fiber-optic systems to the vicinity of our customers and using [vectoring](#) as a new transmission technology, we will be able to provide up to 24 million households (out of a total of 40 million) with state-of-the-art high-speed connections. However, we are still waiting for the German Federal Network Agency to approve use of this technology. We are also planning to equip the entire mobile network with LTE by 2015 so that we can provide even higher bandwidths throughout Germany. This will enable us to create an integrated infrastructure that provides large bandwidths for both fixed-line and mobile services.

### [Last year's CR report](#)

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The backbone of high-speed broadband Internet is a fiber-optic network. Expanding the fiber-optic infrastructure to achieve full coverage goes hand in hand with tremendous financial expense. Experts estimate EUR 70 to 80 billion to provide full fiber-optic coverage in Germany alone. The more remote the communities, the higher the costs. Reasons for this include the necessary civil engineering works, which can cost up to EUR 70,000 per kilometer.

### Blanket coverage calls for cooperation.

Telekom will not be able to afford to finance blanket coverage under financially viable conditions by itself. Even in Germany, where we have a share of around fifty percent of the broadband market, we will only be able to manage this task in collaboration with our competitors. That is why we encourage German and European government offices to provide sufficient incentive to secure the necessary industry-wide participation of all ICT network operators.

## Using synergy effects for FTTH expansion.

Costs reduction potential and synergy effects can be realized and risks can be dispersed when installing new fiber optic networks based on network expansion collaborations. That is why we are open to collaboration and are reviewing all forms of cooperation in both the fixed-line and mobile communications areas.

For the first time, Telekom is working with energy service providers to set up a fiber-optic network in a city. In February 2012, we signed a cooperation agreement with network provider "eins," formerly the municipal utilities company in Chemnitz, Germany. "eins" is building a passive fiber-optic access network in Chemnitz in several stages. Telekom Deutschland leases the network, adds the system technology necessary for active operation

and uses the network to offer users its double and triple-play products. The fiber-optic network project in Chemnitz is Telekom's largest project in all of Germany. Some 20,000 households in the city located in Saxony were provided with the new broadband connections between fall 2012 and January 2013. The plan is to add another 2,000 buildings with another 20,000 households by late 2013. By the end of 2014, the total figure should increase to 60,000. Around 1,000 kilometers of new cable will be laid over the course of this project.

#### Last year's CR report

The range of possible collaborations covers options such as marketing collaboration, renting complete, passive access networks and joint ventures (joint regional companies founded with local utilities companies, special purpose associations or other partners). Telekom also launched the More Fiber<sup>1</sup> Optics for Germany initiative. The goal is to further local fiber optic expansion in collaboration with communities and local utilities companies using a standardized expansion and business model.

Agreements with local competitors regarding mutual guarantee of network access (open access) play a role here as well, because such agreements can prevent double investment. We also offer special terms and conditions packages to enable pure service providers (resellers that do not have their own network) to bear part of the expansion costs and risks involved in new networks.

#### Migration to All-IP.

We are planning to switch our entire network over to an all-IP<sup>1</sup> infrastructure in the next few years. With this step, fixed network and mobile communications will be integrated end-to-end in a next generation network based on the Internet Protocol (IP<sup>2</sup>). Numerous IT systems will be simplified and updated for this purpose.

Many people already use IP-based solutions to organize their day-to-day lives conveniently and individually. We are constantly improving our offer of fast mobile communications and fixed-line connections to lay the foundation for this change. The voice and data service platforms, which are currently separate, will be integrated onto a standardized platform over the course of the all-IP<sup>1</sup> migration. This should help reduce energy consumption considerably.

The all-IP<sup>1</sup> migration and the demand for increasingly faster bandwidths require the provision of new, efficient technologies for both data transport and individual network access. That is why we are planning to further expand our fixed-line network in 2013 on the basis of vectoring technology.

#### Expansion of All-IP network technology.

Makedonski Telekom (T-Home) continued to expand its IP-based network during the reporting period. With a total investment volume of EUR 14 million, the network upgrade is due to be completed by the end of 2013. Within the first nine months of the project 100,000 customers were migrated to the IP<sup>1</sup> network. They can now enjoy the benefits offered by the new IP-based multimedia platform. By replacing the existing digital telephone exchanges, the company is simplifying the everyday lives of its customers through the high quality of its new, converged multimedia services. Besides, the new IP-based technology will significantly reduce the network's overall energy consumption once the old digital equipment has been switched off. Thanks to the company's investment in this new technology, Macedonia will be the first country in Southeast Europe to have a fully IP-based network.

#### Telekom testing TeraStream in Croatia.

In a pilot running in the Zagreb region of Croatia Deutsche Telekom is testing its new TeraStream architecture. TeraStream is a network technology based on a cloud-based IP  architecture. Hrvatski Telekom is thus taking on a pioneering role within the Deutsche Telekom Group. The new network technology significantly reduces the IT complexity of existing networks, with the cloud concept greatly facilitating network administration and management. Deutsche Telekom has developed TeraStream to deal with the rapidly increasing volume of data traffic—now and in the future.

### Award for mobile communications network in Germany.

In the network test carried out by the German telecommunications magazine "connect" in 2012 we held top spots in both Germany and Austria. In Austria we came first in the category of voice quality and were given the overall rating of "very good." German "connect" readers felt the same, rating Telekom the best and most reliable provider of both telephony and mobile Internet. In another network test, this time carried out by the "CHIP Online" portal, our mobile network in Germany came top for the third time in a row.

### Mobile Network Operator of the Year for the thirteenth time.

In Germany, we were voted "Mobile Network Operator of the Year" for the thirteenth time running by readers of the trade magazine "connect". We were also named best mobile network operator by readers in Austria.



## Fixed-line & broadband technologies.

Data transport within the Internet infrastructure and individual use of the Internet both rely on a number of innovative technologies. Many people already use network-based solutions to organize their day-to-day lives conveniently and individually. That is why we are continuously striving to improve our offer of high-speed connections, both for fixed-line and mobile communications.

The DSL-based transmission protocols, ADSL, ADSL2+ and VDSL as well as the expansion of the fiber-optic infrastructure into our customers' homes (fiber to the home, FTTH) will cause ever higher data transmission rates in the fixed-line sector.

We are able to achieve similar increases in performance in the mobile communications area by switching from 2nd generation networks (2G with GSM and EDGE to third generation networks (3G with the UMTS-based standards HSDPA/HSUPA and HSPA+. With the switch to the Long Term Evolution (LTE) transmission standard of the future (also referred to as "4G"), data rates will increase many times over and reach broadband speeds.

### Overview: Access technologies.

Fixed-line technologies.		
	Upstream	Downstream
ADSL (Asymmetric Digital Subscriber Line)	max. 640 kbit/s	max. 6 Mbit/s
ADSL2+ (latest version of Asymmetric digital subscriber line (ADSL))	max. 2,4 Mbit/s	max. 16 Mbit/s
VDSL (Very High Bit Rate Digital Subscriber Line)	max. 10 Mbit/s	max. 50 Mbit/s
FTTH with GPON (Fiber  to the Home)	max. 100 Mbit/s	max. 200 Mbit/s
WLAN (Wireless Local Area Network)	max. 155 Mbit/s	max. 155 Mbit/s

Mobile communications technologies.		
2G  mobile communications	Upstream  *	Downstream  *
GSM plus EDGE (Global System for Mobile Communications EDGE)	max. 220 kbit/s	max. 260 kbit/s
3G  mobile communications	Upstream  *	Downstream  *
UMTS (Universal Mobile Telecommunications System)	max. 384 kbit/s	max. 384 kbit/s
HSDPA/HSUPA (High Speed Downlink/Uplink Packet Access/High Speed Uplink Packet Access)	max. 5.8 Mbit/s	max. 14.4 Mbit/s
HSPA+ (High Speed Downlink Packet Access+)	max. 5.8 Mbit/s	max. 42.2 Mbit/s
4G mobile communications	Upstream  *	Downstream  *
LTE (Long Term Evolution)	max. 50 Mbit/s	max. 100 Mbit/s

\* The maximum values listed here are based on theoretical assumptions. Upstream , downstream and data

rates often fall below these values during actual use.

## ADSL2+ expansion.

ADSL2+ (Asymmetric Digital Subscriber Line 2+) is the current DSL standard being used in Deutsche Telekom's fixed-line network. 23.5 million households had access to bandwidths of up to 16 Mbit/s based on ADSL2+ at the end of 2012.

In 2011 we began introducing MSAN (multi service access node) to integrate legacy systems into the all-IP network. It replaces the splitters that were previously used for network connection to separate voice and data and consequently enables the use of DSL lines with fully IP-based services as well as traditional phone services without the necessity to replace existing devices. By late 2012, 4,709 exchange areas had MSAN service. We will continue the migration process in 2013.

## Expansion of fiber-optic networks in Macedonia and Montenegro.

Optical fiber offers significant advantages over copper wires in long-distance and high-demand applications because of its much lower attenuation and interference. That is why Deutsche Telekom is gradually replacing copper wires with optical fibers in many of its networks—for example at Makedonski Telekom where replacing the copper network by a state-of-the-art fiber to the home (FTTH) network now means 14 percent of households in the country are already benefiting from the high-performance fiber-optic network.

In 2012 Crnogorski Telekom also continued to roll out of its fiber-optic network (fiber to the home or FTTH). By January 2013 the company had 3,777 FTTH and 181 FTTB (fiber to the basement) users.

## VDSL expansion.

Deutsche Telekom began expanding the high-speed DSL version, VDSL  (Very High Bit Rate Digital Subscriber Line), with hybrid networks made of fiber optic and copper lines in 2006. The conventional copper lines are used to bridge the last few hundred meters to the home. That means 12.6 million households already have access to bandwidths of up to 50 Mbit/s (as of December 2012). Bandwidths of up to 16 Mbit/s are available in 7,800 out of around 7,900 exchange areas. Expansion is not possible in the remaining exchange areas due to technical or financial reasons. Almost 21.5 million households in Germany can receive triple-play products based on bandwidths of between 16 Mbit/s and 50 Mbit/s.

In early 2013, Telekom announced that it intended to include more companies in its VDSL  marketing activities in addition to its current sales partners. The collaborations are based on the "contingent model", which gives partner companies a volume discount for VDSL  connections in return for purchasing a certain minimum amount. Telekom is planning to expand this model to include fiber optic connections to the home as well as vectoring connections.

With VDSL , Telekom was able to considerably increase the speed of its DSL connections by more than three times the speed provided by ADSL and more than twice the speed provided by ADSL2+. That required a hybrid network with fiber-optic cables extending close to our customers' homes. However, conventional copper lines are used to cover the last 300 to 500 meters to the customer's home. These lines set a limit on data transmission speed. With the new VDSL  vectoring technology, we can now reach high data transmission speeds of up to 100 Mbit/s.

## FTTH expansion in Germany.

Fiber [i](#) optics is the fastest data transmission medium. One of our goals is to connect a large number of households directly to our high-speed fiber-optic network (FTTH). That is why Deutsche Telekom continues to expand its fiber-optics network, laying the foundation for the gigabit society. This network of the future will provide our customers in Germany with high-speed access of 200 Mbit/s (download speed, up to 100 Mbit/s upload speed) to the Internet, to Entertain offers and to multimedia applications—in one-of-a-kind quality and variety.

Investments by Telekom in new-fiber optic networks will be based on demand. Two requirements need to be met in the expansion areas before civil engineering works can start:

- At least 80 percent of residents need to give their permission to have their building connected or for cables to be laid in their building and
- At least ten percent of customers need to have preordered the service.

If these conditions are not met, the expansion will have to be postponed. At the same time, we are evaluating the feasibility of using other technologies, for example VDSL [i](#) with vectoring.

The number of cities with 80 percent owner approval and 10 percent preorder rates increased by eight to a total of 20 in 2012. We are currently either expanding or getting ready to offer the FTTH network in these cities. FTTH expansion is planned for additional cities in 2013.

### Requirements for FTTH connections met.

Since 2010, we have met the requirements for connecting a total of 340,000 households (homes passed) to the fiber-optic network by laying fiber-optic cables in residential streets. This includes expansion projects completed in collaborations with municipal utilities companies and other partners. More connections should be available by the end of the year.

### Cooperation with housing businesses in North Rhine-Westphalia.

We are specifically looking to cooperate with the housing industry in our expansion activities. Homeowners who agree to the expansion can expect the value of their property to increase considerably as a result of FTTH connections. Deutsche Telekom embarked on a trend-setting ICT infrastructure collaboration with Deutsche Annington Immobilien AG (DAIG). The two partners gave the go-ahead for a fiber-optic connection of around 171,000 homes managed by DAIG in Germany in March 2011. In several steps, Deutsche Telekom will provide DAIG buildings at approximately 600 locations with high-speed broadband connection at competitive prices. During the first phase, we provided 42,000 DAIG apartments in North Rhine-Westphalia with access to the new network. Initially, our agreement with DAIG covers the provision of TV services via Telekom's cable connections. An additional FTTH expansion has been agreed for some of the properties and is scheduled to start in 2013.

## Maximum speeds with VDSL vectoring.

In addition to FTTH expansion, Telekom is also driving fiber-to-the-curb (FTTC) expansion based on hybrid networks that use fiber-optic and copper lines in order to be able to quickly extend broadband coverage. Thanks to VDSL [i](#) vectoring, we can already achieve speeds of 100 Mbit/s in these access networks. Vectoring [i](#) is a technology that was standardized in 2010. It considerably speeds up transmission through the copper cables that cover the final few meters to the customer. All of the signals being transferred in each cable bundle are controlled by a single device. We successfully launched the first VDSL [i](#) vectoring pilot applications in 2012. However, the regulatory framework needs to be modified before we can introduce the technology because VDSL

**□** lines are usually used by several providers to provide their services. Control of these lines by a single network operator is not allowed at present. In late 2012, Telekom took the initiative and submitted an application regarding this situation to the German Federal Network Agency. The aim is to establish legal certainty for all market participants as soon as possible so that expansion can begin quickly. The regulatory authorities in Austria and Belgium, supported by the EU Commission, have already approved the use of vectoring.

Telekom has announced plans to invest several billion euros primarily in vectoring technology in its fixed-line network should the Federal Network Agency decide to approve the application. That would provide up to 24 million households in Germany with a faster Internet connection. We would be able to connect the first customers in 2014. The hardware needed in the process is ready to go to market. We are currently reviewing how to reduce the new systems' energy requirements. If everything goes as planned, Telekom will be able to provide 65 percent of households in Germany with VDSL **□** vectoring via an FTTC infrastructure by 2016.

## Pushing ahead in fixed-line technologies in national companies.

The Deutsche Telekom Group is striving to introduce state-of-the-art technologies for network operation. The fixed-line segment is another area where significant progress has been made, as the following examples show.

### **Hungary: modernizing with WASP.**

Project WASP, a two-phase modernization project for Magyar Telekom's fixed ATM-based ADSL network, got under way in Hungary during 2012. This modernization process is being undertaken by means of broadband MSAN (multi-service access node) devices with VDSL2 cards. MSAN has been chosen because it is a future-proof technology capable of using VDSL **□** (with backward compatibility with ADSL and ADSL2+), POTS **□** cards, or even GPON **□** cards in the future.

During the first WASP phase from 2012 to 2014, legacy DSLAM ports are being replaced with MSAN, using VDSL **□** cards to improve VDSL **□** coverage. The second phase from 2014-17 will involve the rollout of MSAN in copper-based areas with VDSL **□** and POTS **□** cards for legacy public switched telephone network (PSTN) migration in a service-driven way.

### **Hungary: moving forward with IP **□** EDGE.**

Rapidly increasing fixed and mobile aggregation traffic in Hungary necessitates an extension of the capacity of Magyar Telekom's IP **□** network. The company's IP **□** EDGE project served to modernize the IP **□** network, meet additional capacity needs, simplify operations and enable the introduction of new services. Moreover, this technology has enabled Magyar Hungary to build a future-proof convergent fixed/mobile IP **□** platform and at the same time reduce energy consumption.

### **Greece: Upgraded infrastructure for Aegean islands.**

In Greece Deutsche Telekom's subsidiary OTE now offers even faster and steadier broadband connections to the Aegean islands. This was achieved by increasing the capacity of the backbone network by adding an extra 50 Gbps to specifically meet the islands' Internet needs. OTE's 1,885-km offshore network, which connects the Aegean islands to each other as well as to the rest of the company's backbone network, is based on state-of-the-art dense wavelength division multiplexing (DWDM) technology and ring architecture, which ensures multiple alternative routings in case of damage to a cable.

### **OTE VDSL **□**: Ultra-high Internet speeds of up to 50 Mbps.**

In Greece OTE is pioneering the commercial launch of new ultra-high Internet speeds of up to 50 Mbps through VDSL **□** technology. This is transforming the daily Internet experience by offering users options such as faster file downloading, uninterrupted HD video streaming, easy connection of multiple devices and improved online gaming responsiveness.

## Increased speed of fixed line internet in Slovakia.

Slovak Telekom increased the speed of fixed-line Internet for all its customers and stepped up the provision of copper and DSL lines by 9.4 percent. The various programs saw increases from 2 Mbps to 5 Mbps, from 3.5-6.5 Mbps to 10 Mbps, and from 12 Mbps to 20 Mbps. Internet speed was boosted automatically and free of charge for the customers, who were informed immediately afterwards.

## WiFi services for broadband Internet on the go.

We currently offer our customers in Germany and elsewhere diverse options for broadband Internet use. We operate stationary and mobile WLAN HotSpots, for example in public transport, for this purpose. People who use our HotSpotService can conveniently access data and information at more than 11,000 locations in Germany, for example at 1,400 McDonald's restaurants, and at some 50,000 of our partner locations worldwide.

In 2012, Telekom in Germany also operated HotSpots at 5,100 public telestations, the multi-faceted successor of the traditional phone booth. We are planning to set up another 5,000 telestations by the end of 2014 to improve our WLAN coverage.

**WLAN TO GO:** Telekom customers will receive access to a quickly increasing number of HotSpots worldwide with the WLAN TO GO service, starting in the summer of 2013, which will include around eight million HotSpots. This offer will be made possible thanks to our new partnership with the largest WiFi network worldwide, Fon. We expect to create up to 2.5 million additional HotSpots in Germany alone by late 2016 thanks to this collaboration. We will be using a technology mix of wireless, fixed-line and WLAN, which will enable a seamless transition between these technologies. In terms of our integrated network expansion strategy, this technology mix has the advantage that WLAN and HotSpots enable high data traffic to be redirected to the fixed network, freeing up the mobile communications network.

WLAN TO GO is based on the concept of mutual sharing. As of June 2013, DSL customers will be able to share the unused capacities of their Internet connection with others. Participating customers will receive free access to several million WLAN HotSpots worldwide from other DSL users who have also decided to make their Internet connections available. With WLAN TO GO, customers can also surf online at all Telekom HotSpots in Germany free of charge. Telekom places high importance of data privacy and security with its WLAN TO GO service. Customers' home connections stay protected and they assume no liability. They can also continue to surf online at high speeds. Telekom is planning to expand its cooperation with Fon at other international subsidiaries in Bulgaria, Greece, Romania, Slovakia and Hungary in 2013 as well.

**Railnet:** We offer our customers WLAN HotSpots in high-speed ICE trains on selected routes together with the German railway company Deutsche Bahn AG as part of our Railnet cooperation. And we continue to expand the offer. The plan is to equip all 255 of Deutsche Bahn's high-speed ICE trains and around 5,000 kilometers of railway line with WLAN HotSpots by late 2014. We will increasingly be using UMTS/HSPA and LTE technologies as well as Flash-OFDM . The Munich–Nuremberg, Wolfsburg–Berlin and Berlin–Hamburg routes were equipped with LTE by the end of 2012. A mixture of LTE and HSPA is being used between Frankfurt and Nuremberg, while HSPA is mainly employed on the routes between Dortmund, Hanover and Wolfsburg as well as along the Mannheim–Basel connection.

**Inflight connections:** With our Inflight service, we make it possible for our customers to go online via HotSpots on board seven different airlines, including Lufthansa. The service is supported by satellite and made available in collaboration with our partner, Panasonic Avionics. We equipped 85 percent of the 106 machines in Lufthansa's intercontinental fleet with the technology by the end of 2012, which means the airline currently has the most

HotSpots on planes. Our other customers, Gulf Air, Turkish Airlines, Transaero, Etihad and JAL only recently decided to offer the Inflight service, which means only a few of their planes currently feature the service. We were operating 114 HotSpots by the end of 2012 as part of the project. American Airlines, another significant flight service provider, jumped on board in January 2013 as well. They currently offer the service in three of their machines.

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## 2nd & 3rd generation mobile communications.

In addition to setting up state-of-the-art mobile communications networks, Telekom is also continuing to drive expansion of the current 2G and 3G infrastructure. This will enable more and more people to participate in the information and knowledge society through a fast connection. We are also upgrading older systems to meet state-of-art systems technology, which will improve their performance and energy efficiency.

### High-speed UMTS with HSPA+.

Customers in all of Germany's highly populated areas can also go online via UMTS (Universal mobile telecommunications system), the third generation (3G ) mobile communications technology. With the UMTS-based protocol, High Speed Packet Access+ (HSPA+), data transmission speeds can be increased to DSL level, i.e., up to 42.2 Mbit/s.

Telekom is recognized as the mobile communications quality leader in Germany. We continue to expand our UMTS network as part of our technology mix in order to secure this position. By the end of 2012, we were providing UMTS-based HSPA+ coverage to 89 percent of the German population. We plan to continue network expansion in 2013 as well.

### Significant improvements in mobile networks (HSPA+, 3G, IP).

Improving the quality of mobile communications in 2G and 3G networks is another strategic goal throughout the Deutsche Telekom Group, and significant progress was made in a number of subsidiaries during the past reporting period.

Over 70 percent of the Slovakian population is now covered by Slovak Telekom's 3G network HSPA+ is available at 415 sites throughout the country. By the end of the reporting period, 3G HSPA+ (21 Mbps) outdoor coverage had reached 77 percent of the country's population.

Crnogorski Telekom, Deutsche Telekom's subsidiary in Montenegro, invested EUR 2.1 million in the modernization of its radio access network (RAN). With 267 2G sites 99 percent of the population is now covered by GPRS/EDGE technology , and with 90 3G sites (all IP-enabled) the UMTS/HSPA+ coverage has reached 72 percent of the population. EUR 200,000 was invested in IP microwave technology, with 32 TDM-based microwaves hops for 3G sites being replaced by IP microwave ones. During 2012, a total of EUR 200,000 was invested in three new 2G sites and five new 3G ones.

### Increased 3G network coverage thanks to national roaming agreement in Austria.

Thanks to a long-term network partnership that T-Mobile Austria entered into with a competitor, customers in Austria have been enjoying an expanded 3G network since late 2012. The agreement has enabled T-Mobile Austria to considerably improve its 3G network coverage, particularly in rural areas, increasing national network coverage to 94 percent. The collaboration is also cost-efficient and environmentally friendly as it

eliminates the need for new 3G  sites.

## AMC 3G network rated best in the market.

The AMC 3G  network was rated the best in the market and awarded the 3G  Business Excellence prize by the 4th Infocom Albania Forum, which took place in Tirana on November 20, 2012. "From Infrastructure Evolution to Digital Revolution" was the theme of Albania's only conference specializing on national and international ICT developments.

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## 4th generation mobile communications.

Telekom is very involved in establishing 4G—next generation mobile networks—based on LTE (Long Term Evolution) technology. The growing demand for high-speed, location-independent Internet can be met with LTE, even in areas with weak infrastructure. That is why we focus our efforts on connecting areas that previously had no coverage as part of the CR action area "Connect the unconnected."

Telekom is intensively pursuing LTE expansion to give smartphone and tablet computer users access to the entire range of services at as many locations as possible.

### Setting up the LTE network in Germany.

In 2010, Telekom began setting up the LTE infrastructure in Germany to get its mobile communications network ready in plenty of time for the dramatic increase in smartphone and tablet computer use and to meet its customers' growing demands. By the end of 2012 we had set up more than 3,000 base stations and launched the service via LTE1800, which we were also setting up at that time, in more than 100 of Germany's largest cities. Hamburg, Bremen, Berlin, Munich and Cologne are only some examples of cities that have been receiving LTE1800 service ever since. The expansion of LTE technology in the 800 MHz range is quickly progressing.

### Closing the gaps.

Together with the other two 800 MHz network operators, we have met the LTE roll-out obligations in Germany in all of the 16 federal states. The gaps have been closed—even rural regions now have access to broadband Internet. Having satisfied the roll-out obligations, we can now use the assigned frequencies in the 800 MHz range across Germany without restrictions. This enables transmission speeds of up to 50 Mbit/s.

We had already equipped 2,200 base stations with LTE800 technology by the end of 2012. 2,400 additional LTE base stations run in the 1,800 MHz spectrum, which is the frequency of choice in urban regions because of the short range. Taking both technologies combined, 42 percent of the population had coverage by the end of 2012. We plan to increase coverage to 85 percent of the population by 2016.

LTE is the successor of the UMTS mobile communications standard and rings in a new generation of mobile communications technology (4G) that is still being developed. Telekom is playing a key role in this development. LTE enables even greater acceleration of data transmission in mobile as well as fixed-line Internet to up to 100 Mbit/s (for LTE1800). This means that LTE offers transmission speeds that are 20 times faster than in previous mobile networks.

LTE can be used in a wide frequency range from 700 MHz to 2,600 MHz. The lower frequencies around 800 MHz are particularly effective for providing service to rural areas. Signals transmitted in the 800 MHz range travel much further in open space than similar signals transmitted at a high frequency. They also help provide better service inside buildings.

### Expanding 4G/LTE mobile communications.

LTE technology, the fourth generation of mobile networks (4G), offers an unparalleled experience for services

requiring high wireless data rates. Since Deutsche Telekom's strategic goal is to lead the field in connected life and work, subsidiaries throughout the Group are launching and expanding their LTE networks.

#### **LTE rollout in Hungary.**

Thanks to the ongoing rollout of LTE base stations in Hungary, outdoor population coverage reached 27 percent nationwide and 99 percent in Budapest by the end of 2012. This expansion put T-Mobile Hungary ahead of Hungary's two other mobile service providers in LTE services.

#### **Montenegro: soft LTE launch in October 2012.**

Crnogorski Telekom soft-launched LTE technology in the country with a trial network of five eNodeB radio base stations (RBS): four 2,600 MHz RBS in the Podgorica city center area and one 1,800 MHz RBS in Kotor to cover the downtown area.

#### **Cosmote breaking 4G ground in Greece.**

In November 2012, Cosmote launched the first commercial 4G/LTE network in Greece, covering the majority of municipalities in the Athens and Thessaloniki regions. Cosmote's new 4G network is initially available for uploading and downloading data through 4G tablets and USB sticks to subscribing customers. There are plans to extend the 4G network to other Greek cities in the near future.

#### **Cosmote Romania: successful LTE lab and field trials.**

After successfully performing LTE laboratory and field trials, Cosmote Romania's network is ready for expansion into 4G/LTE technology in the near future.

#### **Pioneering the 4G network in Croatia.**

In March 2012, Hrvatski Telekom (T-HT) launched the first commercial 4G/LTE network in Croatia, with base stations located in Zagreb, Rijeka, Osijek and Split. This pioneering achievement will be followed by an expansion of the LTE network to cover other urban and rural areas in the country.

#### **T-Mobile Austria gets ready to expand its LTE network.**

T-Mobile Austria has been getting ready to expand its LTE network throughout Austria. In preparation of the expansion, the company finished updating its entire GSM infrastructure by November 27, 2012, and equipped it with a new transmitter technology. At the same time, T-Mobile Austria improved voice and connection quality for more than four million customers. Call interruptions were reduced by 28 percent while reliability increased by 79 percent.

Connect magazine rated T-Mobile Austria's mobile network as "very good" in October 2012.



## Mobile communications & health.

At Telekom we are convinced that mobile communications technology can be used without health concerns if specific threshold values are complied with. They are based on current findings of independent German and international expert committees that continue to evaluate all relevant studies and research results. Recognized expert organizations such as the World Health Organization (WHO) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) have repeatedly verified the current limit values for mobile communications over the past few years, thereby confirming the safe use of this technology.

Nevertheless, mobile communications continues to be a source of concern among the general public when it comes to possible health risks. We hope to ease these fears by providing scientifically sound, transparent information. We will only be able to run a successful business and systematically drive network expansion if our technology is widely accepted by the people. That is why Telekom engages in open dialog with all stakeholders involved in network expansion including communities, skeptical organizations, interested residents and customers.

Our principles on how to handle mobile communications and health responsibly are specified in Deutsche Telekom's EMF Policy.

### EMF Policy.

EMF is short for electromagnetic fields, the physical requirements for transmitting any signals via radio. In order to ensure a responsible approach to the topic of mobile communications and health, we have set a clear framework for our related activities with our EMF Policy. The policy contains minimum requirements in the area of mobile communications and health. With it, we are committing ourselves to more transparency, information, participation and financial support of independent research on mobile communications, far beyond that which is stipulated by legal requirements.

Our international subsidiaries are following suit: the managing boards at all of Telekom's mobile communications subsidiaries in Europe have signed the EMF Policy. We evaluate compliance with this policy in great depth every two to three years so that we can improve certain aspects and develop solutions in different working groups such as the EMF Core Team and the EMF Technical Working Group. These working groups also work to encourage Group-wide exchange between Group Headquarters and mobile communications subsidiaries. New initiatives are developed and experience gained in pursuing various strategies is discussed in this context. One of our areas of focus in 2012 was developing easily comprehensible information on DECT telephony, WLAN and safety. Internal and external experts from the areas of health, safety and measurement technology conducted training courses with internal specialists on the latest research findings in these areas. International Deutsche Telekom experts were also working to evaluate new technologies from a technical standpoint.

Download Background document on the EMF Policy

Telekom approved its EMF Policy addressing a responsible approach to mobile communications and health in March 2004. It contains mandatory recommendations for the international subsidiaries. These are implemented in different markets in line with local circumstances and requirements. In 2011, Deutsche Telekom defined

standardized minimum requirements for the mobile communications and health area in collaboration with the international subsidiaries. These requirements are also specified in the EMF [Policy](#).

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## Transparency.

Telekom has specified three focal points to promote transparency in the area of mobile communications and health. These are reflected in three recommendations made in the [EMF Policy](#):

- Telekom requires its mobile subsidiaries to clarify and establish internal responsibilities and processes regarding technology, safety and health issues.
- They are encouraged to facilitate access to information on existing electromagnetic fields by the general public. This includes conducting EMF measurement campaigns and supporting national EMF databases.
- Proof of compliance with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) limits for each individual mobile communications antenna must be made available upon request.

On most markets on which Telekom is active, legally specified limit values apply that are based on recommendations made by ICNIRP for mobile communications in the frequency ranges between 100 kHz and 300 GHz. All of the mobile subsidiaries' base stations have been built in accordance with the valid regulations of that country and comply with these recommendations. For the sake of transparency, our international subsidiaries provide information on each individual base station on request.

T-HT Hrvatski Telekom supports the Ministry of Health's national database for all EMF sources.

The Croatian subsidiary, T-HT Hrvatski Telekom is actively involved in helping the Croatian Ministry of Health create an EMF registry of all EMF emission sources. In the reporting period, T-HT Hrvatski Telekom commissioned a laboratory authorized by the Ministry of Health to take measurements near the company's base stations. The measurements covered all of the company's mobile communications systems. The results were submitted to the ministry in May 2012. By being published in the EMF registry, T-HT Hrvatski Telekom is making a contribution to more transparent information on actual EMF emission levels and to easing public concern. With these efforts, the company is laying the foundation for conducting open stakeholder dialog about mobile communications and health with interested residents.

The annual measurements of EMF sources are a permanent component of addressing public discussions about mobile communications and health in Croatia as well as company-internal EMF risk management practices. Measuring emission levels at selected locations is regulated by law. The goal is to inform the general public of actual emission levels.

Greece: Measurements every six minutes.

Cosmote Greece installed the Pedion24 measuring system at a total of ten new measurement stations during the reporting period. This autonomous monitoring system measures the electromagnetic fields at selected sites around the clock and transmits measurement data to a central storage database. The information is then evaluated and immediately published online. 2,550,000 measurements (one measurement every six minutes) were conducted throughout the year and the results were published on [www.pedion24.gr](http://www.pedion24.gr) to provide interested

citizens with seamless information about electromagnetic fields found at selected sites.

To increase acceptance of the base stations by residents and decision-makers and to contribute to an objective discussion, Cosmote Greece published measurement values during the reporting period and informed the critical public comprehensively about all additional aspects of mobile communications and health. The company also pursued dialog with customers and residents through efforts such as getting actively involved in and organizing information events.

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Pedion24 is a constant (24-hour) EMF  measuring system for frequency ranges of 100 kHz to 3 GHz. Cosmote Greece developed Pedion24 in close cooperation with research institutes such as the National Technical University of Athens, Aristotle University of Thessaloniki and the University of the Aegean. Typical Pedion24 measurement sites include schools, hospitals, community centers and other public buildings. Cosmote Greece's experience shows that the public sees these 24-hour measurements as highly credible, which means these measurements are making a considerable contribution to helping the public EMF  debate focus on the facts.

### Measurement campaign in Albania completed.

Since 2011, the Albanian subsidiary AMC has been supporting an independent measurement campaign conducted by the Polytechnic University of Tirana with the goal of creating more transparency regarding actual EMF  emissions in the country. Electromagnetic fields were measured at "sensitive" sites such as schools, hospitals and residential areas. The scientists recorded EMF  levels from a total of 50 AMC base stations in the two largest Albanian cities. The results and the final report will be published on the AMC and Polytechnic University of Tirana websites in 2013.

### Extremely low immission levels in Austria.

The Austrian industry association, [Forum Mobile Communications](#) (FMK) commissioned TÜV Austria to conduct measurements of high-frequency fields throughout Austria from 2009 to 2012. TÜV Austria recorded emissions caused by radio, TV, public safety radio channels, mobile communications and cordless phones at 449 locations. Once the measurements had been completed in September 2012, the levels were published in a database on the industry association's website. The measured levels were very low. In most cases they amounted to some ten-thousandths of the levels recommended by the World Health Organization (WHO) as well as mandatory levels in Austria. The highest levels were not even one thousandth of the permissible level for the 900 MHz range.

By publishing the results, the industry association and T-Mobile Austria, as an active member, contributed significantly to objectifying the discussion revolving around mobile communications and health in Austria.



## Information.

Another principle specified in Telekom's EMF Policy involves active provision of information on technology and health research and requires the mobile subsidiaries to promote communication about technology, safety, research and health. This includes educational measures and consumer information as well as raising employee awareness.

### Industry-wide communication initiatives.

Telekom's international mobile communications subsidiaries are involved in numerous national operator initiatives to improve public communication about mobile communications and health. The operator initiatives act as the central go-to place for residents, the media and public and private institutions when it comes to the topic of mobile communications. They work to promote transparency regarding all aspects of mobile communications, in particular health and consumer protection, network expansion and handling location conflicts.

### Selected memberships in the area of mobile communications and health.

Founded	Name	Subsidiary
1996	Forum Mobile Communications (FMK) <a href="http://www.fmk.at">www.fmk.at</a>	T-Mobile Austria
1999	Mobile Network Operators Association (MoNet) <a href="http://www.monet-info.nl">www.monet-info.nl</a>	T-Mobile Netherlands
2001	Informationszentrum Mobilfunk (IZMF) <a href="http://www.izmf.de">www.izmf.de</a>	Telekom Deutschland
2003	Mobile Operators Association (MOA) <a href="http://www.mobilemastinfo.com">www.mobilemastinfo.com</a>	T-Mobile UK
2004	Mobile Communication Association of Croatia (UPKH) <a href="http://www.upkh.hr/index-en.html">http://www.upkh.hr/index-en.html</a>	T-HT Hrvatski Telekom
2005	T-Mobile USA's web portal on EMF <a href="http://www.t-mobile-takeaction.com/aboutwireless.html">Hand mast siting http://www.t-mobile-takeaction.com/aboutwireless.html</a>	T-Mobile USA
2007	GSM Association's health & environment web portal <a href="http://www.gsmworld.com/health">www.gsmworld.com/health</a>	Deutsche Telekom Group
2007	Hungarian Mobile Operator's EMF <a href="http://www.emf-portal.hu">Portal</a> <a href="http://www.emf-portal.hu">www.emf-portal.hu</a>	Magyar Telekom
2008	Polish Society of Applied Electromagnetics (PTZE) web portal 'Electromagnetic Fields' <a href="http://www.ptze.pl">www.ptze.pl</a>	PTC
2008	Mobile Operators Association (EEKT) <a href="http://www.eekt.gr">www.eekt.gr</a>	Cosmote Greece
2010	Macedonian Operator Working Group on EMF	T-Mobile Macedonia
2010	Czech Operator Association <a href="http://www.zdraviamobil.cz">www.zdraviamobil.cz</a>	T-Mobile Czech Republic

### Initiatives conducted by industry association IZMF.

The industry initiative Informationszentrum Mobilfunk (IZMF) considerably expanded its information offer during the reporting period. They uploaded interactive online content and published several brochures. They also produced several short films in 2012. The films highlight different aspects of mobile communications and health and provide answers to central consumer questions such as "What is an SAR level and how is it measured?" In November 2012, the IZMF also hosted a stakeholder workshop of the Mobile Communications Forum. Deutsche Telekom employees attended the workshop, which focused on the mobile operators' voluntary commitment.

The IZMF is a point of contact for residents, the media and public and private institutions when it comes to the topic of mobile communications. It is a registered, non-profit organization that was founded by the mobile communications network operators in Germany. Supporting the IZMF is an important factor in Telekom's EMF [\[i\]](#) risk management practices. The Group supports the IZMF's activities with financial and technical assistance, such as supporting the creation of information material on the topic of mobile communications. Interested parties can get such information from IZMF via the free hotline 0800 3303133 or by visiting [www.izmf.de](http://www.izmf.de).

## EMF communication at the international subsidiaries.

Several international subsidiaries enhanced their consumer information on mobile communications and health during the reporting period:

T-Mobile Czech Republic redid its online portal, providing interested parties with extensive information on base stations and health. The online information offer now includes reports on joint activities by Telekom and the industry association of GSM-mobile operators, [GSMA](#), in the area of research financing. Visitors to the site can also get in touch with an EMF [\[i\]](#) expert by sending an e-mail to [bts@t-mobile.cz](mailto:bts@t-mobile.cz).

T-Mobile Austria adopted a new communication strategy in 2012. In this framework, the Austrian subsidiary published internal and external brochures on using mobile communications safely, started redoing its online mobile communications and health sites and developed a guideline for installing mobile communications systems in collaboration with [Forum Mobile Communications](#) (FMK). The guideline is a practical aid to help representatives from city and regional authorities make decisions and to familiarize them with the technical, physical, legal and communication-related challenges that go hand in hand with setting up mobile communications networks.

The Albanian subsidiary, AMC, launched a campaign in 2012 to inform the public as well as political decision-makers. The company focused on general mobile communications topics as well as health concerns about mobile communications antennas and distributed 3,000 brochures on the topic.

The Bulgarian subsidiary, Globul, redesigned their EMF [\[i\]](#) brochure in the fall of 2012. The brochure provides extensive answers to general questions regarding mobile communications and health. The company revised the content including information on the latest research findings and legal initiatives.

By continuously engaging in dialog and offering information, our international subsidiaries are making a significant contribution to gaining people's trust in the harmlessness of mobile communications technology. Collaboration with authorities and public information platforms plays an important role in this context. T-Mobile Netherlands, for example, is working closely with its proven partners to handle resident inquiries on individual sites. These partners include the network operator initiative, [MoNet](#), the Dutch government's information platform, [Antennebureau](#) and the public information platform on mobile communications and health, [EMF Knowledge Center](#). All three organizations are supported by all Dutch network operators and have proven their value as an important source of information for the public.

## Support for German communities in LTE expansion.

Telekom in Germany collaborates with its competitors when it comes to issues that are important to the general public, like providing information on electromagnetic fields (EMF). The company works in these industry-wide communication initiatives with public and private partners in areas outside of institutionalized network operator associations as well, such as the [Informationszentrum Mobilfunk](#) (IZMF). For example, Deutsche Telekom

created various information materials like basic papers on the new LTE mobile communications technology in collaboration with local authorities' associations and other network operators in 2012. Telekom coordinated the choice of base station locations with the affected communities as set out in an agreement concluded with the local authorities' associations. Telekom also helped design concepts for improved collaboration with the communities at its annual meeting with local authorities' associations in 2012. The goal of this information initiative is to inform communities about the new technology and to develop solutions for LTE expansion.

## Online information on mobile communications and health.

Many international mobile subsidiaries provide informative material on mobile communications and health online in the local language.

Online information on mobile communications and health provided by mobile subsidiaries.	
Deutsche Telekom	<a href="http://www.telekom.com">www.telekom.com</a>
Telekom Deutschland sales portal	<a href="http://www.telekom.de/sar-werte">www.telekom.de/sar-werte</a>
T-Mobile Austria	<a href="http://www.t-mobile.at">www.t-mobile.at</a>
T-Mobile Netherlands	<a href="http://www.t-mobile.nl">www.t-mobile.nl</a>
T-HT Hrvatski Telekom	<a href="http://www.t.ht.hr">www.t.ht.hr</a>
Cosmote Greece	<a href="http://www.cosmote.gr">www.cosmote.gr</a>
Magyar Telekom	<a href="http://www.telekom.hu">www.telekom.hu</a> <a href="http://www.emf-portal.hu">www.emf-portal.hu</a>
Cosmote Romania	<a href="http://www.cosmote.ro">www.cosmote.ro</a>
AMC	<a href="http://www.amc.al">www.amc.al</a>
T-Mobile Macedonia	<a href="http://www.t-mobile.com.mk">www.t-mobile.com.mk</a>

## Information for users of mobile communications continuously updated.

In Germany, Telekom is committed to providing residents with extensive information on all questions revolving around the topic of mobile communications and health. Among other tools, the company uses the flyer entitled „Information on using your cell phone" for this purpose. Consumers can also find out about the SAR levels of all of the end devices sold by Telekom in Germany on its [website](#). The levels of the devices listed there are considerably below the legal limit of two watts per kilogram of body weight. We also offer interested consumers an up-to-date SAR info service as well as a variety of background information on technological and safety aspects at our shops and in different magazines, like "telekom trend" magazine.

## Training and raising employee and contractor awareness.

Telekom employees are important "ambassadors" to the public. They help increase the knowledge of mobile communications and health among the population and by doing so, enhance the acceptance of mobile communications technology. Training programs were conducted at several international subsidiaries during the reporting period.

### Examples of EMF [training programs at the international subsidiaries](#).

The international subsidiaries offer training to selected employees. These employees are expected to work as facilitators and provide their colleagues, suppliers, subcontractors, customers and the general public with better, more complete information on EMF, thereby helping make the discussion revolving around mobile communications and health more objective. In 2012 focal topics included national and international safety

standards, risk assessment procedures and how to deal with public perception of the topic. Hungary's Magyar Telekom conducted two training courses with a total of 40 employees in 2012, for example. Cosmote Romania conducted training courses with around 50 employees from different technical and business departments. Cosmote decided to conduct this measure as a result of various omnibus surveys that were conducted in 2011 and showed that the public tended to perceive EMF [topics](#) in a negative light.

Globul, our Bulgarian subsidiary, also provided training to subcontractors who had been commissioned to acquire sites for mobile communications base stations as well as construct and equip them. In November and December 2012, these subcontractors learned how to effectively organize communication on EMF [to the public](#).

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## Participation.

Active involvement of all stakeholders early on is the basis for Deutsche Telekom being able to successfully continue its network expansion. For this purpose, we actively seek dialog with stakeholders such as communities, residents and people who live near mobile base stations as well as skeptical organizations and NGOs. Their constructive criticism and comments provide us with valuable information that we take into consideration during the planning phase. That is why the principle of participation is a permanent feature in our EMF Policy.

Based on this principle of participation, we require our international subsidiaries to work closely with communities and to help them with their expertise when it comes to answering the questions of residents regarding network development and site selection for mobile base stations. We also encourage them to try to find solutions that are acceptable to all parties when looking for a site. Assigning local contacts to these projects as a liaison with those involved at the regional level facilitates this task and makes it possible to resolve conflicts or answer questions quickly and easily on the basis of expert knowledge.

Our international subsidiaries have been conducting appropriate measures to encourage participation for several years. These activities are based in particular on voluntary commitments by mobile communications providers in Germany as well as an agreement with local authorities' associations. Telekom in Germany signed both in 2001.

### Voluntary commitment of mobile providers in Germany.

Together with the other mobile communications providers in Germany, Telekom Deutschland made a voluntarily commitment to the German federal government to conduct measures to gain the public's trust when expanding the mobile networks. The focus is on the following activities:

- Improving communication and involving stakeholders in site selection
- Consumer protection and information
- Providing financial backing for independent research
- Helping create an EMF database, EMF monitoring, EMF measurement programs

Under this voluntary commitment, Telekom Deutschland and its competitors announced in 2012 that they would contribute a total of EUR 600,000 to the German federal government's project for EMF risk communication over the following two years. The money will finance projects such as the Knowledge management and risk communication project, which was launched in 2012. The German Federal Office for Radiation Protection (BfS) is responsible for coordination and expert assessment. The goal is to provide people with even more comprehensive, targeted information about the possible impact of mobile communications technology on humans and the environment.

Independent auditors conduct assessments on implementation of the voluntary measures. The results of the 2011 expert report drafted by these independent auditors were published in late 2012. As in previous years, the expert report confirms that Telekom in Germany is realizing its voluntary commitments in a sustainable way. Despite the intensive expansion of the LTE network, more than two-thirds of the communities surveyed said that there were no conflicts during the period under review. However, there is room for improvement when it comes to providing information to small communities. The network operators responded to these results by announcing

that they would review and amend their processes.

### Last year's CR report

In December 2001, the four mobile providers in Germany voluntarily committed themselves to engage in trust-building activities when expanding their mobile networks. This voluntary commitment was confirmed and content was added in 2008 and 2012. The main objectives of the agreement include improving transparency during network expansion, providing more information to consumers and sponsoring independent research. One specific example of how the agreement is being implemented is that we provide information to cities and communities and get them involved in mobile network expansion.

An integral part of this voluntary commitment is having the measures regularly reviewed by a consortium of experts comprised of representatives of Deutsches Institut für Urbanistik (DIFU), the German institute for urban affairs, and the German consumer organization Verbraucherzentrale Nordrhein-Westfalen. Every two years the results of the review are summarized in an independent expert report that is submitted to the German federal government. The expert reports show that implementation of the voluntary commitment contributed considerably to minimizing conflicts regarding sites for mobile base stations and to improving people's acceptance of mobile communications.

### Dialog on network set-up and expansion.

When introducing new technology, it is important to inform residents about the technology being used at an early stage. Our experience with setting up networks shows that engaging in dialog directly with communities and the people contributes considerably to how well our technology is accepted and to easing the public's concerns. In 2012 we focused on measures to improve communication and the distribution of information in order to more effectively inform small communities that had previously complained about a lack of information on base station sites provided by network operators. Our measures included setting up mediation centers to solve conflicts that could arise during network expansion. Telekom also appoints regional contact persons for mobile communications and health to help solve conflicts on site in direct contact to community representatives. Deutsche Telekom also promoted dialog with communities by actively participating in the LTE measurement program, which was completed in late 2012 (in collaboration with [IZME](#)).

Together with the other German mobile network providers and the local authorities' associations (German Association of Cities, German County Association and German Association of Towns and Municipalities), Deutsche Telekom also signed the "Agreement on sharing information and community participation in mobile communications network expansion activities" as early as 2001. Its objective is to encourage cities and communities to participate in the network expansion process. Mobile communications companies and communities work together in cooperative, constructive dialog to come up with amicable solutions for new sites for mobile base stations. As the 2011 annual expert report on compliance with the voluntary commitment of mobile communications providers in Germany shows, the flow of information between communities and network providers has permanently improved thanks to the employed measures.

Residents can address any questions they may have to local contacts that are familiar with local conditions and are involved in continuous dialog with residents and communities. People with questions on mobile communications and health can also call our expert hotline (0800 0852606) or send an e-mail to Telekom's e-mail address [emvu@telekom.de](mailto:emvu@telekom.de).

### Participating in expert discussions on EMF.

Telekom participates in various dialogs at an expert level on the topic of mobile communications and health including the meetings of the Electromagnetic Fields Round Table (RTEMF). Experts on health, the environment and consumer protection as well as scientists were invited to attend the RTEMF meetings held in May and November 2012. Telekom experts also attended the meetings and discussed current safety, research and technology-related mobile communications issues as well as additional ways to get stakeholders involved. The RTEMF is a key instrument for Telekom Deutschland when it comes to open dialog with all stakeholders involved in the public EMF [discussion](#).

In December 2012, experts from the international subsidiary, Globul, attended the annual meeting of the Bulgarian National Program Committee of the World Health Organization in Ognyanovo. In line with the meeting's topic, "Recent tendencies in legislation on EMF [exposure](#) in the work environment and in urban territories," participants discussed the need for regulation to protect people's health from electromagnetic field exposure.



## Research & partnership.

The effects of electromagnetic fields on human beings have been researched thoroughly over the last few decades. All recognized expert committees confirm on the basis of sound research results that current limit values guarantee that mobile communications can be used safely.

However, in light of new technological developments, it is important that we continue to update the information available on possible effects of mobile communications. That is why supporting independent scientific research and partnerships is a key element in our [EMF Policy](#). This is reflected by two recommendations for interacting with the research and scientific community:

- As a leading mobile network provider, Telekom supports independent scientific research on possible public health impacts of EMF [\[1\]](#) and contributes to independent research programs.
- Maximum levels for electromagnetic fields need to be defined on the basis of sound research results and undergo constant review.

### Study on risk assessment at the EMF Science Forum.

The [Electromagnetic Fields Science Forum](#) (WF-EMF) focused its varied activities in 2012 on "further development of evidence-based approaches and tools to communicate risk regarding mobile communications and health."

An important focal point in 2012 for the EMF [\[2\]](#) Science Forum was to work on advancing concepts that can be used to communicate scientific EMF [\[3\]](#) risk assessments to the population in a way that is easily understandable. The project included testing the communicative effectiveness and comprehensibility of different evaluation systems from a layman's perspective. The EMF [\[2\]](#) Science Forum used the results to develop tools and recommendations to improve communication of current risk assessments. The process included several network meetings with experts from the areas of mobile communications research, risk communication and risk assessment. The meetings were open to participants from the worlds of science, politics, NGOs, citizen initiatives and business.

The plan is to test the suggestions, tools and approaches for improving the communication of risk assessments in real-life situations and further improve them in 2013.

Telekom has been providing financial support since 2010 to help the forum get started as well as to enable various projects conducted by the EMF [\[4\]](#) Science Forum, which was founded at the start of 2011. The organization running the project is the Institute for Technology Assessment and Systems Analysis (ITAS) at the Karlsruhe Institute of Technology (KIT), a member of the Helmholtz Association of German Research Centers. The forum is advised by a board of internationally recognized researchers from the areas of biology, epidemiology, decision research, electrical engineering, communication, sociology and statistics. The aim is to develop research expertise in the area of mobile communications and health and to make extensive, clear and current information available to professional circles.

## Supporting independent research.

Promoting independent research projects is part of the voluntary commitment made to the German federal government by German network providers. Deutsche Telekom promotes a variety of research programs and projects together with the other German network providers. From 2008 to 2012 Telekom supported projects conducted by the German federal government's environmental research plan in the area of mobile communications and health. From 2012 to 2014, Telekom will be sponsoring a project on risk communication by the German Federal Ministry for the Environment. The results of all of the completed projects the company has supported so far have contributed significantly to answering open questions about mobile communications and health and to further strengthening the protection concept for mobile communications.

### **Environmental research plan projects.**

Together with the other German network providers, Telekom Deutschland supports projects on mobile communications and health conducted by the German federal government's environmental research plan. Collectively, the network providers contributed EUR 1 million. From 2008 to 2012, several projects were realized by renowned groups of researchers within the scope of the environmental research plan. The research projects focused on possible long-term effects of using mobile communications technology and the possibly higher sensitivity of children to EMFs generated by mobile communications. Descriptions of the projects and their objectives as well as interim and final reports are available online.

### **Risk communication projects.**

Deutsche Telekom will be collaborating with other network providers until 2014 to support the German federal government's risk communication project in the mobile communications and health area with a total of EUR 600,000.

### **Co-financing research database.**

Deutsche Telekom is also providing financial support for operation of the database run by the Research Center for Bioelectromagnetic Interaction (FEMU) at the RWTH Aachen University. The database already contains more than 16,000 scientific papers and articles on the topic.

### **Support for long-term scientific study.**

In 2012, the Ludwig-Maximilians-Universität (LMU) in Munich continued its research on possible connections between frequent use of cell phones and tumors in young people as part of the university's Mobikids study. Telekom Deutschland provided the researchers with all the data they needed on how often study participants used their phones in compliance with data privacy regulations. This lets researchers analyze potential diseases in relation to actual cell phone use, forms the basis for an improved research methodology and leads to more reliable results. Researchers from 16 countries are participating in the study by collecting medical data and data on cell-phone users in their countries. The study will be completed by 2014 and will provide valuable information on possible effects that using mobile communications technology may have on young people's health.

## Researching new mobile communications technologies.

Telekom and the other network providers in Germany supported the German Federal Office for Radiation Protection (BfS) in a study on determining the general population's exposure levels as a result of new mobile communications technology. The study was launched in August 2011 and carried out by the Institute for Mobile and Satellite Communication Technology (IMST) and EM-Institut GmbH. The goal of the project was to add to available information on the electromagnetic fields emitted by new mobile communications technology, such as LTE. Telekom provided all of the necessary information on network configuration to the project participants. The study was completed in late 2012. There is an interim report available online. The German Federal Office for

Radiation Protection (BfS) will publish the final report in 2013.

In 2012, our Hungarian subsidiary, Magyar Telekom continued to work on the EMF  measurement program launched in collaboration with the [Hungarian National Research Institute for Radiobiology and Radiohygiene](#) (OSSKI). Magyar Telekom provided three LTE transmitters to OSSKI for a period of six weeks so that they could research the emissions and pollution levels of LTE technology.

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## Environmentally friendly network infrastructure.

State-of-the-art information and communications technology (ICT) increasingly helps replace energy and resource-intensive products and services with more efficient ones. At the same time, however, the amount of data that needs to be stored and transported is growing due to ever more sophisticated applications. According to the [SMARTer 2020](#) study published by the Global e-Sustainability Initiative (GeSI), the ICT industry was responsible for around two percent of global emissions in 2011, the equivalent of around 910 megatons of CO<sub>2</sub>. Compared to the earlier study, SMART 2020, the current publication shows a flatter curve in increasing emissions and a higher potential to reduce ICT emissions thanks to technological advancements. As part of the "Low carbon society" [CR action area](#) we are planning to consistently use these advances in the interest of [climate protection](#), to increase not only the performance of [networks](#) and [data centers](#) but also their energy efficiency.

Outdated systems that are no longer needed are systematically switched off, replaced and recycled at Telekom in Germany. We do our best to employ energy-efficient, environmentally friendly technology when procuring new systems. We also support and motivate our customers to save energy and reduce CO<sub>2</sub> emissions by offering [efficient ICT solutions](#).

### Code of Conduct on Energy Consumption of Broadband Equipment.

By signing the European [Code of Conduct on Energy Consumption of Broadband Equipment](#) (CoCBB), Deutsche Telekom has pledged to optimize the energy requirements of its broadband networks. In cooperation with its suppliers, Telekom makes sure that the new systems it introduces do not exceed the maximum levels specified in the CoCBB. Because the code is continually being adjusted in line with new technologies and findings, we continuously have to comply with new specifications. We integrated the latest version of the CoCBB, the fourth version of the code, during the reporting period into the environmental specifications of our procurement policies. These included technical specifications for network technology but also for our Entertain boxes. The Entertain media receivers that we brought out in 2012 comply with the CoCBB's current specifications on energy consumption. We are currently preparing for version 5 of the CoCBB to go into effect.

We conduct annual surveys at Telekom's technical areas for fixed-line and mobile communications in Germany to help us analyze compliance with the technical specifications set forth in the CoCBB. The results are summarized in an annual report, which we then send to the regulatory authority. Our approach and process is also reviewed in an audit.

### [Last year's CR report](#)

20 European telecommunications companies—all of them members of [GeSI](#)—signed the CoCBB in September 2012. The signatories, including the Telekom Group, pledged to optimize energy requirements in the broadband sector.

The CoCBB specifies standards for end devices and network components and places a number of requirements on systems manufacturers: Among other things, it requires them to observe energy-efficiency criteria when producing, selecting and employing devices and systems.

## Low power mode on the road to a green DSL.

When applying the [Code of Conduct on Energy Consumption of Broadband Equipment](#) (CoCBB), Telekom identified opportunities to optimize the energy requirements for its [ADSL2+ network](#). Before then, all active connections were always on, i.e., in full power mode (L0 mode). We will be able to save a significant amount of energy by switching the connections to the "enhanced L2 mode while using data services with lower bandwidth." The technical requirements for this are next-generation modems with optimized ADSL2+ function. We initiated a feasibility study on the enhanced L2 mode in January 2013. The study included a field test under real-life conditions. The results are expected by mid-2014.

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So far, the L2 mode has not been used in the network due to poor quality, stability and interoperability. In the meantime, we have been able to improve the quality of the ADSL2+ network in L2 mode as well as stability through improved L2 mode features. Telekom played a decisive role in the development of the new standard. Analyses revealed that the use of the L2 mode in the ADSL2+ network generates energy savings of up to 20 percent.

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## Network upgrading.

Generating energy is still the main cause of climate change. This makes it all the more important to increase energy efficiency in all areas where large amounts of energy are required, e.g., to operate ICT networks, if a company is really concerned about protecting our climate. That's why using energy efficiently is one of Telekom's key goals, not only when planning new networks, but also when optimizing existing ones. In this context, higher performance and less energy consumption go hand-in-hand with reducing our carbon footprint. At the same time, replacing old systems with new ones poses an unusual challenge for Telekom's engineers.

### Replacing outdated 2G network technology.

The largest system technology swap in the history of mobile communications at Deutsche Telekom started in 2011. Old 2G/GSM technology is scheduled to be completely upgraded to the latest technology by October 2013. The plan is to upgrade the technology at a total of 12,000 mobile communications sites in Germany and replace more than half of the outdated 2G/GSM systems. We are also planning to reduce the number of controller sites for base stations from 256 to 13 as part of the swap program, which will drastically reduce energy consumption.

We had upgraded 7,176 base stations and put 195 controllers out of service by the end of 2012. This included a variety of activities from switching over all stations to synchronized processes in the fiber-optic network to issuing permits for access to the equipment and swapping the systems at the antenna sites using cranes.

The upgrading program that we began in January 2013 as a subproject of our swap program involved implementation of Ethernet connections for 2G sites, which also was a technologically challenging task and required extensive coordination. We are planning to install Ethernet connections at around 8,000 sites. The single radio access network (Single RAN) technology makes it possible to operate different mobile communications standards in a single switching unit, further reducing the need for hardware and energy consumption.

With these measures, we are laying the foundation for a future-proof technology platform which is not only suitable for LTE expansion, but will also ensure that the same hardware can be used for all mobile communication generations (2G , 3G and 4G/LTE) in the long term. This is expected to reduce future investments as well as operating costs and will also make the 2G network technology IP-compatible.

### Best Power project.

The high-speed VDSL network is based on fiber-optic cables. Individual network components are bundled in multi-functional cabinets, recognizable as the gray boxes found throughout our cities. In order to further increase the energy efficiency of the systems contained in the cabinets and to minimize performance loss, we initiated the Best Power project in 2011.

The focal point of the pilot project is selecting the most effective network equipment and increasing the energy efficiency of our systems. We plan to reduce our CO<sub>2</sub> emissions as well as our operating costs thanks to the reductions in energy consumption which the project is expected to generate. Development of the new network equipment as well as testing and acceptance by our laboratories were completed in 2012.

Reliable results will not be available until after a field test at the end of 2013, because a subproject of Best Power is being conducted in connection with the DESI project.

## Power Off task force.

Telekom Deutschland's Power Off task force analyzes which residual modules can be removed from the network with a reasonable effort and organizes the systematic dismantling of outdated systems. In 2012 we were able to shut down technical systems with an overall wattage of 4.5 MW due to measures implemented by the Power Off task force. The energy savings realized as a result are the equivalent of 17,020 metric tons of CO<sub>2</sub> per year.

We also launched the Retire project in 2012 to ensure uninterrupted operations during transition from the old, fixed-line technology to the all-IP network. The project also uses opportunities to reduce energy consumption by shutting down outdated equipment. The Power Off task force will become part of the Retire project in 2013. Retire had already realized additional dismantling potential of 1 MW by the end of 2012. Another 3.67 MW can be achieved in 2013.

By dismantling systems that we no longer need early on, we can considerably reduce energy consumption. Dismantling activities in 2012 resulted in annual savings of around 40 GWh in electrical energy consumption and costs amounting to EUR 11 million for electricity, cooling and uninterrupted power supply for Telekom. In addition, the measures freed up one-time investment resources in areas such as cooling and uninterrupted power supply totaling at around EUR 9 million. These will be used to accelerate the installation of the new networks.

## Climate technology & energy use.

Data centers produce a lot of heat and need to be cooled. Some 40 percent of the energy used by data centers is used for cooling. Energy-efficient climate technology offers considerable energy savings potential through increased use of fresh-air cooling instead of compressor cooling, which uses a lot of electricity. Within the scope of our [CR action area](#) "Low carbon society," Deutsche Telekom, and particularly T-Systems, conducts intensive research and development in order to optimize data center infrastructures in consideration of financial and ecological aspects. The Group subsidiary [Power and Air Condition Solution Management GmbH & Co. KG](#) (PASM) is our partner in many of these projects.

### Heat Power Business project.

In December 2012, [PASM \(Power and Air Condition Solution Management GmbH\)](#) launched the Heat Power Business innovation project. In this project, we are operating ten mini-cogeneration plants with capacities of between 4.5 and 50 kW at network nodes being used by different parties. The cogeneration plants are highly efficient and environmentally friendly. For example, the waste heat they produce is used to heat the building. That makes it possible to use more than 80 percent of the total primary energy employed. In 2012, these local mini-cogenerators generated around 1,500 MWh of electricity and around 2,500 MWh of heat. Compared to the energy mix available in the power grid, that means a reduction in CO<sub>2</sub> emissions of around 200 metric tons for 2012. In order to precisely determine the consumption and emissions values of mobile providers that use our systems we analyzed all of the network nodes used by them in terms of the employed [cogeneration plants](#) as part of the project in 2012. We are using the results from the pilot plants to plan and build more than ten additional cogeneration plants.

### Other energy-efficiency programs.

In 2012, PASM introduced other programs to increase energy efficiency in facility management. These include upgrading inefficient air conditioning in Telekom buildings. PASM also set up an additional six cogeneration plants with an output of between 50 and 250 kW. As part of an "integral planning" approach, PASM made an agreement with the service provider, STRABAG-PFS, in 2012 for systematic energy management processes to provide access to innovative, efficient power solutions in complex new building projects. PASM itself was certified by the TÜV technical services company in May 2012 under the [ISO 50001 standard for energy-efficient management systems](#).

### Objectives for 2013.

PASM is planning to conduct a number of energy optimization projects in 2013. For example, the company will adjust and optimize its energy management structures by assigning new responsibilities, including its service departments, and through more effective innovation management as part of its collaboration with the service provider, [STRABAG](#). PASM is also planning to optimize existing split-air conditioning systems and to switch some of these over to fresh-air cooling systems. Split-air conditioning systems are comprised of at least two units, an external and an internal unit, that use the temperature difference between the air inside and outside the building to save energy.

PASM's plans also include introducing load management systems to reduce peak loads with particularly high energy demands from consumers and businesses. These peak loads put a strain on power grids and lead to

price increases on the deregulated energy market. Our goal is to use low-priced electricity in phases of low demand instead of purchasing power in peak-load phases when costs are high. That calls for high-performing energy storage units as well as technology to control energy demand. In collaboration with the energy provider, Vattenfall, PASM is planning to integrate effective storage units into virtual power plants. With these efforts we are contributing significantly to stabilizing future power grids and reducing our procurement costs as well.

Developing and implementing efficient energy and climate technology for data centers is a central component of the portfolio offered by PASM, a Telekom subsidiary. PASM creates and markets complete energy solutions for technical systems for corporate customers, especially for companies from the information and telecommunications industry. The company is dedicated to constantly improving the energy efficiency of its products, "uninterrupted power supply" and "air conditioning for network nodes", which are designed for 24-hour availability.

Its products are used by Telekom in its fixed network and data centers in Germany. PASM also provides energy to around 20,000 base stations in Telekom's mobile communications network in Germany. As a co-founder and partner of the German competence network, Clean Power Net, PASM also works to further develop marketable fuel cells.

### KPI review cooperation with STRABAG.

PASM has been using different KPIs to measure and evaluate the energy efficiency of properties since 2005. The company thoroughly analyzed these KPIs in 2012 with the help of an external specialist agency and STRABAG. The analyses are scheduled to continue beyond February 2013. The goal is to increase the level of differentiation in the KPI system. All Telekom buildings were divided up into seven different groups, and KPIs and related processes were then aligned for each group. The TOP 25 properties, for example, comprise all properties that consume more than 10 GWh of electricity per year. We closely monitor the peak loads of these properties so that we can take suitable countermeasures. The concept, which was developed by the partners, was approved by the PASM and STRABAG-PFS managing boards. The processes will be made even more efficient in 2013, particularly with the collaboration of STRABAG service units.

PASM also introduced integral planning with energy managers and service agents as well as building owners and property developers in 2012 as an additional measure to increase efficiency. PASM was able to achieve considerable improvements in five pilot tests. The next step will be to stabilize the processes and incorporate them into corporate structures. An integral concept is currently being tested at a Telekom location in Munich.

Energy efficiency means climate protection. PASM uses efficiency indicators to monitor efficiency improvements at around 8,000 network nodes and data centers in Germany. The company commissioned the STRABAG-PFS construction company to conduct on-site analyses of its production facilities. STRABAG-PFS engineers analyzed energy efficiency potential and developed solutions as to how to effectively exploit this potential. PASM has been able to significantly increase energy efficiency in the past few years, e.g., by replacing inefficient fans, installing innovative control units or adjusting the systems to current demand.

### DESI project.

Since late 2011, PASM has been testing solutions for the smart energy systems of the future in collaboration with Telekom Innovation Laboratories (T-Labs  ) and Telekom Deutschland as part of the DESI project on end-to-end, energy-sensitive ICT. The purpose of the project is to develop a system for load adaptive control and

to test concepts for generating and storing energy. This is one of the key foundations for smart grids. Different ways to manage peak loads and optimize the purchase of electricity are also being tested.

In 2012, the project partners set up a remote control connection to control the storage behavior of an uninterrupted power supply (UPS) system as a demonstration. At the same time, they laid the technical foundation for a comprehensive control system. The purpose of the system is to flexibly control data storage and provision of the required electricity in line with data volumes to be stored. Electricity is either taken from the supply network or from our own storage system, depending on availability and price. The project team then began developing the necessary control software. They also continued and completed studies on the required hardware.

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Solutions for implementing smart grids have been one of the big technology goals for the past few years. In the DESI project, which is sponsored by the German Federal Ministry of Economics and Technology as part of the IT2Green research focus, PASM has been working on developing a comprehensive approach that integrates the entire ICT supply chain in collaboration with Telekom Innovation Laboratories (T-Labs  ) and Telekom Deutschland. The project is scheduled to run from 2011 to 2013.

The DESI approach focuses on three core areas:

- Creating ICT component connectability in smart grids
- Integrating ICT components into the entire energy supply chain
- Control of variable energy supply for ICT networks

Participants in the DESI project are also looking at how the ICT network power supply can meet the main requirements of a smart grid such as load shifts and supply stabilization. The solution the team is working on can be seen as the first development stage in creating a control unit that can monitor all smart grid processes and control them in a way that is energy efficient.

## The LOLA Project.

We are also working on optimizing the telecommunications network within the scope of the LOLA project (Load-adaptive Networks & LANs), as well as in the [DESI](#) project. The DESI project focuses on smart concepts for supplying and storing power in a demand-oriented, cost-efficient way. The LOLA project, on the other hand, focuses on solutions for flexible, load-adaptive usage models for the operation of ICT resources that are used for customer and access networks. Many of today's ICT devices and systems require a consistent power supply as long as they are switched on, regardless of what they are actually being used for. In the LOLA project, participants identified and studied usage case examples in which energy consumption can be adjusted to fit actual use both for operator networks and customer networks. The LOLA project ran from October 2010 to December 2012. The advancement and pilot phase of the LOLA approach of load-adaptive network operation is scheduled to be continued in another project in 2013 as well.

We were able to save a significant amount of energy in the operation of corporate and broadband access networks in 2012. A pilot project, which was completed in March 2012, is the perfect example. Within the scope of the project, Deutsche Telekom developed control mechanisms for the load-adaptive operation of its own workstations. Results showed that energy consumption can be reduced by up to 23 percent when IT systems, including PCs, notebooks and phones, are only switched on during actual working hours and automatically switched to standby mode or completely shut off during lunch break.

In 2012, Telekom also developed and tested an ICT component control system for home networks. The tests showed that energy savings of 20 to 25 percent were feasible depending on usage behavior and

communications service type. Analyses on certain operator network segments even showed savings potential of up to 30 percent.

### **Access network.**

Telekom has been using the G-PON (Gigabit-capable Passive Optical Networks) technology since 2009 for FTTH expansion with fiber-optic lines all the way to the users' home. By using G-PON technology it is now possible to use the high-speed potential of fiber optic technology to its fullest: up to 2.5 Gbit/s of download speed and up to 1 Gbit/s of upload speed have now become feasible. In the spirit of the LOLA basic concept, we are working on a solution that enables us to reduce G-PON technology energy consumption by standardizing the device at the end of the fiber-optic network on the customer's premises.

### **End-to-end network control.**

Another goal of the LOLA project is to establish end-to-end-network control. This will enable us to save even more energy in addition to the already existing load-adaptive control technology, as it was used as an island solution for DSL and G-PON networks, for example. In order to achieve this, we need to develop solutions that enable load-adaptive operation and high-quality data services across networks at the same time. We have been working in collaboration with system manufacturers since 2010 to develop the technology and to standardize load-adaptive, cross-network systems internationally in order to create energy-efficient global market products that anyone can purchase.

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Unlike traditional systems, which require a basically constant supply of energy throughout the day, load-adaptive ICT networks adjust their energy needs to actual use, which is subject to extreme fluctuations. Load adaptation means that parts of the production systems can be shut down gradually or all at once at times of low data load such as at night or in the early morning hours. That reduces energy consumption considerably. The LOLA project explored how smart control systems can reduce energy consumption in networks and end devices. The project initially focused on customer networks and access networks. By continuing to pursue the LOLA basic approach, our long-term goal is to develop smart, end-to-end control along the entire network architecture. Initial model analyses and lab measurements indicate an estimated total energy and CO<sub>2</sub> reduction potential of around 30 percent.

### **ComGreen: load-adaptive optimization of radio access networks.**

The energy consumption in radio access networks is steadily increasing. This is due to the network expansion and also to the increasing capacity demands of mobile users. Telekom operates tens of thousands of base stations and Wi-Fi hotspots in Germany, which have a total annual energy consumption in the three-digit gigawatt hours range. Until now, these networks were operated regardless of their usage; the same amount of energy has been used no matter whether the load is high or low.

With the ComGreen project, Telekom wants to develop a way of adjusting mobile communications network performance to demand. Every telecommunications network user should be able to use the transmission capacity they actually need in any location instead of being provided with maximum transmission capacity, as is current practice. To achieve this, the project team is developing a model for self-organized adjustment of network parameters such as data rates and transmitting power. The model takes the number of logged in users and their current capacity needs as well as other data into consideration and makes it possible to switch available network resources on and off accordingly, depending on capacity requirements.

Initial results from the project, which were presented in 2012, show that load-adaptive, intelligent network control holds a saving potential of up to 30 percent when it comes to energy consumption and CO<sub>2</sub> emissions. Following this analysis, the project team is planning to develop drafts for load-adaptive control standards and present these

to international standardization committees. The objective is to be able to integrate the concepts and mechanisms developed in the project into operative network nodes in the medium term with the help of system manufacturers. The team began preparing a feasibility study to implement selected mechanisms in 2012.

## Program for hydrogen and fuel cell technology in Germany.

We are currently operating five fuel cell systems. These were tested for suitability under the German federal government's National Hydrogen and Fuel Cell Technology Innovation Program. We focused in particular on using fuel cells as a backup system and to manage peak loads and on identifying ways to incorporate the fuel cells into a virtual power plant. We were able to prove the systems' suitability for daily operation at all five pilot sites.

PASM closed out the program with a workshop in 2012. The findings show that the technology used can be employed efficiently at sites with backup times of more than 24 hours. PASM continues to participate in Clean Power Net (CPN) together with manufacturers and users of fuel cell technologies under the patronage of the National Hydrogen and Fuel Cell Technology Organization (NOW) in order to share our experiences with these systems with all market partners.

## Green data centers.

Energy efficiency is the most important instrument to effectively improve the carbon footprint of data centers. Telekom takes an integrated approach to improving the energy efficiency of its data centers within the scope of its "Low carbon society" CR action area. This approach includes all aspects ranging from cooling and energy provision to optimized utilization of hardware capacities.

### Video: DataCenter 2020

(Animation from our CR App □ "We care")



DataCenter 2020.

T-Systems has been operating the DataCenter 2020 test data center at Euro-Industriepark in Munich since September 2009 as part of its collaboration with Intel. At DataCenter 2020, we are testing solutions that enable more energy and cost-efficient data center operation to benefit the environment and the climate.

### Optimizing cooling systems.

Phase one of the collaboration project includes testing two different architectural measures for cooling data centers efficiently, i.e. cold aisle and hot aisle containment. One approach involves separating cold areas from the rest of the room while the other involves separating the warm areas to prevent air flows from mixing. Telekom has been using cold aisle containment to cool its all-IP platform since 2011.

In 2012, we conducted tests on entire data centers to make the cooling process even more efficient. During the tests, we compared both approaches and looked for optimization potential. The results showed that both methods were similar in terms of energy efficiency. However, they also showed that there are different advantages and disadvantages in using the two methods. That is why the decision to use either cold or hot aisle containment depends on the relevant requirements and actual operating conditions at each data center. The advantage of using cold aisle containment is that it can be employed without making major changes to the server room. The disadvantage, however, is that employees have to walk into a room with a temperature of around 45 °C. This is not the case with hot aisle containment, which eliminates "hot spots" without heating up the rest of the room. We factor in these findings when introducing the cooling methods at other data centers.

### Increasing the energy efficiency of hardware.

In early 2012, a second project phase was launched in addition to cooling technology optimization. During this phase, the partners studied ways to increase the energy efficiency of IT hardware. They used extrapolations to find out how much computing capacity could be achieved per area unit with new processor technology and made forecasts with respect to the energy demands of future processor generations. T-Systems will use these forecasts and estimates for data center upgrading projects and new data centers in the future.

During the second phase, the project partners also researched how to save energy by changing the settings of the servers' basic operating system (BIOS). Significant savings potential was realized especially as a result of these optimization efforts during project operation at DataCenter 2020. Since then, the findings have been discussed with server manufacturers and applied to the production process.

### Implementing project results in real-life operations.

T-Systems is applying its experiences from the DataCenter 2020 project in its Roll-Out DC2020 project to optimize operation and maintenance of existing data centers. T-Systems' largest data center at Euro Industriepark (EIP) in Munich is playing a pioneering role in these efforts. The start phase, for which T-Systems assigned around EUR 1.5 million, began in September 2012 and is scheduled to be completed in March 2013.

T-Systems is also using the results from DataCenter 2020 to plan and construct new data centers in locations such as Magdeburg/Biere in Saxony-Anhalt.

### **Project topics for 2013.**

The project participants defined additional focal areas for 2013. These include testing new ways to provide energy and cooling to the data centers. One important topic in this context will be providing cooling for liquid-cooled servers and processors.

With the DataCenter 2020 project, T-Systems is getting ready for rapidly increasing performance demands on ICT systems, particularly in the area of process security. For example, protecting the basic infrastructure required for ICT services, particularly networks, servers and storage against failure holds high potential for the future. T-Systems intends to rely on ongoing standardization of system environments in this respect.

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The technology partners Intel and T-Systems are working together on the DataCenter 2020 project in accordance with the open source principle. The results of their joint efforts will be published and can then be used by all interested parties. Every year, some 200 events are held with around ten participants each both from Germany and abroad. The events serve to present and discuss ways to optimize energy consumption at data centers. The partners work on developing pioneering business models and new, cost-efficient ICT solutions for users and customers.

One of the milestones the project partners aim to achieve is a PUE (power usage effectiveness) value of 1.3. The PUE value is the most important indicator of data center energy efficiency. It expresses the ratio between the entire amount of energy consumed in data center operation, from cooling and computer operation to lighting, and the energy used by the servers. The average PUE value at T-Systems International and PASM data centers is 1.75. That means that 1.75 kW of power need to be supplied to the data center for every kilowatt of power the servers need. Telekom's goal is to decrease this value for new data centers to 1.3 and for existing data centers to 1.6 by the end of 2013. We have already achieved a PUE value of 1.23 at DataCenter 2020.

### Data Center Optimization project.

We launched the Data Center Optimization project in collaboration with [PASM](#) in 2011 to optimize the infrastructure of our data centers in Germany. It specified around 16 measures for each data center to reduce energy costs and was tested at 15 pilot locations. The project was closed in late 2012 but the individual measures that were begun under the project are being continued.

We evaluated technical feasibility at three project sites to finalize the Data Center Optimization project. Our assessment showed that the indicator of energy efficiency, the [PUE](#) value, improved on average for all data centers.

Following the project, we are planning the progressive closure of data centers whose energy efficiency cannot be improved and the transfer of their IT load to data centers with optimized energy requirements, starting from 2013.

### Participating in the European Code of Conduct on Data Centers.

T-Systems is participating in an EU Commission initiative with the aim of cost-efficiently reducing data center energy consumption and encouraging operators to share best practices. The focus of the initiative is the European Code of Conduct on Data Centers. The Commission published the code in late 2008 in response to the increasing need for energy on the part of data centers. Companies can become supporters of the code or, if they operate their own data centers, participating members of the code. In order to participate, a company needs to report extensively on the servers it operates and be in compliance with certain, sustainable policies. Nine T-Systems data centers successfully became members in late March 2013. The applications of two additional data centers are currently being processed.

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2012 Corporate Responsibility Report

We take responsibility.

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## Customers.

### #CLIMATE FRIENDLY

Telekom helps customers reduce CO<sub>2</sub> with secure cloud services.

[Find out more](#)

We want to help create a beneficial digital society with innovative climate and environmentally friendly ICT solutions. With the goal of becoming the market leader in connected life and work, we focus our work around establishing long-term customer relationships. We offer our customers attractive products and services that meet their needs and help them make sustainable, green consumer choices. Our [cloud computing](#) offer for consumers is an important innovation in this area.

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## Basics for product development & product design.

Responsible consumer decisions can make a big difference when it comes to protecting the climate and the environment. According to the German Federal Environment Agency, private households are responsible for generating around 40 percent of greenhouse gas emissions in Germany. Telekom wants to make it easier for its customers to engage in sustainable consumption by structuring its portfolio accordingly within the scope of our "low carbon society" [CR action area](#).

### Sustainable Product Portfolio program completed successfully.

We work to help our customers lead a sustainable lifestyle with attractive products of high ethical and environmental quality. We also want to increase [customer satisfaction](#) and minimize the social and environmental impact of our products. Our Sustainable Product Portfolio program, which we completed successfully at the end of 2012, supported this goal.

During the reporting period, we made progress in the following areas as part of the program:

- We defined product sustainability criteria
- We developed a process for evaluating and critically reviewing products based on sustainability criteria
- We created a Sustainable Product Performance indicator and Sustainable User Experience indicator
- A labeling system for sustainable product features was developed, tested and prepared ready for implementation within the scope of Telekom's new packaging policy, which was approved in 2011

### [Last year's CR report](#)

### Policies for sustainable product design.

The Deutsche Telekom Design Principles have been mandatory for product development at Telekom in line with the Group strategy since the end 2009. The primary principle, "Act responsibly— think globally", was derived from the CR strategy. In 2012, Telekom incorporated sustainability requirements into its Design Principles, making them a permanent feature in product design-related invitations to bid. One example of this is our inclusion of ecological criteria in the product design of our new Entertain boxes. Thanks to the requirements we place on our suppliers, any harmful substances contained in the materials used in the new boxes are below legally acceptable levels. The new boxes exclusively feature sustainable plastic and low-pollutant varnishes. We are planning to incorporate additional sustainability standards in the product innovation area from 2013.

### [Last year's CR report](#)

The Deutsche Telekom Design Principles provide the basic content for Telekom's Experience Style Guide and Sustainability Guideline for Product Design. The design policies set forth in the Experience Style Guide are mandatory for all product development activities. Their purpose is to ensure a consistent user experience of Telekom hardware and software offerings. The policies are in line with Deutsche Telekom's sustainability strategy.

## Deutsche Telekom Design Principles at a glance

1. Act responsibly— think globally.
2. Analyze and picture the future to design toward it.
3. Create moments for sharing.
4. Support throughout the day.
5. Start with emotion.
6. Focus on core benefit.
7. Use learned recognition with a new interpretation.
8. Be coherent.
9. Design with passion and care for detail.
10. Create desire at first glance.

### Conserving resources in end-device packaging.

After revising our end-device packaging policy in 2011, we introduced various measures to help us considerably cut back on resources. One example of this is the International SIM Packaging project, which we anticipate will lead to savings in materials and also in costs worth millions of euros. We also began using environmentally friendly polyethylene in our Telekom Shop bags as part of our Bio Bags project. Up to 80 percent of the material is comprised of renewable resources (sugarcane). The new material is better for the climate because it can be produced with significantly lower CO<sub>2</sub> emissions than the paper bags we used to use at our stores. We also plan to introduce a mini-bag for smaller products in 2013.

We are planning to revise our packaging policy in June 2013, including further improvements in terms of material characteristics and consumption as well as the ink we use in printing. We are also planning to replace the plastic components of our latest MR 303 media receiver with recycled materials.

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In 2011 we revised our device packaging policy, which is valid throughout Germany, and incorporated sustainability criteria. In line with the policy, packaging material will be reduced to a minimum and only environmentally friendly materials will be used. All materials used must be fully recyclable including any plastic materials. Paper and cardboard must comply with the requirements of the Forest Stewardship Council® and be bleached without the use of chlorine. Printing ink needs to be made from vegetable-based oils.

### Magyar Telekom: Recycled packaging in shops and online stores.

Magyar Telekom now uses recycled packaging materials for all deliveries of products ordered online and replaced plastic bags with recycled paper bags for products sold in its T-Shops, where up to 800,000 bags per year were given to customers in T-Shops in the past. Both moves significantly reduce the impact of the waste generated on the environment.

### Sustainable services for customers.

Deutsche Telekom helps its customers conserve natural resources while reducing costs at the same time, e.g., by switching from paper mail to e-mails and virtualizing conferences with TelePresence systems that make business trips unnecessary.

At T-Systems, Telekom's corporate customer arm, sustainability and corporate responsibility comprise one of

five core beliefs that T-Systems put together in 2010 on the basis of mega trends in the worlds of society and business. In accordance with these principles, the company offers a range of ICT solutions for the healthcare sector. Other examples include a telematics application for logistics service providers and fleet operators as well as our De-Mail service.

### "Telekom expert circle 50+" customer forum.

In 2012, the Telekom expert circle 50+ forum once again critically reviewed products developed by Telekom for people over the age of 50. In cooperation with BAGSO, the German association of organizations for seniors, the experts conducted various product tests to assess acceptance and user guidance of our Entertain Premium product and a prototype of the successor to the Sinus A 201 phone. The new phone is designed to give users all of the advantages of a digital telephone in a model that is very easy to use. The expert circle also helps us improve our service for older people.



## Climate and environmentally friendly products & services.

Deutsche Telekom is helping millions of consumers and business customers effectively lower their energy consumption and reduce CO<sub>2</sub> emissions within the scope of our "low carbon society" CR action area with our growing offer of green products and innovative ICT solutions. The company is researching innovative solutions for the energy, automotive and healthcare industries. It is also working to improve transparency regarding the CO<sub>2</sub> emissions generated throughout the entire life cycle of ICT products for its customers. We are working to create a method for calculating the carbon footprint of ICT products and services in collaboration with partners from the world of industry as well as NGOs.

### Platform for climate-compatible consumption.

The online platform, Climate Compatible Consumption in Germany, which Telekom helped launch in 2011, provides companies from all industries in Germany and abroad with extensive information and recommendations on reducing emissions along the entire added-value chain. The platform was designed as a dialog platform. During the reporting period, activities focused on developing calculation methods that can be used to include the use of green energy when using ICT products and services into the the carbon footprint. This would have a positive effect on the carbon footprint results. In pursuing this goal, Deutsche Telekom was involved in several activities including participation in the "Green Energy Balance in Carbon and Environmental Footprinting" dialog forum.

Platform activities also focused on consolidating findings on the critical hot spots in different product categories, which resulted from product carbon footprinting (PCF) analyses. Knowledge of these hot spots would then also be useful in decision-making processes, e.g., procurement, doing away with the need to prepare extensive PCF analyses.

Plans for 2013 particularly include activities relating to the new EU guideline for calculating the product environmental footprint and to the development and/or review of the product category rules for the ICT industry. The aim here is to develop methods to reduce CO<sub>2</sub> production based on our own experiences so that we can also help other industries and business sectors cut back on their CO<sub>2</sub> emissions.

### Last year's CR report

Deutsche Telekom has been participating in the "Product Carbon Footprint" (PCF) project since 2008. The project's online platform was expanded in 2011 to create a dialog platform for green consumption and carbon footprinting methods, the Platform for Climate Compatible Consumption in Germany. Workshops and dialog forums on key topics such as using renewable energy in the production process and how they affect the PCF are offered on a regular basis. The aim is to encourage discussion throughout the community and make a contribution to pursuing climate-friendly consumption together in a coordinated manner.

### Product carbon footprint calculation for Entertain completed.

In 2012, Telekom completed its calculation of the carbon footprint for our triple-play Entertain offer within the

scope of the Product Carbon Footprint project. We started the calculation process in 2011. The ISO 14040/44 life cycle standard, the [Greenhouse Gas Protocol](#) and the [International Telecommunication Union \(ITU\)](#) guidelines are being taken into account in this process. In terms of the service itself and the related components, Entertain produces around 550 kg of CO<sub>2</sub> emissions a year. This value also includes the average emissions generated when the customer uses their television. Although we do not have a direct impact on these emissions, they represent a large portion of Entertain's carbon footprint. We developed a new generation of the Entertain media receiver in order to reduce the emissions for which we are responsible. The device will be available as of 2013 and supports the power-down mode, which drastically reduces the amount of energy the device consumes. In standby mode, the receiver also falls below the legally permitted maximum energy consumption levels by 10 to 20 percent. Of course, the product also complies with the energy specifications contained in the [Code of Conduct on Energy Consumption of Broadband Equipment](#).

We published an internal instruction sheet on calculated product emissions at the end of 2012. It provides orientation in many matters, such as how emissions from the telecommunications network are allocated to the different services, and also serves as a basis for calculating the product carbon footprint (PCF). Our goal is to increase internal competence when it comes to comprehensively assessing the sustainability of our product portfolio. With these efforts, Telekom is in line with current trends in European regulation policies that also tend toward comprehensive reporting on the environmental impact of products and services. An innovative model for managing the sustainability of Telekom products and services, which was developed by Telekom, can be used here as a basis, for example. This model uses different criteria to assess the sustainability of ICT products and services while identifying driving forces for customer satisfaction and their willingness to recommend our products and services to others. That provides the Product development, Procurement, Marketing and Sales departments with the information they need to design even more sustainable products and use those features to market the products effectively. We are planning to use this internal instruction for the first time in 2013 and calculate the carbon footprint of a product being produced by an international subsidiary.

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Products and services generate CO<sub>2</sub> emissions throughout their entire life cycle, from production and use to disposal. These emissions can be illustrated using the product carbon footprint (PCF). Telekom is also involved in other initiatives to develop industry-wide standards such as the Greenhouse Gas (GHG) Protocol Initiative. Within the scope of this involvement, we helped develop a sector-specific supplement to the GHG Protocol in 2012, the ICT Sector Supplement.

### Improved carbon footprint for our network infrastructure.

At [Telekom Innovation Laboratories \(T-Labs\)](#), Deutsche Telekom's central research and development institute, we continue to work on reducing the CO<sub>2</sub> emissions generated throughout the entire life cycle of our network infrastructure. That also includes realizing savings potential in our customers' infrastructure. For example, we developed a load-adaptive operating mode to help make DSL router operation more efficient and reduce its carbon footprint. We completed pilot projects on this topic in 2012. We are planning to use the knowledge gained in these projects as the basis for feasibility studies, which are scheduled to be completed in 2013. The next step will be to standardize the load-adaptive mode.

The load adaptive mode makes sure that full power is only available to routers while they are actually being used, thereby making them more energy efficient. This mode can be used by the customer on-site as well as in the Telekom network infrastructure. By developing this innovation, we are taking steps to fulfill our voluntary commitment to gradually reducing network infrastructure energy consumption, which we made when we signed the [European Code of Conduct on Energy Consumption of Broadband Equipment](#).

## Online document services.

Switching over to online billing helps reduce CO<sub>2</sub> emissions significantly both in terms of paper production and mail delivery. That's why Telekom has been offering this service to its customers since 2008 and has made it the standard option in most new contracts. The number of customers using online billing continues to grow. Telekom Deutschland sent out around 16 million online bills per month by the end of 2012, which is equivalent to more than 50 percent of all bills for the first time. With its Mobile Communications Customer Center, Deutsche Telekom launched a new online platform in early 2013 where mobile customers can manage all their contract and billing issues conveniently online. Customers can visit the center, for example, to look at their latest billing information (updated daily) or make changes to their personal billing data online.

### **Increased online billing in Macedonia, Montenegro and Poland.**

Online billing helps to reduce paper consumption, and in this respect progress was made at several Deutsche Telekom subsidiaries in the reporting period.

- At Makedonski Telekom the number of customers using online billing in the reporting period was twice as high as in the previous reporting period.
- Crnogorski Telekom saw a significant increase in the use of online billing during 2012. Online billing for business customers rose from 11 to 16 percent and from 20 to 30 percent for residential customers.

PTC continued to advertise online billing to its customers and is also involved in a coalition of companies set up by the Polish Confederation of Private Employers to promote online billing through amended legislation and raising public awareness.

### **Digital workflow thanks to Managed Document Services.**

With Managed Document Services, T-Systems customers can make workflows digital, entirely or in parts, and significantly reduce their paper and energy consumption. With this service, T-Systems handles its customers' entire document process from digitalizing and tamper-proof archiving of documents to sending them on as an e-mail, letter or webpage. To ensure tamper-proof archiving, Managed Document Services use a certified electronic signature and meet statutory requirements, including the German Federal Ministry of Finance's "Principles of data access and auditing of digital documents" (GDPdU).

The archiving solution encompasses SAP, various document management systems, billing archives and digital personnel files.

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According to a study by Öko-Institut e.V., the Institute for Applied Ecology, paper bills are five times more harmful to the environment than online bills.

### Life cycle assessment of online billing compared to paper bills

## De-Mail helps reduce up to 50,000 metric tons of CO<sub>2</sub> emissions per year.

Since September, consumers and business customers have been able to use our secure electronic letter service, De-Mail. De-Mail combines the advantages of the Internet with those of written communication: It is as fast and convenient as e-mail and as secure and binding as a letter. De-Mail enables companies to transfer a large proportion of their written communication to the digital world, and enables private users to avoid having to meet in person to sign documents. Before the De-Mail service was launched, well over one million people had already reserved themselves a De-Mail address. Many well-known companies from the insurance and financial services

industries have now signed up too.

The environmental effects of De-Mail and the potential savings in CO<sub>2</sub> emissions that this service offers were analyzed as part of a case study. De-Mail could potentially lead to CO<sub>2</sub> savings of up to 50,000 metric tons per year. To offer the customer an even better carbon footprint during the start-up time for the service, the 8,559 metric tons of CO<sub>2</sub> emissions produced by operating the platform were offset through CO<sub>2</sub> reduction projects for 2012 and 2013. Our customers benefit from this approach, because it significantly improves the carbon footprint of the service, which is already positive in comparison with sending letters.

## Cloud computing.

Cloud services are growing increasingly important and as such are a promising market for us. We have set ourselves the goal of enabling constant access to data and services for all of our customers—at all times, from anywhere and on any device, with the full range of services and maximum security.

Our corporate customer arm, T-Systems, has been offering dynamic SAP services since 2005. Since then, its portfolio has been growing, via application migrations and data integration, and now includes complex cloud services, meeting the strictest possible security standards. T-Systems runs a wide range of services and customer-specific cloud solutions within the hosting environment of 90 data centers around the world with more than 60,000 servers. 2.6 million SAP customers use our cloud services. Last year, we won a number of big deals, including BP and Georg Fischer AG. In order to offer our customers even easier and faster access to cloud services, T-Systems also entered into a strategic partnership with VMware, the world's leading provider of virtualization and cloud solutions.

We also offer cloud services that are primarily tailored to the needs of our 2.2 million small and medium-sized business customers in Germany, e.g., virtual servers and security and application programs. This year, the online Business Marketplace was launched, where companies can book business applications in a flexible, affordable way.

Our consumers have long since moved into the cloud. Via the Media Center and MyPhonebook applications, they can store their own documents, photos, videos, music and contact data in the cloud, and can access such files at any time or place. And it all works with any Internet-enabled device, whether smartphone, tablet PC, computer, or TV. The TÜV technical inspection agency agrees: the online storage is secure, as is the customer data—especially since the servers are located in Germany. So far, 6.2 million customers have registered with the Telekom Media Center.

### **Cloud-based video conferencing for business customers.**

Video conferencing can replace business trips, making it a potential way to significantly reduce CO<sub>2</sub> emissions. That is why Telekom decided to expand its range of video conferencing services in 2012 by adding a cloud application. iMeet enables web-based phone and video conferencing with up to 15 participants in a personal online meeting room. Users can also view documents and work on them together at the same time.

## Improving energy efficiency and compensating for CO<sub>2</sub> emissions.

With our new Sinus series, Telekom Deutschland launched the first and, currently, only generation of cordless telephones to bear the Blue Angel environmental seal in March 2013. These DECT phones meet the highest environmental standards. They are particularly energy efficient and low radiation. For the first time, our customers can determine the range of their DECT phone themselves. Long-term availability of replacement parts as well as a replaceable battery means that customers will be able to use their phones for a long time. We set up the website, [www.telekom.de/der-blaue-engel](http://www.telekom.de/der-blaue-engel), to provide our customers with more transparent information on

the environmental qualities of the first Sinus devices to bear the Blue Angel seal.

### **Neutralizing the carbon footprint of download portals.**

We are able to improve the carbon footprint of our products and services by compensating for CO<sub>2</sub>, which neutralizes the carbon footprint. Telekom compensates for the emissions produced by our download portals at the end of every year. We were able to compensate for 592 metric tons of CO<sub>2</sub> by investing in high quality climate protection projects at the end of 2012. One project Telekom invested in was a project to install biogas plants for families in rural southern India. In addition to reducing CO<sub>2</sub> emissions, the project helps local development in many other ways as well. The project meets the international, verifiable WWF Gold Standard. According to calculations, Telekom's Load offers—Gamesload, Musicload, Videoload and PagePlace—will generate an estimated 670 metric tons of CO<sub>2</sub> by the end of 2013.

### **Professional end-device management in leasing service.**

Our increasingly popular leasing service for end-devices helps reduce electronic waste and encourage raw materials recycling, thereby indirectly improving the carbon footprint. Once the leasing period has expired, the devices are processed in accordance with environmental standards or properly recycled. The number of people using our leasing service had increased to some 5.5 million by the end of 2012.

### **Telekom and TÜV Rheinland offer energy management.**

Deutsche Telekom and TÜV Rheinland have been helping companies reduce their energy consumption with a complete package since January 2013. Telekom records all building technology consumption values and constantly monitors peak loads and the energy consumption of IT systems. In addition, Telekom's energy-efficiency management controls larger consumers such as heating, ventilation and cooling systems. TÜV Rheinland uses the data provided by Telekom to develop energy savings measures and helps companies to set up an energy management eligible for certification. With this offer, companies can reduce energy consumption in the field of building technology by up to 15 percent and by up to as much as 60 percent in the case of IT systems.

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Telekom's download portals generate around 80 percent less CO<sub>2</sub> emissions than retail stores. However new CO<sub>2</sub> emissions are also generated by providing these portals. By neutralizing the carbon footprint of our download portals step-by-step, we help our customers to opt for green consumption.

### **Carbon-neutral shipment via GoGreen.**

In Germany we started to use GoGreen, the carbon-neutral shipping offering of Deutsche Post, to ship all of our standard parcels in 2008. We were able to cut back on a total of 78 metric tons of CO<sub>2</sub> in 2012 for the shipment of T-Online Shop parcels alone. The year-on-year decrease in this value can be attributed to more effective logistics processes as well as the fact that fewer packages were transported.

### **Last year's CR report**

## Barrier-free products & services.

State-of-the-art communications devices are important tools in our everyday lives. To make it easier for people with age-related or physical limitations to use new media, we develop products and services that meet their needs and continuously work to further improve user friendliness. Throughout the Group, Telekom also offers various subsidized rates to provide low-income customers and people with disabilities with cost-efficient phone and data rate plans. In line with our [CR strategy](#), we want to give as many people as possible the chance to participate in the information society and to use the opportunities it offers.

### Products and services for the elderly.

Telekom addresses the needs of older people in particular with numerous innovative products and services. We are continually expanding our range of products in this area. In 2012, for example, we introduced the Sinus A 806 cordless phone with a particularly large display and keys that is compatible with hearing aids. We launched two innovative emergency call services to the market as well:

We introduced our smart home emergency call solution at German Senior Citizens' Day in Hamburg in May 2012. The solution comes with software that uses sensors to recognize an emergency situation caused by the person falling and automatically contacts the emergency call center. The center can talk to the person via hands-free equipment while a graphically modified image provides them with a picture of the situation. Deutsche Telekom also launched a mobile emergency call service to market in 2012 in collaboration with the German Red Cross and Swiss watchmaker, Limmex. The solution is comprised of a wristwatch with an integrated cell-phone function that allows the wearer to call up to ten stored emergency numbers one after the other.

Another project focuses on improving home care for severely ill patients. A network comprised of palliative practitioners, hospital physicians and nursing staff etc. in the German Lahn-Dill district will soon be able to monitor patient care electronically. This will help them improve care and avoid unnecessary hospital admissions. The actual benefit of this offer is currently being scientifically evaluated within the scope of a dissertation.

### SmartSenior—Smart living for seniors.

Being able to live in their own home for as long as possible is a concern for a growing number of older people, and Telekom's central research and innovation area, [Telekom Innovation Laboratories](#), is developing SmartSenior solutions to help make this a reality within the scope of a joint project. Under the coordination of Telekom Innovation Laboratories, 28 partners from the world of research and industry are looking into how smart living environments can help seniors within the scope of the research project, which is being sponsored by the German Federal Ministry for Education and Research. The project focuses on solutions for increased security and comfort both at home and on the go. SmartSenior relies on an integrated overall concept with standardized, intuitive user interfaces that intelligently connects different technologies, from television and smartphone to home electronics and cars. In addition to developing cooperative and integrated business models, Telekom Innovation Laboratories is focusing on developing an innovative home gateway that provides access to previously separate, age-appropriate assistance systems for a healthy, independent life (AAL services) via one standardized gateway and makes those services easier to use for older people. A field test was launched in early May 2012 in around 30 apartments in Potsdam. The largest German AAL project laid the foundation for products and services designed specifically for older people that can now be advanced for a broad market launch. The project can

serve as a role model for joint projects in other areas as well.

## Products and services for the hearing impaired.

Deutsche Telekom works to create equal opportunity in telecommunications under the motto "Connect the unconnected". That includes our services for people with hearing impairments. We set up a hotline especially for this target group in 2003 that is becoming increasingly popular. Users can send inquiries to trained employees via e-mail. The employee either answers the question directly or lets the person know how to contact them via video telephony or webcam. Up to 60 people currently call the hotline every day to ask about special rates for the deaf or about special media receivers for television programs with subtitles. The hotline in Bremen is run by two deaf Telekom employees. They are available at the Telekom Shop in the Bremen Weserpark center once a month as well. In addition, in the Telekom shops in Landsberg am Lech and Munich, advisory services for deaf customers are provided every Wednesday and Thursday respectively. We are planning to expand this offer to other cities as well.



## Slovak Telekom: Portfolio extension for the visually impaired.

Slovak Telekom now offers a Nokia C5 mobile phone equipped with a special application for the blind and visually impaired for the price of a standard phone. This app talks to customers to guide them through the menu and magnifies the screen. The company also sells a landline phone with a larger display, an enlarged keypad, larger buttons and a function that increases the voice and ring tone volume—again for the price of a standard phone.

## Connecting the unconnected through social tariffs.

Makedonski Telekom has introduced a social tariff model for vulnerable people on welfare. For example, social welfare beneficiaries who only need voice services can now obtain a free prepaid fixed phone line. Moreover, both T-Home and T-Mobile in Macedonia have special offers for elderly people and individuals with special needs.

In Montenegro Deutsche Telekom's subsidiary, Crnogorski Telekom, also offers a special discount for disadvantaged people (25 percent for mobile Internet users and 20 percent for ADSL). Over 300 customers made use of the discount during the reporting period.



## Customer communication.

The Internet has become one of the most important sources of information for consumers. More and more consumers are trading information on products in blogs, forums and other networks and are addressing sustainability-related aspects with increasing frequency. Telekom launched a new corporate campaign in 2012 to meet this demand for information. The Digital World campaign has replaced our previous sustainability campaign but is still addressing the same topics. Numerous international subsidiaries also promoted a sustainable approach during the reporting period.

### Digital World campaign replaces sustainability campaign.

Telekom ended its sustainability campaign and launched its Digital World corporate campaign in September 2012. Telekom posted information on current sustainability topics at the company on the sustainability campaign's website year-round, including:

- **Media skills competition:** In February 2012, Telekom launched a media skills competition as part of its sustainability campaign. The winner of the competition was featured on the campaign website.
- **Call for donations:** In October 2012, we used the campaign website and invoice inserts to let our customers know about our continuing support for the BILD hilft e.V. "Ein Herz für Kinder" charity and asked them to participate in a virtual donation drive.

The Digital World corporate campaign presents Deutsche Telekom's innovative products and services in a broad framework. The campaign also focuses on topics that are important to the environment and society beyond what they offer the individual including smart metering, e-health and virtual newspapers, books and music.

We will be encouraging different target groups to embrace sustainability in 2013 as well, another step in fulfilling our corporate responsibility.



### We Care app playfully teaches people how to live green.

Telekom uses various communication channels to report on its ecological and social commitment. For example, we have been providing the We Care app as a free download since 2012. With the app, we address target groups that have had little exposure to the topic of corporate responsibility. The app provides answers to questions such as: How many trees have to be planted to compensate for a 1,000 kilometer-long flight? How would a more environmentally friendly alternative look like? The app takes a playful approach to informing people about the areas in which Telekom is active, gives people insight into the company's philosophy and shows how each individual can do their part. Hosts Katrin Bauerfeind and Christian Mürau guide users through the content and discuss critical topics and offer different points of view as well.

The "We Care" app provides information on climate protection, social commitment, connected life and work and Telekom as an employer. Complex topics are explained using multimedia and interactive content. The app uses 3D animation to explain how the greenhouse effect works, for example. This makes it possible to illustrate the factors involved in global warming in a way that is simple and easy to understand. The basic approach of the app

is for users to have fun as they learn about CR topics. That's why the app primarily features simple illustrations complemented with games and intuitive navigation. The app also provides information on the latest CR report.

The "We Care" app received the German CSR prize in the special Innovation category from the International Forum for Sustainability and Future Viability. The app also received the "Goldener Funke" business communication award as the best CR communication tool as well as the Econ Award in gold for corporate communication in the "Digital Applications" category.

### feelGreen.de: Sustainability you can enjoy.

Deutsche Telekom's feelGreen.de online portal is targeted at people who want to combine being green with enjoyment. The portal provides information and tips at a glance on environmental, social and health-related themes. Topics range from nutrition, health and fashion to energy, the environment and travel.

### Customer communication through social media.

We want to give our customers and other Telekom stakeholders a variety of options for getting in touch with us. In addition to our service offers, we also engage in dialog with these groups on different online platforms such as Facebook and Twitter. More and more people are following us in these networks. Deutsche Telekom AG's Facebook page already has around 31,100 fans (last update: December 2012) and some 36,700 people follow our Twitter profile, Deutschtelekom (last update: December 2012).

### Customer assistance through the Feedback Community.

The www.telekom-hilft.de website has been the place to go for all of Telekom's social media offers since June 2012. The website offers content across all media. The Telekom service team—otherwise known as our Feedback Community—answers questions about products and services on the site. In addition to our Facebook and Twitter pages, the website also features our Telekom blog, which we started in 2010. The blog complements the Group's traditional press activities. People can also access a number of current reports on innovations at the Group on our YouTube channel.

### Magyar Telekom: Integrating sustainability into sales activities.

Magyar Telekom, Deutsche Telekom's Hungarian subsidiary, published for the first time in April 2012 a mobile device catalog that provides information about the sustainability aspects of different products and labels the mobile devices' sustainability features.

These include:

- Mercury and arsenic-free display
- PVC-freeFree of nickel, brominated or chlorinated elements and antimony trioxide
- Packaging made of 100 percent reusable materials
- Charger more energy-efficient than even the highest standards
- Energy-saving mode
- Made of 100 percent reusable materials
- Reminder to pull out the charger
- Designed for disadvantaged people (e.g., the elderly, people with disabilities, etc.)

Magyar Telekom indicates the sustainable features in its device catalogs. The sustainability evaluation of the

mobile devices comes from the supplier, however, who is also responsible for such statements.

### Cosmote—"Our world is you."

Cosmote's corporate campaign in the reporting period was once again its "Our World is You" Program, which serves to enhance the company's contribution to society and bonding with customers. Through this corporate campaign Cosmote invited its subscribers to send their wishes "for a better world" via Facebook to inspire the company to take action in the field of social work and volunteering.

More than 13,000 people responded and made suggestions via Facebook to show Cosmote how to "make the world a little better". The company selected a number of ideas for a better world that were to be realized with their help. In this context, Cosmote launched a groundbreaking Family Support Program in 2012 in collaboration with the Solidarity and Support Center of the City of Athens (KYADA) to provide in-kind and psychological support to families in distress. Through the Program Cosmote provided food, clothing and other necessities, toys, books, Internet access, as well as support by psychologists and KYADA social workers to a total of 200 families for a whole year. What's more, 40 Cosmote employees contributed to the "Our world is you" program by participating in the renovation of the KYADA building and by collecting things like clothes, books, etc.

The "Our World is You" program also has an internal dimension. Several of the wishes mailed by Cosmote employees have already come true. In May 2012, for example, the walls of the Customer Care building were painted in bright colors and with striking designs to cheer up both employees and customers.

### OTE & Cosmote: Tracking surveys show CR leadership in telecom sector.

In a mobile telephony tracking study conducted in 2012, 46 percent of the participants—residents of Athens and Thessaloniki—mentioned Cosmote as the most socially responsible mobile telephony company in Greece. The mobile telephony company ranked second in this category scored a mere 10 percent while 37 percent of the respondents did not select any mobile telephony company in the "Social responsibility" category. The Cosmote score was 13 percentage points higher than the previous year, when the company also came out top.

In a tracking study for fixed telephony/Internet providers conducted in 2012, 28 percent of the participants—residents of Athens, Salonica, urban, semi-urban and rural areas in Greece—mentioned OTE as the most socially responsible fixed telephony company/Internet provider in Greece. The company ranked second in this survey was chosen only by 5 percent of the participants, whereas 55 percent were unable to mention any socially responsible company. In the 2012 tracking study for 2012 OTE achieved the same score as in 2011 in this category, and was ranked first both years.

### A campaign for the hearing-impaired in Slovakia.

During a Hearing-Impaired Week in September 2012 Slovak Telekom ran a "Love does not need words" campaign with the aim of raising public awareness of the presence of hearing-impaired people in society, and to mark the tenth anniversary of the company's support for this group of people. On International Hearing-Impaired Day (30 September) all Slovak Telekom's commercials were shown in sign language —the first time any company had done this in Slovakia. "We would like people to think more about the hearing-impaired in everyday life. They are just like us, but simply have a few more obstacles in life," says Andrej Gargulák, head of Corporate Communications at Slovak Telekom.

During the campaign almost 35,000 people visited a dedicated website and Slovak Telekom undertook several activities on Facebook to bring the significance of this issue home to people. One was a "Read my lips" app in

which people can try to guess what a person is saying by reading their lips. People could also put a badge in their profile picture saying "I love you" in sign language. Although sign language is not international, this "I love you" sign is familiar to all hearing-impaired people around the world. Slovak Telekom also posted the sign in all its shops where the basics of sign language are spoken so people can easily identify them. Last but not least, a special mood film the company shot about a hearing-impaired girl was posted on Facebook and YouTube.

Slovak Telekom also ran a fund-raising campaign for the hearing-impaired from September 19 to October 31, 2012. A special online app enabled people to draw a picture and the company promised to donate one euro for every drawing in order to pay for a special course for hearing-impaired business people. A total of 1,066 drawings were submitted and Slovak Telekom tripled this sum to enable the course to take place.

## Information on environmental protection in the Czech Republic.

### T-Mobile Czech Republic: informing customers about eco-friendly activities.

In 2012, in a customer brochure entitled "Partner solutions" T-Mobile Czech included a two-page article focusing on the environment, cutting CO<sub>2</sub> emissions and reducing a customer's environmental footprint through telecommunication services and remote work products (e.g., home office, teleworking, etc.). The company regularly included in the invoices sent to customers specific information about the need to recycle cell phones and the possibility of switching to online billing. The number of online bill activations is continuously increasing and has now reached a total of around 550,000.

The company's environmental activities are also being communicated on the T-Mobile Czech CSR webpage and at several conferences focusing on this topic.

### Green ICT in the Czech Republic.

ICT is an intrinsically energy-consuming business—and a challenge for most companies. Green ICT , in contrast, is a win-win situation for both business and the environment because a company's entire ICT technology is moved to a virtual data center ("cloud computing") with dynamic hardware allocation and operation systems, database and web server management. T-Systems Czech held various Green ICT  presentations at the Czech-American Chamber of Commerce for interested public and business representatives where the focus was on green solutions and security issues.

In the reporting period, T-Systems Czech also translated and modified an international sustainability and ICT report in order to make it available to a broader Czech audience.



## Phone & cell phone recycling.

Deutsche Telekom is dedicated to cell-phone reuse and recycling and has launched various campaigns to collect used devices. Together with its customers, the company makes an important contribution to conserving natural resources and protecting the climate and the environment with these activities within the scope of its "low carbon society" CR action area. Using cell phones as long as possible helps conserve resources while recycling provides us with valuable raw materials.

### Used Cell-Phone Collection CR KPI.

We have been measuring the Used Cell-Phone Collection CR KPI since the financial year 2010 in order to highlight the importance of collecting used cell phones. This KPI compares the collected cell phones, measured in piece items and the equivalent in kilograms, with the number of customers at the respective international subsidiary.

For a detailed description of the CR KPIs, go to Strategy and management.

According to the European WEEE Directive (Waste Electrical and Electronic Equipment), manufacturers of new electrical and electronic devices in Europe are under the obligation to take back used devices free of charge and dispose of them properly. Deutsche Telekom is involved in this process beyond the scope of these legal requirements with targeted initiatives for collecting used devices.

Data privacy poses a particular challenge when collecting cell phones. Telekom's Data Privacy and Data Security department is involved in the collection system to guarantee data privacy and keep customer data from being misused.

### Cell-phone collection campaign.

In 2012, we collected a total of 207,543 used cell phones in Germany in the course of different campaigns and either had them repaired for reuse or recycled professionally. For each cell phone that was turned in, Telekom donated part of the proceeds to the Deutsche Umwelthilfe e.V. (DUH) environmental organization.

Around 25 percent of the material that makes up cell phones are valuable metals, some of which are mined or extracted under problematic working and environmental conditions. That makes recycling particularly important. Telekom supported the German Federal Ministry of Education and Research's educational initiative, "The raw materials expedition—discover what's hidden inside your cell phone," in 2012 to raise consumer awareness and to encourage people to take a more sustainable approach to cell-phone use.

The initiative was launched in the context of the Science Year 2012 "Project Earth: Our Future" to raise awareness among young people on how to use valuable resources responsibly through scientifically founded classroom material and collecting used cell phones. Telekom helped the Federal Ministry of Education and Research run the initiative and conducted its own ongoing cell-phone collection campaign as part of the initiative from September to mid-November 2012. The company also advertised for its customers and the public to join in and donated attractive prizes for the school competition in which more than 1,600 schools participated. In

addition, Telekom supported the first state-wide cell-phone collection campaign conducted by the Bavarian Ministry of the Environment and Public Health, "Smart cell-phone disposal" from April 30 to June 30, 2012, by providing organizational advice and donating prizes for schools. Around 70,000 used cell phones were collected during this time. In cooperation with the Deutsche Umwelthilfe environmental organization, Telekom sponsored a cell-phone collection campaign conducted by the Odyssø science program, which is broadcast by the German SWR television broadcasting company. People sent in 3,500 used cell phones to SWR in the course of the campaign. Telekom donated EUR 3,000 of the proceeds to Deutsche Umwelthilfe.

In June 2012, Telekom received the internationally renowned [Ethical Cooperation Award 2012](#), presented by the online magazine, Ethical Corporation, for its successful cell phone recycling campaign in 2011 to benefit the children's charity organization "[Ein Herz für Kinder](#)".

#### Last year's CR report

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Around two-thirds of all German citizens have a total of 85.5 million old and unused cell phones sitting around in their homes. Those were the findings of a study conducted by the [BITKOM](#) industry association in 2012. That is why Telekom has been working to raise consumer awareness and increase the number of returned and recycled cell phones for ten years. Some used cell phones can be reused after a few repairs and erasing any personal information still on the phone. We can recycle cell phones that require repairs that are too extensive, giving us valuable raw materials such as silver, gold and copper.

### Recycling programs in Romania and Greece.

#### **Cosmote Romania: "I love recycling" program.**

To mark Earth Hour in March 2012, Cosmote redirected the public's attention to its environmental program "I love recycling," which focuses on the importance of collecting and recycling old mobile phones and accessories. For each of the nearly 1,900 mobile phones and accessories collected from the beginning of the campaign up to the end of September 2012, Cosmote Romania planted a tree near the city of Ploiești on November 10. Cosmote Romania also had an additional 5,000 trees planted on a one-hectare site as part of the Adopt a Forest program. Almost 200 volunteers participated in the planting events: Cosmote and Germanos employees, their families, external volunteers and school students.

#### **COSMOTE: "Join Us in Recycling."**

Since 2005, Cosmote has been implementing a recycling program for mobile phones, accessories, batteries and ink cartridges in all Cosmote and Germanos shops and Cosmote buildings. In order to raise public awareness about this issue in 2012, Cosmote ran a campaign of print ads, which was launched on World Environment Day.

## Consumer protection.

Information and communications technology (ICT) gives consumers a lot of advantages but also comes with some risk. Protecting its customers is a key factor in Telekom's corporate responsibility, from maintaining the security of personal information and offering transparent pricing models to protecting children from unsuitable content. We want to provide our customers with a secure, reliable user environment and comply with high standards to make this happen. In our efforts to do so we have been able to successfully market new—and sensitive—services such as mobile payment.

We especially want to contribute to the safe use of digital media by children and young people. To do this, we help them improve their own media skills and also provide parents in Germany with special child protection software, an effective tool to ensure an age-appropriate online experience. In early 2013, we became a member of the alliance for consumer education established by the Federation of German Consumer Organizations. The alliance of representatives from the worlds of business, science and associations works to promote consumer skills throughout Germany through activities such as making media skills part of the curricula.

### Customer-friendly data privacy standards.

Deutsche Telekom actively participated in the "Mobile Privacy Initiative" (MPI) to develop customer-friendly data privacy standards again in 2012. These standards are set forth in policies such as the Mobile Privacy Design Guidelines, which were published in 2011. Just like other European mobile communications providers, Telekom introduced this guideline gradually at its European subsidiaries, completing the process in 2012.

#### Quick reference for data privacy categories.

Telekom classifies personal and confidential business data in data protection classes ranging from "open" to "strictly confidential". A newly developed data privacy disc, similar to a parking disc, shows employees which protection measures need to be employed for the particular information they are working with. All employees can access the online version of the data privacy disc from their computer.

We are planning to develop a smartphone app to help employees work with data privacy standards in 2013. Telekom has created a series of informative flyers on the topic. The flyers provide brief, clear explanations of different data privacy and security regulations, for example for working with smartphones. Content is tailored to different target groups such as team colleagues, managers and heads of organizational units.

#### TÜV Nord certifies Deutsche Telekom's billing processes.

Telekom sends out around 65 million bills in its fixed-line and mobile communications business each month. Depending on the rate plan, it is often necessary to process thousands of traffic data items to be billed to the exact time for a single customer. Numerous different IT systems work together for this purpose in fixed and mobile communications. In 2012, the technical services company TÜV Nord audited the entire process chain and associated systems in terms of compliance of the billing process with data privacy and IT security, and certified both our fixed-line and mobile communications areas. This was the second TÜV certification for our fixed-line business.

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The MIP, which was officially launched in January 2011, was initiated by the world's largest mobile communications association comprised of more than 800 mobile providers, the GSM Association (GSMA). The purpose of MPI is to develop customer-friendly data privacy standards for Internet-enabled and multi-functional cell phones, otherwise known as smartphones. The mobile communications value-added chain is comprised of different providers from all over the world specializing in end devices, the operating systems that run on them, telecommunications services, software programs (apps) and online services. The aim is to establish customer-friendly standards to be incorporated into products by product developers right from the start.

### At a glance: Examples of voluntary commitments and codes of conduct on consumer protection.

Telekom guarantees consumer protection at the highest level for its customers through a number of national and international voluntary commitments and internal codes of conduct. Sometimes these even go far beyond the standards required by national regulations. We have also made a large number of voluntary commitments in the area of youth protection.

At a glance: Examples of voluntary commitments and codes of conduct on consumer protection.	
Data privacy code for geodata services with Bitkom	Telekom Deutschland
Specific price controls in the General Terms and Conditions, § 13 (3)	T-Mobile Austria
General Recommendations for the Provisioning of Audiotex Services	T-Mobile Czech Republic
General Rules of Provision of Premium Services (Premium SMS, Premium MMS)	T-Mobile Czech Republic
Code of conduct for premium SMS/mobile services and web-based services	Telekom Deutschland (mobile communications)
The GSMA's Mobile Privacy Initiative	Deutsche Telekom
Code of Conduct for Value Added Services Provided through Mobile Phones and for the Protection of Minor Users	Cosmote Greece
Bill Limit Service	T-HT Hrvatski Telekom
Code of Conduct—Mobile Premium Services	Magyar Telekom (mobile communications)
Code of Ethics for Premium Rate Services	Magyar Telekom (mobile communications)
AntiSpam Policy	T-Mobile Macedonia
SMS Service Provision Code of Conduct	T-Mobile Netherlands
General Rules for Providing SMS Services for Non-branded Projects	Slovak Telekom (mobile communications)
Cellular Telecommunications & Internet Association's (CTIA) Wireless Consumer Checklist	T-Mobile USA
Cellular Telecommunications & Internet Association's (CTIA) Consumer Code for Wireless Service	T-Mobile USA

### OTE and Cosmote: Broad-based online safety program.

In 2012 OTE and Cosmote joined forces to inform children and parents by releasing a new campaign—"In the Internet fairyland, we want no villains"—about online safety and to protect children from possible dangers lurking online. This program included the following:

- **Safe Internet navigation and mobile telephony service usage:** OTE offers Connx Secure, which provides full protection for a user's e-mails and computer (including parental control services) while Cosmote provides a free, user-friendly parental control service enabling subscribers to block adult categories in Cosmote's My View

portal.

- **Raising public awareness:** OTE and Cosmote have published a new common information leaflet on online safety for children for distribution at the companies' customer touchpoints (e.g., the OTE Telecommunications Museum, and big events sponsored by the two companies).
- **Collaboration with recognized institutions:** OTE and Cosmote cooperate with and sponsor the Adolescent Health Unit of the Second Department of Pediatrics at the University of Athens; P. & A. Kyriakou Children's Hospital and the Greek Awareness Center (Saferinternet.gr), which operates under the auspices of the European Commission; and the Cyber Crime Unit through its support for the Awareness Conferences organized in 2012 by the Unit on safe internet navigation. OTE and Cosmote also support the YpOSTIRIZO 800 11 800 15 helpline of the Greek Awareness Center. OTE is a member of SAFENET (the Greek self-regulatory body for Internet content) and along with Cosmote is a member of the Advisory Board of Greek Awareness Center.
- **Safer Internet Day-2013 initiatives:** On the occasion of the Safe Internet Day 2013 and driven by the conviction that prevention and proper information can ensure the safe use of the Internet and of the mobile telephony services, OTE and Cosmote implemented an awareness campaign for the second consecutive year. This special event for parents, adolescents and children took place on Saturday, 2 February 2013, at the biggest shopping mall in Athens. Specialists from the Adolescent Health Unit informed parents and children about the safe use of the Internet, potential risks, as well as young people's addiction through interesting interactive activities.

### Cosmote Romania: Safer Internet Campaign.

Through a Safer Internet Campaign in the first quarter of 2012, Cosmote Romania was involved in promoting safe Internet usage for children for the fourth year in a row. On Safer Internet Day (February 7) the company launched a large-scale communications campaign that made a key contribution to the largest national campaign aimed at protecting children and youngsters from unsuitable digital content.

This campaign aimed to increase parents' and youngsters' awareness of the potential dangers encountered while surfing the Internet. 32,000 of copies of a flyer entitled "How to protect your children from internet dangers" were made available through Cosmote and Germanos stores and at corporate events. In addition, Cosmote Romania implemented an online and print campaign as part of the company's commitment to improving the social and environmental dimension in which it operates as a responsible member of the society.

### Globul: Road safety campaign in Bulgaria.

Globul and Germanos conducted a national road safety campaign entitled "Drive safely—Use hands-free" from July to December 2012. They distributed leaflets with tips for safe driving and a list of sanctions for road traffic offences as stipulated in the Bulgarian Road Traffic Act as well as car stickers with the slogan of the initiative at central junctions and boulevards in Sofia, Varna, Plovdiv and Burgas. Held for a sixth consecutive year, the campaign aims to encourage responsible driving and the use of hands-free devices behind the wheel—to improve road safety in the country.

## Protecting minors.

The Internet has become part of everyday life for children and young people. According to a study conducted by the media research association Medienpädagogischer Forschungsverband Südwest in 2010, young people spend an average of almost 140 minutes online every day. Some young people are still naive when it comes to using the numerous possibilities offered by the new technology.

That's why protecting children and young people and teaching them how to use new media responsibly is of pivotal importance. Deutsche Telekom takes a three-pillar approach:

- **Providing attractive, age-appropriate offers for children:** We offer children and young people exciting, attractive content with age-appropriate websites and content such as the [fragFINN.de](#) search engine and our [Kids Portal](#), which we have been offering since 2004.
- **Promoting media skills:** We promote competent, confident use of the Internet and mobile communications. This is the only way for children and young people to learn how to recognize risks and stay within boundaries. Telekom also collaborates with different social groups and initiatives in this area.
- **Offering autonomous, protective tools for users:** A key element is also offering suitable protective tools. Telekom Deutschland has been offering a reliable solution since 2003 with its child protection software, which was officially recognized by the Commission for the Protection of Minors from Unsuitable Media Content (KJM) in February 2012. The software can be used to find out the age rating of websites, for example.

In this context, Deutsche Telekom also supports numerous [initiatives and collaborations to protect young Internet users](#).

### Industry-wide protection of minors initiative.

Internet users are getting younger and younger, which makes providing effective protection for children and young people one of the main challenges on Europe's digital agenda. At the end of 2011, 28 leading technology and media companies, including Telekom, joined forces in the ["CEO Coalition to make the internet better place for kids"](#) initiative for one year following an invitation by EU vice president Neelie Kroes.

DTAG is also participating in the industry's ["ICT Coalition for a Safer Internet for Children and Young People."](#) Initiative members include telecommunications companies, end-device manufacturers and online service providers. For the first time, a broad range of companies from the ICT industry along the entire Internet value-added chain teamed up for a common, long-term goal to improve protection of minors and signed the [Principles for the Safer Use of Connected Devices and Online Services by Children and Young People in the EU.](#)

Telekom has promised to implement a [list of measures](#) at every subsidiary in the EU by January 2014 as part of the two initiatives. The measures include:

- Designating a child safety officer as a coordinator at Telekom and as an external contact
- Offering a special website that provides helpful information on keeping minors safe online
- Simple, secure mechanisms for reporting harmful or inappropriate content and processing these reports effectively
- Age-appropriate data privacy settings in Telekom apps, e.g., for social networks or advertising preferences on

cell phones

- Categorizing content on Telekom websites and in Telekom services into at least two age groups: "for adults only" and "for all ages"
  - A more extensive offer of services to help parents control use of the Internet including offering child and youth protection software
  - Systematic removal of child pornography-related content from Telekom's servers
  - Measures to raise awareness among children and young people of how to use the Internet responsibly
- 

We work throughout the Group to keep children and young people safe when using different forms of media. Our basic approach takes national laws and specific local needs into account. The Group subsidiaries individually decide where they want to focus their efforts for improving the protection of young people online.

### Protected surf rooms and improving media skills.

Telekom supported [fragFINN.de](#), a protected surf room that provides children with a protected online space without inappropriate content, in 2012 as well. Since November 2012, the fragFINN app has been offering a child-friendly browser for smartphones and tablets. We are also involved in [various collaborations](#), including "Youth and cell phones," which promotes [media skills](#) among children and young people. We plan to continue our support for this initiative as well.

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The fragFINN search engine is our contribution to the safe Internet initiative "Ein Netz für Kinder" launched by the German federal government. It has been available since 2007. In November 2009, Deutsche Telekom founded the association fragFINN e.V. in collaboration with other ICT companies in order to enable the platform for safe Internet content to offer its services over the long term.

### Protection of children and young people integrated into product development.

Protecting children and young people from damaging influences presented by the media is an important aspect of product development at Deutsche Telekom. Our [design principles](#), which are mandatory throughout the Group, have been in effect since 2009. These are based on the "Be responsible" principle and specify that criteria for protecting children and young people have to be taken into consideration even as early as in the product development phase.

The standards and labels of self-regulation institutions such as [Freiwillige Selbstkontrolle der Filmwirtschaft \(FSK\)](#) and [Unterhaltungssoftware Selbstkontrolle \(USK\)](#), the entertainment software self-regulation body, are becoming increasingly important. These give guidance to children, young people and adults. That is why Deutsche Telekom makes sure that all of its distribution channels and Internet pages comply with the age recommendations published by the self-monitoring institutions.

In 2012 we voluntarily labeled our web offers containing age-appropriate content (e.g., [Videoload.de](#)) according to age groups in compliance with legal requirements and with the standards set forth by [Freiwillige Selbstkontrolle Multimedia-Diensteanbieter \(FSM\)](#), the voluntary self-control of multimedia service providers (self-classification). In doing so, we are protecting young users from content that could negatively impact their development. We also make it possible to block such content with appropriate child protection software.

## Online safety with child protection software.

All fixed-line customers can download Telekom's child protection software free of charge. During the reporting period, we also started to develop a browser that is safe for children when accessing the Internet via a smartphone or tablet computer on the go.

As part of our involvement in the [CEO Coalition to make the Internet a better place for kids](#), we also address issues such as parental control over online usage and filter tools for protecting minors. Deutsche Telekom made [specific commitments](#) in the context of their involvement in early 2013.

### Last year's CR report

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In February 2012 Telekom's child protection software became one of the first two initiatives for the protection of minors in Germany to be recognized by the Commission for the Protection of Minors from Unsuitable Media Content (KJM). The software helps parents control their children's use of the Internet by providing features such as age-based filters for page content and time limits.

We have also been offering our own service forum on child protection software to promote online safety since 2008. The forum is hosted by the Telekom Team and offers a platform for discussion on current problems and suggestions for improvement.

## Initiatives and collaborations to protect young users.

Close cooperation of all parties involved is crucial to pushing forward the protection of children and young people in the media. That is why Telekom collaborates closely in this area with partners from the worlds of business, politics and society and supports numerous initiatives on protecting children and young people in the media on its markets. We have been an active participant in the federal and state administrations' multi-stakeholder dialog on developing the system for protecting children and young people in Germany since 2009 and have already conducted various projects within this context. The goal of the dialog is to establish uniform standards and policies for the protection of minors in the media as well as to initiate measures to communicate and raise people's awareness of the topic.

Deutsche Telekom has been participating in the child protection awareness campaign "sicher online gehen - Kinderschutz im Internet," since July 2012. The campaign is also being sponsored by a broad alliance comprised of the federal and state governments and the business sector. Its objective is to raise awareness of youth protection programs and to encourage people to take advantage of them.

We also participated in the following numerous initiatives and collaborations, working for a safer environment for young people:

**At a glance:  
Initiatives and collaborations for the protection of minors and Internet security.**

<a href="#">ICT Coalition for a Safer Internet for Children and Young People</a>	Deutsche Telekom
<a href="#">European Framework for Safer Mobile Use by Younger Teenagers and Children (GSMA Europe)</a>	Deutsche Telekom
<a href="#">Adolescent Health Unit (A.H.U.) of the Second Department of Pediatrics – University of Athens (P &amp; A Kyriakou Children's Hospital)</a>	OTE
<a href="#">Advisory council of the klicksafe.de project</a>	Telekom Deutschland
<a href="#">CEO Coalition to make the internet a better place for kids</a>	Deutsche Telekom
<a href="#">Deutschland sicher im Netz e.V.</a>	Telekom Deutschland
<a href="#">fragFINN e.V.</a>	Telekom Deutschland
<a href="#">Freiwillige Selbstkontrolle Multimedia-Diensteanbieter e.V. (FSM)</a>	Telekom Deutschland
<a href="#">Greek Awareness Centre Saferinternet.gr</a>	OTE Cosmote Greece
<a href="#">Jugend und Handy (Youth and cell phones)</a>	Telekom Deutschland
<a href="#">Informationszentrum Mobilfunk e.V.</a>	Telekom Deutschland
<a href="#">Internet Service Providers Austria</a>	T-Mobile Austria
<a href="#">Kinder sicher im Netz (Making children safe on the Net, in collaboration with FSM e.V. and the police crime prevention units of German state and federal governments)</a>	Telekom Deutschland
<a href="#">I-KiZ Center for the protection of minors online</a>	Telekom Deutschland
<a href="#">Local Safer Internet initiatives under the patronage of the European Union</a>	Telekom Deutschland T-Mobile Czech Republic PTC Slovak Telekom
<a href="#">Mobile Alliance against Child Sexual Abuse Content (GSMA)</a>	Deutsche Telekom
<a href="#">NGO e-Slovensko</a>	Slovak Telekom
<a href="#">Safenet</a>	OTE
<a href="#">Media Rakkers foundation</a>	T-Mobile Netherlands
<a href="#">sicher online gehen initiative</a>	Telekom Deutschland
<a href="#">Teachtoday.eu in the UK and Germany</a>	Deutsche Telekom
<a href="#">Support for the German federal government's Wege ins Netz media skills competition</a>	Telekom Deutschland

### Taking action against child pornography.

As a responsible company, Deutsche Telekom considers it its obligation to take rigorous action against depictions of child abuse and its documentation.

Telekom has been working with criminal prosecution authorities and NGOs active in this area in Germany and in other countries for some time now to ban such content from the Internet. This topic was also heavily discussed in 2012 in the context of the "[CEO Coalition to make the Internet a better place for kids.](#)" Deutsche Telekom made a commitment in early 2013 to implement [measures](#) as part of this initiative.

Deutsche Telekom has been involved in a Europe-wide fight against the depiction of child abuse since 2007 in the [European Framework for Safer Mobile Use by Younger Teenagers and Children](#). Deutsche Telekom has also been an active member of the global [Mobile Alliance](#) against this type of content since 2008.

## Magyar Telekom: Ensuring child safety.

A Safer Internet Conference staged in September 2012 featured three presentations of Magyar Telekom's child safety strategy, policy and tools. The company's commitments for the future include a child safety webpage, appointment of a person responsible for child safety, tightening up the privacy of its social media, refining its reporting tool, developing standardized processes of reporting and implementing a notice and takedown (NTD) policy.

## Slovak Telekom: e-book sensitizes parents to dangers of children's internet usage

Children and adolescents are one of the most vulnerable groups in the virtual environment, especially as they are the ones most attracted by these new technologies. So Slovak Telekom launched a free e-book that makes parents aware of the dangers their children may encounter in Internet usage. The company is the main partner in a project involving the Ministry of Education, Science, Research and Sport and other organizations. The chapter on mobile usage was co-written by Telekom employees. The book is available as a free Kindle download.

## Slovak Telekom: Child safety seminars continued.

Between May and October 2012 Slovak Telekom was involved in an Internet child safety campaign, which involved visits to 78 schools. Over 7,000 children attended these seminars on safe Internet usage conducted by an NGO known as eSlovensko. The topics vary, but usually they show the children cartoons and then discuss about the danger featured in the cartoon. The seminars are interactive and sometimes the children act out their own theater play about safety on the Internet. In addition, 339 teachers were trained in how to teach their pupils about Internet child safety tools.

30 young people attending the special Summer University of Comenius were invited by Endowment Fund Telekom with Pontis Foundation to attend two seminars at Magio Beach, one on sign language and one on safe use of the Internet. Slovak Telekom paid for the students to attend these seminars.

## International conference on safer internet usage in Poland.

The Polish subsidiary PTC co-partnered the 6th International Conference on "Keeping Children and Young People Safe Online," which was held in Warsaw on September 20-21, 2012. 57 speakers and nearly 600 participants from over 20 countries attended the conference, which attracted experts from all over Europe who are dealing with issues of Internet usage by children and young people. The extensive conference program comprehensively tackled the issues relating to Internet usage by these vulnerable youngsters. Two PTC employees directly contributed to the conference by giving a talk on the operator's perspective on children in the mobile world. In this talk they particularly stressed the importance of education.



## Customer satisfaction.

As a service-oriented, responsible company, we feel obliged to respond to our customers' needs and expectations. We have incorporated this commitment in our Group-wide Guiding Principle "Customer delight drives our action." In this vein, we develop sustainable products with a high degree of reliability and easy-to-use, intuitive controls.

In order to promote dialog with our customers, our goal is to enable them to get in touch with us in a fast, uncomplicated way through various different communication channels. Since March 2013, we have been the only provider that can be accessed at any time free of charge by all fixed-line and mobile communications customers. This applies to all service numbers for questions about fixed-line, online, wireless and TV issues. Online inquiries are becoming more and more important. More than 40 percent of all service inquiries at Telekom Deutschland are solved by support provided by our cross-area online platforms. Systematically evaluating customer inquiries and complaints gives us the chance to identify the underlying causes and introduce improvements, helping us achieve our aim of significantly reducing the number of complaints.

We evaluate customer satisfaction at all of our locations by conducting surveys, and integrate the results into our management processes. Systematic complaint management also provides us with valuable information about areas that need improvement.

### Improved service at the service center.

Compared to late 2011, we recorded 20 percent fewer complaints and repeat calls in the areas of fixed-line and mobile communications at the end of 2012.

Within the scope of our K1 program ("Customer first"), we launched the Complaint Management 2.0 project in 2012 to improve customer service in the fixed-line consumers area, where we frequently get calls. If customers make repeated calls within a certain period of time, a trained case manager takes over the service process. The case manager handles the case and provides the customer with regular progress updates, e.g., via a short phone call. Thanks to these improvements we were able to increase customer satisfaction considerably. That also effects the results of our customer loyalty TRI\*M program. We are planning to expand the Complaint Management 2.0 concept to include other customer contact channels such as e-mails and complaints in the technology area.

### Last year's CR report

### TRI\*M 2010 program for increasing customer loyalty.

We see it as our duty as one of the leading providers of telecommunications and information technology worldwide and a service-oriented, responsible enterprise to take the needs and opinions of our customers into account. That's why an independent external service provider uses structured surveys to assess customer loyalty (surveys at Telekom Deutschland are conducted by the TNS-Infratest market research institute via the globally-applied TRI\*M method). As part of this customer loyalty study, we measure our customers' loyalty to our company several times a year, primarily based on responses to the following questions:

- How our customers rate our performance,
- Whether they intend to remain with us and would recommend us to others,
- Our cutting edge over the competition.

The results are expressed in the form of a specific indicator, the TRI\*M index, and integrated into our management processes. We were able to increase customer loyalty by 3.6 percent between 2011 and 2012 (last update: December 2012). Our goal is to increase this value by a total of around 10 percent by 2015.

#### Last year's CR report

##### "Customer first" program expanded to business customers.

In 2011, Telekom expanded its contact reduction program to include business customers, also streamlining and expanding its complaint management processes within the [K1 program](#) (Customer first). The goal was to improve complaint service, avoid unnecessary customer calls and permanently improve customer satisfaction in the business customer segment. The main focus of our activities was to increase satisfaction among small and medium-sized enterprises. These measures enabled Telekom to steadily increase customer satisfaction with the way we handled complaints. The results were up to 10 ACCI (after call customer interview) points higher at the start of 2013 than at the end of 2011.

However, there is still a lot of potential for improvement in the complaint management area. That is why we introduced additional steps in 2012 as part of the initiative. For example, we launched a new market research tool (process tracking) in January 2012, which for the first time monitors relevant business processes in Telekom Deutschland's fixed-line for business customer area and then evaluates the results using standardized KPIs. Unlike the ACCI, which uses market research to measure customer satisfaction 48 hours after service contact, this value is calculated using process tracking 14 days after service contact. Using both the ACCI and process tracking gives us a complete picture of customer perception along the entire process chain.

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In 2009, the contact reduction project was launched in Germany with the aim of reducing complaints and repeat calls in the area of fixed-line services for consumers by 20 percent. We continued to expand our initial goals: In 2010, mobile services were included and in 2011 the project was extended to include business customers as well. We are planning on decreasing the number of complaints and repeat calls by 20 percent in each area. All organizational units that have direct or indirect influence on complaints are being included, from Sales and Marketing to Product Management, Process Management, Finance and Technology.

##### Feedback Community social media platform.

We have been bringing together all of our "Telekom hilft" activities (Telekom helps), which we publish on our Facebook and Twitter channels, on our new social media platform, ["Feedback Community"](#), since May 2012. Helpful tips and problem solutions from our service channels in the social web are now available in one place. 58 Telekom employees initiate and moderate discussions between our customers and solve specific service issues from the community as needed. Some 24,000 members have signed up since the platform was launched.

We sent out around 104,000 tweets providing information on Telekom-related topics in 2012, which around 23,000 people followed. The [Telekom hilft](#) Facebook fan page already has more than 36,600 fans (last update: December 2012).

#### **Leading the way in customer service via social media.**

Telekom answers almost all customer inquiries received via social media, making Telekom the leading German

company in this area. In the AllFacebook Stats study from 2012, Telekom came in first out of 433 German brands with its "Telekom hilft" Facebook page. The company came in fifth in the general international comparison.

## TÜV confirms Telekom's service quality.

The technical services company, TÜV Rheinland, has been conducting a customer service assessment of the Telekom service hotline for twelve years now. Telekom shops and technical service were included in the assessment for the first time in February 2013. The survey of more than 2,500 customers on topics such as reliability, competence and friendliness showed that customers give Telekom's service at all three units a good rating. With these results, the units new to the 2012 assessment were able to join the service hotline in its positive results from previous years. This shows that our efforts to improve customer service are paying off.



## Research & innovation.

Telekom is not content with just being state-of-the-art but wants to anticipate new developments and help shape the future. That is why we invest in wide-ranging research and development activities, in particular in the work of Telekom Innovation Laboratories. We are also committed to financing professorships and creating pioneering ideas in cooperation with universities.

By developing smart solutions in the areas of energy, automotive and healthcare, Telekom has opened up new business areas. Together, these business areas are expected to generate around one billion euros in revenue by 2015. We intend to become the number one partner of the healthcare industry by providing innovative health services.

### Expenditure in research and development.

Research and development expenditure includes pre-production research and development, such as the search for alternative products, processes, systems, and services. By contrast, we do not class as research and development expenditure the costs of developing system and user software with the aim of increasing productivity and providing more effective IT support for business processes. In 2012, research and development expenditure in the Deutsche Telekom Group amounted to EUR 65.9 million, which is less than in the previous year. As the parent company, Deutsche Telekom AG bears part of the Group's research and development expenditure. At EUR 52 million, this amount was slightly above the prior-year figure of EUR 48 million.

However, this indicator must not be considered in isolation from the three-pronged innovation strategy described above. We also rely on new external innovations and plan to generate growth not only from our in-house developments but also from our partnerships and company shareholdings. We currently have a fund of EUR 410 million available for such projects, for example in our T-Venture company.

Deutsche Telekom's investments in internally generated intangible assets to be capitalized were down year-on-year at EUR 78.0 million. These investments predominantly relate to internally developed software, mainly for our Systems Solutions operating segment. In the reporting year, over 2,400 employees (2011 around 2,200) were involved in projects and activities to create new products and market them more efficiently. The majority of employees working for T-Labs , the unit responsible for results-oriented research and innovation, are researchers from a wide variety of disciplines.

### Expenditure and investment in research and development.

### Telekom Innovation Laboratories, our central innovation unit.

Telekom Innovation Laboratories (T-Labs ) is the central research and innovation unit of Deutsche Telekom. T-Labs  works closely with Deutsche Telekom's operating units by offering new ideas and support when it comes to developing and rolling out innovative products, services and infrastructures for Telekom's growth areas.

Telekom Innovation Laboratories incorporates six innovation areas:

- Internet & services
  - New media
  - Cross-domain middleware
  - IT & cloud
  - Convergent networks & infrastructure
  - Emerging ecosystems
- 

With sites in Berlin, Darmstadt, Bonn (Germany), Tel Aviv (Israel), and Mountain View in the United States, T-Labs' focus is on medium-term projects and on technologies that produce USPs and new business for Deutsche Telekom. The cooperation with universities in Berlin, as well as several other universities, institutes, industry partners and start-ups around the world, ensures close links between the research community and the private sector and the pivotal knowledge transfer into Telekom.

## T-Labs research areas.

Research and development at [Telekom Innovation Laboratories](#) ranges from developing interactive, globally available media services and virtualizing the IT infrastructure as part of [cloud computing](#) development to extensive IT infrastructure improvements. Focal topics in 2012 included the following:

- **Smart assistance systems:** T-Labs coordinated the SmartSenior research project conducted by the German Federal Ministry for Education and Research, which was completed in 2012. The goal of the project was to enable older people to live independently in their own homes as long as possible with the help of smart assistance systems. In the project, T-Labs developed an innovative home gateway that provides access to previously separate, age-appropriate assistance systems for a healthy, independent life (AAL services) via one standardized gateway and makes those services easier to use for older people.
- **Load-adaptive network operation:** Load-adaptive network operation, which brings network capacities in line with current demand, is energy-efficient and helps conserve resources. Networks that feature smart control systems to dynamically adjust capacities to current demand are gaining importance especially in times where the use of renewable energy sources is on the rise. In the context of the [DESI](#) project, Telekom Innovation Laboratories is working to further advance load-adaptive networks, a technology originally designed solely for use in emergency power supply.
- **IT-supported traffic management:** In cooperation with the Hamburg Port Authority, SAP and T-Systems, T-Labs is developing an IT-supported traffic management system that can be used to optimize the flow of goods based on constantly updated information on freight orders and the current traffic situation as part of the Smart Port Logistics project.
- **Communication and translation device for deaf-blind persons:** T-Labs' prototype of the Mobile Lorm Glove turns the Lorm alphabet—a means of communication for people with pronounced hearing and sight impairments—into digital text and vice versa. The Lorm alphabet is a hand-touch alphabet where specific points of the palm of the hand represent different letters. Words are composed by touching the relevant points. Thanks to a glove equipped with sensors (a Lorm glove), these messages can be transformed into text and then transferred to mobile devices or computers. The system signals incoming text messages to the person wearing the glove via vibration.

In 2012 T-Labs also founded a new Telekom subsidiary, Trust2Core, that enables highly secure mobile communications. Other start-ups are being planned.

[Last year's CR report](#)

## Pioneering developments in T-City Szolnok, Hungary.

The T-City program was launched more than three years ago in Szolnok, Hungary. It aims to introduce new and innovative services and product concepts to the local residential and business market. During the past few years, numerous products and services have been launched in this city. This opportunity to test the services in the city before the actual product launch enables Magyar Telekom to fine-tune its service concepts to customer expectations.

### **FUTURISTA.**

In the two-year FUTURISTA program announced in 2012 and running for two years from January 2013, Magyar Telekom invited 20 Szolnok households to test its product developments before their market launch. These households were asked to share their experiences via questionnaires or personal interviews in order to help the company fine-tune its products and solutions.

### **Intelligent city card.**

A sophisticated smart-card solution initiated in 2012 works on the "one card" philosophy, i.e., all the separately card functions previously available are now integrated into one card. Already more than 500 test cards are in operation. The beneficiaries come from all groups of the city's population since the card can be used in various areas of their lives, e.g., as school card and school ID card in cooperation with Hungary's National Unified School Card System; at work as a card to track the number of hours worked; or in public transport as a smart ticket solution. What is more, this smart card opens up new possibilities for future implementation, e.g. a mobile public transport ticket payment system, near field communication (NFC) solutions or a usage-based billing system for public transport.

### **Mobile City app—enhanced version of previous virtual tour guide.**

Previously implemented as a virtual guide to Szolnok, detailing all the important and famous places in the city with useful up-to-date information, the enhanced version of this mobile city app now takes the users' manifold requests into account and features upgraded functions with useful opportunities related to everyday life in the city. The free app has already been downloaded more than 8,500 times. Users are informed about all the city's cultural, sport and educational programs and are often motivated to send short messages about any activities, potholes in roads, damage, etc. that are of importance to the city authorities. Another interesting function is that the city's senior officials can send push notifications to local residents. Last but not least, Facebook is also integrated into the Mobile City app.

### **Optimizing energy management.**

Energy consumption has been monitored in two secondary schools and the Mayor's office to determine their potential for energy savings. Magyar Telekom experts prepared proposals for optimizing the energy consumption of the above-mentioned institutions.

### **Smart metering .**

As part of a pilot program initiated in 2012 with a strategic partner from the energy sector, Magyar Telekom plans to set up a comprehensive smart metering system for meter, network and meter data management. The pilot program involves the power company installing smart meters in 1,000 households in Szolnok's varying rural and urban transformer network topology. The first 500 meters had been installed in households by the end of 2012. This equipment enables the power company to obtain cost-benefit analyses and extensive information about the energy usage characteristics of each household. For their part, the households participating in the pilot are also benefiting from the chance to monitor their energy consumption via a Magyar Telekom web interface.

### **Public lighting optimization program.**

In 2012 Magyar Telekom launched a program to test different technologies that enable the local council to save

money on energy consumption.

### **Monitoring water quality.**

In August 2012 Magyar Telekom installed a water quality monitoring system powered entirely by renewable energy. The system, which works 24 hours a day (except in the cold winter months), examines different water quality parameters and enables the general public to access the results in real time via a web interface.

### **CityGuard.**

The ENOTO system installed in a suburban area of Szolnok to monitor the roads of the settlement is playing a key role in resolving the public's safety concerns since it improves their security situation. The equipment installed is capable of identifying—without human intervention—any vehicle registration number coming from any direction 24 hours a day and taking photos of a vehicle. As such, it plays a key role in improving crime detection.

### **Improving ICT skills for people of all ages.**

In order to enhance ICT skills in Hungarian society, Magyar Telekom offers Szolnok residents two programs free of charge: the Internet Academy, which primarily addresses senior citizens, and T-City Kids, an ICT education program for children between the ages of 8 and 11. More than 300 people have already taken advantage of the Internet Academy programs and more than 1,200 children have participated in T-City Kids so far.

### Croatia's first NFC mobile payments pilot.

Near field communication (NFC) technology is an innovative and safe way of making fast cashless payments by mobile phone. Hrvatski Telekom launched a test phase for NFC technology in 2012 in which some 200 of its employees were able to make payments at selected points of sale using NFC-enabled mobile phones.

## Smart grids & smart metering.

The use of wind and solar energy poses a considerable challenge to energy providers. The constantly changing intensity of wind and sun has an impact on electricity generation while the voltage in the power grid needs to remain stable to prevent power outages. What is more, an increasing number of private households are producing their own electricity, for example by using small cogeneration plants or photovoltaic systems. Energy flows need to be controlled intelligently with the help of modern ICT so that a balance can be maintained between local generation of energy and energy consumption. This requires a smart grid.

In order for a smart grid to work properly, a huge amount of data needs to be evaluated in real time for operators to see when and where how much electricity is being generated and how much needs to be supplied. Smart meters provide the needed transparency. We have been working with local utilities and major energy suppliers on different projects dealing with smart metering and smart grids.

### Video: How smart grids work

(Animation from our CR App □ “We care”)



### Smart grids and green ICT at T-Labs.

Telekom Laboratories is working intensively on several research and development projects to come up with possible ways to control communications networks using flexible, load-adaptive technology. Examples include the LOLA (Load-adaptive networks & LANs) and DESI (End-to-end energy-sensitive ICT production) projects. Integrated storage elements make it possible to dynamically incorporate energy sources based on demand. It is also possible to adjust the capacities of different network areas to current demand by flexibly activating or deactivating individual network components, which helps saving energy. We may even be able to help keep power grids stable through ICT-supported control of electricity supply in line with demand.

In October 2012, energy provider EnBW, the ABB technology group and Deutsche Telekom put the first automatic local grid station into operation in the Bavarian town of Wechingen. This unit with its compact design makes it possible to adjust the voltage in the local grid to the amount of energy being produced by renewable energy sources. The station automatically shuts off different production plants on the weekends when residents are using less electricity, for example. That helps keep mains voltage from increasing excessively. The automatic local grid station is an important component for low-voltage smart grids and reduces the need for expansion of the high-voltage grid.

### Smart metering.

During the reporting period, Telekom was commissioned by RWE to install 15,000 smart meters in the German city of Mülheim. According to the EU's third energy market package published in 2009, at least 80 percent of

customers should be able to monitor their energy consumption with the help of smart meters by 2020, motivating them to reduce energy consumption by providing up-to-date consumption data.

Telekom prepares the data from the meters and then transfers it to the relevant energy provider via a smart metering platform in compliance with high data security and data privacy requirements. Unlike recording data manually, there is much less chance of error in smart metering with a more efficient recording process and shorter processing times. The short meter reading intervals required to control demand intelligently can only be managed by technological means. Connecting more than 100 types of meters from around 20 different manufacturers, Telekom's smart metering platform is highly developed as well as efficient in terms of time and cost. The "Metering in Mülheim" project is the largest testbed for smart metering in Germany with a total of 100,000 meters.

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The 2011 amendment to the German Energy Industry Act ("Energiewirtschaftsgesetz") specifies that customers must install a smart meter if consumption levels exceed 6,000 kWh a year. Smart metering  makes it possible for customers to more effectively control and manage their own consumption. Smart metering  systems also provide energy providers with consumption data that helps them adjust mains supply to actual consumption and activate local energy sources as needed. That makes smart meters a key component of secure energy supply in Germany, which is an important business factor.

### Smart metering project launched in the Czech Republic.

The project involves new smart metering technologies, testing and data transport straight to energy distributor's office and data processing systems. Although preparations for this smart grid/smart metering project began in 2011, it was realized in 2012 with first installation being in Pardubice with the major utility company ČEZ, a.s. (Czech Energy Works). An agreement with E.ON and RWE is also in progress.



## Connected cars.

Business drivers such as competitive pressure, increasing efficiency and cost reductions in the automotive industry and in fleet operations combined with the fact that consumers want more security and to see their mobile lifestyle integrated into their car calls for new solutions and business models for the connected car. Deutsche Telekom has been actively pushing this development with a number of innovations. These include machine-to-machine (M2M) and broadband communication for assistance systems and cloud-based real-time services, new mobility concepts and smart transport systems in which environmental and security aspects play a key role.

### Group business area for Connected Cars.

Telekom is connecting dashboard computers in cars with the cloud, giving drivers and passengers access to the Internet and online applications on the road. Transmission channels include mobile communications technologies such as UMTS, HSDPA and GPRS.

The Deutsche Telekom Group's Connected Car business area focused on four markets during the reporting period:

**Car manufacturers:** Brand differentiation and customer retention in the automotive industry increasingly depend on online services. Telekom helps car manufacturers and dealers offer, integrate and operate cloud services designed specifically for cars (car cloud) in areas such as public transportation systems in major cities where people can use different forms of public transportation and affiliated car sharing initiatives with an electronic combo ticket. Telekom also supports the automotive industry in processes for online customer management in marketing and sales.

**Logistics service providers:** Optimizing capacity utilization and avoiding empty runs require real-time tracking of vehicles and goods. Telekom is integrating all the players in the logistics network on a modern telematics platform.

**Fleet operators:** Using telematics in vehicle and driver management processes gives fleet operators increased efficiency and transparency as well as an improved carbon footprint for their commercial fleets. Telekom provides effective telematics solutions together with efficient customer and product processes. Telematics services in the area of car sharing and rental fleets can make it easier to book and use cars, increasing the attractiveness of car sharing services.

**Customers:** Synchronizing smartphones with the dashboard computer lets people use private communication, social networks and personal data from the cloud while driving without posing a danger on the road. Seamless integration of cars into new mobility concepts such as car sharing using telematics-based technologies also promotes green mobility. Deutsche Telekom is also active in the area of electromobility and mobility concepts. One example of the company's activities is the Connected Mobility project in the German city of Friedrichshafen, where we are testing how to integrate electric cars in terms of traffic, communication and energy.

### Telematics application for shipping companies.

T-Systems and MAN worked together in 2010 to develop a telematics application for logistics service providers

and fleet operators. We launched the Europe-wide roll-out during the reporting period. The application records all relevant vehicle data, evaluates it and then sends it to a portal. Operators can use the portal to analyze their drivers' driving profile, determine the next maintenance date and communicate with the drivers. Current driving and sensor data of refrigerated transports are monitored live and drivers are notified on their smartphone when the temperature of their freight is rising.

## Green telematics applications reduce pollutant emissions.

Various independent studies show that fleet operators' fuel costs and CO<sub>2</sub> emissions can be reduced by around 10 percent by using different telematics solutions. Telekom is involved in various projects in this area. For example, Telekom developed an app in 2012 for fleet operator Telekom MobilitySolutions called the T-Systems Mobility Manager. The app collects electronic vehicle data and then transfers it to a central database in the T-Systems cloud. There, the data is evaluated practically in real time and then combined with data from the system such as information about current prices at nearby gas stations. In addition to smart fueling, the Mobility Manager services include smart parking and EcoDrive, a service that offers tips on low-emissions driving.

## E-health.

Networked services can offer major social value. One excellent example is telemedicine, which helps reduce the cost of providing health services. In addition, it offers a broad array of facilities for patients and medical staff, ranging from mobile access to electronic patient records, reliable remote diagnosis and treatment to transmission of lab results in a matter of seconds.

### Video: Healthcare



#### Mobile rounds with the iPad.

In cooperation with the Berlin-based hospital, Charité, Telekom has been piloting a mobile application for doctors since 2012 that can be used for read-only access to relevant patient information on the go via an app on your tablet PC. The app connects the tablet to the hospital's information system as well as other laboratory and imaging systems. Different administrative and technological measures, such as encrypted data transmission, guarantee data privacy. Doctors can look at their patients' vital data at any time and from any location and use their tablet as an aid when explaining treatment to patients at their bedside. In 2012, doctors at the Clinic for Neurology on the Charité Mitte campus began testing pilot operation of the mobile, electronic patient file.

Telekom continued to work on the development of numerous innovative healthcare applications during the reporting period as well:

#### Digital doctor ID.

The digital doctor ID by T-Systems enables doctors and hospitals to be connected securely without extensive investments. Doctors can use the ID to log onto different online portals, sign documents so that they are tamper-proof and then send them via e-mail in encrypted format.

#### Multimedia system for patient rooms.

Telekom launched the "Entertain am Krankenbett" multi-feature media system for patients at hospitals and rehabilitation centers as well as for residents of homes for seniors in 2012. The system offers different ways to access movies, TV series and e-Books and can also be used to make service calls or monitor building systems. The thin client solution, where all applications run on a central computer, also reduces electricity costs by 80 percent compared to hardware solutions.

#### Telemedicine applications for patients.

Telekom has developed a number of different applications for various patient groups in the telemedicine area as well.

#### Prevention with e-health.

Telekom supports the prevention program, Health Watchers, which was developed by general practitioners in Leipzig, Germany and can be used to constantly monitor the health of patients with high blood pressure and diabetics. Treatment for high blood pressure, for example, involves regularly measuring the patient's weight and blood pressure and sending the information to their electronic patient file. The doctor can then track the recovery process with visual depictions of the evaluated data. The system makes it easier to motivate patients to change their lifestyle for the long term. The seamless control of data helps diabetics adjust their medication more effectively, reducing their risk of secondary health issues. During the reporting period, Telekom also developed an online platform in collaboration with Central health insurance company that helps diabetics better understand the relationship between nutrition, daily activity and higher or lower blood sugar levels. At the heart of the platform is an electronic journal that is used to record current patient data with the help of devices such as a pedometer or a blood sugar monitor connected to a smartphone. The platform gives patients feedback on the effect their behavior is having on their health, which should ultimately encourage them to live healthier lives.

### **Ambulance for stroke patients.**

Since 2012 and in collaboration with Deutsche Telekom, the Berlin-based hospital, Charité and other partners have been researching the use of an ambulance specialized in preclinical treatment of stroke patients. The ambulance features a computer tomograph and telemedical connection technology. Radiologists and neurologists at Charité use the data collected on site to come up with a precise diagnosis and then tell the emergency doctors the best clinic to take the patient to. Deutsche Telekom encrypts and sends the data with top priority status. The service also includes video communication in HD quality.

### **Video: Telemedicine pilot project**



### **Cosmote: GERYON1 research project.**

In 2012, Cosmote took part in the GERYON1 research project aimed at developing communication infrastructures which, in emergencies, will allow an in-depth exchange of information (geographic location, photos, video, etc.) to facilitate quicker identification and coordination of the parties involved, as well as a more immediate response by rescue teams.

### **mySugr—app for people with diabetes.**

T-Mobile Austria initiated a collaboration with Austrian start up, mySugr, in honor of World Diabetes Day on November 14, 2012. The Austrian company has developed an app for people with diabetes that is structured like a game. Users collect points by entering the values of their meals and certain activities and then tackle exercises. The app gives users a quick overview of how their blood sugar is responding and helps them improve their treatment in a playful setting. An additional project is targeted especially at children with diabetes.



## Society.

### #SUPPORTIVE

"Yes, I can!" initiative has reached more than 50,000 children and young people since it was launched.

#### Find out more

Telekom not only provides the necessary ICT infrastructure but also helps give as many people as possible access to the information and knowledge society through its many different activities. Our involvement is based on our desire to contribute to the well-being of society as an active member of the community. We conduct all of our activities in compliance with our [CR strategy](#) and the [action areas](#) specified therein. Under the motto, "We take responsibility," we have launched numerous initiatives of our own and have also sponsored non-profit organizations to live up to our responsibility to society.

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## engagement@telekom.

The activities conducted as part of the engagement@telekom platform during the reporting period focused on corporate giving and corporate volunteering. Various projects to promote media skills were launched in this context. For example, we provided school students with information about data privacy and security, provided training on how to use cell phones for people with disabilities and conducted campaigns for the European Year for Active Aging and Solidarity between Generations.

The engagement@telekom platform was one of our focal points in 2012 in our collaboration with international subsidiaries. The agenda of the CR Manager Network meetings, held in Bonn in April and in Vienna in November, included workshops lasting several hours and an opportunity to share best practices on how to conduct corporate volunteering and corporate giving. Between the meetings, the Manager Network worked on introducing standardized relevant performance indicators.

### Find out more

engagement@telekom: This platform shows our broad commitment to supporting the society we live in—both as a company and through the volunteer efforts of our employees. Overall, the engagement@telekom platform provides support at three levels:

- Corporate volunteering and corporate giving
- Partnerships with NGOs
- Disaster relief

The fast technological change taking place in society offers a range of opportunities. However, at the same time, it represents a risk for social cohesion. As a responsible enterprise, our aims must therefore include enabling as many people as possible to participate in the information and knowledge society. This is one of the goals involved in our action area "Connect the Unconnected," which we have set forth in our CR strategy. To allow us to reach people in different phases and situations of their lives, we have placed our social commitment on a broad basis and focused it in our engagement@telekom program.



## Corporate volunteering & corporate giving.

Telekom supports and encourages the volunteer efforts of its employees (corporate volunteering) and uses the positive effects of team activities to promote human resources development. We also make corporate donations (corporate giving) worldwide to support non-profit organizations, to recognize our employees' volunteer efforts and to provide fast aid to the victims of disaster. We frequently give our employees the chance to help us decide where our donations will go, as we did in 2012 when we asked them to decide where we should donate the proceeds from this year's Christmas campaign. This year our employees also decided where we should donate the penalties paid by users of high-emissions cars from our company car fleet with higher mobility costs and higher pollution levels (see [Green Car Policy](#)).

### Corporate volunteering program in Germany.

Employees can also use our volunteer mosaic intranet tool to present their volunteer activities and talk about what motivates them to volunteer their time. Employees had posted more than 158 entries there by the end of 2012. The mosaic was used to spell out the word DANKE ("THANKS") on [Volunteer Day](#) and then used in internal communication. We also gave the [BBE organization](#) (Bundesnetzwerk bürgerschaftliches Engagement) access to the mosaic tool for their 10-year anniversary. The BBE is using the tool as a community involvement mosaic.

### Integration into training programs.

In 2012, Deutsche Telekom continued to expand its corporate volunteering activities under the engagement@telekom program and optimized the integration of corporate volunteering into the company's [training programs](#). Many of our 9,300 trainees and students on cooperative degree courses volunteered for a good cause this year as well. We present an award to the most effective project each year at our [Responsibility wins!](#) competition as a way of honoring the community involvement of our trainees. At the awards ceremony in February 2013, a team from Rottweil received first place for coming up with suggestions for improving barrier-free access at three Telekom shops in the region.

### Award for taking responsibility.

Deutsche Telekom once again received numerous awards in 2012 commending the quality of its involvement in the community. In June 2012, Deutsche Telekom received the internationally renowned Ethical Cooperation Award 2012, presented by the online magazine, Ethical Corporation, for its successful [cell phone recycling campaign](#) in 2011 to benefit the children's charity organization, Ein Herz für Kinder. The German Red Cross (DRK) blood donation service also presented the company with the Helping Hand award for its many years of support. Deutsche Telekom also received the Tafelteller award from the German Tafel food bank (Deutsche Tafel) for the third time. The SOS Children's Village project received two awards, one at the Deutsche Telekom Responsibility wins! competition and first place in the U21 category for participants ages 21 and under in the regional competition held by the Deutscher Bürgerpreis organization (prize presented to

As part of the engagement@telekom initiative, we have set up an Internet platform to encourage our staff to do voluntary work. In addition to providing information on current projects that employees can participate in, the platform also gives them the chance to suggest their own projects and find people who want to volunteer. They can also apply for funding for their volunteer projects. Many employees take advantage of this offer. By late 2012, more than 300 projects, project suggestions and requests for volunteers had been posted on the portal. engagement@telekom supports these projects with up to EUR 250,000 each year.

German citizens for their involvement in the community).

In fall 2010, Telekom in Germany introduced a comprehensive corporate volunteering concept as part of [engagement@telekom](#), which consists of three main components:

- An intranet portal gives employees tips on volunteering in their free time as well as contact information for participating in activities and the opportunity to talk about their experiences with other involved colleagues.
- Corporate volunteering is being integrated into employee training and development.
- Employees can apply at Deutsche Telekom for funding for charitable projects. 1,000 applications submitted by employees within the scope of [engagement@telekom](#) are approved each year, and the company makes donations totaling EUR 250,000. To receive funding, employees have to be involved in volunteering for the organization in their free time and the organization's activities need to relate to one of the three strategic [CR action areas](#).

### Special events for volunteering.

Our employees were once again able to volunteer their time at numerous special events. Deutsche Telekom supported the Community Volunteering Week held by the BBE organization (Bundesnetzwerks Bürgerschaftliches Engagement) from September 24 through October 3, 2012, as well as International Volunteer Day on December 5, 2012.

#### **Community Volunteering Week.**

This year, the third Group-wide Guiding Principles Day, which is devoted to living out Deutsche Telekom's corporate values, took place during the BBE's Community Volunteering Week from September 24 through October 3, 2012. Numerous employees throughout Germany used the opportunity to support Deutsche Telekom partner organizations. Trainees from Saarbrücken donated EUR 350 earned in a button sales campaign to the German Bone Marrow Donor Center (DKMS). During Community Volunteering Week, Telekom trainees in Berlin spent a day working together with the German Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ) and employees from the Randstad temp agency in the neighborhood of Berlin-Marzahn on the BolleKids project sponsored by the Straßenkinder e.V. organization to help children living on the streets. In Bonn, Deutsche Telekom employees conducted a cell phone workshop for mentally disabled residents of the Lebenshilfe organization centers, and Telekom teams helped the Bonn city forestry department get the Bonner Stadtwald park ready for winter.

The joint campaign conducted by Deutsche Telekom and the BBE organization within the scope of Community Volunteering Week was presented as an example of best practice at the BBE Government and Business stakeholder day on December 10, 2012. Deutsche Telekom has also been supporting the BBE network development project since July 2012 within the context of its membership in the BBE organization. The goal of the project is to better mobilize the network's current resources and potential and make these easier to use.

#### **International Volunteer Day.**

Telekom used the occasion of International Volunteer Day on December 5, 2012, to motivate its employees to get involved and to recognize those who already volunteer. Partner organizations presented their activities and their collaboration with Telekom in Germany at company headquarters in Bonn. Representatives from the [German Bone Marrow Donor Center \(DKMS\)](#), the Bonn Tafel food bank and the [Deutschland Hilft non-profit association](#) as well as the [Telekom Foundation](#) attended the event. Numerous employee volunteer efforts were also presented at an exhibition. Head of Human Resources at Telekom Deutschland, Dietmar Welslau, recognized ten "life savers" whose bone marrow donation gave leukemia patients the chance at a new life in

2012. Two Deutsche Telekom employees also got to meet the recipients of their donations within the scope of International Volunteer Day, a four-year-old boy and a sixty-five-year-old man.

Telekom employees also donated high-quality, non-perishable foodstuffs to the Bonner Tafel food bank at the event. The Group had asked its employees to contribute a donation to needy people in the region. Donations were handed in on December 5.

## 14,829 volunteering employees.

In the context of the [engagement@telekom](#) program, 14,829 employees did volunteer work in 2012, e.g., as part of one of the 380 Social Days. They volunteered at schools and day care centers, conducted initiatives to improve [media skills](#), participated in typing drives for [DKMS](#), the German bone marrow donor center, and volunteered for the environment. Such volunteering work often results in long-term involvement and regular joint activities.

In April, for example, eight Telekom employees painted the classrooms at a school in the German Rhein-Sieg district; in May, twelve Telekom managers helped volunteers of the food bank in Dortmund. We also took part in various activities as part of our partnership with the [Lebenshilfe](#) organization, in which we have been involved for many years. Telekom employees redesigned the garden and patio at a residence for people with mental disabilities within the scope of our Social Days, for example. In addition, employees initiated and conducted many additional projects on their own. Employees from the international subsidiaries volunteered in [numerous projects as well](#).

### **Employees volunteer for the climate and environment.**

Other activities focused on the environment and climate protection. In May 2012, around 70 managers helped plant oak, beech and birch trees in a forested area near Heide, Germany and in October, Telekom employees planted new fruit trees in the Siebengebirge area with advice from the nature conservation organization, Rhein-Sieg Biologische Station.

## Widespread corporate volunteering worldwide.

There is a long tradition of corporate volunteering throughout the Deutsche Telekom Group. The year under review was no exception.

### **Valuable contribution to society in Hungary.**

In June 2012, some 200 Magyar Telekom employees and their families took part in Volunteering Day. By the end of December 2012, 596 employees had been involved in seven different volunteering projects. A total of 4622 volunteer working hours were invested and their contribution to society was valued at HUF 21.7 million (EUR 74,366). The volunteering activities undertaken included renovation work in kindergartens, collecting waste, and preparations for a festival (e.g. building a locker for bicycles and building tables and chairs from reused material).

In the context of the Hungarian Digital Bridge program, whose aim is to provide people in remote villages with the possibility of using modern ICT technology and thus counteract the digital divide in society, Magyar Telekom participated in the local art festival at Kapolcs, which took place between 27 July and 5 August 2012. 23 employees of the company were involved in providing internet access and help for the guests at the event.

### **Volunteering network initiated in Slovakia.**

In 2012 T-Systems Slovakia initiated its own volunteering network and organized a variety of activities in which a total of 113 employees were involved. The activities included helping in a dog shelter in spring 2012,

participation in Our Town volunteering events in June 2012 (e.g. planting trees and repairing buildings), blood donations, rebuilding a wagon for Košice Children's Railway, a St. Nikolaus Day for children in need, and collecting material things for families in need in December 2012.

During the reporting period, Slovak Telekom organized a volunteering weekend up in the High Tatras where around 50 employees helped to clear roads in a nature preservation area. Volunteering weekends in the High Tatras have been a tradition at Slovak Telekom since 2004.

#### **National Day of the Nature Parks in Bulgaria.**

In Bulgaria Globul's annual National Day of the Nature Parks initiative motivated over 2,200 volunteers to collect more than 10 metric tons of waste from the country's natural parks.

#### **"Building a Dream" in Albania.**

"Building a Dream" is an employees' team-building and community responsibility program at AMC, the OTE Group's Albanian subsidiary. In 2012, the employee teams involved in "Building a Dream" were assigned to implement childcare and development projects in a number of childcare institutions within a limited timeframe and budget. The teams had to develop a meaningful solution to a problem identified in the chosen institutions, thus improving the lives and contributing to the development of these children. The three teams were made up of 13-14 AMC employees and each one was assigned to work at one institution. Most of the work, e.g. painting, assembling, dissembling, building, etc., was done out of working hours and by the team members themselves.

Furthermore, AMC organized a clean-up campaign on a beach in Spille, Kavaja. 150 employees took part and some also invited their friends or family to join in as well. A tree-planting and cleaning activity involving 50 AMC employees was staged in December 2012.

#### **T-Mobile for Macedonia Foundation involved in humanitarian projects.**

In the reporting period the T-Mobile for Macedonia Foundation was involved in the following humanitarian projects:

- For the tenth year in succession, T-Mobile and Makedonski Telekom employees took part in the New Year Caravan project, organizing plays and distributing presents – personal New Year packages they had put together – to 1,000 needy children throughout Macedonia during the last week of December.
- In 2012 T-Mobile and Makedonski Telekom employees once again took part in a Humanitarian Giant Slalom where their participation fees were donated to an NGO known as "Give us wings", which helps people with dysfunctions, handicaps, rare diseases and special needs.

#### **Volunteering Day in Croatia.**

During the reporting period Hrvatski Telekom organized a volunteering day involving over 80 employees, with each one working for four hours to refurbishing the playground of a kindergarten that accommodates some 200 children. The company donated EUR 3,500 to this project.

#### **T-Mobile USA: Huddle Up community outreach program.**

T-Mobile Huddle Up is T-Mobile USA's national community outreach and employee volunteer program that connects kids, primarily from single-parent families in high-need, urban communities, to positive people, places and programs, especially during the after-school timeframe. In the reporting period ten T-Mobile Huddle Up service days were held. Between June and September 2012, T-Mobile embarked on its annual Huddle Up community outreach program, beautifying and donating to ten schools, community centers, and Boys and Girls Clubs around the country. In all 1,650 T-Mobile employees were involved in this community work and performed a total of 13,200 hours of community service. \$40,000 was donated in grants.

#### **Projects all over the Czech Republic.**

T-Systems Czech supports a variety of projects in the cities it operates in. Employees can propose and vote on

which organizations are to be supported. In the reporting period 67 employees – around 10 percent of the company's workforce – were involved. The projects supported included the planting of trees in all cities where the company has an office, help for dear or elderly people and children, a charity football cup and fund-raising campaigns in Prague, support for a children's project in Brno, IT support and a fund-raising campaign in České Budějovice, and support and IT training for elementary school teachers in Mladá Boleslav.

625 employees from T-Mobile Czech participated in a volunteering project known as One Day For People in Need. The project enables employees to volunteer to work at an NGO for one day and get paid by the company. In many cases, the employees in question share their know-how with people from specific communities.

### **CR intranet site keeps employees informed.**

Telekom Iberia has an intranet site that is used to publish reports on selected employee volunteering projects, details of all solidarity activities and calls for help if some emergency or disaster occurs. During 2012 reports on two solidarity projects were published. Operacion Kilo, a campaign that involves donating food to the needy, is organized by a Telekom Iberia employee. Another Telekom Iberia employee is involved in the Turkana project, which aims to improve the health and nutrition of 800 under 6-year-olds attending 12 nutritional units in the Turkana area.

### **Collecting pens for recycling to support Adiflor.**

A partnership with an association known as Adiflor enables equipment to be purchased for schools in Cameroon through T-Systems France employees handing in their old pens for recycling and the money being donated to Adiflor to purchase the school equipment. This recycling campaign is naturally a good move in sustainability terms as well. T-Systems France has built up a strong relationship with Adiflor, e.g. through publishing one of their advertisements in the company's Best Practice magazine which is distributed to all its customers.

### **1,000 Days for Charity in the UK.**

Every T-Systems employee is permitted one day per year to dedicate to helping a charity of his or her choice. A simple system for booking the time has been devised so the number of days that charities have been supported can be easily recorded. Employees who give their time to charity can voluntarily blog about their day of helping on the T-Systems intranet. To date, nineteen charities have been assisted across the UK, some of these by multiple employees.

## **Christmas charity activities in Poland and Austria.**

Christmas is traditionally a time of giving, and Deutsche Telekom employees are no exception, as the following examples show.

A Christmas Charity Auction organized by PTC, Deutsche Telekom's Polish subsidiary, for the 11th time raised around EUR 35,000 for NGOs working to help children from dysfunctional families or communities. In October and November 2012, 90 employees and their children took part in art and craft workshops where they designed and made 60 cuddly toys and 40 works of art or crafted items. They were auctioned off in the first half of December 2012 at the Christmas Charity Auction where employees could also offer "gifts full of passion", e.g. a free dinner or babysitting evening. Around 1000 employees took part in the auction and PTC doubled the amount of money raised.

### **Christmas campaign in collaboration with DEBRA.**

For Christmas 2012, T-Mobile decided to support the work of the DEBRA Austria self-help organization for "butterfly children" instead of giving Christmas presents to business partners and employees. "Butterfly children" are children whose skin is as sensitive as the wings of a butterfly because of a serious illness. Even the slightest friction can cause their skin to break out in painful blisters or tear open completely.

The T-Mobile seasonal punch stand also toured through Austria for the first time during the Christmas season, earning more than EUR 5,000 that went to help those affected. The donations are being used to help develop a therapy for the serious skin disease, EB (Epidermolysis bullosa).

## New donation policy and employee donations.

In 2011 we revised our donation policy in consideration of our CR strategy. The new policy was approved by the Group Board of Management at the end of November 2011. The policy provides guidelines for our company's donation activities, laying the foundation for corporate volunteering and corporate giving activities in the context of [engagement@telekom](mailto:engagement@telekom). Under the engagement@telekom program, Telekom donates a total of EUR 250,000 each year to non-profit organizations for which our employees volunteer.

### **Employees donate to people in need.**

Our employees also initiate a number of their own donation campaigns. A total of 27 charities in Germany were presented a donation this year by Telekom customer service to help in their work. The management had given employees the opportunity to support a charity of their choice from their region. Customer service employees throughout Germany were able to distribute a total amount of EUR 40,000. Recipients included the Deutsche Krebshilfe organization to fight cancer, the Bethel hospice for children and young people, the Vestische Klinik hospital for children and young people in Datteln, and the Kinder Hannover e.V. organization for children with cancer.

Employees of the Telekom Shop Gesellschaft had the chance to donate a specific amount based on revenues generated to a non-profit organization for the first time in 2012—a total of EUR 30,000. Telekom employees also donated proceeds from a party in the amount of around EUR 6,000 to day care centers in Bonn, while other employees held a bake sale where they earned EUR 752 that went to support the "Yes, I can!" initiative.

Many employee donations also went to the [DKMS](#), the German bone marrow donor center, with which Telekom has been working for many years. Employees in Oldenburg donated the proceeds from an employee party in the amount of EUR 3,030 to DKMS and apprentices in Berlin donated EUR 500. One employee and his family rode their bikes on a bike tour from Bonn, Germany to Portugal and earned EUR 3,600 in donations for DKMS. The bike tour was sponsored by Telekom under the engagement@telekom program.

## Donating time and money to those in need.

Throughout the Group Deutsche Telekom subsidiaries made donations and employees gave time or money to help the needy in their local communities.

### **Big donations to Greek NGOs.**

For the 13th consecutive year, Cosmote offered a share of the revenues from the New Year's SMS & MMS to NGOs for children. This Custom of Love SMS & MMS Campaign resulted in a donation of EUR 320,000 to nine NGOs.

For the 10th consecutive year, OTE donated part of the revenues generated from voice calls on specific dates during the holiday season in 2012 and three NGOs – one of them consisting of 10 charitable non-profit organizations – received a total sum of EUR 230,000 as a result.

### **NGO donations from customers and employees in Poland.**

PTC continued its cooperation with NGOs in Poland in providing a dedicated text messaging service that enables its customers to donate money to charity projects. In 2012 PTC cooperated with 20 NGOs. Last year PTC's customers donated approx. EUR 1 million. SMS charity campaigns are provided free of charge for the

NGOs, and 100 percent of the collected resources are always distributed to the beneficiary.

The company's "Together for others" campaign allows employees to donate money to projects of their choice by having the money deducted straight from their paycheck to the United Way Poland Foundation. In 2012, the company collected donations totaling more than EUR 20,000. Through this initiative PTC and its employees have contributed to the financing of over 60 different projects run by the United Way Poland Foundation.

### **PC and notebooks donated in Czech Republic.**

T-Systems in the Czech Republic donated three desktop PCs and one notebook to an organization supporting the deaf; 15 desktop PCs to Říčany u Prahy High School and 20 desktop PCs and 20 notebooks to Mladá Boleslav School to promote higher educational standards through new multimedia projects; and 12 desktop PCs to Bernartice Basic School to open up new educational opportunities for the pupils there.

### **Various donation activities in Hungary.**

In December 2012 Magyar Telekom employees and members of the Sustainability Media Club the company set up sold home-baked cookies. Magyar Telekom matched the money raised in this way and gave a total of HUF 6,037,695 (more than 20,000 EUR) to the SOS Children's Village Foundation. The money raised will go towards funding a therapy room in one of the facilities of the Foundation in the Kecskemét region.

During 2012, Magyar Telekom launched three donation campaigns focusing on specific themes of particular relevance to life in Hungary today: sustainable cities, the power of communities, and sustainable education.

Furthermore, Magyar Telekom's donation line gives individuals the means of supporting a cause that is important to them.

### **Globul: Bulgaria's biggest corporate donor.**

During the reporting period, Globul's social commitment was once again demonstrated by its donations, which were so generous that Globul won a competition for Bulgaria's biggest corporate donor in two categories (Largest Amount of Financial Grants and Most Generous Donor). Over the past year, Globul has invested over EUR 500,000 in programs and initiatives in the key areas of environmental protection, education and social development.

### **Chocolate Auction in Macedonia helps visually impaired youngsters.**

Pozitivo, the T-Mobile for Macedonia Foundation and Tea Moderna organized the third Chocolate Auction in Skopje. 400 guests participated and placed bids for unique chocolate exhibits that were made especially for this occasion. The funds from the auction were donated to the reconstruction of the Dimitar Vlahov School for visually impaired children and young people in Skopje. The T-Mobile for Macedonia Foundation donated a total of EUR 5,000 to the auction and a further EUR 3,000 for Braille machines. Another EUR 5,000 were raised through the Chocolate Auction itself and an auction of pictures so the sum of EUR 13,000 was ultimately donated to the Dimitar Vlahov School.

### **"Together we are stronger" – annual donation project in Croatia.**

Hrvatski Telekom runs an annual donation project entitled "Together we are stronger". It encourages the company's employees to propose ideas for appropriate donation projects. The best ones are selected in line with the Group's CR action areas of "Connected life and work ", "Connect the unconnected" and "Low carbon society" and then communicated to the public via TV commercials, social networks, etc.

The project started at the beginning of May 2012 when all employees were invited to propose suitable projects over a period of two months. A total of 125 projects were proposed and 20 selected. The TV campaign featuring these donation projects commenced in December 2012 and ran until mid January 2013.

### **Austrian subsidiaries collect donations for AIDS LIFE and the Vienna food bank.**

T-Mobile Austria set up an Austrian donation hotline for the third time on May 19, 2012 to benefit the AIDS LIFE

organization. Profits went to support a Life Ball donation campaign for the Clinton Health Access Initiative (CHAI). The organization's goal is to reduce the number of babies born with HIV in Uganda and Sambia as far as possible by 2015.

The Life Ball is a charity event held in Vienna to support the fight against HIV and AIDS. T-Mobile Austria has been supporting the event as the main sponsor for four years and plans to continue its involvement in 2013.

T-Systems Austria has been supporting the Vienna food bank Wiener Tafel since 2010 in line with its guiding principle "I am T—Count on me." The organization collects consumer goods from industry and retail that cannot be sold due to minor visual defects and brings them to people who need them the most, to more than 9,000 socially disadvantaged people at 80 social facilities like homeless shelters, refugee shelters and shelters for women and children. Up to 3 tons of high-quality food and other "survival goods" are delivered every day. That's five fully loaded delivery trucks driven by volunteers.

In 2012, T-Systems Austria collected goods to sell at the largest flea market in Vienna to benefit the Vienna food bank. They made a total of EUR 1,323 on four different days. Wiener Tafel used the money to help cover fuel costs for 2013.

### **T-Systems Malaysia Jumble Sale for Charity.**

In June 2012 T-Systems Malaysia employees initiated a charity jumble sale over three days and successfully collected RM 11,124 (EUR 2,799) from the sale of home baked cookies, cakes, a variety of rice dishes and noodles as well as items such as bags, books, balloons and many more. 100 percent of the proceeds from this event went to the Malaysia Association Help for the Poor Terminally Ill. This money was used to purchase wheelchairs and other medical supplies and equipments to support the needy across hospitals in Malaysia.

**The "Millionen Lauf" charity run and other campaigns to benefit Ein Herz für Kinder.**

Staying in shape and helping others is the idea behind the Millionen Lauf charity run with which Deutsche Telekom generated one million euros in donations to benefit the childrens' charity organization, Ein Herz für Kinder, from October through December 2012. Anyone could sign up to participate via a free app to support the common goal - to run a total of one million kilometers together while the campaign was underway. More than 41,000 people signed up throughout Germany. That made the Millionen Lauf the largest charity run to have ever been held in Germany. Deutsche Telekom donated one euro to Ein Herz für Kinder for every kilometer run. Participants could keep track on the campaign website of the current number of kilometers that had been run, which helped them stay motivated. The Bundesliga Stiftung soccer league charity foundation supported the campaign as well. They logged every kilometer that the pros from all of the clubs ran between the 8th and the 16th game day on the Telekom initiative site. The distance totaled around 20,000 kilometers and the Bundesliga Stiftung foundation donated an additional euro for each kilometer run by the athletes. The players from FC Bayern and the Telekom Baskets Bonn as well as boxing world champions Vitali and Wladimir Klitschko participated in the Millionen Lauf run as well.

### **Other campaigns to benefit Ein Herz für Kinder.**

Deutsche Telekom supported the children's charity organization, Ein Herz für Kinder, with other campaigns in 2012 as well.

- We donated EUR 10,000 for each goal scored by the German national team during the 2012 European Football Championships, a total of EUR 100,000.
- 19 teams from 13 countries played each other at the international Telekom employee tournament in Cracow, the World Cup United, on the occasion of the 2012 European Football Championships. Deutsche Telekom

donated EUR 100 for each goal scored to Ein Herz für Kinder for children's projects in Poland and Ukraine.

The teams scored a total of 169 goals and Deutsche Telekom rounded its donation up to EUR 20,000.

- Instead of handing out gifts to participants on Capital Markets Day for investors and financial analysts, Deutsche Telekom made a EUR 2,000 donation to Ein Herz für Kinder.

Deutsche Telekom donated a total of EUR 1.2 million to Ein Herz für Kinder in 2012. The money was presented to the organization at the ZDF broadcasting network's gala charity event. Several hundred Telekom employees also worked at the event to accept calls for more donations.

### **Award for the 2011 cell phone recycling campaign.**

Deutsche Telekom was presented with the internationally renowned Ethical Corporation Responsible Business Award in June 2012 for its cell phone recycling campaign, where the company generated donations totaling EUR 1.5 million within the context of a Germany-wide competition, collecting around 600,000 used cellphones. The company won first place in the Best Consumer Engagement category. Telekom was the only international ICT company to win an award in one of the 13 categories.

### **Charity runs in Europe bring big donations.**

Charity runs are a popular fund-raising activity, combining the fitness-enhancing fun of a run with doing something for a good cause.

- In November 2012, 510 OTE and Cosmote employees ran the 30th Athens Classic Marathon or the 5 or 10 km races. For every employee kilometer run Cosmote promised to donate a specific sum to the Athens Public Nursery. In all, this charity run resulted in a donation of EUR 27,000, which will be used to buy 27,000 meals for children from 600 undernourished families in 47 Athens primary schools.
- In Hungary, Magyar Telekom organized a charity run with the employees who took part in this Vivicitá raising money for the SOS Children's Village. The total amount donated was calculated by multiplying the number of kilometers run by each employee by 100 Hungarian forints.
- In Poland, PTC employees took part in a "T-Mobile around the world" campaign in July and August 2012. The amount of money donated depended on the distance covered, either running or cycling. The 300 employees who took part covered 92,000 kilometers and raised a total donation of around EUR 20,000.
- Since Slovak Telekom's volunteering weekend took part during the European Mobility Week, the company was keen for its employees to walk a bit more and gave them the chance to take part in a prize competition to find out who walks the most in three weeks. Depending on the distance covered by the participants, the company promised to donate a sum of money to plant trees. Employees could order a special pedometer or count their steps via a smartphone app. In all, the company's employees walked 15 million steps – a distance of 10,300 km – and the employees who walked the most got interesting prizes. As more than 10 000 km were walked, Slovak Telekom will be planting around 600 trees in the High Tatras in 2013.
- On March 11, 2012 T-Systems France supported and participated in a charity run in Blagnac. The charity run was organized in support of Mécénat Chirurgie Cardiaque Enfants du Monde, a humanitarian organization that enables children suffering from heart defects and cannot be treated in their home countries (for financial or medical reasons) to be operated on in France.



## Partnerships with NGOs.

Deutsche Telekom focuses on long-term collaboration in its involvement in the community. We engage in partnerships that last for years with different organizations such as the Nummer gegen Kummer youth counseling line, the Telefonseelsorge crisis hotline, Lebenshilfe (a non-profit organization for the mentally disabled) and the German Bone Marrow Donor Center (DKMS). Our employees play a key role in our community involvement. They volunteer regularly for a good cause, help organize events on site and donate money to different organizations. Many employees are involved in mentoring programs or pass on their expertise at schools. These various initiatives are concentrated at the Group under the umbrella platform, [engagement@telekom](#).

### Partnership with DKMS.

Since we first started collaborating with DKMS gGmbH, the German bone marrow donor center, in 1994 we have conducted 197 company typing drives and one Christmas donation campaign. 7,465 Telekom employees have been typed so far. We have donated over EUR 410,000 for typing activities.

In 2012, another 34 typing drives were held at 29 Telekom sites in Germany and one was held in Poland for the first time as well. A total of 1,293 employees registered with DKMS in 2012. The seven-thousandth Telekom employee, from Gelsenkirchen, registered with the bone marrow bank in October 2012.

Thanks to the stem cells donated by 64 German employees, patients were given a new chance at life. Each year's "life savers" are recognized on Volunteer Day on December 5th for their dedication.

The collaboration will celebrate its 20-year anniversary in 2014. Our goal is to have at least 10,000 potential Telekom life savers registered by that time.

#### Last year's CR report

Telekom sponsors [DKMS](#), the German bone marrow donor center, in its fight against leukemia. We have been conducting company typing drives and assuming the costs for employee typing for 16 years. Every potential donor who wants to be registered in the DKMS bone marrow database submits a tissue sample to be typed.

### Successful blood drives.

Deutsche Telekom has been supporting the German Red Cross (DRK) blood drives since 1985. We have conducted more than 330 drives at different sites in Germany since entering into the cooperation, and have been able to collect considerably more than 18,000 blood donations. The German Red Cross presented Telekom with the Helping Hands plaque from the Red Cross blood drive service in December 2012 to say thank you for decades of support for the Red Cross blood drives. We will continue our blood drive activities in 2013.

#### **Numerous international Telekom subsidiaries support blood drives as well:**

- In Greece the OTE & Cosmote blood donation program produced a total of 2,845 units in 2012.
- In Romania 70 Romtelecom employees from Bucharest gave blood in the first campaign in July 2012 and 65 employees in the second campaign in November 2012.

- In Bulgaria the Deutsche Telekom subsidiaries Globul and Germanos organized a blood donation campaign for employees in cooperation with the Bulgarian Blood Association and the National Center for Hematology and Blood Transfusion.
- 50 Crnogorski Telekom employees donated blood in a campaign organized in May 2012 in partnership with the Montenegro Institute for Blood Donations and the Montenegrin Red Cross.
- In Slovakia 32 T-Systems employees also donated blood.

## Partnership with the Lebenshilfe organization.

Our employees breathed life into our partnership with the German association for people with mental disabilities, Lebenshilfe für Menschen mit geistiger Behinderung e.V., during the reporting period through various corporate volunteering activities. Other departments also supported the Lebenshilfe aid organization once again in 2012 within the scope of our Social Days.

The campaign launched in the fall of 2012 by the Berlin training center is new to the initiative. The campaign will devote around 500 activity days to the Lebenshilfe organization. One group of trainees from our cyber team conducted computer training courses for Lebenshilfe in October 2012, for example. The trainees also helped set up and decorate the Christmas market in December 2012. More activities have been planned, including building a raised garden bed and helping with renovations. Representatives from the Lebenshilfe organization thanked the trainees from the Berlin training center by running a juice bar for the trainees at the center's Health Day event on November 13, 2012.

We plan to continue our partnership with the Lebenshilfe organization in 2013.

## Multifaceted partnerships.

Deutsche Telekom engages in volunteer activities in collaboration with a number of partners. These partnerships form a central pillar in our engagement@telekom program. Our employees' volunteer activities breathe life into these partnerships. Below you will find some examples of partnerships, some of which have been going on for years now.

### **Collaboration with Nummer gegen Kummer.**

Many Telekom employees in Germany traditionally support our partnership with the Nummer gegen Kummer organization, which provides a helpline for children, young people and their parents going through difficult life situations. Our employees volunteer to man the helpline and provide assistance to the people calling in.

### **Support for TelefonSeelsorge crisis hotline.**

TelefonSeelsorge, the crisis counseling helpline run by the Catholic and Protestant churches in Germany, is there to help callers in crisis situations. More than 7,000 extensively trained volunteer advisors, including numerous Telekom employees, make sure that the hotline is available 24 hours a day. We have been supporting the hotline for people in distress since 1997 by providing free numbers and special services.

### **Partnership with ACHSE e.V.**

We have also been involved in a partnership with the Allianz Chronischer Seltener Erkrankungen (ACHSE) e. V. alliance for rare diseases for many years now. The Eva Luise and Horst Köhler Foundation presented the EUR 50,000 Eva Luise Köhler Award for research on rare diseases in cooperation with ACHSE e.V. for the sixth time at Telekom's Berlin Representative Office on February 28, 2013.

### **Christmas campaigns to benefit partner organizations.**

Many international subsidiaries donated to Telekom's partner organizations or volunteered their time in other

ways during the 2012 Christmas season as well.

- **Penalties for high-emissions company cars:** Telekom employees in Germany decided which organizations would receive donations totaling at EUR 300,000 from the proceeds earned from penalties for choosing high-emissions company cars. A total of around 6,000 employees voted for which organizations would receive the donations.
- **The Kinderzukunft foundation's Christmas present campaign:** T-Systems supported the Christmas present campaign organized by the Kinderzukunft children's organization in 2012 and set up collection centers at the front offices of different locations throughout Germany. Employees collected a total of 246 packages, which our collaboration partner then sent to Romania and Bosnia-Herzegovina where they were given to children in need at orphanages, hospitals, schools and in poor neighborhoods. The campaign was conducted under the patronage of German Federal Minister for Family Affairs, Kristina Schröder.
- **Christmas present campaign with soldiers from the German military:** Telekom apprentices from Cologne packed a total of 600 Christmas presents for seniors in need in a campaign held in collaboration with soldiers and civilian employees of the German military.

#### Last year's CR report

#### Supporting the German Foundation for Integration.

Deutsche Telekom supported the grant and mentoring program, "Go your way," which was launched by the Deutschlandstiftung Integration (German Foundation for Integration) in early 2012. The goal of the program, which is being conducted under the patronage of Chancellor Angela Merkel, is to promote the integration of young, talented people from immigrant backgrounds. Up to 150 grants are presented each year for a period of two years each. Every participant is assigned a mentor who acts as a career consultant and opens doors to potential career paths. The grant program also includes individual coaching, topic workshops, an internship job market and networking events. Telekom helps the German Foundation for Integration design program content and provides assistance under a technology partnership. In addition to providing infrastructure, Telekom played a significant role in setting up the foundation's website.

#### Living partnerships throughout Europe.

#### **Increasing pupils' awareness on environmental protection in Greece.**

An important objective for OTE and Cosmote in 2012 was to increase pupils' awareness of environmental protection. To this end, OTE and Cosmote supported educational initiatives through the establishment of strategic partnerships with two NGOs (Callisto-Environmental Organization for Wildlife and Nature and Philodassiki-The Union for the Protection of Forests in Athens). These partnerships relate to environmental educational programs for school communities, particularly with regard to forest and wild life protection.

#### **Romtelecom supports breast cancer campaign.**

As in the past ten years, Romtelecom was again involved in a health-related project through its support for the Center for Breast Cancer Diagnosis (Renasterea). In the reporting period alone, 4,631 women benefited from free consultations, mammography and ultrasound examinations. 92 of the women were company employees.

#### **New T-Mobile Austria cooperations.**

The welfare organization Volkshilfe's new campaign, which is being sponsored by T-Mobile Austria, focuses on the topic of poverty in Austria and addresses the issue of nutrition as well. Experts state that eight percent of the Austrian population do not have enough money to buy good, healthy food.

The new campaign was launched throughout Austria on December 1, 2012 with posters, the new TV ad and a new radio ad run on different media in Austria. Donations will be passed on to people suffering from severe poverty via local Volkshilfe offices in Austria (state organizations, community and local groups, volunteer employees, social help centers).

T-Mobile Austria sponsored the 3rd Austrian Social Business Day on March 15 and 16, 2012, and presented its sponsorship program for refugees there. 45 companies, non-profit organizations and social entrepreneurs presented their projects at the cooperation market, and 170 participants discussed corporate collaborations.

During the event, the school student project "get2gether" was brought to the attention of T-Mobile Austria. The aim of the project is to host joint activities to make it easier for young refugees to get to know Austrians in the same age group and encourage their understanding of each other. For example, T-Mobile Austria organized a soccer tournament as part of the 2012 get2gether program, bringing together 32 young Austrians and refugees.

#### **T-Mobile extends collaboration with War Child to end of 2014.**

In November 2012 T-Mobile Netherlands extended its collaboration with War Child, a charity that supports children in war zones, for another two years.

For years T-Mobile has been the main sponsor of War Child, working with this charity to strive towards a better future for children affected by war. T-Mobile offers financial support to projects in Sri Lanka in which children participate in programs to help them deal with their difficult experiences. Besides this, T-Mobile enables children in various program countries to communicate with each other via new media. T-Mobile contributes actively in finding new ways to use ICT and media in reaching more children. T-Mobile also sponsors all of War Child's phone services – in The Netherlands and abroad. That means more funds can go towards this work for children and young people affected by war.

#### **T-Systems Czech: Free marketing advice and support for NGOs.**

T-Systems Czech provides 100 hours per year of free PR and marketing advice to three NGOs it cooperates with, e.g. Ratolest Brno, a non-profit organization responsible for social contacts and care for children from non-functional families. In 2012-13 the company's Marketing Department is also supporting one NGO in their applications for grants.

### **Public Housing 3.0—connected neighborhoods help close the digital divide.**

In order to help close the digital divide, T-Systems Austria launched the Public Housing 3.0 project in 2012 in collaboration with the Vienna Margareten district and the operator of the Austrian social media platform, Sankt Onlein. The Public Housing 3.0 project provides the mostly low-income residents of the Körnerhof housing area and neighboring facilities like the local youth center with access to state-of-the-art information and communications technology. For the project, T-Systems set up a container equipped with multimedia technology, the T-Systems Media Box, at the housing area as a teaching and communications center. T-Systems employees have been volunteering there as part of our corporate volunteering activities, conducting training courses for residents including computer courses for women and basic Word and Excel training. By November 2012, more than 250 of the 3,000 residents had attended courses, particularly women and young people. T-Systems launched the [www.koernerhof.at](http://www.koernerhof.at) information and social media platform to accompany the project. Some 200 people have signed up on the platform so far. The platform helps connect people in the neighborhood and provides local information like programs and registration forms for Media Box training courses as well as information on doctors, childcare and events in the area.

### **Sponsorship program for young refugees in Austria.**

## **lobby.16@t-mobile—"Learning pathways" project extended.**

T-Mobile Austria teamed up with lobby.16 to extend the "Learning pathways" project. For the first time the company conducted a module in 2012 in which young refugees can learn the skills they need to attend a vocational training program. The six-month education program includes German, English and mathematics courses and is supplemented by sector-specific training. At T-Mobile Austria, this involves product training, communications and sales training as well as internship days at the stores and in customer service. In 2012, T-Mobile helped four young people prepare for vocational training as a retail sales assistant with an emphasis on telecommunications and as office administrators.

The lobby.16 association received the Sozial Marie award on May 1, 2012, in recognition of its dedication to the vocational and social integration of young refugees living in Austria with-out relatives. Other companies have also decided to adopt the program, which was enhanced by lobby.16 and T-Mobile Austria.

### **Basic IT skills for refugees.**

As part of its collaboration with lobby.16, T-Systems Austria conducts computer courses spanning several weeks for young refugees. Between 2010 and 2012, T-Systems taught basic IT skills to more than 70 young refugees. In addition to IT training offers, T-Systems Austria also provided lobby.16 with laptops.

### [Last year's CR report](#)

T-Systems Austria and T-Mobile Austria have joined forces with the non-profit organization lobby.16 since 2010 to give a brighter outlook to young people by investing in their education. lobby.16 provides job perspectives to young refugees who are living in Austria without their parents. The program helps them find internships and apprenticeships and helps them to complete schooling. The aim is to help young people develop their skills, become confident in their abilities and gain self-confidence.

## Sustainability funds in Central Europe.

During the reporting period the T-Mobile companies in Austria and the Czech Republic supported sustainability and environmental projects with grants from their sustainability-oriented funds.

### **Environment and sustainability fund at T-Mobile Austria.**

Our non-profit T-Mobile environment and sustainability fund (TUN fund) supports projects that make a contribution to energy efficiency and climate protection, the environmentally conscious use of ICT technology and the protection of the environment, nature and endangered species.

Under the slogan, "Sharing commitment," the TUN fund grants prize money to projects that use ICT to develop creative solutions to environmental and sustainability problems. The fund supported the following projects during the reporting period with a total of EUR 50,000 in prize money:

- CSI: Styria Climate Safety Investigation
- Smartphone  app for [www.naturbeobachtung](http://www.naturbeobachtung.at).
- atklima[trick], an animated film competition for young people on the topic of climate change

CSI: Styria Climate Safety Investigation was selected as the best project in an online vote. The project concept is to teach students about climate protection, such as how to reduce energy use. The students then pass on the information to others. They tell their family about what they have learned and motivate their parents to do their part. Content is presented in media forms that are attractive to young people so that it can be transported from the schools and into the students' private lives.

37 projects were submitted during the second call for submissions, which ended on November 26, 2012. The three winning projects were announced at a gala event hosted by the TUN fund on April 24, 2013. For the first time, school student projects also received funding totaling EUR 3,000 at the event.

### **Czech Republic: grants for employees' and regional projects.**

In the reporting period the T-Mobile Fund for Employees received 141 grant applications. An independent committee selected the 27 most worthy projects and supported them with grants totaling CZK 2 million. The projects included the restoration of cultural and religious monuments in Mrtnik and the creation of pools to support amphibian populations in Strelna and Kostan. The T-Mobile Fund for the Regions received 115 grant applications and distributed a total of CZK 2 million for suitable projects in the Louny district and Hradec Kralove region.

Under the umbrella of T-Mobile Fund the company also staged four seminars for NGOs focusing on public relations and human resources. Around 100 representatives of foundations and civic associations learned how to communicate with journalists to facilitate the dissemination of information about interesting projects, and how to select and motivate employees. These seminars are offered free of charge.

### Romtelecom: "Words hurt, don't they?"

"Words hurt, don't they?" is a campaign that aims to draw attention to verbal violence, the consequences it has on young people's behavior, and solutions to manage the problem. Launched on November 20 2012 by Romtelecom and the Child Helpline Association, the company's partner for over a decade in projects dedicated to young people and children, the campaign was triggered by the increasing number of violent situations children and young people are involved (either as victims or aggressors) and of related calls to the Child Helpline. In addition, Romtelecom commissioned two studies whose findings revealed a higher degree of immunization to verbal violence on the part of children and young people, although it is generally recognized as a potential cause of serious physical violence. The campaign aims to offer instruments for managing violence situations and includes open meetings with adults and young people interested in obtaining more information about constructive solutions to approaching verbally violent situations. At the same time, the campaign offers a virtual center for information and recommendations ([www.cuvinteleedor.ro](http://www.cuvinteleedor.ro)). A free e-book containing case studies and general recommendations was published as part of the campaign in December 2012.

### "Early childhood development": participation in UNICEF project.

In early 2012 T-Mobile Macedonia started a partnership with UNICEF for an "Early childhood development" project that aims to help all children in Macedonia to attain a more equal start in life. In Macedonia only 22 percent of 3- to 5-year-olds attend kindergarten or some other organized early childhood development program. The aim of the UNICEF project, which T-Mobile is co-sponsoring, is to raise awareness of the importance of stimulating cognitive and emotional development in the first five years of life, and to raise funds for early childhood development facilities. This is the first major UNICEF partnership with a private-sector company in Macedonia.

### Engagement for the hearing-impaired in Slovakia.

#### **Supporting families with a hearing-impaired child.**

The Endowment Fund Telekom with Pontis Foundation have long been devoted to helping the Hearing-Impaired through a variety of programs. In September 2012 a new grant program was launched for early intervention in the case of the hearing-impaired children. Such a program had not existed in Slovakia. Families with

hearing-impaired children of up to six years of age were entitled to apply for a grant, as were special-needs teachers who know how to work with hearing-impaired children and would be going into their homes to work with such a child. The program, which was set up because the most important time for achieving a positive change and improving the quality of life of the Hearing-Impaired is at an early age, aims to promote systematic and long-term education in families with a hearing-impaired child. Selected mobile teachers will regularly visit the family once or twice a week and work directly with the child at home. The advantage of such field work is that the child specialist also works with parents and siblings and naturally incorporates them into their work with the child. At the same time the activity uses work devices available in the home, which can then be used by the parents as well. All the costs are covered by the Endowment Fund Telekom with Pontis Foundation.

### **Sign classes on the road.**

Three sign language classes across Slovakia were offered in a roadshow. 20 people attended each free course in which the basics of sign language were communicated and a film shown about the Hearing-Impaired.

### **Music therapy for hearing-impaired pupils.**

Slovak Telekom is supporting a music therapy campaign for pupils at a primary school for the Hearing-Impaired. Percussionist Eddy Portella leads classes where hearing-impaired kids play the drums. Since they can feel the vibrations, this is a great chance for them to express themselves.

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## Disaster relief.

Natural disasters such as floods or earthquakes often have devastating effects on the people affected by them. They lose everything they have from one day to the next and are dependent on help from others.

Telekom has been working with the [Aktion Deutschland hilft alliance of German aid organizations](#) for years in order to provide direct, fast help to the people affected. We provide equipment and money right after disaster strikes. Our employees are always ready to help people who have been affected by floods or earthquakes.

### Collaboration with Aktion Deutschland hilft aid organization.

Telekom has been working together with the [Aktion Deutschland Hilft alliance of German aid organizations](#) for years to provide aid to victims of natural disasters. In 2012, we once again supported the organization by donating EUR 20,000 to help with reconstruction in Haiti after the disastrous hurricane Sandy hit the country.

Birgit Klesper, Senior Vice President for Group Transformational Change & Corporate Responsibility (GCCR) at Deutsche Telekom, became a member of the alliance's board of trustees in May 2012.

### Disaster relief in Montenegro and Romania.

A severe snowstorm hit Montenegro and Romania in February 2012. Telekom Montenegro responded by donating EUR 10,000 to the Montenegrin Red Cross and installed a donation line where a euro would be donated for every call received. In all, the sum of EUR 13,269 was collected in the month the donation line was in operation. Besides, some 50 of the company's employees helped to clear roads in front of the Institute for Public Health in Podgorica, the main hospital and the company's headquarters. With many people cut off by the snow, mobiles were often the only means of communicating with the outside world. Here, the company's network maintenance teams worked round the clock to ensure services functioned properly or were restored. Their brave efforts were recognized by the Montenegrin public and the country's media.

When the severe winter weather struck Romania, Romtelecom and Cosmote Romania offered material support to the "Romania Needs You" campaign. Romtelecom and Cosmote Romania collaborated with PRO Media Group to deliver over 18 tons of food and materials to 13 affected communities. Thousands of people in the counties of Buzau, Vrancea and Ilalomita benefited from the help offered by the two companies, e.g. basic survival foods and other goods delivered even by helicopter to the most isolated areas. Employees from both companies even drove or staffed eight off-road jeeps and two trucks to transport food to communities badly hit by the snow. Romtelecom supported the Romanian Red Cross campaign through the Foundation Romtelecom for Romanians. 55 tons of food and water were distributed.

### Helping victims of "Superstorm Sandy".

When "Superstorm Sandy" struck the Northeast of the USA in late October, the unprecedented flooding and wind damage left many people devastated. All the region's cellphone provider networks were damaged, leaving customers disconnected for varying lengths of time. T-Mobile USA helped in various ways to relieve the sufferings of Sandy victims. 14,000 pounds of food, 1,700 cleaning supply items, nearly 100 winter coats and

some 250 pairs of gloves for school children, as well as a cash donation of \$10,000 were given to the Community Food Bank of New Jersey. Since the people living on a badly hit Long Island peninsula had no power for weeks after the superstorm and were thus unable to charge their phones, T-Mobile USA organized two coaches where people could charge their phones and watch TV and movies. Last but not least, T-Mobile USA provided the American Red Cross with hundreds of cell phones and donated \$100,000 to help with the organization's storm relief efforts. Text-to-give opportunities were also opened up for T-Mobile customers, with the company saying it would match the next \$100,000 in donations. The fact that that sum was reached within two days triggered another \$100,000 donation from T-Mobile. In all, T-Mobile USA and its customers donated more than \$850,000 to the Red Cross relief efforts.

### Practical assistance for those in need in Malaysia and Montenegro.

At T-Systems Malaysia the company's community engagement took the form of support for people struck by natural disasters, several orphanages, the poor, and terminally ill patients in hospitals across Malaysia.

A further example of the practical assistance offered to the educational sector by Crnogorski Telekom came after a fire destroyed the building used by the Faculty of Fine Arts in Cetinje: Crnogorski Telekom made its own premises available to the Faculty's students and teaching staff so that studies could continue.



## Media skills.

Telekom is dedicated to promoting media skills in society. The focus here is especially on showing children, young people and seniors how to use the new information and communications media safely, because the new media can help them make their lives easier and participate in the information society. This is one of the goals involved in our action area "Connect the Unconnected," which we have set forth in our CR strategy.

Examples of our activities include the Telekom@School project, our collaboration with the "Internet mentors sharing experience" project launched by the German Federal Ministry of Economics and Technology, data privacy projects at schools and computer training courses, which we offer in cooperation with the Lebenshilfe organization.

We launched several campaigns revolving around the European Year for Active Aging and Solidarity between Generations in 2012. In addition to initiating the competition, "The Internet—it's not a question of age," we also supported the Heroes with Heart campaign and offered training courses for seniors, like the one conducted at our Telekom Shop in Frankfurt.

In February 2013, Telekom held a panel discussion on "Digital learning—smart learning" at our Berlin Representative Office. At the event, which was part of the telegraphen\_lunch series, experts discussed the opportunities and risks involved in increasingly digital teaching. One of the main points of the discussion was how teaching methods at schools need to be improved by adding more digital content in view of changing learning patterns—an issue that Telekom has been addressing for years in different projects such as Telekom@School.

The "Surfing together" convention was held at Telekom's Representative Office in March 2013 in the context of the European Get Online Week. The event was addressed to people who volunteer or work full-time directly with people who have never used the Internet or do not use it very often. Participants learned methods that they can use to teach the people they work with how to use the Internet safely and responsibly. The convention was sponsored by the German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ) and by the German Federal Ministry of Food, Agriculture and Consumer Protection (BMELV).

### Free Internet access for educational institutions.

There was no charge for the switch-over or for subsequent use of the Internet. Telekom also gave each school licenses for its new child protection software. We also offered to upgrade the connections of all schools in VDSL expansion areas to VDSL at reduced rates. VDSL enables data transmission speeds of up to 50,000 kbit/s. Deutsche Telekom has invested a nine-figure sum since the infrastructure project was launched and has equipped some 34,000 general and vocational schools in Germany with free online access.

In Greece, for example, Cosmote offers free, wireless broadband Internet access to schools on remote islands and in remote regions through its Surfing the World program. The company installs the required 3G-enabled devices (desktop PCs, WLAN routers, multi-functional devices and webcams) at schools to provide the children and teachers with fast Internet access. In 2012, more than 1,200 students and teachers from 46 schools throughout Greece benefited from the 240 devices that were donated as part of

During the reporting year, we extended our offer of free Internet access within our Telekom@School initiative. The project has enabled schools without or with slow Internet connections to apply for a broadband line; depending on local service coverage, it offers a speed of 12 Mbit/s instead of the previous 6 Mbit/s.

this program. Cosmote has installed wireless Internet access at numerous schools with a total of more than 3,000 students since the program was first launched.

Crnogorski Telekom, Deutsche Telekom's Montenegrin subsidiary, provides free ADSL Internet connections to elementary and secondary schools in Montenegro. The company's goal is to improve both theoretical and practical PC and online skills, raise awareness of the significance of the Internet and promote the information culture in Montenegro. A total of 150 schools participated in the program. The agreement made with the Montenegrin Ministry of Education and Science has been extended.

### Data privacy in the classroom.

The dangers of using the Internet, data privacy and necessary security measures are all topics of four video spots that the [Telekom Foundation](#) filmed together with students from the "[Interactive schools](#)" project. In the videos, students answer questions like "Is it ok for me to be friends with my teacher on Facebook?" or "Which private data is ok to post online?". All of the videos can be seen on the [www.teachtoday.de](#) platform, which was set up for teachers as well as parents who want to learn more about modern media.

The goal of the project is to encourage students to use new media responsibly. The project works to teach students how to anticipate the consequences of their actions, particularly in terms of social networks.

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Teachtoday Deutschland is an initiative that was founded by Telekom, Google, Microsoft, O2 and Vodafone. In cooperation with European Schoolnet, the klicksafe EU initiative and Freiwillige Selbstkontrolle der Multimedia-Diensteanbieter (FSM) e. V., the voluntary self-control of multimedia service providers, the initiative focuses on actively helping teachers safely use ICT technologies and providing support for young people in the media age.

### Activities to mark the European Year for Active Aging.

The European Parliament proclaimed 2012 the European Year for Active Aging and Solidarity between Generations. Against this backdrop, Deutsche Telekom launched various projects in 2012 to promote media skills among seniors:

- **"Internet—it's not a question of age" competition:** In February 2012, Telekom, the German association of senior citizens organizations, BAGSO (Bundesarbeitsgemeinschaft der Senioren-Organisationen), and klicksafe, the EU initiative for a safer Internet, launched the competition, "Internet—it's not a question of age!". The competition was conducted under the patronage of Kristina Schröder, German Federal Minister for Family Affairs, Seniors, Women and Youth. Around 150 participants submitted their projects in the "advice and training" and "online offers" categories with the chance to win between EUR 2,000 and 5,000. The seven winners—including the winner of a special prize—each received between EUR 2,000 and 5,000 to help finance their projects. Telekom granted a total of EUR 26,000 in prize money.
- **Heroes with Heart competition:** In 2012, Telekom also sponsored the Heroes with Heart competition, where family members can nominate their grandparents for the "Best grandparent in the world" award. The competition was initiated by the German senior citizens organizations, Deutsche Seniorenliga, and sponsored by Telekom. One of the jury members who evaluated the submissions was a Telekom representative.
- **Presentations at the Telekom Shop in Frankfurt:** In 2012, a free presentation for seniors on the topic of "Internet for late-comers" was held as part of a pilot event at the highly-frequented Telekom Shop in Frankfurt's shopping district. Visitors learned how to shop online, what mobile e-health solutions have to offer and how to use the Internet to plan vacations. Because of the tremendous response, the presentations were repeated in

early 2013. Additional presentations are planned over the course of 2013.

### Telekom employees continue Internet mentoring project.

With the completion of the federal project sponsored by Telekom, "Internet mentors sharing experience," Telekom employees in Hanover moved their mentoring activities over to the Sharing Experience association. There, they continue to pursue their mentoring activities, helping older people and people from immigrant backgrounds take their first steps online. By late 2012, some 175 Telekom employees had decided to get trained as Internet mentors. The federal project ended in late 2012 after three years. Telekom continues to support Internet mentoring under its [engagement@telekom](mailto:engagement@telekom) program.

### eMacedonia Foundation donates three e-classrooms.

In the reporting period the eMacedonia Foundation launched a new program and donated about EUR 50,000 to encourage the development of the information society. One of the program's highlights was the donation of three fully equipped e-classrooms at three locations around the country. These e-classrooms enable a total of 300 socially vulnerable people to obtain basic computer skills free of charge, e.g. learning how to use Word, Excel, e-mail and the internet. These skills can help those attending the e-classes in getting a job and in their everyday lives.

### E-Bonton: helping to promote good manners in e-communications in Macedonia.

In recent years, social networks, and in particular Facebook, have become very popular in Macedonia. Unfortunately, online behavior is not always what it should be. This is why the e-Macedonia Foundation has launched an e-Bonton project with the aim of promoting good manners in online communications and raising public awareness of how best to communicate via social networks. The program involves the creation of an e-Bonton manual for electronic communications, with anybody who is involved in online communications able to get involved. This manual is expected to consist of a set of rules for ethical conduct and communications. The project is also supported by the NGO Metamorphosis, the Youth Education Forum and the School of Journalism and Public Relations in Macedonia.



## Education.

Education is one of the most important prerequisites for innovation and progress. We consider promoting talented individuals of all ages at the Group as well as a broad-based commitment to education to be one of the keys to our long-term success. That is why we are very committed to enabling future generations to develop the skills they need, even beyond our company borders.

- With the "Yes, I can!" initiative, Telekom helps strengthen the skills that enable children and young people to take on the challenges of their everyday lives and shape their lives successfully.
- For many years now, the key element of our educational commitment in Germany has been the Deutsche Telekom Foundation, which is one of the largest corporate foundations in Germany.
- When it comes to vocational training and continuing education, we rely on collaborations with universities, scholarships and grants.
- In order to promote talent we support start-ups, sponsor STEM initiatives and help young people from disadvantaged backgrounds. For example, Deutsche Telekom supports the grant and mentoring program, "Go your way," which was launched by the Deutschlandstiftung Integration (German Foundation for Integration) in early 2012. The goal of the program, which is being conducted under the patronage of Chancellor Angela Merkel, is to promote the integration of young, talented people from immigrant backgrounds.



## "Yes, I can!" initiative.

The ["Yes, I can!" initiative](#), an association founded the previous year by Deutsche Telekom employees, managers and board members, began working on projects officially in early 2012 and has been actively engaged in pursuing the work of the initiative launched by Deutsche Telekom in 2009 ever since. Founding the association provides more leeway for support. The association hopes to be able to support more institutions and projects that encourage young people in Germany through specific donation campaigns. The first member meeting was held in May 2012.

With our "Yes, I can!" initiative, we fund projects in Germany that help give children and young people from difficult social backgrounds greater confidence. We want to help them pursue their own educational and professional goals. In 2012, we also supplied funding for various projects for children and young people from disadvantaged areas; 123 of the projects submitted to the initiative were supported with up to EUR 10,000. Since the initiative's launch in 2009, we have provided financing for over 350 projects, some EUR 2.5 million in total. We will be making over EUR 500,000 available again in the year 2013. Our "Yes I can!" initiative was awarded the UN Decade Education for Sustainable Development award for the second time on February 28, 2012.

123 projects sponsored in 2012.

A jury selected 123 projects from among more than 600 applicants in 2012 to receive support of a maximum of EUR 10,000 each. The methodological focus was taking a peer-to-peer approach. Projects in which children and young people take on mentoring and advisory roles or teach each other specific skills were particularly welcome. The projects addressed the focal topic creatively in a variety of ways. Participants took part in mentor programs and different training courses, including qualification as nutrition and legal advisors, mediators and nature scouts. Projects in which children and teenagers learned how to identify their own specific skills and then pass them on

to others were conducted as well.

### **2013 annual topic: Fairness and respect.**

The "Yes, I can!" initiative launched its fifth call for submissions in 2013. Projects and institutions that are active in the community had the chance to apply for support from the initiative from February 20 through April 2, 2013. With this year's topic, "Fairness and respect," the "Yes, I can!" initiative hopes to help people learn to appreciate and treat each other with respect, thereby preventing abusive situations.

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The "Yes, I can!" initiative supports projects that allow children and teenagers to discover and explore their own abilities and in which they have the chance to develop personal and career perspectives. Open youth work projects for children and teenagers that are targeted toward young people from difficult backgrounds can apply to receive up to EUR 10,000 in financial support during the annual call for submissions. The projects supported range from teaching everyday skills and projects with a media-based or cultural focus to programs offering new experiences.

### **The "Yes I can!" project network.**

During the reporting period, we continued to successively promote networking among the sponsored organizations and projects. As part of these efforts, we held the third "Yes, I can!" Cup in Berlin in 2012. More than 250 children and young people from sponsored projects all over Germany came to the capital and competed in 32 teams in the soccer competition. In addition to keeping track of the score, we also recognized fair play this year for the first time. The "Yes, I can!" initiative invited all of the highest scoring teams to attend a soccer game and a fair play workshop in Berlin in November 2012. A total of 62 children and teenagers attended the event. The initiative also launched the "Look what I can do!" competition. Children from the sponsored institutions had the chance to submit a photo, video clip or picture that they drew of situations where they learned something new and interesting or discovered a new ability that they or someone else has. The three winners, who were selected by a jury and via online voting, were invited to attend a two-day photography workshop in Berlin.

### **UN Decade award.**

The "Yes, I can!" initiative received the UN Decade Education for Sustainable Development award on February 28, 2012, for the second time. The award is presented every two years. The chairman of the national committee, Prof. Dr. Gerhard de Haan, and the Secretary-General of the German UNESCO  commission, Roland Bernecker, presented the award at an international workshop in Bonn. At the workshop, experts from all over the world discussed a variety of topics revolving around education for sustainable development.

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## Deutsche Telekom Foundation.

The Deutsche Telekom Foundation was established by Deutsche Telekom AG and now has a foundation capital of EUR 150 million, making it one of the biggest business foundations in Germany. It is dedicated to improving education levels in the STEM  subjects (science, technology, engineering, and mathematics) throughout Germany. The Deutsche Telekom Foundation was among those who committed themselves to supporting young children in 2012. The Deutsche Telekom Foundation and the Little Scientists' House foundation held a competition for day care centers under the slogan, "Forschergeist 2012" (Inquisitive minds 2012).

The foundation is active in the following areas:

- Early education,
- Lessons and more,
- Teacher training,
- Promoting talent, and
- Impetus.

Some EUR 4.9 million went into project work in 2012. We were also able to create a reserve of more than EUR 4.1 million for projects that have already been budgeted.

### The Science—Nature—Knowledge project.

The Deutsche Telekom Foundation began training facilitators in 2010 as part of the Science—Nature—Knowledge project. These facilitators go on to train staff at day care centers throughout Germany. A total of 650 facilitators had been trained by the fall of 2012. The foundation also donates course materials to the centers. These materials were developed over the past few years by the Science—Nature—Knowledge project.

### New curriculum for training educators.

The Telekom Foundation is planning to expand its activities to train educators based on the curriculum for educators that was completed by the Science—Nature—Knowledge project in January 2013.

### Expert meeting on cooperative project.

Once the Science—Nature—Knowledge project has been completed, the Foundation is planning to conduct a cooperative project to promote the training of educators at vocational schools and universities in Germany. A skills model focusing on improving educators' skills and their personal development was designed as the basis for the project. The model is not based on a particular subject so it can be used with different content and applied to various areas. The STEM  skills are being used as an example.

### Forschergeist 2012 day care competition.

With the Forschergeist day care competition, the Deutsche Telekom Foundation and the Little Scientists' House foundation recognize educators who work to educate very young children in the areas of natural sciences, mathematics and technology. The competition under the patronage of German Federal Minister at the time, Dr. Annette Schavan, ran from December 1, 2011, until March 16, 2012. Day care centers throughout Germany were encouraged to submit projects from the areas of natural sciences, mathematics and technology to win prize

money. 25 projects out of 1,135 submissions were nominated. The five winning projects received EUR 5,000 each. The winners included a long-term project that takes children through different ages in the history of human development and a research project on sand. An additional 15 day care centers received EUR 3,000 each. Because of the number of high-quality submissions, the jury also decided to grant five special prizes of EUR 2,000 each. The day care centers will use the prize money to continue to promote educational work in the fields of natural sciences and technology.

In September 2012, materials were published for parents to give them tips on how to make use of and support educational opportunities for their children. An extensive handbook for parents will be published in fall 2013.

#### Last year's CR report

Science—Nature—Knowledge is the Deutsche Telekom Foundation's largest individual project focusing on early education. The Deutsche Telekom Foundation has been helping teachers communicate STEM  skills to young children since 2006.

#### Supporting the "Interactive schools" initiative.

The Deutsche Telekom Foundation initiated the "Interactive schools" project in 2005 as part of its "Teaching and more" focus. The project investigated the integration of new media into teaching and learning activities. Teachers developed their own concepts for incorporating new media into the classroom at an initial four and then later at 42 secondary schools in the German states of North-Rhine Westphalia, Hesse and Saxony. The Deutsche Telekom Foundation completed the Interactive Schools project at the end of the 2011/2012 school year. The participating German states are continuing the project on their own.

#### "Be a math whiz".

The second facilitator meeting under the project sponsored by the Telekom Foundation, "Be a math whiz" was held at the Freiburg University of Education in November 2012. Participants developed and tested classroom material modules for decimals, fractions and percentages at the two-day meeting. The goal of the project, which was launched in 2011 with funding of EUR 1.4 million, is to research and develop lesson structures, concepts and materials for low-performing students and their teachers for grades 5 through 10. The aim is to structure math classes in a way that is more individual and more effective. The project is being conducted in collaboration with Technische Universität Dortmund, Freie Universität Berlin, Freiburg University of Education and Westfälische Wilhelms-Universität (WWU) Münster. The project is scheduled to run for three years.

In December 2012, the Telekom Foundation's board decided to launch the second phase of the project, which will run until 2016. The plan is to implement concepts and materials at secondary schools in the states of North Rhine-Westphalia, Berlin and Schleswig-Holstein. Project participants will also be developing material for solving practical problems in maths.

#### Competence center for teacher training.

The first annual convention of the German Center for Mathematics Teachers Education (DZLM) was held at Deutsche Telekom's Representative Office in Berlin on September 21, 2012. More than 200 people attended the event. DZLM has been designed for educational staff at day care centers and math teachers as well as other facilitators who want to develop their skills. The foundation is planning to invest around EUR 5 million in setting up and operating the center by 2016. The competence center started its activities in the 2011/2012 winter

semester. The center's communication platform went online in spring 2012 and the first continuing education program started for the 2012/2013 winter semester.

Because a solid education in math is important for developing skills in the other STEM  subjects, work at the competence center will initially be focused on mathematics. The plan is to offer scientific and didactic training courses in the other STEM  subjects in the future.

### Facilitator training.

The "Lernen vor Ort" facilitator project, which was initiated by the German Federal Ministry of Education and Research in collaboration with an association of more than 140 foundations, creates incentives for cities and districts to set up consistent, cohesive educational management structures. As the sponsor of the business, technology, environment and science categories, the Deutsche Telekom Foundation contributes concepts and materials from its projects Science—Nature—Knowledge, Class Kits, Junior Engineer Academy and Doing Math Differently. The Telekom Foundation's involvement included financing three facilitator training courses during the reporting period. The facilitators were then each provided with a "class kit." Teachers can use the experiment sets and course material to teach topics such as "air and air pressure," "sound" and "swimming and sinking" more effectively at elementary schools. Those responsible for the project had conducted a total of 260 training courses in the 20 participating communities by September 2012.

The foundation's support was scheduled for three years (2010-2013). Even after the Telekom Foundation stopped actively participating in the project, the communities continued to use the "class kits" during the second phase of the "Lernen vor Ort" facilitator project, which will continue until 2015.

### Magenta Sofa talks to reflect sponsorship activities within the company.

Deutsche Telekom Foundation has been promoting involvement in education at regional events with the Magenta Sofa talk series since spring 2011. The series of talks was continued in the cities of Berlin, Hamburg and Darmstadt in 2012. The event was hosted in Berlin on April 23, 2012, within the scope of the Berliner Stiftungswoche, a week-long event presenting foundations, and was open to Telekom employees as well as residents of Berlin. Dr. Manfred Balz, the then Board member for Data Privacy, Legal Affairs and Compliance at Deutsche Telekom, and other well-known guests discussed the significance of being involved in the community for Germany as a center of innovation. Encouraging STEM  junior staff members was the focal point of the discussion with T-Systems CEO Reinhard Clemens and Hamburg's mayor, Olaf Scholz, on September 3, 2012. Niek Jan van Damme, Managing Director of Telekom Deutschland and Hesse's Minister of Education and Cultural Affairs, Nicola Beer, explained in Darmstadt on November 19, 2012 what needed to be done to drive science and research forward in Germany.

More events in the series have been planned for 2013.

### Everyone needs education—education needs everyone.

The Deutsche Telekom Foundation and Deutsche Telekom sponsor employee volunteering at day care centers and schools under the "Everyone needs education—education needs everyone" project, which was launched in December 2011. In particular, employees are invited to volunteer in science, technology, engineering and mathematics projects that go beyond every day activities at day care centers and schools and to apply for financial support from the Foundation for their project. Seven projects were sponsored during the reporting

period (as of Nov. 2, 2012: since March 7). Deutsche Telekom employees went on excursions to the Odysseum, a science adventure park in Cologne, with the children and to the Mathematikum, a hands-on maths center in Gießen, and conducted fire safety workshops with training kits financed by Deutsche Telekom. The children learned about the benefits and dangers of fire at the workshops. The "Everyone needs education—education needs everyone" project will be continued in the coming year with a total sponsorship amount of EUR 50,000.

## Establishing more Junior Engineer Academies.

The goal of the Junior Engineer Academies is to show students in 8th grade and above what it is like to work as an engineer, scientist or researcher. Partners of the Junior Engineer Academies include schools and universities as well as other regional partners from the worlds of business and science. The Junior Engineer Academy network currently includes almost 40 schools throughout Germany. The Deutsche Telekom Foundation requested submissions for a competition to create fifteen new Junior Engineer Academies during the 2013/2014 school year in order to spread the concept further. An expert jury selected the best concepts on March 22, 2013. The schools were accepted into the Germany-wide Junior Engineer Academy network at the network meeting on April 26 and 27, 2013, in Berlin.

## Commitment to training & development.

As one of the major vocational training providers in Germany, we invest heavily in training programs for the young generation. We also set up external projects to facilitate access to the information and knowledge society for all young people. One important aspect of the training program is assuming social responsibility through activities such as participating in the "Responsibility wins" competition.

### Responsibility wins: More than 700 participants.

The internal Telekom competition, "Responsibility wins," was once again a tremendous success during the reporting period. More than 700 apprentices and students on cooperative degree programs from all over Germany submitted some 80 projects for which they had volunteered. With the competition, which was held for the fourth time, Telekom wants to recognize and encourage a sense of responsibility in its junior staff. At the awards ceremony in February 2013, a team from Rottweil received first place for coming up with suggestions for improving barrier-free access at three Telekom shops in the region. Apprentices got into wheelchairs for their research, which was supported by the non-profit Bruderhaus Diakonie Foundation. A team from the Nuremberg training center received second place. The team developed Internet training courses for seniors along with course materials and offered these in collaboration with the Communications Museum in Nuremberg. Third place went to four apprentices from Bremen who conducted workshops at schools on how to use personal information safely in social networks and discussed cyber bullying with the boys and girls.

### Promoting STEM subjects at HfTL University of Applied Sciences (Hochschule für Telekommunikation) in Leipzig.

Young people benefit from the many years of experience the Group's own HfTL University of Applied Sciences (Hochschule für Telekommunikation Leipzig) has in the field of youth mentoring. Through a wide range of STEM  initiatives, the university hopes to inspire children and young people to go for technical and science-based careers, professional and management positions. It conducts hands-on projects to encourage children and young people to learn more about these career paths.

- **Student mentoring program for girls:** The HfTL youth mentoring program for female students began in 2012. The program is particularly targeted at girls from immigrant backgrounds. Female mentors accompany students from three Leipzig schools for ten months and help them in their personal development and with any questions they might have about their career choices. The girls can gain their first hands-on experience within the scope of an extensive accompanying program. We also share our extensive experience with youth mentoring with our competitors. In 2012, we published a handbook about the mentoring program concept with recommendations on how other companies and organizations can get involved.
- **Student marketing at HfTL University of Applied Sciences in Leipzig:** HfTL plans further expansion of its student marketing activities. The university launched or continued numerous projects in this area in 2012:
- **The Junior Engineer Academy:** HfTL opened a Junior Engineer Academy at three secondary schools in Leipzig in cooperation with the Deutsche Telekom Foundation. A total of 16 thirteen to sixteen year olds will study technological subjects there intensively in the next two years, giving them the opportunity to pursue their

interest in STEM  subjects. The foundation already sponsors 39 Junior Engineer Academies throughout Germany.

- **"Ask the frog" kids university:** The kids university, which was initiated at HfTL in 2012, also gives kids a chance to have fun learning about natural sciences and technology. Elementary students can experiment in these fields twice a semester under guidance and pursue their interest in these areas.
- **Technology Day:** HfTL and the Telekom student marketing department held a technology day at the Schulforte secondary school near the city of Naumburg under the slogan "Experience telecommunications." 8th through 12th grade students had the chance to get to know the university and overcome their fear of studying technology and computer science in hands-on experiments in labs set up especially for them. We also offered a field trip to a Deutsche Telekom company. HfTL holds Technology Day throughout the year for different participants.
- **Leipzig Academy for School Students:** HfTL successfully continued the Leipzig Academy for School Students program in 2012 with four lectures. Students in 9th grade and above can attend the lectures to learn more about natural sciences and engineering.

### Special support for disadvantaged young people.

We take our corporate and social responsibilities very seriously at all levels of education. In 2012, we collaborated with the German Federal Employment Agency to offer 119 young people the chance to start their careers in the "My chance to get going" project. The program is particularly targeted at kids whose parents are on welfare. We are planning to continue the project in 2013 as well.

### Education programs facilitate connected life and work.

As part of its strategic goal of facilitating connected life and work, Deutsche Telekom promotes numerous education programs around the world, as these examples illustrate.

Deutsche Telekom's Bulgarian subsidiary, Globul, is involved in a long-term program known as the Globul Hour, which aims to increase the educational and professional standards of young people. Some of the company's most valued professionals participate in the program by sharing their know-how with young people through a series of lectures and seminars. The initiative is aimed at telecommunications students at the Technical University of Sofia and in May 2012, for example, over 400 students attended the lectures.

During the reporting period, T-Mobile Czech cooperated closely with a number of technical and economic high schools in a project where the company's employees, including the CEO, shared their know-how with high school pupils by way of presentations and subsequent discussions.

T-Systems Czech organized so-called smart grid classes for apprentices and high school pupils in Prague. The activities included a Tech-tour to Friedrichshafen in Germany where the participants were introduced to Deutsche Telekom's smart metering and smart grid solutions for the educational sector.

### T-Systems Slovakia: promoting ICT education.

In the reporting period T-Systems Slovakia undertook a number of activities in cooperation with educational institutions with the aim of furthering ICT skills.

- **ICT education in elementary schools:** Around ten of the company's employees taught pupils in ICT subjects (e.g. Linux, Windows, basic programming and internet safety) at four elementary schools in Košice.

- **T-System Education Academy:** T-Systems Slovakia has developed officially accredited lectures for around 11 ICT subjects and trained lecturers to deliver them to students at the Technical University of Košice, which recognizes the credit points gained by the students in these subjects.
- **Summer UniversITy (for the public) & Evening UniversITy (for students):** T-Systems Slovakia has been enabling ICT training courses for the public in the Košice region by offering summer and evening university programs since 2006. In 2012 160 people successfully qualified from these classes.

### Globul: general sponsor of Green Olympics competition.

Globul partners the Green Olympics organized by the educational portal Akademika BG. This initiative aims to boost Bulgarian school pupils' knowledge of environmental issues and to establish a "green culture" among young people. In this context, Globul sponsored a Green Olympics campaign from October to December 2012, which aimed to increase Bulgarian pupils' awareness of environmental topics. The nationwide competition was open to 1st-12th grade pupils from all over the country.

### Globul's summer traineeship program.

Globul's annual summer traineeship program gives young and aspiring students a unique opportunity to acquire new knowledge and practical skills through working in a dynamic business environment. In 2012 53 young people took part in the program.

### Idea goes App award in Austria.

T-Systems participated as a partner of the Austrian-wide school student and trainee competition, Innovative Youth, for the sixth time. The goal of the competition is to encourage creative potential in young people with talent and an interest in scientific research between the ages of 15 and 20. In 2012, young people interested in communications and technology had the chance to submit their innovative app ideas in the areas of healthcare, energy and mobility.

The T-Systems idea.goes.app award includes prize money in the amount of EUR 5,000. Out of the 26 projects that were submitted, the First Aid Live app idea developed by three young school graduates from Salzburg won the prize in 2012. First Aid Live is an efficient first aid application that makes it possible for potential helpers at the site of an accident to provide the best possible first aid by following the app's instructions.



## Promoting talent.

Deutsche Telekom supports talented students and innovative business ideas both within the Group and outside. The purpose of Telekom's hub:raum start-up incubator, which opened in 2012, is to help people who are starting a business get their ideas off the ground. Numerous Deutsche Telekom subsidiaries also offer grant programs to provide talented students with the financial support they need.

### Telekom start-up incubator helps get new ideas to the market.

In May 2012, Deutsche Telekom opened its own start-up incubator, hub:raum, to help people who want to start up innovative businesses get their ideas off the ground. At hub:raum, start-up teams can further develop their ideas in an "incubator" environment and then introduce them to the market. People with experience in starting up businesses help them as mentors and Telekom also offers seed funding of up to EUR 300,000.

Interested start-ups can go to the hub:raum website and apply for the program. The program will take on around 10 to 15 start-ups each year.

The first hub:raum accelerator program was launched in November 2012, an eight-week training program where start-up teams can develop their business ideas into business models that are ready to be financed. At the end of the program, the start-up teams presented their business models to selected potential investors and the hub:raum team.

### Scholarships support talented students.

In several countries where Deutsche Telekom subsidiaries operate scholarship schemes provide talented students with much-needed financial support.

- In Bulgaria, for example, Globul offers scholarships to ten talented students as part of its annual Scholarship Program. The scholars receive monthly support up to graduation. If they perform well during the traineeship and vacancies are available, they are invited to join the Globul team.
- In Greece, the OTE-Cosmote Scholarship Program provides financial support to first-year students enrolled at universities far from home. For the 11th consecutive year, this program is supporting first-year students at higher education institutions throughout Greece, and for the first time in the major metropolitan areas of Attica and Thessaloniki. For the 2012-13 academic year, OTE and Cosmote have offered 20 scholarships of EUR 15,280 each, and 26 honorary distinctions worth EUR 1,528 each.
- In November 2012 Cosmote Romania offered five new scholarships to bring the total to 15 since 2010. The scholarship amounts to approx. 700 RON (approx. EUR 150) per month and student for the whole duration of a student's university studies.
- In the same country Romtelecom offered a number of scholarships to reward talented students and young people with leadership potential. Three student scholarships were offered as part of the company's internship program through the Romtelecom for Romanians Foundation. Four scholarships were for students who performed outstandingly at the Leaders School, the only one of its kind in Romania. One scholarship was awarded so a Romanian student could study at Perrotis College in Greece (as part of the OTE Scholarship

Program). Moreover, Romtelecom continued to offer students the use of voice, internet and IPTV services at its own laboratory in the Faculty of Electronics in Bucharest.

- In Croatia Hrvatski Telekom offered scholarships to the six best students at the Faculty of Electrical Engineering and Computing. Moreover, Hrvatski Telekom joined the Zagreb Rotary Club's Kaptol scholarship program "Step into life" and funded five scholarships for students without parents. So far, this has provided 121 scholarships for young people from children's and foster homes.
  - In the third year of the T-Systems Slovakia Scholarship Program six scholarships worth 1,400 EUR each were provided for the academic year 2012/2013. The six students selected are all studying at universities in Košice, with two of them in their final year of studies. The aim of the Program is to generate educational opportunities for talented young people from eastern Slovakia, to train skilled new professionals who are committed to the development of that region, and to raise young people's awareness of their regional identity and the opportunities for volunteer work. The Program is targeted at university and college students from eastern Slovakia who are majoring in IT and relevant fields, as well as high school graduates apply to study one of those subjects.
  - In the reporting period T-Systems Malaysia introduced a High Achievers Scholarship Program as part of the company's commitment towards developing an intellectualized society and shaping the network future for business. The Program enables young scholars to pursue their tertiary education in universities throughout Malaysia.
  - Providing scholarship for the best students studying at state universities as well as internships and employment opportunities at the company on graduation, the AMC student scholarship program was run for the 11th time in the reporting period. This program helps to improve the quality of education and create sustainable human resources in Albania. In the reporting period, 18 students (eight freshmen and ten others) were awarded an AMC scholarship.
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Life is for sharing.

2012 Corporate Responsibility Report

We take responsibility.

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## Sponsorship.

Culture and sports are two areas where society gets its innovative strength. They create a feeling of community, encourage communication across borders and inspire people.

We have been involved in the world of sports and promoting the cultural landscape in Germany for years. In the meantime, we are among the largest sponsors in these areas in Germany. Telekom's international subsidiaries are also active in promoting culture and sports. This approach is an expression of how we see ourselves as an international company that accepts its corporate responsibility at all places where it does business.

Our cultural sponsorship activities are also focused on promoting music and fine arts. We help established artists and up-and-coming talents in various areas to foster diversity.

Regardless whether it is competitive sport, mass sport, school sport or sport for the disabled—what matters to us is team spirit, tolerance and our responsibility toward society. These values are at the core of our sports sponsoring activities.

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## Sports sponsorship.

Telekom's sports sponsorship philosophy is centered around the values of fairness, tolerance and team spirit. We promote these values, which also apply to our company, as part of long-term commitments and collaborations. Acting on our social responsibility, we are now more active than ever in supporting mass sport, school sport, sport for the disabled and talented young athletes. Our support of top athletes and our collaboration with the Deutsche Sporthilfe foundation, the German Olympic Sports Confederation (DOSB) and the German National Paralympic Committee (DBS) also played an important role in our sponsorship activities in 2012, the year of the Olympic and Paralympic Games in London. We ended our partnership with the German Olympic Sports Confederation at the end of 2012 but continue to support Olympic sports through our involvement with the Deutsche Sporthilfe foundation.

### "New sports experience" initiative.

In 2012, the year of the Paralympic Games, we conducted numerous special projects as part of our "New sports experience" initiative. In these projects, students from grades seven through ten had the chance to experience first-hand what athletes with disabilities can do. During the reporting period, around 15,000 students throughout Germany participated in the project day events, which were integrated into their normal school day. We have been able to reach some 60,000 school students since the initiative was launched in October 2009.

### Training with Paralympic medalists.

On August 24, 2012, Telekom hosted a Paralympic training day in Cologne where wheelchair basketball players Mareike Adermann and Annika Zeyen trained school students in their sport before going on to win a gold medal in the 2012 Paralympics. Holger Nikelis, reigning world champion in wheelchair table tennis, also conducted a training module. 2012 Olympic silver medalist in fencing, Britta Heidemann, participated in the training as a guest. Blind soccer players from the German national team gave training at a secondary school in Augsburg and national team members and Paralympic athletes gave training in wheelchair basketball in Frankfurt.

### Upcoming reporters at the Paralympics.

In cooperation with the German National Paralympic Committee (DBS) and the Cologne school of journalism, Kölner Journalistenschule, Telekom also hosted the "2012 Paralympics upcoming reporter" competition in 2012. Interested students were asked to submit a 60-second film on "Respect—The 2012 Paralympics." The winners, four teams comprised of a total of 16 students, were invited to go to London where they reported live online on the Paralympics from August 29th to September 9th.

In 2012, Telekom also provided all secondary schools in Germany with classroom material entitled "High performers with a disability" as part of the "New sports experience" initiative. The course material was developed under the patronage of Hubert Hüppe, the German federal government's commissioner for people with disabilities.

### Last year's CR report

In collaboration with the German National Paralympic Committee, DBS, and the German association for wheelchair sports, Deutscher Rollstuhlsportverband (DRS), we launched an unprecedented school project in Germany called "New sports experience" in October 2009. Students attending grades 7 to 10 are given the

chance to experience first-hand what disabled sports are like. The kids can play sports that they would not normally find at their schools, including wheelchair basketball, goalball and blind soccer. Getting this unusual perspective makes it easier for them to understand and respect people with disabilities. Project days are held at around 150 secondary schools each year.

### Partnership with the German National Paralympics Committee.

As a partner of the German National Paralympics Committee (DBS), Telekom has been involved in disabled sports since 2006. To celebrate the 2012 Olympic and Paralympic Games, Telekom extended its partnership with the organization in 2012 for two more years. It also provided the communication infrastructure at Deutsches Haus, a meeting spot for guests from the worlds of sports, politics, business and society, during the games, including the media lounge for journalists.

As a sponsor, the Group helped select the Disabled Athletes of the Year in November 2012. The group of candidates comprised medalists from the Paralympic Games in London. Track-and-field athlete Birgit Kober, table tennis player Jochen Wollmert and the women's wheelchair basketball team were chosen as the 2012 Disabled Athletes of the Year.

### Telekom supports careers after professional sports.

In cooperation with the Deutsche Sporthilfe foundation, Telekom initiated the Dual Career Planning Program in 2012. The goal of the program is to make it easier for former athletes to start new careers. Twelve top German athletes attended a professional applicant training at Telekom Headquarters in Bonn in October 2012, including hockey Olympic medalist Benjamin Weß, Sara Goller, who came in fifth place at the Olympics in beach volleyball, Katrin Mattscherdt, Olympic gold medalist in speed skating and top gymnast Kim Bui. A second applicant training was held for ten athletes sponsored by the Deutsche Sporthilfe foundation at the Allianz Arena in Munich in November 2012. Both training sessions were conducted by human resources experts from Deutsche Telekom.

The focus of the Dual Career Planning Program are internship offers for which interested athletes can apply at Deutsche Sporthilfe. Each athlete's particular situation is taken into consideration during the selection process, including additional time needed to spend on training and competitions as well as any lack of job experience. Several Olympic athletes have already participated in the program.

### "Your name for Germany."

Telekom has been supporting the Deutsche Sporthilfe foundation's "Your name for Germany" campaign as one of four German sponsors since 2011. The campaign offers any German resident interested in sports the opportunity to personally sponsor top German athletes with three euros a month as an official sponsor. In 2012, Telekom advertised at 20 offices throughout Germany as well as with various internal communication platforms to get employees interested in the program. Top marathon runner and Olympic athlete, Susanne Hahn, ran in the 2012 Bonn Marathon for the Telekom team as a project "ambassador." Some 4,000 employees signed up as Olympic sponsors during the campaign.

### Sponsoring the Bonn Marathon.

Telekom is a sponsor of the annual Bonn Marathon and has its own team at the starting line. Many employees travel to Bonn from different cities to attend the event. This year, a total of 700 Telekom employees participated in the marathon. In 2012, top marathon runner and Olympic athlete, Susanne Hahn, and three Telekom employees formed a Telekom-Sporthilfe team that advertised for the Deutsche Sporthilfe campaign, "Your name

for Germany." Deutsche Sporthilfe was also at the marathon with its own truck and advertised for people to sponsor the initiative of which Telekom is a partner. In 2013, we will again be supporting the Bonn Marathon and are preparing our employees for the race with our "Staying in shape in the winter" training program 2,000 employees signed up in 2012.

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## Cultural sponsorship.

Deutsche Telekom encourages variety in cultural expression from Beethoven and electronic beats to contemporary art and cross-over cultural events. Together with various partners from the national and international music and art scene, we want to give people access to an extensive cultural event offer and contribute our experience in effective and broad-based communications and marketing. We also provide state-of-the-art technology and products as needed.

### International Telekom Beethoven Competition.

With the [International Telekom Beethoven Competition in Bonn](#), Deutsche Telekom helps young musicians on their way to the top. We first held the piano competition in 2005. Young pianists from all over the world have been performing every two years before a first-class jury ever since. Deutsche Telekom will be hosting the fifth International Telekom Beethoven Competition in Bonn from December 6 - 14, 2013. During the reporting period we once again put out a request for submissions from young pianists who would like to participate in the competition. Twenty-four participants will be invited to the competition.

### Telekom Street Gigs—the music experience.

Since 2007, German and international mainstream artists have been appearing at unusual places like ferries, botanical gardens and parking structures as part of the Telekom Street Gigs events under the slogan, "The best bands where no one expects them to be." Tickets to the events are limited and are given away as prizes in Telekom sweepstakes. However, the events are broadcast live online as well as by various television stations. The Telekom Street Gigs are particularly popular among young people. During the reporting period, more than 65,000 people participated in sweepstakes to win concert tickets to see Casper, Jupiter Jones, Linkin Park, Billy Talent and Medina. We also held a talent special with upcoming artists and a punk rock special featuring three bands.

### 140,000 active community members.

The number of active community members has increased considerably by almost 50 percent to around 140,000 members. The live online streams of the concerts were very popular in 2012 as well, with 75,000 people viewing the broadcasts. The street gig with Linkin Park was viewed more than 1,000,000 times on YouTube within just a short amount of time. Another 2.5 million viewers watched the concerts on TV. In addition to the German TV station, ProSieben, Telekom got other TV stations such as Viva, sixx and iMusic to broadcast the concerts during the reporting period.

With the Telekom Street Gigs events, we have been making another contribution to the German music scene since 2007. According to a market survey conducted throughout Germany in late 2012, 40 percent of those surveyed said they were familiar with the events.

### Electronic Beats throughout Europe.

Telekom's international music marketing program, Electronic Beats, saw a total of 18 music events being held in Germany, Austria, the Czech Republic, Hungary, Croatia, Poland, Slovakia, Montenegro and the Netherlands in 2012. More than 30,000 fans celebrated upcoming and established artists like the Pet Shop Boys and New Order. In June / July 2012, we also organized a photography and cover artwork exhibition by the band New Order at the .HBC Berlin club. The band was available at the opening to answer questions.

The [electronicbeats.net](http://electronicbeats.net) website recorded around 200,000 clicks a month in 2012 and the number of Facebook visitors even increased to 380,000 during the top months. The Electronic Beats profiles on Soundcloud and Twitter have thousands of followers. The music and club culture magazine, Slices, which is published four times a year, has also been well received and is now available in ten markets. Telekom will continue to support Electronic Beats in 2013.

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Telekom's music and lifestyle program, Electronic Beats, can look back at more than ten years of success. In addition to live events held all over Europe, the program includes a music and club culture magazine that is published every three months, the Slices DVD series with new releases from the world of electronic music and the online platform, [electronicbeats.net](http://electronicbeats.net).

### Slovak Telekom supports Roma music.



Slovak Telekom was a general partner of the International Roma Festival held at Red Castle in August 2012. This open-air festival is a forum for Roma artists to present their culture and features typical Roma food and hand-made products. The NGO Wild Poppies, which runs a scholarship program for Roma children from poor families or orphanages, also enabled these children to attend the festival, to which Slovak Telekom donated EUR 40,000. Slovak Telekom also partnered the Roma Christmas Concert 2012. CDs from the concert and the summer Festival have been sold and the money raised returned to the Wild Poppies in the form of a donation.



Life is for sharing.

2012 Corporate Responsibility Report

We take responsibility.

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## Employees.

### #TOP RANKING

Telekom ranked at the top among DAX companies with around 9,300 trainee position offers.

#### Find out more

As a global corporation, we are involved in a fast-paced industry that is driven by innovation. We expect our employees to be highly flexible and ready to face new challenges throughout their careers. It is our duty as an employer to create the space and framework our employees need to meet these challenges. We support our employees by giving them a sustainable work environment and professional and personal development opportunities as well as promoting health and personal life balance. Our offers are targeted at the needs of our employees and take different phases of life into consideration. They range from new career training and company day care to encouraging intergenerational dialog.

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## HR responsibility.

We are pursuing the ambitious goal of delighting our customers and making things simpler. Our goal is to create the best customer experience possible—in everything we do. This is what our employees worldwide strive to put into practice every single day. Our responsible HR policy is a key factor behind our success. With our new HR strategy adopted in 2013 we have initiated a comprehensive process to update our corporate culture in order to increase the Group's competitive edge, innovative strength and ability to transform the Group on a long-term basis. Just like our Group-wide Employee Relations Policy and our Social Charter, our new HR strategy is a perfect example of how seriously we take the responsibility we bear toward our employees.

### The strategic context.

"Seamless connectivity for the Gigabit Society," "More innovation by cooperation," "Secure cloud solutions," and "Best-in-class customer experience"—these are the four action areas of Deutsche Telekom's Group strategy. Their implementation is defined by the call to "Compete—Transform—Innovate" which, in turn, provides the framework for our human resources strategy. We have also incorporated any external factors that could influence the focus of our personnel strategy, including megatrends such as globalization, individualization, sustainability and demographic change, as well as Deutsche Telekom's competitive environment. Our mission is to permanently support and accelerate the success of our company and our employees.

### Productivity, Performance, Power—the three main drivers of our HR strategy.

In early 2013, Telekom introduced a new human resources (HR) strategy and laid the framework for its implementation. Our strategic principles are clearly formulated: HR's role is to accelerate the success of the company and its employees. Through these principles, we promise to develop processes and products with a measurable influence on the success of our company and its employees. Our HR work is therefore clearly centered around the three strategic thrusts of Productivity, Performance and Power.

- Productivity means deploying employees with the right skills and attitude, in the right place, and at an appropriate cost in relation to capacity. This is one of our fundamental tasks.
- Performance means systematically focusing on performance and establishing a leadership concept that supports and rewards achievement transparently and appropriately.
- Power means our company's agility, flexibility and capacity to innovate. We create the framework conditions to inspire and motivate our workforce.

These three strategic drivers make a decisive contribution towards Deutsche Telekom's corporate success.

### Four strategic cornerstones: "HR BIG 4".

We have defined the following four focal areas for 2013:

HR BIG 1: We manage our internal and external employee structure to maximize productivity. This means

- Consistently implementing Total Workforce Management and
- Introducing External Workforce Management for comprehensive control of outsourced work across all Group units.

HR BIG 2: We embrace inspiring leadership principles to encourage and reward top performance. To this end, in 2013 we are

- Preparing to roll out a new performance management system for our executives to inspire even more entrepreneurial ideas and actions, and
- Introducing Group-wide leadership principles for the first time.

HR BIG 3: We create modern work environments where professional experience and knowledge can be shared and enhanced.

We achieve this by

- Applying work models that reflect the different lifecycles of our employees in line with the demographic structure of our workforce,
- Introducing modern workplace concepts and new worktime models.

HR BIG 4: We are committed to clear and simple processes.

#### HR MOVES!—eight strategic initiatives drive the implementation of our HR BIG 4.

We are speeding up the implementation of the HR BIG 4 in 2013 with the HR MOVES! program. We bring together eight strategic initiatives that address our most important topics in our HR MOVES! program:

Demography, work environments, collaboration, efficiency, leadership, performance and costs. These initiatives will maximize the effect of the HR BIG 4 in Deutsche Telekom's operational business. Here is an overview of the initiatives:

- **Demography as an opportunity:** We identify the challenges associated with demographic change, and develop appropriate solutions. The priorities are lifelong learning, health, concepts for greater flexibility of working hours, and cultural change.
- **Future Workplace:** In an initial pilot project, we have developed a workplace concept which incorporates architectural requirements and the necessary IT infrastructure, whilst also accommodating the culture of collaboration. Our office space is carefully designed to create a modern working atmosphere and encourage close collaboration between employees. This concept will become our standard for optimizing the Deutsche Telekom Group's property portfolio.
- **Global Collaboration:** We support international cooperation within the Group. This means encouraging the use of English in day-to-day operations. We are also developing technical solutions to make virtual collaboration even easier.
- **Fix the Basics:** We are scaling back the complexity of our HR products and processes, and streamlining the entire HR portfolio. We are also working on an integrated, customer-centric HR process landscape with extensive automation.
- **Deutsche Telekom leadership principles:** For the first time, we are developing uniform Group-wide leadership principles, and integrating them into our leadership processes and systems.
- **New Performance Management:** This initiative will simplify existing performance management tools for our executives, with an emphasis on rewarding strategy implementation and initiative.

- **External Workforce Management:** Our aim is to reduce the cost of outsourced work using efficient control mechanisms. To this end, we are introducing uniform quality criteria that will affect the volume, price and skills structure of our external workforce.
- **The Way We Work:** We are implementing methods and work processes in the HR unit to make our day-to-day working practices even simpler, more customer-centric and result-focused.

## Realizing HR projects with transparency and efficiency.

HR at Deutsche Telekom has positioned itself as a partner and recognized consultant for operational business in the Group. We fill this role best by consistently focusing our activities on the needs of our internal customers, namely the employees at Telekom, who give their best every day to satisfy the Group's customers. That is the reason why we critically evaluate our product and service portfolio, along with our processes, at regular intervals. We keep three principles in mind:

- We tailor our offerings in response to the current needs of the various business areas in the Group.
- We speak the language of our customers and draft our offers in their language.
- We provide our products and services throughout the Group in line with consistent and standardized categories.

### For more simplicity: the HR portfolio under review.

In 2013 we are striving to achieve more simplicity through a number of concrete measures:

- The strategic HR initiative Fix the Basics helps us focus our attention on the simplicity of current HR products. That also means reducing the complexity of our product portfolio. Obsolete or inadequate products need to be upgraded or discontinued.
- HR Category & Product Management is an initiative for 2013 that is specially designed to sharpen the profiles of HR roles and establish clearly defined responsibilities in the Group. These roles have been defined according to the three-pronged model adopted by Telekom HR: Management and controlling tasks are the responsibility of our HR Competence Centers, while our HR Business Partners  provide consulting for strategic HR topics, and Group HR Services take care of our operational business matters. This structured approach enables us to constantly improve our cross-segment HR performance and facilitate smooth interaction among the various HR roles.
- In addition, the Lean HR initiative provides the Group with a market-conform rate in terms of HR support for the business side. This means that we continually improve our HR functions at all levels to achieve more efficiency. HR support should be available to management and employees in a quality that is in line with industry standards, with a consulting ratio comparable to that of similar ICT enterprises.

By accepting responsibility, by taking customer feedback seriously and by responding to key issues with consistent action, HR clearly focuses its efforts on meeting the requirements of the business side.

## Employee Relations Policy.

Group-wide standards regarding employee relations as well as working with trade unions and employee representatives are developed by a department that was set up at Deutsche Telekom especially for this purpose. The department also encourages the different countries to exchange information about employee relations.

The Employee Relations Policy, which was rolled out throughout the Group by late 2012, defines the core elements of Deutsche Telekom's human resources policy and describes what we stand for in our relationships to our employees around the globe. These relationships are characterized by our shared values and are derived

from our five Guiding Principles as well as from additional Group policies. Our Employee Relations Policy also addresses the following topics:

- Employee development
- Handling change responsibly
- Healthcare and sustainability
- Fair pay
- Achieving a good life balance
- Leadership
- Diversity
- Ban on discrimination
- Communication
- Collaboration with employee representatives

We began using indicators to monitor the Employee Relations Policy in 2013. We are also planning to conduct reviews in different countries over the course of the year. We will be monitoring the Employee Relations Policy and conducting related measures on a continual basis.

### Accompanying measures for the Employee Relations Policy.

We developed various accompanying measures for Group-wide introduction and implementation of the Employee Relations Policy in 2012:

**T-Mobile USA:** The Best Place to Perform and Grow initiative was founded at T-Mobile USA to improve employee satisfaction. A project team is collecting feedback from employees as well as from exit interviews. The results of the employee survey will also be used. The team is also developing measures in the customer service area that will help to communicate information more effectively, improve the employees' growth options and motivate them to work even harder.

The company also continues to promote an open-door policy so that any accusations of harassment or discrimination can be thoroughly and fairly investigated as quickly as possible. This communication initiative informs employees of their rights and gives them contact information for submitting complaints, concerns or similar.

**T-Systems South Africa:** Our activities at T-Systems South Africa exceed local standards and legal regulations. Regular dialog takes place between management and employees even though no labor union is represented at the company. This is known as "Employee consensus seeking approach" and helps take account of employee interests in the corporate decision-making process at an early stage.

**T-Systems Malaysia:** In early 2012, T-Systems Malaysia developed a new hiring procedure for managers based on the Guiding Principles and the Employees Relations Policy. The procedure defines who should participate in the selection process, the various steps to be taken and the required qualifications. The plan is to integrate the procedure into the company as a standard process with clear role assignment and responsibilities and, on a long-term basis, as a measurement system based on KPIs that will make sure that managers act as role models in terms of the Deutsche Telekom Group's Guiding Principles.

### Social Charter: Complying with minimum standards.

We passed our Group-wide Social Charter [\(Download\)](#) in 2003. The Charter is based on the principles of the Global Compact [\(I\)](#), the OECD guidelines and the core labor standards set out by the ILO. It specifies compliance

with international standards. The Social Charter [i](#) addresses key topics such as the ban on child labor, equal opportunity, occupational health and safety and the right to form and join a trade union (the right of free association). Our suppliers are obligated to comply with these policies as well.

We publish an annual social performance report in which we assess our Group companies' compliance with the principles set forth in the Social Charter [i](#). In 2012, we added two detailed questions on the topics of freedom of association and collective bargaining to our annual survey. The responses we received show that our Group companies are complying reliably with the principles contained in our Social Charter [i](#). That means that all of Telekom's consolidated units both in Germany and abroad conducted their business in compliance with our Social Charter [i](#) in 2012. You will find a summary of our 2012 Social Performance Report on the Deutsche Telekom website.

The head of Group Relations Management is responsible for all matters dealing with human rights issues at Deutsche Telekom. The topic was assigned to this function in November 2012.

### First collective agreement at T-Mobile USA.

T-Mobile USA is a good example of our high international standards when it comes to employee rights. Contrary to some statements made, the international subsidiary complies with U.S. labor law without exception, including policies and legally specified processes regarding the right to set up and join a trade union. T-Mobile USA does not prevent any of its employees from setting up or joining a union and does not discriminate against those who do. On October 23, 2012, T-Mobile USA signed a collective agreement with the US Communications Workers of America (CWA) trade union. The agreement concerns 16 employees in Connecticut who voted for union representation on July 19, 2011.

Some features of the collective agreement particularly worth mentioning are the performance-based pay system, health insurance benefits, disability insurance, life insurance, accident insurance, paid leave, employee benefits, advisory services and reimbursement of work-related education and training fees.



## Corporate culture.

Together with its employees, Telekom has initiated an extensive transformation of our corporate culture with the aim of creating more agile and more efficient work processes and encouraging our employees to take a more innovative and entrepreneurial approach. We are working to encourage our employees to take responsibility, expand international collaboration and strengthen our corporate culture, which is based on trust, throughout the Group. Our Guiding Principles and our Code of Conduct are the foundation of our shared, global corporate culture.

### Our Guiding Principles—the foundation of our corporate culture worldwide.

Having a clear orientation based on accepted values is an integral element of our corporate culture. At Deutsche Telekom integrity, mutual respect, reliability, consistent customer orientation and performance orientation are among the principles that guide the conduct of our employees. These values are defined in our Guiding Principles, which are binding for all 56 Group companies—with the exception of OTE in Greece—that represent the consolidated units comprising Deutsche Telekom. OTE will be completing the implementation of the Guiding Principles during 2013.

The Guiding Principles are firmly rooted in our corporate and HR processes, such as the employee competency models and the performance review procedures in all of our subsidiaries. This enables us to create a viable basis for our corporate culture that is consistent throughout the Group. Through events and specific campaigns, we raise our employees' awareness of our basic values and encourage them to act in accordance with our accepted principles. The highlight in 2012 was Guiding Principles Day, which was observed throughout the Group for the third time.

Our employees confirm that our commitment to the values represented by our corporate culture is paying off: 63 percent of those participating in the Group's 2012 employee survey said that acting in accordance with the Guiding Principles is becoming an accepted practice every day, and they view these principles as the solid basis for effective collaboration.

### **Guiding Principles Day. Anchoring corporate culture in daily working life.**

In order to make practicing the Guiding Principles a matter of course, a Guiding Principles Day is held every year at all Group units. All of our employees are called upon to think about the Guiding Principles and come up with ideas on how to implement them in day-to-day work. The third Guiding Principles Day took place on September 26, 2012, with a great turnout. This event took place in 34 countries and 50 business units, with inspiring and novel activities conducted in 19 different languages to underscore the importance of our Guiding Principles. Activities included team events, discussion panels and surprise flash-mob dance performances.

The day's success continued even after the event was over. Around 500 pictures, videos and comments on Guiding Principles Day were handed in to be published in the intranet, and the intranet special, which we launched in June 2012, had been clicked more than 100,000 times by the end of the year. The next Guiding Principles Day is scheduled for September 25, 2013.

### Code of Conduct: promoting compliance every day.

Ways of living up to the values of our Guiding Principles every work day are defined in our Code of Conduct, which applies throughout the Group. The code supplements the values stated in the Guiding Principles by outlining clear, legally compliant approaches to daily conduct that must be followed by our employees. Thus the Code of Conduct serves as a bridge between corporate culture and compliance awareness, offering us support in maintaining daily business conduct that is both ethical and legally compliant in every way.

The Code of Conduct was completely revised in 2010 and 2011, and was implemented in all of the fully consolidated companies within the Group. We monitored the implementation process in all units until the end of 2012 via the pulse check. When the implementation process was completed, some 72 percent of those surveyed said that the Code of Conduct represented an important source of orientation that influenced their professional behavior.

There has also been an increase in the number of employees who believe that they can report improper conduct without suffering negative repercussions. The proportion of employees throughout the Group sharing this view increased from 67 percent in 2010 to 75 percent in 2012, according to the results of the employee survey.

Campaigns, training sessions and guidelines spelling out the specifics contained in the various sections of the Code of Conduct were at the core of our activities in 2012. Typical examples included the anticorruption campaign and many on-site compliance training courses that were held throughout the Group. We also support employees by providing them with the latest guidelines pertaining to topics such as consulting and sponsoring.

### Standardized tools and international network support cultural transformation.

Telekom wants and needs to provide its customers with excellent service at competitive prices, both on our domestic market in Germany as well as at our European subsidiaries and affiliates. That is why we are continuing to restructure our company. Our goal is to structure the company in a way that will make it as efficient as possible while providing maximum flexibility for our customers. That means our employees need to be ready to embrace the change. We introduced a change management system throughout the Group in 2009 to help our employees adjust to challenging changes during our transformation to the "new Telekom" and to firmly establish the new structures and the new corporate culture as part of their daily work. Our globally available Change Navigator, a kit of tools and information on the topics of change and change management, is intended to help create a uniform understanding of the transformation that is taking place throughout the Group. As a Group-wide best practice platform, the Change Navigator helps design appropriate measures for managing change projects and processes. We continue to advance the Change Navigator with the help of experience and feedback. However, this tool cannot replace the professional assistance of change experts. That is why Telekom offers certified on-site training programs where the HR Business Partners  and managers at the business units can become change managers. We also make sure our change experts are networking effectively and communicating regularly through channels such as social media platforms and teleconferences.

### Promoting agility, knowledge transfer and innovativeness—a new unit is leading the way.

We are consistently redefining the role of Human Resources. In January 2013 we began bundling activities related to cultural transformation at Deutsche Telekom and established the Group Transformational Change unit to manage these activities. This unit develops sustainable solutions and offerings for the world of the future—both professional and private. These solutions include new forms of internal and external collaboration, agile work models, improved innovation and service orientation, as well as measures for promoting

entrepreneurial thinking and action. A series of pilot projects were launched in 2012. We then boosted these activities in 2013. Instead of utilizing standardized training and seminar programs, Group Transformational Change applies creative approaches that address specific needs as they arise. The concept is renewing our corporate culture – not by merely following directives issued by headquarters, but rather through concrete measures and initiatives originating in the various Telekom business units.

## Continuing to expand our service orientation.

Delivering the best possible service to our customers—anytime, anywhere—is a fundamental tenet at Deutsche Telekom, and it is one of our most important competitive value propositions in today's market. We have launched numerous initiatives and programs to raise service awareness in all Telekom companies and segments. These activities will ensure that we are—and remain—the customer's first choice. One example of these efforts is the Voluntary Christmas Helpers program at Magyar Telekom, in which more than 200 additional employees voluntarily help their colleagues in the shops during the holiday season. And Slovak Telekom presents the Service Hero Award to those employees who demonstrate outstanding service consciousness. We have initiatives and programs in nearly every Group company so that we can maintain and improve the high quality of our service.

In Germany we have also relied on our Service Academy since 2008. In fact, all managers are required to participate in this program. The goal of the Service Academy is to maximize service consciousness, customer understanding and service competencies, especially for managers who do not have direct customer contact. To reach this goal, managers participating in the Service Academy are given an opportunity to learn about what customers expect from us in daily real-life situations. In addition to providing theoretical knowledge, the program also helps participants gain hands-on experience by having them visit various service units and shops, where they carry out tasks involving direct contact with customers. Over the past five years, 98 percent of our managers in Germany have participated in the Service Academy annually. In 2012 the number of those taking part in the program was about 1,800.

We are currently working on plans to further develop the Service Academy, which is a German initiative, so that we can transform it into an international program. In the future the target group will not be limited to upper-level management in Germany, but will also include international participants across all hierarchies. Future program content will be comprised of theoretical and practical modules that will be developed in collaboration with our stakeholders.

## Diversity & equal opportunities.

Deutsche Telekom represents a union of people from 34 countries where it does business, and our employees have different cultural backgrounds, expectations and capabilities. We encourage this diversity and utilize it as a source of creativity and agility. We are convinced that diversity makes social integration easier and that it has a positive impact on career development. Diversity improves customer understanding, promotes innovations and contributes to the business success of the Group.

Furthermore, this diversity is a key factor that drives change within our corporate culture, thus ensuring that Telekom is an open, flexible and agile organization. Our diverse teams, comprised of men and women of different nationalities and age groups, follow different approaches and establish synergies that enhance their competencies in ways that bolster our success in global markets. That is why we offer all of our employees a wide variety of opportunities to grow both personally and professionally in all phases of their lives: in Germany and internationally, for men and women, young and old. One important aspect in this approach involves scenarios that contribute to more flexible working hours. In 2012, our activities included further expanding our program for improving the reconciliation of work and private life, [work-life@telekom](mailto:work-life@telekom). By signing the Diversity Charter, created by the initiative of the same name, we made an official commitment to promoting diversity at the company.

### Gender as a cornerstone of diversity.

It is our conviction that diverse teams, comprised of men and women from different age groups, follow different approaches and contribute different skills that bolster our success in global markets. That is why promoting diversity is one of the most important objectives at our company and will also help us increase the number of women at all company levels.

#### More and more women in management positions.

In 2010, Deutsche Telekom was the first DAX 30 enterprise to announce the launch of the Fair Share initiative, with the goal of appointing women to fill 30 percent of the leadership positions available in mid-level and senior management throughout the Group worldwide by the end of 2015. To achieve this goal, we are focusing our attention on development programs for women in the company who demonstrate management talent. We support women not only with an eye toward their future management career, but also in their current positions of leadership.

- In doing this, we tie Fair Share to segment-specific target structures and, based on standardized reporting, examine the measures taken to achieve these targets.
- We rely on the steadfast commitment on the part of our management employees, and we expect that our managers serve as role models by acting in ways that reflect the values of the Group. We support this with specific communications measures.
- We integrate diversity-compliant quality standards in all HR products and processes, especially in our hiring and appointment processes.

Membership in the women's network, which is sponsored by the Group, rose considerably. The network is already being used by more than 1,000 women.

 **training: Effective management of mixed teams.**  
We launched our Group-wide gender collaboration training program in late 2010. The training is mandatory for all managers. The course helps prepare managers to lead mixed-gender teams and opens their eyes to the potential of diverse employee groups. By December 2012, more than 3,600 managers had attended these courses in Germany alone.

 recent past indicates a significant improvement since the women's quota was introduced. The proportion of women in management positions across the Group increased from 19 percent in February 2010 to 24 percent in December 2012. Compared to December 2011, the figure underwent a slight 0.7-percent drop owing to the reorganization (including the sale of parts of the company) at T-Mobile USA. In all other segments the figure continued to rise, as in previous years. Since 2010, we have also consistently increased the proportion of women in our supervisory boards, particularly on the employers' side. In 2010, 17.7 percent of employer representatives in Germany were women, rising to 24.8 percent by the end of 2012. During the same time period, the proportion of women representing employer interests on the supervisory boards of our international businesses increased from 7.4 percent to 25.5 percent. Furthermore, two out of the seven Board of Management positions have been held by women since 2012. The number of women in our Business Leader Team, the international management team below the Group

## Demography as an opportunity.

Today much of the work done in Human Resources is influenced by demographic change in some way. And we are actively taking up the challenge associated with this development. In our selection and placement processes, we do more than examine grades and report cards—we also carefully evaluate the personal and social skills of job candidates. We offer our employees attractive training opportunities, we promote their careers through long-term skills development programs, and we promise them new and interesting perspectives for their future in the Group—all of this contributes to employee retention.

In light of the current demographic trend, it is our aspiration to accompany and support each and every employee throughout his or her individual life cycle while a member of our workforce. One important aspect in this approach involves scenarios that contribute to more flexible working hours. The introduction of lifelong working time accounts is the first step in this direction.

Health is another key aspect related to demographic change. When it comes to matters of health, we are already taking the lead with initiatives that promote good health among employees.

The age spectrum of our employees is continuously widening, and the average age of our workforce is on the rise. Employment lifetimes are also becoming longer. We utilize and manage this development with new teaching and learning formats. New teaching and learning formats geared to experience and age.

### **Intergenerational dialog and demographic awareness.**

Deutsche Telekom began offering different educational and development options several years ago, addressing the educational and professional needs of its increasingly heterogeneous staff. In addition to traditional training courses, we also included more informational and educational offers on the topic of life balance and intergenerational dialog. In two workshops on the topic of 45-plus conducted during the reporting period, we collected ideas on creating a working environment that equally meets the needs of both younger and older employees. In a special ideas competition, people submitted more than 270 suggestions on how Deutsche Telekom could better adjust to meet the needs of employees and customers from all age groups and tap the strengths of every generation. Since 2012, we have also been giving our employees the chance to take shorter or longer periods of time off, e.g., for continued education, with new, flexible working models.

Deutsche Telekom is also involved in different individual initiatives outside the company, such as the "Internet—it's not a question of age" competition. The 50plus customer advisory council also gives the Group advice when it comes to developing and introducing products and services designed especially for the 50-plus generation.

## Diversity in our work culture.

### **Internationality: More effective exchange.**

Encouraging collaboration across borders and cultures is one of Deutsche Telekom's central goals – whether it be in the form of international exchange through our diversity network or through our international development programs.

### **Sexual identity.**

In September 2012, Deutsche Telekom received the Max Spohr Prize, one of Germany's most important

diversity awards. The award goes to employers who implement diversity management at all levels, also regarding sexual orientation. In order to encourage an open-minded working environment, we support queerbeet, the employee network for homosexual, bisexual and transsexual employees. We also maintain close partnerships with Völklinger Kreis and Wirtschaftsweiber, two associations for gay and lesbian managers. A Deutsche Telekom recruiting team also attended the Milk career days, Europe's largest job and career trade fair for homosexual and heterosexual professionals on June 9, 2012, in Berlin.

Deutsche Telekom rolled out a Group-wide sexual harassment policy in 2011 to raise awareness of possible cases of sexual harassment and provide support. Contacts for reporting sexual harassment include managers, Human Resources employees and employee representatives. Complaints will also be used as feedback when making future changes to the policy.

### **People with disabilities: statutory quota surpassed.**

Supporting and integrating people with disabilities is important to us. 6.4 percent of our employees in Germany are disabled, putting us well over the statutory quota of 5 percent. We conducted some 937 measures for making the workplace better suited to people with disabilities and maintaining existing facilities during the reporting period.

In 2012, we also offered our second theoretical and hands-on training course on secure, fuel-efficient driving for employees with hearing disabilities. Eleven employees from Telekom MobilitySolutions in Munich—including three trainees—participated.

The LVR Rhineland Regional Council also awarded us the distinction of "disabled-friendly employer," in recognition of our exemplary commitment in the Group Business Security unit, which has created additional jobs for disabled employees and increased their employment rate to around 22 percent, significantly above the national average.

### **Life balance: the harmonization of work and private life.**

We feel that it is very important for our employees to be able to strike a balance between their dedication to work and their interests in private life in the best way possible. That is why we continue to promote our life balance activities in a focused way, also sharing our expertise at the international level. We surveyed employees in 32 of our international subsidiaries with regard to life balance matters, such as reconciling family life with work, health and fitness, working conditions and the advancement of women. This survey was used as the basis for establishing an online platform to support the continuous exchange of information about best practices and projects that had been especially successful.

### **work-life@telekom program.**

Mobile work environments also offer many options for harmonizing work and private life. That is why Telekom expressly promotes mobile work options. At the same time, mobile work options come with other stressors, particularly if managers require their employees to be constantly available. In 2011, Deutsche Telekom became one of the first companies to require its managers to make sure their employees were using e-mails and phone calls responsibly and to set an example through their own behavior. The relevant policy states, for example, that employees do not have to answer e-mails outside of working hours.

Our work-life@telekom program is designed to systematically improve the balance between work and home life. In the year under review, we continued to extend the range of options available. Since 2010 we have increased the number of

company childcare places in Germany by 212 to a total of 559, and the number of places for schoolchildren during the school holidays from 170 to 300. At the same time, we have also set up seven new parent-and-child offices at locations across Germany, and are planning to create at least ten more over the coming year to cushion any childcare shortfalls. Free assistance is available to help employees find local childcare places, together with an emergency child-minding service. Not only female but also a growing number of male employees are consciously making time for their children, as indicated by a doubling in the proportion of men who take more than two months' parental leave, which increased from 11.3 percent in mid-2012 to 22.1 percent by late 2012.

## Supporting a good life balance.

We continue to promote life balance in Germany with the following supportive measures:

- Fathers' network: The Heimspiel fathers' network provides information on how to coordinate career and family as well as contact information and discussion forums.
- Holiday program: Organizing holiday activities for our employees' children
- Youth exchange program: in 2012, second international youth exchange
- Free emergency childcare
- Free assistance in finding local childcare facilities
- Advisory and placement service for employees with elderly family members in need of care
- Leave of absence for family emergencies
- Family vacation offers: used by 40,537 employees and their families in 2012
- Family support services: advice and arranging of services through the AWO welfare organization's parental service

There are many examples of progressive life balance activities being conducted at our international subsidiaries:

- T-Systems UK: The Keeping in Touch program for employees taking time off after childbirth or adoption or taking parental leave. The program gives qualifying employees up to ten days of full pay where they can either work at the office or participate in training courses or conferences.
- T-Systems Austria; T-Systems Switzerland: Part-time hours for managers.
- T-Systems Italia: The company set up a company daycare center in Milan.
- Building child-friendly offices in Hungary
- T-Systems China; T-Systems Slovakia: Implementing the policy for employee use of company cell phones in their free time.
- T-Systems Czech Republic; France Télécom-Orange: Implementation of home office guidelines that we approved to promote more flexible working conditions at an international level.

### Flexible working models.

Having the chance to structure your work according to your own needs considerably improves your life balance and helps prevent stress and the feeling of being overworked. That is why Deutsche Telekom expressly encourages flexible working models. Deutsche Telekom's working models comply with current collective agreements for employees, the Federal Civil Service Act and internal regulations.

The range of possible working models has expanded already, and will continue to do so in future. Different forms of project organization including a flexible pool organization, location-independent and virtual teams are just some of the current options. We are committed to making our managers and employees fit for the future, since these forms of collaboration often require more trust and flexibility on both sides than a conventional working relationship.

Deutsche Telekom's flexible working model offer ranges from flex-time and part time to lifetime work accounts. Deutsche Telekom also expressly encourages mobile work forms where employees can work from home or on the go in order to be able to better coordinate their professional and private lives. With their manager's permission, Deutsche Telekom employees whose position allows for flexibility can work from a location of their choice.

### Customized models and voluntary commitment to promote part-time working hours.

Telekom is one of the first companies in Germany to take advantage of the opportunities of the Family Care Time Act. Since 2012, the company has been offering its employees the chance to reduce their working hours down to 15 hours a week for a period of 2 years to care for family members. Employees also receive a 50 percent advance to help compensate for the money they won't be earning because of their reduced working hours. The company then deducts a part of the advance from the employee's pay check each month once the employee has returned to their regular work schedule.

With the voluntary commitment to provide part-time hours for managers made by Telekom in 2011, the company is explicitly promoting part-time working hours for managers as well. The aim is to promote part-time work, with a view to improving the life balance and facilitating integration into everyday working life, for both women and men. Our voluntary commitment is already having an impact. The number of managers working part-time throughout Germany increased from 16 in 2010 to 37 in 2012. We have also made a similar voluntary commitment regarding employees under collective agreements and civil servants. 10.8 percent of employees covered by collective agreements and 19.7 percent of civil servants employed at Telekom throughout Germany are currently

working part-time.

Telekom also has many other part-time regulations to reduce working hours including job sharing, where two or more employees share one position. This option can be employed using a job splitting model where each employee is responsible for different tasks or via job pairing, where employees share responsibility for one area.

Other part-time models are structured for specific target groups:

#### **Phased retirement.**

Phased retirement is a model to help employees phase out their working hours to get them ready for retirement. Employees aged 55 and above can reduce their final working years and begin early retirement. Telekom offers phased retirement both as a block and as a part-time model:

- The block model consists of two phases: an active phase of generally one to four years followed by an equally long leave or passive phase.
- Employees participating in the part-time model continue to work until normal retirement at half of their previous working hours. This model will be available as of April 1, 2013.

Unlike regular part-time policies, Telekom pays a considerable addition to the employees' net part-time pay with its phased retirement offer. That means that reducing their weekly hours does not mean a severe reduction in net pay for employees.

#### **Part-time training for single parents.**

In September 2011 and in collaboration with the German Federal Employment Agency, Telekom launched a project to make it possible for single parents to attend training and study programs. A total of 16 single mothers have participated in part-time training and three have started a cooperative study program at Telekom since the project was launched.

#### **Returning to work after parental leave.**

Within the scope of the Stay in ContacT parental leave program, Telekom offers employees on parental leave a part-time program to help them return to work.

## Time-off with and without pay.

Telekom also offers employees different customized models, some of which are pre-financed by the company, for employees who want to take a specific amount of time off from work. In addition to traditional forms of taking time off such as vacation without pay, Telekom also offers different models for time taken off for particular reasons.

#### **Time-off for education.**

Time-off for education is based on the current vacation time offer without pay and makes it possible for employees to take up to four years off for a degree course or a doctorate. The employment contract is put on hold during this time and the employee does not receive any pay. In addition to policies for employees, Telekom also offers up to five years of time-off for education to civil servants who want to further their education or do a doctorate. This time does not apply to their pension and no salary is paid.

#### **Lifetime work accounts.**

Deutsche Telekom has been offering lifetime work accounts to managers at all German Telekom subsidiaries in which Telekom has a majority interest since July 2012. The model opens up new ways of achieving a better life balance in all stages of life.

Unlike the conventional long-term compensation time accounts for employees covered by collective agreements, lifetime work accounts are based on the deferment of remuneration components. Regular or one-time payments can be made to the lifetime work account from the executive's gross monthly salary as well as from the variable component. The credit is protected against insolvency and is invested in the capital market at a guaranteed minimum interest rate.

Managers can use their credit ...

- To take up to twelve months off (sabbatical), which the manager can use freely to pursue their own interests
- In the context of agreements to reduce working hours (part time)
- When taking advantage of leave options provided by law (family care, parental or caregiver leave)
- For early or phased retirement from active working life until reaching the applicable retirement age

We are planning to offer lifetime work accounts to employees outside of and covered by collective agreements within the Group as soon as possible.

### Award-winning diversity.

In 2012 we received a number of awards for activities that promote diversity in the Group while also establishing an integrative corporate culture. For example, with our comprehensive life balance concept, we were among the finalists in the 2012 "Family as a success factor" competition for business enterprises, launched by the German Federal Ministry of Family Affairs, Senior Citizens, Women and Youth. The Völklinger Kreis e. V. awarded us the Max Spohr Award because we accept the sexual identity of our employees as an enrichment of corporate culture. And the Rhineland Regional Council (LVR) awarded us the title Disability-friendly Employer.

Over the past few years our international subsidiaries and affiliates have also been distinguished for their efforts in establishing more flexible and family-friendly working conditions. For example, in 2012, T-Systems in the Czech Republic defended its third-place ranking as "Employer of the Region," while T-Systems Malaysia won the silver "Employer of Choice Award" and T-Systems Austria received the accolade "Great Place to Work." One good example:

#### **Family Friendly Employer Award for T-Systems Slovakia.**

Ever since the company was founded, T-Systems Slovakia has endeavored to ensure its employees enjoy a healthy life balance. In March 2012 the company's efforts in this field were rewarded when it received a Family Friendly Employer Award at an international conference on women in top management. The conference organizers welcomed the company's Life Balance program and their new Diversity Program, which among other things helps employees on parental leave to cope with the difficulties of combining work and parenthood. A Work Life Coaching scheme, which is part of the Diversity Program, offers professional advice, e.g., from a psychologist or financial advisor, for employees in stressful parenthood or family situations. The company's aim is to ensure that present and future parents do not have to decide between work and family but instead can combine their personal life with a career at T-Systems Slovakia.

## Employee recruitment.

We need competent and creative employees at all levels and in all areas of our company, whether apprentices, students on cooperative programs, young people at the start of their careers, or experts and executives with professional experience. Our forward-thinking human resources and talent policies help make our company more attractive. We are intensifying our profile on the global job market with our The Great Experience campaign. The international subsidiaries are also honing their message of exactly what it is that makes them attractive as an employer, showing future employees why they can gain unique, valuable experience at Telekom.

### Successful recruiting.

Deutsche Telekom's image as an attractive employer continues to grow, as attested by the host of awards received in Germany and Europe during 2012. The Career's Best Recruiters study gave us the silver seal in 2013 as the best telecommunications company. The Austrian government commended T-Mobile Austria for being the country's best training provider in 2012. Our Hungarian subsidiary, Magyar Telekom, was crowned Best Employer in 2012. The company has regularly received awards for its reputation as a quality employer since 2008. What's more, Telekom was also the recipient of many awards in Germany during 2012, especially for its diversity activities and online communication with talented young people using social media, the external Telekom career website and Telekom Job World. Telekom was able to successfully hire on 3,970 new employees in 2012.

Deutsche Telekom is also further expanding its international recruiting activities systematically to compensate for the lack of skilled workers in Germany. At the start of 2012, we launched a new international career website, the Global Career site with links to numerous countries. 70 percent of the website's users are international. The website also features our global job search. Employees can use the search to find any available positions at 19 international subsidiaries. The website also includes a link to the Facebook fan sites of nine international subsidiaries.

Internal and external recruiting standards are regulated throughout the Group by the Global Recruiting Declaration. 95 recruiters from 16 countries use the international recruiting community to share experiences and best practices. Our recruiting experts continue their development in international projects within the scope of the X-Change exchange program as well. This program gives employees in Germany the opportunity to spend between three and six months working at one of our international companies and for employees from our international companies to work in Germany.

### Targeted recruitment of female applicants.

We address female applicants with numerous activities in order to tap the potential of this target group and, in particular, to recruit more female junior staff. This helps us increase the number of women at our company and, as a consequence, diversity at the Group. We are also working to up the number of women in managerial positions over the long term. We conducted the following measures to encourage this development in 2012:

- We proactively offered internships in cooperation with the bachelor's program in computer science and

economics for women at the HTW Berlin University of Applied Sciences in Berlin.

- Our official partnership with the career network, Femtec, started in January 2012. We gave potential female applicants the opportunity to get some insight into what it's like in the professional world at different contact events.
- Female applicants were targeted through innovative job offers on our Careers website.
- "The most successful woman at Telekom" ad campaign was launched to increase women's self-confidence at the workplace.
- T-Systems participated in the "Dream job: IT expert" contact event in April 2012. There, T-Systems campaigned for more women to apply for jobs in the information technology sector.
- Deutsche Telekom participated in the women&work and womanpower career trade fairs. The visitors at the woman&work trade fair voted for us to receive the Female Recruiting Award for our excellent advice and consulting efforts.

## Employee recruitment: Leader in the use of social media.

Unlike a few years ago, today's applicants expect to be able to get direct insight into a company and what their future job could entail by using social media. Telekom has been one of the top German DAX 30 companies for years now with its Web 2.0 involvement. We were able to further solidify this position in 2012 by taking first place for the third year in a row in the HR social media activities of DAX 30 companies. In the Online Talent Communication study conducted by Potentialpark, a consulting firm, which assesses corporate activities on social media, career sites, online applications and mobile recruiting, we improved our ranking from 5th place in 2012 to 2nd place in 2013. We were also ranked second in the subcategory, social medial communication, which focuses on a company's Facebook and Twitter activities as well as the overall appearance of the career blog. Potentialpark surveyed around 30,000 people looking for employment worldwide for the study. We also came in first place in the "Social web activities" category in the Careers Best Recruiters study in 2012.

After receiving first place in 2012, Telekom launched an initiative of the same name, Careers Best Recruiters, on its Facebook careers site. Recruiters regularly introduce themselves there and present career-related topics, such as getting a job at the company through the Start up! program, the German federal government's grant program or internship opportunities at Telekom. The recruiters also answer users' questions. Fourteen recruiters gave advice in 2012 within the scope of this initiative. We were able to reach some 48,000 users from June through December alone. Our European subsidiaries are also increasing their use of Web 2.0 to communicate with their customers and other external stakeholders.

Deutsche Telekom was one of the first companies to reach a new level in HR marketing with the Your Idea! crowdsourcing project, which was completed in 2012, by having the target group develop an application aimed at itself. Telekom asked students and graduates to come up with an idea for an application for the TelekomKarriere Facebook fan page and a way to incorporate it into the online Careers website. We received 82 suggestions. The winning concept, Join Telekom—Match! was incorporated onto our Facebook fan page and our Careers website in May 2012. With the app, applicants can learn more about the corporate culture by taking a playful quiz on the [Guiding Principles](#).

### Telekom Job World: Apply in just five minutes.

Deutsche Telekom launched its new Telekom Job World initiative in May 2012. The initiative speeds up the application and recruiting process. Candidates with job experience only need five minutes to apply for available positions. Thanks to links to external job portals like Monster and StepStone and social media channels like Facebook and Twitter, our job offers are reaching a considerably larger number of applicants than ever before. Another attractive feature is the inclusion of recruiting videos so that managers can address the applicants personally. Recruiting experts can also upload their personal Xing profile with the job description, making the

offer more authentic and tangible. The fact that the Telekom Job World initiative is highly innovative and user friendly was confirmed by the Online Talent Communication study with second place in the online application subcategory.

### **Jobs for friends initiative.**

Telekom has had very good experiences with its Jobs for Friends initiative, which was launched in Customer Service in 2010. Employees are asked to recommend people they know for available positions at the company. Telekom guarantees that those recommended will be invited to an initial interview and, if we decide to hire them, the person who made the recommendation receives a voucher or bonus. Our success rate is around 55 percent. Out of 445 recommendations made by employees in 2012, we hired 246 new employees.

### **Pros Looking for Pros.**

The T-Systems program, Pros Looking for Pros, is also based on Telekom employees recommending Telekom as an employer to their friends. In 2012, 183 recommendations made by T-Systems employees led to a total of 92 new hires—a high success rate as well.

## **Successful start for students and graduates.**

We successfully continued our entry-level offers for graduates in 2012: the entry program, Start up!, and the direct entry program, Jump in!.

Start up! is our Group-wide entry program for ambitious university graduates. Participants benefit from project placements at home and abroad, with mentoring provided by experienced executives. Graduates of Start up! gain a comprehensive insight into our Group and build their own interdepartmental network of contacts.

In 2012, 29 graduates from different countries, 13 of whom were women, began working for Telekom through our Start up! program. Over the course of the 15-to-18-month program, participants tackle challenging assignments in different business areas in line with the corporate strategy, Compete—Transform—Innovate. A personal mentor works with them closely during this time.

We also offer Jump in!, i.e. direct entry into a preferred job field at Telekom, where new employees receive special support during the first 24 months with accompanying measures.

### **Flexible internships.**

The Bologna university reform substantially restricts the timing options for students doing internships. In order to give students the opportunity to make the connection between theory and praxis, Telekom has developed an internship model, the Flexikum, which gives students the chance to do an internship with flexible hours. The hours spent at the office are customized in consultation with the area the intern is working for to meet the intern's personal needs. In 2012, Telekom increased awareness of the new offer with a communication campaign.

### **360 grants in Germany by 2014.**

Deutsche Telekom has been supporting the German federal government's grant program since the 2011 summer semester. In 2012, a total of 94 grant recipients received financial support, a third of whom were involved in master's programs and two thirds of whom were in bachelor programs. They were also encouraged with individual internships, network events and regular dialog with the Telekom management. The program focuses on promoting STEM  degree programs. The Group will have sponsored a total of 360 students under the German grant program by 2014.

## **Actively targeting potential candidates.**

Telekom uses a series of events and programs to recruit students, graduates and people with job experience.

Our goal is to position Telekom as an attractive employer and show potential candidates the variety of career opportunities available at our company.

#### **Ambassadors at universities and field trips to the company.**

Telekom had a network of more than 500 ambassadors in 2012, i.e. experts and managers who give guest lectures or talks at universities. The personal contact that results contributes significantly to improving our image as an attractive employer. In 2012, we also continued to pursue the new Insights@Telekom format that gives students the chance to really see what it's like to work at the company with field trips to selected Telekom departments. Some 280 participants took advantage of this offer in 2012 by attending a total of 13 Insight events.

#### **Campus BeatBreak: Dance performance in the cafeteria.**

Telekom launched a guerilla marketing campaign in the 2012/2013 winter term with Campus BeatBreak, which was combined with a Facebook application. Dancers gave what appeared to be a spontaneous performance in the cafeteria at different universities during the main lunch hour. The dance was a humorous interpretation of what it's like to look for a job and then finally starting a career at Telekom. The performance was also an invitation for students to participate in a Facebook competition with their own dance video. The Telekom Facebook community helped rate the submissions, which also helped us attract a large number of new Facebook fans.

#### **Applicant numbers increasing thanks to school student marketing.**

Telekom is getting increasing numbers of applicants for technical cooperative study programs as well as applications from young women thanks to its successful marketing activities among school students. We offer information on career choices in our award-winning magazine for young people, reif, which is published in an engaging format. We invite students to take a virtual, playful look behind the scenes at Telekom by visiting our Knowledge changes everything platform, which we set up in November 2010. The platform is based on the needs and user behavior of our target group. Our participation this year in the major Ideenpark event in Essen was also well-received. The organizers of the family event describe it as being Germany's largest event for experiencing innovation and technology with around 320,000 visitors in 2012 alone. Telekom encouraged visitors to explore, presented itself as an attractive company and employer and talked about the importance of encouraging the study of STEM  subjects at two trade fair stands and in two workshops with around 170 participants in total. The highlight of Telekom's stand was a digital waterfall where visitors could display their SMS messages.



## Employee involvement & satisfaction.

Our employees want to be able to identify themselves with the company and help it grow. We get them actively involved, for example by providing a portal where each and every employee can contribute ideas and suggestions. More streamlined hierarchical structures, new forms of work and communication channels and regular surveys also promote open dialog and the productive exchange of ideas.

### Cooperation with employee representatives throughout Germany and internationally.

During the reporting period, we continued to engage in active dialog with the elected employee representatives within the Group in Germany. Without their cooperation, we would not have been able to successfully conduct a number of measures and projects. Results such as these are the fruits of our commitment to cooperation based on trust as outlined in the [Employee Relations Policy](#). A key role falls to the Group Works Council, our contact for all co-determination issues within the Group in Germany. In the European Works Council (EWC), Deutsche Telekom nurtures an active relationship with the employee representatives of our European subsidiaries and affiliated companies. We intensified our dialog in Europe and discussed current changes and challenges in our industry as well as the need to adjust framework regulations based on EU legislation during an EWC project week event. We continued our trusting collaboration with employee representatives at an international level as well.

### Social networks for networking and digital work.

Telekom is pushing ahead with the transformation of our working culture toward the concept of Enterprise 2.0. The term Enterprise 2.0 stands for all the options provided by social media for creating new forms of collaboration within an enterprise, in addition to new forms of customer contact. Above all, social media can dramatically improve communication within a business enterprise. More dialog takes place, and this leads to more transparency and communication irrespective of hierarchies. Employees have more opportunities for setting their own agenda with topics of their choice, and it is also easier for them to join discussions that are already underway.

Since 2007 employees at Deutsche Telekom have been building networks on internal social media platforms to exchange ideas and promote collaboration across departments. That is why we established the Telekom Social Network (TSN) in 2012, so that employees would have access to a central platform for their networking activities. By the end of 2012 more than 40,000 users throughout the Group were registered in TSN, and by late April 2013 the number had risen to about 60,000. Even members of the Board of Management are among the users. Thanks to these numbers, TSN has become one of the largest and fastest growing corporate networks in the world.

We conducted the following social media activities in 2012:

- We set up a Social Media Council to manage and implement our social media strategy. The council is responsible for implementing our external social media strategy and makes sure that people at the company

comply with the regulations when using social media. Representatives from the Social Media Council have the authority to make the final decision in escalation cases.

- More than 210 people responsible for social media discussed the topic of Enterprise 2.0 in four think tanks in 2012. They created a readiness check, which defines capabilities and specific components needed at any Enterprise 2.0 company.
- Deutsche Telekom developed an online training program to train all employees in how to use social media at the workplace and launched it as part of our regular offer mid-year. Numerous employees had completed the program by the end of the year.
- Other Enterprise 2.0 activities in 2012 included setting up the online large group format, Jam, and hosting the digital BarCamp event, which is organized by employees for employees.

We promote the use of social media at Deutsche Telekom through numerous marketing, communications and HR projects. The strategic HR initiative Global Collaboration plays an important role in this regard. It aims to improve collaboration throughout the Group, across all segments and national borders.

#### **Outlook: Governance framework and technological advancement.**

We are going to establish a mandatory governance framework in 2013 to provide guidelines for the internal and external use of social media throughout the Group. These guidelines will define and specify appropriate use of social media in areas such as marketing activities and in terms of data privacy and security.

We will advance Deutsche Telekom's social media channels technologically and connect different applications with each other via intelligent interfaces to make it easier for users to synchronize and use all of the applications. We also plan to develop a toolbox to monitor the efficiency of Enterprise 2.0 tools throughout the Group.

#### Ideas Management: utilizing the creative potential of our employees.

Ideas Management encourages employees to actively contribute to the constant, ongoing improvement of our products and services. Employees can submit their ideas for innovations. These ideas are then evaluated by our experts. If an idea is successfully realized, the employee is paid a bonus in recognition of his or her contribution. Suggestions submitted by employees have led to considerable cost reductions within the Group on a regular basis: In 2012, Ideas Management implemented 700 process, product and service improvements in Germany alone, resulting in overall savings of EUR 103 million. In 2012 our employees provided us with more than 13,000 ideas, which represented an increase of 20 percent over the previous year.

We continually support the further development of tools and instruments for Ideas Management. Two IT portals have become well-established in the Group: genial@telekom is a site where ideas that are ready for implementation can be submitted—whereas the Ideas Garden is a portal that supports joint development of new solutions. A third online platform—known as the Jam—was added in 2012. With Jam several thousand employees can work directly and interactively on concrete ideas or questions. Activities are clearly focused on a specifically defined task or issue, which participants must resolve within a specified time with support from a professional moderator. The platform was very popular from the start and has already hosted several jams. A jam developed for T-Systems drew 500 participants who generated more than 100 solutions during the specified time period.

The collective intelligence of our employees is also of great value for Telekom Prediction Markets. This new tool was introduced in April 2012 to support management decision-making. Employees use a simulated exchange and trading system to provide their market forecasts in response to current or strategic questions submitted by various Group business areas. This data is then analyzed and compiled to produce forecasts that are just as precise as those coming from professional market research organizations. In 2012 those participating in Telekom Prediction Markets addressed more than 100 different market issues. Some 1,100 employees have

already registered to use the tool.

## 2012 employee survey: Record participation level, plus improvements in nearly all areas.

The employee survey held every two years and the six-monthly pulse check are our most important Group-wide feedback tools. We use the pulse check several times a year to gauge employee morale as well as the progress we have made in those areas that need improvement as indicated in the last employee survey. Both tools are popular, as can be seen in the high participation rate.

Following the 2010 employee survey, we optimized the survey itself as well as the follow-up process. We reduced the number of questions and simplified the results report. We also improved support for teams during the follow-up process.

In 2012, we conducted our fifth Group-wide employee survey since 2005. We invited some 195,000 employees in 27 countries to provide us with structured feedback in 18 languages. Nearly 150,000 colleagues from around the world took part—that is 76 percent of all those contacted (the figure for the 2010 employee survey was 72 percent). Employees in Germany set an all-time record with a participation rate of 82 percent.

And there was more good news: The results at Group level, in almost all areas, were much better than those recorded two years ago. In some cases positive feedback increased by double-digit percentages. Responses related to employee commitment and leadership as a key factor in this category continue to be very favorable, receiving even higher ratings than those recorded in 2010.

The survey trend is also positive when it comes to health. This is certainly due to the fact that we launched and implemented specific initiatives and programs following the 2010 employee survey. One example involved experts at Technische Universität (TU) Dresden, our health services provider B.A.D. GmbH, the Employee and Executive Advisory Service, local works councils and specialist health managers, who provided extensive support and advice to teams with below-par health scores. These measures have paid off, both for our employees and in terms of our reputation as a responsible employer.

We are continuing to uphold this level of commitment, and in mid-2013 we will again ask employees to provide us with anonymous feedback by participating in the pulse check.

When it comes to feedback on work intensity, the employee survey revealed a slight improvement in comparison to the figures gathered in the last survey. We are keeping attention focused on this matter, and we will promote those activities that have been particularly effective to date. We will continue to offer appropriate workshops for both management and employees. In these workshops participants can practice how to cope with increasing workloads and stress, while also learning to develop ways of simplifying work processes.

In 2013 we launched the strategic HR initiative, The Way We Work, to promote work processes that are simpler, more streamlined and customer-centric, with an eye toward achieving better results. This initiative focuses attention on how we collaborate as colleagues and will begin with our own processes in Human Resources: We are making things less complex, in addition to establishing efficient approaches to solutions and promoting efficient collaboration methods. We will draw upon the lessons learned from various pilot projects and information from the open discussions conducted by our employees in Telekom's own social network. This approach enables us to promote culture change in collaboration with our employees as we strive to become more agile and efficient. According to our Guiding Principle "Customer delight and simplicity drive our action," we are all required to examine the efficiency and simplicity of our processes and change them for the better, if necessary.

Telekom is planning to begin documenting the improvement measures using an IT follow-up tool in April 2013 so

that we will be able to more effectively review the success of the measures that were developed based on the survey. This will make it easier for us to identify best practices and to support the teams more effectively during the follow-up process when our employees analyze their team's results and develop measures accordingly.

## Slovak Telekom: Multifaceted engagement with employees.

The focus of Slovak Telekom's activities in the year under review was on intensifying the engagement and on-going dialog with employees. This took place through a variety of formats:

- Employees were given the chance to discuss with members of the Board of Management. Though held in Bratislava, the forum was streamed to all other offices around Slovakia and shown on the intranet. 560 employees watched the forum on-site, 1,200 watched it online and 530 via the intranet.
- At five "Hot chair" events in 2012 senior managers discussed with employees on topics such as technology transformation or project management. Around 30 employees attended each event.
- Managerial Business Forum: Twice a year, members of the Board of Management meet up with the managers they are responsible for in order to discuss the business strategy and performance updates.



## Performance & development.

Every employee in our Group is given the opportunity to broaden their knowledge at every phase of their (professional) life, and to develop and grow. We believe that development should be closely linked to the individual life phase, because we are aware that employees' needs change over time. For example, those bringing up young children or caring for family members have particular employment needs. Learning interests are also constantly evolving: Recent university graduates are more interested in company-specific knowledge, whereas a long-established employee might be keen to broaden their specialist knowledge or share it with up-and-coming talents. With this in mind, our lifecycle-based approach to HR development includes a wide range of target group-specific offerings.

### Performance management as a basis for transparency and comparability.

Assessing the achievements, competency and potential of our employees provides the starting-point for their subsequent development. A uniform approach ensures the transparency and comparability of individual achievements, both for employees and for the Group. Based on these assessment results, we can offer challenging, inter-departmental or international prospects, as well as being able to promptly identify suitable successors when vacancies arise.

When assessing the performance status of our workforce, as well as target management, we also use the Performance & Potential Review (PPR) and Compass performance measurement tools. The PPR was made mandatory for all managers and experts in Germany and for all managers at international level during the reporting period. Successful pilot projects have already been conducted at some of our international subsidiaries to prepare the international roll-out for experts. Another system available to us in Germany is Compass. Compass is used to review both employees covered by collective agreements and civil servants. Both tools promote dialog between managers and their teams. This exchange, which includes regular feedback on performance and development measured against uniform yardsticks, allows employees to take stock of their current career position. On this basis, they can then liaise with their superiors to plan and implement subsequent development steps. Our assessment tools and related processes are constantly evolving to become even more efficient.

### Wider focus on talent management.

With our talent management program, we address exceptionally high performers who are likely to develop into a significantly more complex and challenging role in the foreseeable future. Talent management pursues several objectives simultaneously: To identify motivated talents, make them visible within the Group for suitable positions and decision-makers, support them with Group-wide networking, and ensure that they are considered in succession management. For example, one aspect of our Group-wide talent management system is the Talent Space program, Following the successful pilot initiative in 2010, we launched the second round of our international, cross-area program in October 2012. 43 percent of participants were women and around half, 49 percent, were international participants from a total of 22 different countries. More than 240 people with expert and leadership talent are currently participating in the program. Participants are given the opportunity to get involved in projects outside of their own unit, network with other talents at joint events, and receive specific

career support from a mentor. Talent Space is available to a number of functional units such as HR, Technology and Finance. In 2012 we additionally incorporated the Innovation unit, in view of its particular strategic importance to the Group.

In the past few years, our talent management activities have tended to focus on specific talent groups, so we will be expanding our talent focus considerably in 2013. Our goal is to be able to identify the individual talent of each employee and to develop that talent so that they are able to use it for themselves and for the company as effectively as possible. We will particularly be focusing on experienced employees and their skills. We will be placing greater emphasis on employee needs in different phases of their lives, such as coordinating training measures with phases of family life, when designing and conducting our talent measures.

### Go Ahead! establishes a framework for expert development and expert careers.

Our experts can take advantage of special courses for their personal professionalization and career development under the Go Ahead! system. In 2012, thanks to Go Ahead!, expert development and careers were raised to the same level of importance at our companies in Germany as management career paths, which are promoted by Step up!. This standardized system aims to make job requirements transparent and elucidate which development paths will lead to which career and development goals. At any time, our employees can use a dedicated tool to explore suitable training and development measures for their particular role. In 2012, around 85,000 employees in Germany benefited from Go Ahead!, and there are plans to give the scheme a more international focus.

Within the framework of Go Ahead!, we also offer a modular training system known as CAMPUS, aimed at developing and building essential strategic skills for experts. Within CAMPUS, we offer a portfolio of courses tailored to different sectors, such as finance and controlling. Our repertoire also includes a range of more general qualifications, such as project management.

Go Ahead! helps the Deutsche Telekom Group ensure medium and long-term skills planning and talent promotion across different areas. Both Step up! and Go Ahead! make it possible for employees to switch from an expert to a managerial career and vice versa.

### Internationalizing the Step up! development program.

Our Group-wide system for executive development, Step up!, includes the worldwide Leadership Development Program with its German Executive Development Program counterpart. In 2012/13, 414 employees and managers participated in one of the two programs. 41 percent of the participants were women. As part of internationalizing our leadership program, we have been preparing managers at the middle management level for higher positions exclusively within the context of the international Leadership Development Program since 2012. Employees and managers at the first managerial level also have the opportunity to participate in the German language Executive Development Program.

In 2013, we plan to shift the focus of both development programs more toward the individual and make the structure more modular in order to get participants ready to face the challenges of the next few years on the basis of a shared understanding of leadership and business priorities. This should help to support changes at the Group's business units even more effectively.

With our Step up! development program, we support employees who are preparing for their first management position with greater, permanent HR responsibility as well as managers on their way to taking on more advanced

assignments.

### Bologna@Telekom enables employees to gain a degree on a part-time basis while continuing to work.

Our Bologna@Telekom initiative encourages talented employees to study for a bachelor's or master's degree alongside their work, provided they have worked for the Group for at least two years. Each year, some 200 scholarships are awarded to employees wishing to study part-time for a Bachelor's or Master's degree. Since 2009, the scheme has even been open to those without formal university entrance requirements. As well as degree courses in information and communications technology, business information systems and economics, we also offer doctorates. Under the Bologna scheme, we pay half of the course fees at one of our partner universities and give students 10 days' leave of absence per annum for studying. Around 600 employees are currently studying for a degree under this scheme, 32 percent of whom are women, and a growing number of over-40s. All of them are increasing their employability parallel to working. For Deutsche Telekom, this represents a great opportunity to secure the loyalty of key top performers, and cover our demand for specialists. The first 33 employees graduated successfully from this scheme in 2012.

### New experience-based forms of teaching and learning for specific age groups.

The age spectrum of our employees is continuously widening, and the average age of our workforce is on the rise. Employment lifetimes are also becoming longer. We steer and utilize these developments by implementing new formats for teaching and learning. These new approaches are specifically focused on the needs of the different generations and life cycles found among our employees. By supporting these new training methods, we make a significant contribution to job security for our experienced and seasoned employees. In addition, we make every effort to meet current training and learning demands within the Group, such as integrating the learning experience in daily work processes. For example, we achieve this by striking a balance between formal training sessions (workshops, reality training) and informal methods (collaboration via our internal Telekom network). Hands-on, practical teaching, coaching and mentoring are also intended to generate enthusiasm for lifelong learning. We currently take this approach when training specialists for network infrastructures, and in vocational and academic training programs for employees with vast experience in communications engineering.

### Academic training at our in-house University of Applied Sciences.

Since 2012, some 48 communications and electrical engineers at the Group's own HfTL University of Applied Sciences (Hochschule für Telekommunikation) in Leipzig have taken advantage of continuing education opportunities to refresh and update their expertise. The average age of these engineers is 53 years. The course takes 18 months and consists of several modules from the Bachelor course in communications and information technology. It contains specific coaching measures and individual support from specially trained tutors. The curriculum takes past learning experience into account, and lectures at the university are supplemented by hands-on training sessions in the real world. Additional training programs in business administration and economics will be introduced at the university in 2013.

### Support for outstanding talent in the IT area.

In addition to our university involvement, we set up or continued other training initiatives in 2012 that further

enhance our search for and promotion of talent. This year another 28 apprentices and students at Telekom with a special talent for IT took advantage of the intensive training offered by the Young IT Talents program, which was launched in 2010. We also launched the Young Sales Talents program in 2012 for young staff members particularly talented in customer service and sales with 30 participants. Participants of both programs will have the opportunity to tackle challenging customer projects and earn additional qualifications in their own community, at internal and external trade and training events and in national and international competitions.

## Service careers help ensure customer service quality.

We have trained more than 3,400 employees in our "Service careers" HR development program since 2009, thereby securing high-quality customer service across the board. The program is comprised of seminars and practical elements such as job shadowing and working on projects. The program is generally available for personal and professional development to all employees from the areas selected for service careers such as sales or customer service. Another 215 employees began their service career program in December 2012 and January 2013. They expect to complete the program this year.

## International mobility, exchange and knowledge transfer.

In order to drive the development of know-how as well as a shared Once Company concept across national borders, we put extensive efforts into international development measures: The Group-wide program, Telekom x-change, offers top performers and high potential employees here in Germany and internationally the opportunity to work for three to six months in Germany or at an international subsidiary. Since the program was launched in 2009, the number of people going on international assignments has steadily grown.

The development offer for top experts, Master Classes, which was launched by the Europe and Technology segment in 2009, is another good example of a successful international exchange and knowledge transfer program. In 2012, more than 180 participants from 14 countries attended training modules and engaged in extensive dialog with their international colleagues, discussing forward-looking topics such as innovation, change management and leadership.

## Telekom: a top training provider.

Telekom offers excellent training programs in business and technology, including qualification as an office communications administrator or as an IT systems technician. Having set ourselves the target of ensuring that 8.7 percent of our workforce in Germany consists of young people in training until 2013, we are one of the top companies for trainees and students on cooperative degree courses.

In Germany we have been one of the biggest training providers for many years. Nationwide, competent young people can train in eleven different training programs and nine cooperative study programs in cooperation with ten partner universities. In training year 2012/2013, we had some 9,300 apprentices and students overall. Our commitment to vocational training also extends to our subsidiaries in other countries, such as the Netherlands, Austria and Switzerland, where young employees can take advantage of training options. Our commitment to education and training is much more than an active response to the shortage of highly qualified specialists in the workforce. We take corporate and social responsibility seriously, with dedication that extends beyond national borders. Fast-paced technological progress is becoming more and more dynamic, thus creating a growing need for qualified specialists in areas where innovation and technical development take place. The purpose of our new training concept is to strengthen and boost our capacity for innovation at Telekom. We are constantly bringing new talent and expertise into the Group. This enriches our internal pool of qualified junior employees, who will be

moving up through the ranks in the years ahead.

In 2012 we offered more than 3,200 young people the chance to profit from high-quality career development by entering training and cooperative study programs in Germany and abroad. Cultural diversity should play a major role in vocational training, which is why we currently employ trainees and students on cooperative degree programs from 49 nations.

The Group's own HfTL University of Applied Sciences in Leipzig (HfTL) is a key provider of higher education and professional development courses, particularly in the technology sector. In the year under review, around 70 percent of the 340 graduates from our on-campus and cooperative study programs at various cooperating universities were subsequently offered positions within the Group, including 72 graduates from HfTL alone.

#### **T-Mobile Austria named a role model training provider.**

For example, T-Mobile Austria was named one of the country's leading training providers by the Austrian Federal Ministry of Economy, Family and Youth in 2012. Training programs at our Austrian subsidiary are distinguished by the effective use of modern online training methods, with a special focus on personal development and social skills, resulting in an 80 percent rate of apprentices being transferred to permanent positions after completion of their training.

### **Creating new perspectives: more opportunities for the disadvantaged**

In cooperation with the German Federal Employment Agency, we lend support to members of disadvantaged social groups by assisting them in finding jobs or through job qualification training programs.

The "My chance to get going" project is aimed in particular at underprivileged young people receiving basic income support and job seekers with qualification deficits. The project has been quite successful: 100 trainees entered basic qualification programs in 2011, and one year later 66 of them began their vocational training at Telekom. What's more, we also offered a second year of training to 47 project participants. And in 2012, an additional 119 young candidates began their internship with us.

In another project that was continued in 2012, we address the particular needs of single mothers and fathers. In light of the limited choices available to them, the goal of this project is to give single parents an opportunity to participate in training or a course of study on a part-time basis. We offer part-time training for all jobs at Deutsche Telekom that require vocational qualification. Part-time courses of study are also offered as part of the cooperative degree programs at the Group's University of Applied Sciences in Leipzig (HfTL). In 2012 alone, 19 single mothers started their careers in the Group through this program.

We will be expanding both these projects in the future.



## Health & safety.

Requirements on our employees and managers are increasing in many areas of the company. As a responsible employer, we want to actively prevent possible physical and mental stress. The high standard of health protection at our company is a recognized fact, and we offer our employees many target group-oriented measures above and beyond our general company health management program. We see the legal occupational safety and health provisions as minimum requirements. Numerous awards have recognized our outstanding dedication. We rely on high standards when it comes to industrial safety, fire safety and environmental protection as well.

### Employee survey on health.

We conduct an anonymous health survey as part of our Group-wide [employee survey](#), which is conducted every two years. We evaluate the survey down to team level for all teams where at least five employees participate. The survey helps us identify general health risks and patterns of mental illness in plenty of time and then use this information to develop measures at the corporate, departmental and team levels as well as personal offers. One focal point of the health survey is mental stress at the workplace, which makes Deutsche Telekom a pioneer in this area in Europe. A comparison of employee surveys at European companies conducted by Technische Universität (TU) Dresden and the Gesellschaft für Konsumforschung Trustmark (GfK) consulting firm in 2012 showed that Deutsche Telekom poses the most questions on the topic.

We are planning to conduct additional follow-up measures in 2013 based on the recommendations derived from the survey results and on more in-depth analyses conducted by TU Dresden.

### Supporting long-term performance capability.

We are committed to implementing health-promoting measures throughout all areas of the Group. Awareness-raising, prevention and individual responsibility are our top priorities, so we devise Group-wide campaigns to promote health awareness and health competency in the workforce. Our measures are carefully tailored to the specific requirements of the different employee groups. The portfolio of health and safety measures also includes a wide range of voluntary measures to promote health within the company. In particular, these include

- Stress prevention seminars
- Flu jabs
- Colon cancer screening
- Information on diet, exercise and relaxation, as well as
- A comprehensive annual health check with the company physician, which is available to all employees.

The success of our measures is reflected in our impressive health rate of 94.2 percent (as at December 31, 2012).

### Health and safety accommodates demographic changes.

Our clear goal is to keep our employees healthy and fit to work throughout their entire career with Deutsche Telekom. That is why we are analyzing age-related health risks and risks associated with particular activities on an ongoing basis and develop preventative offers based on the results. In particular, these schemes are tailored to health problems that tend to be more common in certain working environments and selected job profiles.

For example, preventing cardio-vascular and musculo-skeletal disorders is a paramount concern. These types of illnesses are likely to become more prevalent within our own workforce against the backdrop of an aging society. For example, our Step by Step scheme is aimed at preventing muscle and bone injuries from trips and falls. In this training program, we not only teach people how to identify risks and avoid falls but also how to fall "properly" in case it happens. Training programs are held for specific target groups at the offices of Deutsche Telekom Technik and Deutsche Telekom Technischer Service. Working closely with the Post and Telekom Accident Insurance Fund and the Institute for Occupational Safety and Health (IFA) at Deutsche Gesetzliche Unfallversicherung (German Social Accident Insurance, DGUV), we take care to incorporate the latest scientific findings when developing such measures.

## Mental health.

The prevention of mental illness is particularly crucial. By acting quickly, it is often possible to avert the chronic suffering associated with a rapid drop-off in performance, long before the sufferer becomes unable to work. All employees have access to an extensive range of seminars on mental health and stress prevention, plus healthy living advice. Our innovative seminars on how to boost mental resilience are a popular option. Individual psychosocial counseling on stress, addiction, conflict, change, leadership and health is also available, both face-to-face and via our service line. In order to raise our managers' awareness for this important topic, we provide a Web-based training course on mental health and what they can do to help. The program trains them to detect mental pressures, both in their team and in themselves, early on, act swiftly and, where necessary, arrange for professional support.

## Raising awareness via health communication and training.

We ensure that employees have access to comprehensive information about the range of company health offerings available, particularly with a view to enhancing their mental health. This was the thinking behind our year-long health campaign in 2012. We use a range of in-house media to keep employees informed: our staff magazine "you and me", the intranet, social media, as well as posters and brochures. Employees can take advantage of a wide range of services relating to exercise, nutrition, stress prevention and stress management. Response to our offers is very high. A total of 2,250 participants attended the five one-day events on stress prevention during the reporting period, for example. The health special, which was launched within the scope of the campaign, was one of the most clicked-on specials on the Group's intranet. More than 580 employees applied as testimonials for nutritional coaching, which was conducted within the scope of the campaign, and 200 teams attended relaxation seminars. In addition to the communication campaign, employees have access to an international information forum on occupational health and safety on the Telekom intranet. Campaigns such as the dialog forums on stress proved so popular, they will be repeated in 2013.

Our managers play a key role in prevention: In direct contact with their team members, they perform a duty of care, are ambassadors for healthy living, and provide guidance. We support our managers with a comprehensive range of materials, including guidelines and brochures, e.g., outlining the training courses available on health-related and occupational safety issues.

## Health and safety standards and management system.

A team of experts from different fields pursues an holistic, systematic approach to occupational health & safety and fire protection. Controlled by our Health & Safety organization, in Germany alone we have around 130 company physicians and 120 occupational health and safety specialists looking after our employees. Additionally, employees can take advantage of a free, confidential, nationwide advisory service on psychosocial issues, staffed by more than 50 experts.

Back in 2012, we collaborated with selected subsidiaries—T-Systems Mexico, T-Systems South Africa, T-Systems Malaysia, T-Systems UK, PTC, Slovak Telekom—on the definition of common health standards. These standards will become mandatory across our Group companies by 2014. On-site reviews will be carried out to assess whether companies are implementing these standards, carrying out health and safety improvements, and complying with statutory workplace requirements. Our international subsidiaries are also certified to the international health and safety standard OHSAS 18001 [\[i\]](#), which provides independent verification. In 2013, we will be further extending our certification activities, and 20 companies with a combined workforce of around 31,000 will have their legal and standard conformity certified by an independent agency.

Providing the best possible protection for our employees is our pivotal concern. We support the Group-wide approach of our occupational health and safety team with a uniform international health, safety and environmental management system. 30 international subsidiaries had been integrated into the system by late 2012 and nine more will be linked in during 2013. This has paved the way for uniform Group-wide standards in occupational health and safety. The system is based on the following international standards: OHSAS 18001 [\[i\]](#), ISO 14001 [\[i\]](#) and ISO 9001 [\[i\]](#) on health, safety, environmental protection, and quality. We have also defined uniform indicators, e.g., for measuring the number of days lost. Minimum standards and related indicators create greater transparency and facilitate comparability at international level. The health, safety and environmental management system also helps us to maintain our global telecommunications infrastructure in the event of a crisis.





## Compensation.

Fair and market-oriented pay and benefits are a key tool to steer Telekom in times of change and high competitive pressure. Telekom also addresses this topic in its Social Charter.

Deutsche Telekom is committed to fair pay.

Deutsche Telekom has a close relationship with employee representatives and pays all of its employees fairly. Even temps working for Telekom, who are paid by third parties, receive competitive rates of pay. The outcome of collective bargaining is one example of our successful cooperation with our employees. In the 2012 collective bargaining round the negotiating partners agreed on the following terms for the employees of Telekom Deutschland and T-Systems:

- The salaries of the around 50,000 Telekom Deutschland employees are being raised by a total of 6.5 percent in three phases: by 2.3 percent beginning in May 2012 and by 2.1 percent in each of two phases in 2013. The new collective pay agreement went into effect on February 1, 2012, and has a term of 24 months.
- The negotiation partners also agreed on new conditions for variable remuneration for Telekom Deutschland employees. The previously individual performance-based components will be based on corporate targets in future. In some cases, these variable components will be guaranteed, and in some cases paid out monthly.
- T-Systems' 18,500 employees also receive a 6.5 percent raise in several phases: 2.3 percent retroactively from May 1, 2012, 2.1 percent from January 1 and another 2.1 percent from September 1, 2013. The new collective agreement went into effect retroactively on May 1, 2012, and has a term of 27 months.
- Protection against dismissal for T-Systems employees has been extended until the end of 2013.
- For employees outside Sales, variable pay will be solely based on T-Systems' corporate targets and at least 50 percent will be guaranteed. Targets for variable pay are mainly based on corporate targets at T-Systems' international subsidiaries, too. However, special payment regulations are in place in some countries in accordance with local law.

Telekom does not offer employment in low-wage sectors. Our wages considerably exceed the minimum wage of €8.50 per hour that is often demanded by trade unions for employees.

### Gender-based pay analysis indicates fairness.

We have been systematically comparing the pay of male and female employees in Germany since 2009. Once again, our 2012 analysis did not indicate any significant gender-based differences in the pay of employees not covered by collective agreements and executives. Among employees covered by the collective bargaining system, we can exclude the possibility of gender-specific disadvantages, since pay is determined solely by an employee's assignment to a function group. These results prove that Deutsche Telekom practices fair pay for men and women alike and is opposed to all forms of salary discrimination. We also participated in the Logib-D project conducted by the German Federal Ministry of Family Affairs, Senior Citizens, Women and Youth to assess whether men and women were being paid equally. The study confirmed the positive results of our own analysis.

Company pension plan.

Telekom offers its employees an attractive, employer-financed company pension plan on the basis of voluntary commitments. The capital account plan is a modern, defined contribution system. In addition to the capital account plan, we also offer our employees an optional company pension scheme, which is exclusively financed by employees. This enables employees to close any retirement income gaps and, if desired, to protect themselves against occupational disability and/or secure financial support for relatives in case of death.



## Workforce & organizational restructuring.

Short innovation and technology cycles and constant price and cost pressure characterize the global ICT market. With future-thinking restructuring measures, Telekom continued to increase its competitiveness during the reporting period, thereby laying the foundation for the company's long-term success. The measures focused particularly on Group headquarters and IT functions in Germany. As in the past, Telekom structured the change to make it socially acceptable and used natural attrition as well as the available HR tools.

### Total Workforce Management: Boosting productivity, developing skills, driving the transformation forward.

Our Total Workforce Management (TWM) system is being rolled out across the entire Group worldwide. We use it to manage the structure of our workforce with due regard for capacities, skills, demographics and locations. The TWM allows us to simulate the effects of different business scenarios on our HR work, for example with the expansion of hybrid broadband in Germany. Over the next few years, broadband demand will increase significantly, both in mobile communications and in the fixed network. With this in mind, Deutsche Telekom is stepping up its investments in broadband networks and products. This will improve our competitive position in the long term. Broadband investments are concentrated in Germany, with the expansion of the LTE network and the use of new technologies in the fixed network. Against this backdrop, and with a view to the future requirements placed on our workforce, we make carefully measured decisions regarding

- HR development measures
- The structure and principal content of vocational training
- The number of apprentices or direct hires over the next few years
- The feasibility of new business models, based on existing HR capacities.

Our objectives are clearly defined:

- We want to boost the productivity of our workforce and thereby optimize Deutsche Telekom's cost situation throughout all markets.
- We want to deploy our employees according to their individual abilities, and pay them at the going market rate.
- We want to drive the Group's restructuring forward in a business-focused manner.

Another key parameter used in Total Workforce Management is continuously monitoring the health rate of our workforce. This helps us to identify action areas, derive selected centralized and local health protection measures, and review their efficacy.

### Total Workforce Management in the international environment.

48 percent of our employees work outside of Germany, and we generate 54 percent of our revenue abroad. The Group-wide perspective is therefore pivotal to the success of Total Workforce Management (TWM). With this in mind, TWM has been anchored across the entire Group. Global decisions regarding how many staff with which skills are deployed where and at what cost are based on standardized criteria.

## **Embracing Total Workforce Management at more international subsidiaries.**

In 2012, we rolled out key TWM methods at other subsidiaries as well. For example, the quantitative and qualitative HR planning tool, Quality of Workforce, was piloted at OTE and Cosmote, which are members of the Greek OTE Group. This tool lets us look at the current skills profiles of the workforce and to compare it with future business demands. We also take demographic and cost-related factors into consideration when planning the measures. We were able to establish extensive use of HR planning and management measures based on our total workforce management approach at T-Systems' international subsidiaries.

We expect the market environment to become even more complex over the next few years, meaning that requirements on our employees in terms of their skills and flexibility will increase as well. That is why we will continue to expand our total workforce management approach as the foundation of strategic HR planning and adjust it to meet the demands of the market environment.

## **External Workforce Management: Steering tool for external employees and service providers.**

In 2013, we are expanding our Total Workforce Management by adding an External Workforce Management system to ensure that external employees and service providers are deployed as cost-effectively as possible. This will provide us with an integrated overview of internal and external employment, thereby systematically interlinking our staff restructuring tools. External Workforce Management facilitates integrated, end-to-end steering of our employees, external staff and service providers.

## **Upsizing, restructuring, downsizing: The strategic HR program continues.**

Deutsche Telekom actively addresses the challenges associated with technological and demographic changes. We are continuing to balance the age structure of our workforce by consistently building on the skills of our experts—including older employees—and attracting new expertise into the company. In Germany alone, we are planning up to 3,800 new hires during 2013, including some 1,900 university graduates and experts with professional experience. A further 1,900 positions will be set aside for in-house trainees, particularly graduates of our cooperative degree courses. The number of new appointments at Deutsche Telekom therefore remains at a high level.

As part of the business-centric reorganization, in 2012 we continued our socially considerate staff restructuring program, using tried-and-trusted instruments and relying on mutual consent. In Germany, these primarily centered around the new regulations on phased retirement for employees within and outside of the collective bargaining system and executives, introduced in fall 2011. Corresponding provisions on phased and early retirement also exist for civil servants. The packages we offer are far more generous than the law requires. We have a range of effective change instruments to support employees who are thinking of a change in direction, including a professional "new placement" advisory service to advise and support employees in their search for a new position, and provide assistance with sabbaticals.

## **Reorganization of Group Headquarters.**

January 1, 2013 saw the launch of our revamped Group Headquarters and the modified Group Services. During the course of reorganization, we are simplifying our internal processes, eliminating inefficient duplications, and creating clear responsibilities. The new Group Headquarters focuses on motivating the Group and steering it in the right direction. Operational functions are being relocated to Group Services, which operates as an efficient service provider to Group Headquarters and other Group units. The relaunch of our Group headquarters

necessitated extensive structural and personnel-related changes. Most of these were achieved without compulsory redundancies in 2012 by way of internal and external fluctuation and established exit models. Employees whose roles disappeared following the reorganization are receiving individual support with their search for new employment from a dedicated temporary business unit.

### Streamlining business customer sales and service.

The company and employee representatives have agreed to streamline the previously segmented structure in Germany. Business customer sales will be represented by 16 sales and service centers and 28 sales offices in the future. The restructuring measures were completed at our offices in Bielefeld, Stuttgart, Bremen, Hanover and Saarbrücken by February 2013. Eleven additional offices will follow. The transformation is scheduled for completion by mid-2014.

### New company for fiber-optic network expansion.

On January 1, 2012, we founded our own company for fiber-optic network expansion, Deutsche Telekom Glasfaser Service GmbH. This will enable us to speed up broadband network expansion and make it more flexible and financially viable.

### More flexible structures and streamlined processes at T-Systems.

In order to counter the increasing competitive pressure on the global ICT market and secure the company's long-term success, T-Systems has extensively restructured its business areas as part of the Act4Service project. The goal is to create more flexible structures and streamlined processes. The new business structure was implemented at all business units worldwide in 2012. The new structure creates conditions for leaner operations across areas and national boundaries. The project was completed in early 2012. The new Telekom IT business area was also established in 2012. T-Systems will also streamline its organization in 2013 by reducing the number of operative business areas in its corporate customer segment from four areas to two, Sales and Delivery. This process is scheduled for completion in June 2013.

### **Workforce restructuring at T-Systems—employees encouraged to embrace change.**

In the context of workforce restructuring measures, T-Systems is keeping its employees actively informed about the opportunities available to them as well as available tools in order to help them better plan the next step in their careers. Options include skills development to qualify for attractive positions at the company or, if necessary, an external position. We continue to develop new employment perspectives for civil servants and non-civil servants in cooperation with HR service provider Vivento, for example through the "Transferring IT potential to the public sector" HR initiative, which was launched in 2012.

### Centralizing IT functions in Germany.

Deutsche Telekom centralized its IT departments in Germany in 2012. Since July 2012, the company has been concentrating its internal IT activities at a new area that is integrated into T-Systems, the Telekom IT business area. The purpose of these changes is to make the IT organization at the Group more effective and create significant competitive advantages. The new target organization is scheduled to be in place as of April 1, 2013.

### Restructuring at the OTE group.

The crisis in Greece means that the transformation at the Greek subsidiary OTE is taking place in the midst of a very difficult economic and political atmosphere. In spite of this situation and despite the restrictions of labor law and collective agreements dating from the time when OTE was a nationalized company, we were once again able to make significant progress in 2012. Thanks to a series of measures, including reducing overtime, shortening weekly working hours with reduced pay, training employees working in non-profitable positions and transferring them to new jobs, as well as the successful conclusion of a socially acceptable workforce downsizing program, we were able to considerably reduce personnel costs and improve performance. We were even able to hire some 350 junior staff in the wake of these measures. In consideration of the general economic environment right now in Greece, that is a considerable success. As part of our One Company strategy, we also continued to implement a new human resources role model involving clear separation between strategic, advisory and administrative functions.

### Vivento: Assisting with workforce restructuring at Deutsche Telekom in Germany.

Vivento has been tasked with creating new employment prospects for Deutsche Telekom employees, both within and outside of the Group, and is therefore instrumental in helping to restructure the Group's workforce in a socially considerate manner. Vivento specializes in advising and placing employees who are seeking a new role outside of Deutsche Telekom while still working there. As per the end of 2012, Vivento had placed around 3,600 employees in external roles, primarily in the public sector, such as the Federal Employment Agency. A further 3,200 Vivento employees were employed within the Group, primarily in the Service Center unit. Since Vivento was set up in 2003, it has helped a total of 41,400 employees (as at December 31, 2012) to change jobs.

Vivento has an excellent track record—here are just a few examples of its recent successes:

- It extended its cooperation with the Federal Employment Agency and intensified our collaboration with federal, regional and local authorities.
- Vivento continued to expand the Internet portal "interamt.de" and continuously improved the range of services associated with this inter-authority platform for public sector vacancies.
- It also continued to systematically improve the quality of advice and support offered to employees. Measures included the training of Vivento consultants, and an extended range of training and development measures, including virtual classrooms, Web modules and attendance training courses.
- Vivento intensified its communication with external employees via a redesigned, web-based information and service portal. At present, for example, users can find a wealth of information on every aspect of career changes, prospects outside of the Group, and developments within the Group and on the labor market.
- Vivento held numerous information and dialog events about the options available for employees considering a move outside of Deutsche Telekom.
- Vivento was awarded the quality seal "excellent" as a particularly service-focused HR services provider by the renowned ServiceRating GmbH, the first German company to offer a comprehensive ratings system.

In 2013, Vivento will be continuing its vital workforce restructuring duties within the Telekom Group, with a portfolio tailored to current and future requirements.



Life is for sharing.

2012 Corporate Responsibility Report

We take responsibility.

[Home](#) > Suppliers

Content verified by PwC

## Suppliers.

### #DEDICATED

Telekom requires suppliers in more than 50 countries to guarantee basis human rights.

[Find out more](#)

Deutsche Telekom promotes a sustainable supply chain throughout the Group. We employ the principles of trust, dialog and audits in our relationships with suppliers in more than 50 countries worldwide. We support sustainability in the supply chain in industry initiatives as well. During the reporting period we focused on harmonizing our standard procurement processes throughout the Group with the aim of continuing to increase the transparency and efficiency of our supplier selection process. We continued to engage in dialog with our suppliers through activities such as our fifth ["Sustainable Procurement Stakeholder Dialog Day"](#).

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## Sustainability strategy for procurement.

Within the scope of its CR strategy, Telekom is making efforts to live up to its role as a responsible company in terms of our procurement and supplier management policies as well. We once again were listed in renowned sustainability rankings, confirmation that our efforts are paying off. We intend to solidify this position and expand it further. The basis for this is the strategic integration of sustainability into our procurement activities.

### Sustainability in procurement activities at Deutsche Telekom. Methods, tools and stakeholders.

Tools and methods

for promoting  
sustainability in  
procurement activities

#### Supply chain management

- [Prequalification questionnaire](#)
- [Supplier selection process](#)
- [Supplier assessment](#)
- [Supplier workshops](#)

#### Risk management

- [E-TASC](#)
- [Social Audits](#)
- [Improving supplier competence](#)
- [Escalation process](#)

#### Communication & training

- [Procurement portal](#)
- [Online training tool](#)
- [Reports on sustainability  
in our procurement activities](#)
- [Stakeholder Dialog Day](#)

#### Rules & regulations

- [Procurement Practices](#)
- [General Purchasing Terms and Conditions](#)
- [Social Charter](#)
- [Statement on Extractives](#)

Strategy to promote sustainability in procurement activities

Sustainable

## Procurement

### workgroup

**Internal:** Developing standards, KPIs; internal communication, central point of contact and first escalation level

**External:** External communication, dialog sessions with suppliers, NGOs, investors, scientific community

### Stakeholder

**Internal:** Employees, purchasers, other workgroups (Climate Change Group, “sustainable products,” etc.)

**External:** Suppliers, sustainability-oriented investors

## Procurement volumes and regions.

Telekom works with suppliers in more than 50 countries worldwide. In 2012, we purchased goods and services totaling at some EUR 355 million from newly industrialized and developing countries, the equivalent of around 1.6 percent of our total procurement volume.

Collaboration with stakeholders on-site is key when it comes to permanently improving production conditions in these countries. We particularly focus on social and environmental conditions in the production areas in newly industrialized and developing countries.

[Last year's CR report](#)

## Laying down principles and taking responsibility for the supply chain.

### Mandatory standards and tools.

Through our guidelines and voluntary commitments, we require our suppliers to comply with minimum social and ecological standards. Our Group's Code of Conduct and its Social Charter  explicitly incorporate our suppliers in these regulations. The Social Charter  contains guidelines that are valid throughout the Group for the following:

- Human rights and working conditions
- Environmental protection
- Equal opportunities
- Health and safety at work
- The right to set up and join a trade union

Download : [Code of Conduct](#)

Download : [Fraud Policy](#)

Download : [Social Charta](#)

We use different tools to make sure these standards are complied with. Before entering into a business relationship, we use a prequalification process via our Supplier Management Portal to ask potential suppliers about their CR activities and voluntary

commitments. If a supplier's responses do not yet meet our requirements, we require that supplier to submit additional self-assessments of their CR activities during the course of the business relationship and, with the permission of our suppliers, conduct on-site social audits as well. If a supplier is not able to provide the requested information, an internal, multiple phase process is initiated to enable the supplier to comply with our requirements. In many cases, a few meetings suffice for this purpose. We employ several escalation levels (escalation process) in case of disputes in order to come up with a fast solution in compliance with Deutsche Telekom's sustainability standards. The outcome is recorded throughout the Group.

### **Handling raw materials.**

With our Coltan Statement, which was published in 2005, and our Statement on Extractives [□](#), which was published in 2009, we want to make sure that both our direct suppliers and their sub-suppliers work to minimize the social risks linked to extracting raw materials. We require our suppliers to officially state that they will comply with Deutsche Telekom's Statement on Extractives [□](#). In cooperation with the Global e-Sustainability Initiative and Electronic Industry Citizenship Coalition programs, we helped further develop the Conflict-Free Smelter Program, the purpose of which is to enable companies to procure conflict-free raw materials only. We are also working on industry-wide solutions for conflict-free raw materials extraction within the scope of the Program.

Download [□](#): [Coltan Statement](#)

Download [□](#): [Statement on Extractives](#)

### **Positioning within the organization**

The Corporate Procurement Strategy department has been responsible for developing concepts and methods for achieving sustainability in our procurement practices since 2010. The Sustainable Procurement Working Group continues to provide assistance when it comes to realizing sustainability in our procurement activities throughout the Group. Experts from the CR area work together with representatives from Telekom's major procurement areas on this international committee. Our sustainability principles have been incorporated into the Group's Global Procurement Policy, and the associated Procurement Practices contain regulations for our buyers in Germany.

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Deutsche Telekom adopted its Social Charter [□](#) in 2003. As an integral element of Deutsche Telekom's Code of Conduct, the Social Charter [□](#) is based on the values of the UN Global Compact [□](#) and the guidelines passed by the International Labour Organization (ILO) and the OECD Guidelines for multinational Enterprises.

The principles described in the Charter apply to all Telekom business units worldwide. In the Charter, which is an integral part of our General Purchasing Terms and Conditions, we require all suppliers to comply with these basic principles as far as possible.

### **Sustainable procurement strategy.**

During the reporting period, Telekom developed a concept for supplier selection that it plans to use to make sustainability criteria a permanent feature in the supplier selection process. In addition to price, quality and other aspects, sustainability criteria should make up 10 percent of the decision to procure goods from a supplier. In 2012, T-Mobile

Netherlands tested the new selection process in a pilot project. The results were analyzed in early 2013. The plan is to incorporate the concept into the Sustainable Procurement Strategy and also as in procurement processes throughout the Group. We are also working on integrating product and materials group-specific sustainability criteria into our procurement processes.

Telekom approved the Sustainable Procurement Strategy in 2007 and revised it in 2010. With the strategy, Telekom acknowledges its social responsibility, e.g., regarding fair payment based on local conditions and the observance of basic human rights. All guidelines and processes to improve sustainability in the supply chain are based on our Sustainable Procurement Strategy. For example, we take potential environmental impact from the entire life cycle of products and services into consideration as far as possible when making our procurement decisions. Some examples of this are our Sustainable Product Portfolio program and our particularly energy-efficient products.

### Expanding the Sustainable Procurement CR KPI.

A key component of our supplier management policies is the electronic industry information system, the Electronics Tool for Accountable Supply Chains (E-TASC). We also use the supplier information recorded in E-TASC to calculate our Sustainable Procurement CR Key Performance Indicator (KPI). We use this KPI to measure the procurement volume with suppliers that are being reviewed for compliance with our social and environmental standards within the group or at one or several group companies. We have also been using supplier data from the Supplier Management Portal to calculate the CR KPI since 2012. In this way, we focus above all on suppliers who are of strategic relevance and have a higher CR risk.

We were able to considerably increase the procurement volume reviewed according to sustainability criteria by 16 percent to a total of 54 percent in 2012. This increase can in part be attributed to the fact that we are now using additional supplier data in our CR KPI calculation. Other measures introduced in 2012 contributed to this result as well. For example, we increased the number of suppliers that we require to undergo a prequalification process. This process is now mandatory for suppliers with whom we expect an order volume of more than EUR 100,000.

We have also developed a matrix that categorizes suppliers according to specific, risk-relevant criteria including procurement volume, country, material group and strategic significance for Telekom. The matrix helps us identify potential suppliers for audits as well as those suppliers who we would like to provide us with a self-assessment. Telekom is pursuing the objective of requiring all strategic suppliers as well as those at high risk in terms of CR to provide us with a self-assessment via E-TASC by 2015.

### Supplier code of conduct integrated at BuyIn.

In 2011, partners Deutsche Telekom and France Télécom-Orange combined their procurement activities in the areas of end devices and mobile communications networks as well as a large portion of their fixed-network equipment and service platform procurement activities in the BuyIn joint venture. During the reporting period, we met key

prerequisites for integrating the sustainability standards of the two parent companies in this joint venture as well.

We published the BuyIn code of conduct for suppliers during the reporting period in consultation with France Télécom-Orange and BuyIn. The code of conduct covers topics such as ethics and anti-corruption, the ban on child and forced labor and the right to freedom of association. The code is mandatory for all of the procurement joint venture's suppliers. BuyIn also expects its suppliers to require their own suppliers to comply with the provisions set forth in the code of conduct. Should a supplier violate the code of conduct, BuyIn has the right to demand improvements and, should the supplier fail to meet these demands, to terminate the contract. During the reporting period, BuyIn also set up an online whistleblower system where people can anonymously report mismanagement, problems or violations of the principles set forth in the code of conduct.

### **Code of conduct announced internally and externally**

BuyIn has been informing its employees of the content of the code of conduct for suppliers via training courses and internal communication. In October 2012, for example, the company provided online training courses, which more than 80 out of the total of 240 employees had completed by the end of 2012.

All BuyIn suppliers were sent the code of conduct in early 2013 along with a questionnaire for them to provide a self-assessment. The purpose of the questionnaire is to help BuyIn assess compliance with the requirements specified in the code of conduct as well as the suppliers' general sustainability performance.

### **Creating structures for steady CR integration**

We established two committees in 2012 in order to structure BuyIn's procurement processes so that they continue to correspond with the sustainability criteria of Deutsche Telekom and France Télécom. The CR Steering Board meets every six months and is responsible for defining strategic priorities and sustainability objectives. The CR Operations Committee is responsible for operative implementation of the policies. The committee meets at least every two months. Both committees are comprised of employees of Deutsche Telekom, France Télécom-Orange and BuyIn.

BuyIn also defined specific CR clauses during the reporting period. The company is planning to integrate these clauses into all future supplier contracts and has already conducted initial pilot bidding processes. The clauses contain sustainability-relevant requirements such as external audits of sustainability performance and self-assessments on the energy efficiency of certain products.

### **Principles for a sustainable supply chain**

With the CR Steering Board and the CR Operations Committee created in 2012, BuyIn has appropriate structures to make sure that suppliers will comply with local regulations as well as Deutsche Telekom and France Télécom's environmental and social standards. These include in particular:

- Mandatory compliance with the code of conduct, even during the bidding process
- Prequalification of new suppliers
- Regular provision of information to current suppliers regarding the requirements specified in the code of conduct
- Social audits within the scope of the Joint Audit Cooperation (JAC).

BuyIn is also planning to make its supply chain more sustainable in close cooperation with strategic suppliers. The company plans to use a key performance indicator to conduct regular reviews. The KPI will be specifically designed to measure sustainability performance as well CR action plans.

### Participation in the German Global Compact Network.

In January 2013, Deutsche Telekom employed the German Global Compact <sup>1</sup> Network's Organizational Capacity Assessment Instrument (OCAI). The tool helps companies assess their own capacities in the area of human rights and increase their management capabilities in this area. It comprises 22 questions related to integrating respect for human rights and other sub-topics. The results are rated using a six-level rating scale from "non-responsive" to "human rights promoter." According to the results of the assessment, we are currently at level three in terms of efficiently managing human rights in almost every issue. Some of our answers point to the next level, "proactive experimentation," which indicates the ambition to take on a leading role when it comes to human rights.

Based on these results, we are planning to make improvements in the areas of training measures and complaint mechanisms for human rights violations. Deutsche Telekom is also planning to conduct a Human Rights Impact Assessment and develop measures based on the results. The point of this assessment is to identify human rights risks within the Group. The assessment is based on recommendations made by the United Nations in its Guiding Principles on Business and Human Rights. We will be conducting the assessment throughout 2013 and possibly longer, followed by an annual review to address the need for constant improvement.

In 2012, we also participated in two workshops held by the science and human rights learning group of the Germany Global Compact <sup>1</sup> Network. The workshops focused on the question of how to guarantee that human rights are respected in the mining and metal industries.

### Common Supplier Code of Conduct and Policy for OTE and Cosmote.

The OTE Group has introduced a common Supplier Code of Conduct covering labor, health and safety, environment and ethical issues in early 2013. The Suppliers' Evaluation System included in the Suppliers' Policies for both OTE and Cosmote contains specific CR criteria.



## Supplier selection.

Telekom lays the foundation for a sustainable supply chain even when selecting its suppliers. Suppliers interested in entering into a relationship with Telekom must undergo a prequalification process. With the help of an online questionnaire on our supplier portal, we are also able to collect information on compliance as well as conformity with sustainability criteria and then take these factors into consideration during the further selection process.

### **Stricter requirements on selected supplier groups.**

Not only do our strategic suppliers and suppliers from high-risk industries have to pass prequalification, they are also asked to provide additional information on the topic of sustainability using the Electronics Tool for Accountable Supply Chains (E-TASC). The term "strategic suppliers" refers to suppliers that are significant for procurement activities at Telekom due to the extent of the supply relationship, their position on the market or their potential for innovation. Telekom is pursuing the objective of requiring all strategic suppliers as well as those at high risk in terms of CR to provide us with a self-assessment via E-TASC by 2015.

### Expanding the supplier portal.

During the reporting period, Telekom expanded its supplier portal, which was originally introduced in 2011. Companies that wish to qualify as Telekom suppliers now need to provide answers to 16 sustainability-related questions on topics such as human rights, corruption and measures in the areas of environmental protection and occupational health and safety. Telekom uses the responses to create what we refer to as a supplier scoring, which lets us assess a supplier's sustainability performance at a glance. We expanded the information we require from our suppliers to include information provided by current suppliers as well. We have been conducting the entire prequalification process electronically since April 2012.

By introducing an electronic supplier file that documents all relevant information on each supplier, Telekom is planning to offer new ways to transparently exchange and manage documents in 2013.

### Last year's CR report

### New online training tool for buyers.

Due to changes in our procurement organization, we had to reschedule the launch of our revised online training tool for buyers, which was scheduled for 2012. It will now be launched in 2013. The tool, which we developed and revised in collaboration with the Humboldt University in Berlin, contains fundamental information on Telekom's sustainability strategy as well as on our sustainable procurement principles. The tool also

gives specific tips on implementing these principles and our strategy.

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## Supply chain management.

Processes and tools for evaluating suppliers are key aspects of supplier management at Telekom. These are, for example, valuable in identifying financial improvement potential and in monitoring progress in social and environmental areas. They also help Telekom identify possible risks in the supply chain and respond to them immediately.

We also rely on dialog with regard to sustainability in cooperation with our suppliers. For us at Telekom, it is important to know that our business partners are supporting new ways of achieving sustainable business practices. We need this information to be able to effectively improve the supply chain. In addition to our suppliers, our most important external stakeholders when it comes to procurement, our collaboration partners – organizations and NGOs – act as key supporters in designing a sustainable supply chain. We are also engaged in promoting improvements in ethical, social and environmental standards in industry initiatives such as the Global e-Sustainability Initiative (GeSI) and the Joint Audit Cooperation (JAC).

### Advancing the E-TASC information system.

E-TASC, or the Electronics Tool for Accountable Supply Chains, is an online information system used throughout the industry for assessing the sustainability-related risks involved in supplier activities. As a member of the Global e-Sustainability Initiative (GeSI), Telekom played a key role in the development of this system and is also involved in its further development. GeSi is planning to provide additional useful features to buyers and suppliers and is working on making the system's structure more modular. The initiative is planning to introduce an audit tool that provides information on all audit activities, an information system on conflict minerals and a CO<sub>2</sub> management system to check scope-3 emissions. GeSi is also planning to deal with the issue of fighting corruption in more detail and to simplify and restructure the questionnaire so that it can be used across industries. GeSi initiated a preparatory market study in late 2012 to help it make decisions regarding the implementation and design of the new E-TASC platform.

E-TASC makes it possible for us to recognize current or potential CR risks in the supply chain early on and to respond to them appropriately. Suppliers use the system to provide detailed information on the social and environmental aspects of production at their companies and the management systems they employ, which gives them the opportunity to provide proof of their CR status to other business partners or the critical general public. A multilevel consulting and escalation process is planned for cases in which companies refuse to provide information or when disputes arise.

### Supplier workshops for a more sustainable supply chain.

As part of Telekom's climate protection strategy, we are currently testing calculation procedures for scope-3 emissions, i.e., indirect CO<sub>2</sub> emissions generated by our suppliers' production processes as well as through usage by consumers of the final product. In 2012, we conducted two workshops on the topic with top suppliers, Chinese supplier Huawei and the US-based telecommunications company, Cisco. At the workshops, we talked to these suppliers about how important this topic is to Telekom and discussed expectations on all sides. The goals of the long-term collaboration include obtaining information from these suppliers about CO<sub>2</sub> emissions generated by their production processes, because these emissions also count toward our own scope-3 emissions. We plan to use the results of the workshop as the basis for introducing additional measures in the value-added chain. We are currently involved in negotiations with other suppliers such as Sony-Ericsson in order to permanently reduce our scope-3 emissions.

#### Last year's CR report

#### Preparations for developing selected suppliers completed.

Within the scope of supplier workshops and international initiatives, Telekom has been actively promoting sustainable value-added chains in the ICT industry for several years. In 2012 we prepared a program designed to support our suppliers even more when it comes to implementing socially and environmentally friendly as well as economically efficient business practices. The program covers essential risks regarding employee working hours, occupational health and safety, wages and working and living conditions.

We are planning to pilot the program in 2013 with selected suppliers and focus on working hours, occupational health and safety, and cooperative management. The pilot project will include conducting educational programs as well as setting up different communication channels for employees so that they can actively participate in the decision-making process. In addition to reducing potential risks, the program is expected to improve long-term cooperation with suppliers and help us learn more about local and culturally-influenced needs.

#### Sustainable Procurement Stakeholder Dialog Day.

The fifth Sustainable Procurement Stakeholder  Dialog Day took place on November 8, 2012, at Deutsche Telekom's Group headquarters in Bonn. 75 participants, including employees from different Telekom departments, selected suppliers and representatives of NGOs and from the worlds of politics and research, participated in the dialog event. Focus was placed on how to best pursue sustainably-oriented procurement policies at Telekom. Participants discussed ICT-specific opportunities and risks at three workshops and talked about ways in which sustainability can increase business as well as how to best incorporate CR into procurement processes. The very positive response we got from the participants strengthened Telekom's commitment to further establish the company as a CR leader and consistently integrate sustainability criteria into its procurement activities. The dialog also improved the suppliers' understanding of Telekom's sustainable procurement strategy and the challenges it entails.

## Last year's CR report

### Cosmote Romania evaluates 102 suppliers.

In 2012, 102 suppliers were evaluated by Cosmote Romania with respect to their collaboration during 2011. The evaluation process involves sending a detailed questionnaire to suppliers with specific questions relating to corporate responsibility and human rights. The completed questionnaire is returned accompanied by a letter confirming compliance with Cosmote Romania's Supplier Code of Conduct.

### DELFIN Award 2012 for progress in sustainable development.

Sustainability and the drive to harmonize business, social and environmental interests are a long-term strategic principle for Magyar Telekom. The company strives to conduct all its operations in this spirit, and through its own example encourage suppliers to operate in a sustainable manner as well. With this in mind Magyar Telekom established the DELFIN Award in 2008 to promote the idea of sustainable development and honor progress made in this direction. DELFIN is an acronym of the Hungary phrase "Award for a committed, sustainable and innovative generation". Award recipients must exhibit exceptional performance in one of four categories: supporting equal opportunity and promoting anti-discrimination within and outside of the company; sustainable innovation; sustainability education and awareness; and investment and development in the area of climate protection. In 2012 one sustainable innovation prize went to Ericsson Hungary Communication Systems for its EARTH project, which delivers solutions to the question of how to reduce the energy consumption of wireless info-communication networks and enhance their energy efficiency.

### Makedonski Telekom: Vendor Management System includes suppliers' sustainability performance.

During the reporting period, Makedonski Telekom's Procurement Department introduced a vendor management system project with the aim of improving relationships between the company and its suppliers through more regular and optimized communications. One of the project's specific goals is to evaluate the performance of suppliers from a sustainability perspective. This includes a company-wide evaluation of a supplier's sustainability, financial, technical, commercial and administrative performance.



## Social Audits.

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We continued our auditing activities with modified objectives in 2012. Instead of trying to conduct as many audits as possible, we focused more on intensively auditing strategically important and other risk-relevant supplier groups and countries. In order to pursue implementation of CR at the different levels of the ICT supply chain internationally, we cooperate with other telecommunications providers in the Joint Audit Cooperation (JAC), which we co-founded.

Our effective supplier management was recognized this year again. Once again, we received a very good score in the renowned sustainability rating conducted by the Sustainable Asset Management Group (SAM), where we were able to maintain our leading position in the supply chain management category with 83 out of 100 possible points and received the title of "Best in Class." The decline from 94 (previous year) to 83 points can be attributed to the fact that SAM revised its ranking system, so the scores cannot be directly compared.

### Expanding the JAC cooperation increases certified supplier pool.

By expanding the Joint Audit Cooperation (JAC), which was founded in 2010 by Deutsche Telekom, France Télécom-Orange and Telecom Italia, to currently include nine members, we were also able to increase the number of suppliers audited by JAC from 30 to 63. In 2012, JAC audited a total of 26 Telekom suppliers and sub-suppliers within the scope of this collaboration. Telekom itself also commissioned an additional seven audits to be conducted by internal experts and external auditors. Our audit activities are focused on Asia, and we also audit suppliers from other high-risk regions, such as Latin America and Eastern Europe.

### Last year's CR report

A social audit at Telekom comprises the following essential elements:

- A general risk assessment of suppliers conducted by Telekom,
- An evaluation of the supplier's self-assessment by Telekom
- Personal communication with the suppliers and
- The on-site audit

The auditor then writes an audit report and evaluates the results. Instead of ending our business relationship with suppliers who violate our policies, Telekom works together with these suppliers to permanently improve conditions. We address any problems in an action plan and work together with the supplier to remedy these within a pre-defined period of time.

### Focus on high-risk suppliers.

Contrary to our original aim to conduct 200 social audits between early 2010 and late 2012, we decided to limit our focus during this time on conducting 86 audits of strategically important and other high-risk supplier groups. The audits were conducted either by Telekom or by the Joint Audit Cooperation. By focusing on high-risk suppliers, we were able to significantly increase the share of procurement volume reviewed according to sustainability criteria in 2012. We are planning to conduct at least 30 audits a year using this new approach.

In addition to the social audits, our China office in Shenzhen once again conducted supplier performance visits during the reporting period. Since 2012, our China office has been using a checklist to systematically analyze different corporate departments of our suppliers during these visits, taking certain sustainability criteria into consideration. The China office immediately reports any critical findings to Telekom and the supplier involved becomes a potential candidate for a social audit. The office conducted nine supplier performance visits with direct and indirect suppliers in 2012. We are planning to intensify the supplier performance visits and make them a permanent fixture of our supplier auditing process in the network infrastructure area.

### Activities within the scope of the JAC audit cooperation.

Deutsche Telekom is a founding member of the Joint Audit Cooperation (JAC) of telecommunications companies. In 2012, JAC published its guiding principles on vision, governance and strategy. With these guiding principles, the cooperation is pursuing the objective of becoming a driving force for sustainability in the ICT supply chain and making sure that internationally-recognized social and environmental standards are complied with along the entire supply chain. JAC's strategic approach is to equally promote supplier audits as well as the development of adequate corrective and improvement measures. JAC also encourages cooperation between suppliers and intends to intensify its own collaboration with NGOs.

Activities in 2012 revolved around structuring the auditing process effectively. In addition to further developing the JAC auditing parameters on topics like conflict minerals, bribery and corruption and adjusting the list of questions accordingly, the cooperation also set up a supplier database that provides a clear overview of audit results and corrective measures. The database can also be used to identify potential areas for improvement and future audit priorities for different suppliers.

#### **Adopting the JAC Guidelines and defining KPIs**

During the reporting period, the cooperation network expanded its membership to a current total of nine telecommunications providers: Belgacom, Deutsche Telekom, France Télécom-Orange, KPN, Swisscom, Telecom Italia, Telenor, TeliaSonera and Vodafone. All members were asked to approve the JAC guidelines unanimously by the end of March 2013. The next step is to work together with the suppliers and NGOs to define key performance indicators (KPIs) for the topics involving the highest risks, such as working hours and child labor. The KPIs should be completed by summer 2013.

Télécom-Orange and Telecom Italia, announced a joint decision to improve the sustainability of their supply chains in Asia in December 2009. In October 2010, this decision resulted in the founding of the Joint Audit Cooperation (JAC). The JAC is setting up a strategy that enables the three companies to audit their shared suppliers globally on the basis of standardized criteria. The collaboration partners are also striving to establish social, ethical and environmental standards amongst their suppliers.

## Response to violations against employee rights.

If we find out about violations against employee rights on the part of our suppliers, we work to make sure these violations are remedied and that working conditions are permanently improved. If the violations cannot be promptly remedied, Telekom responds to the situation within the scope of an escalation process, like the one used in 2012 with a supplier from China.

An international non-governmental organization (NGO) made serious accusations against this supplier. The NGO claimed that the supplier's working hours were too long and that they had 16 - 18 year-olds working the night shift. They also claimed that the supplier had used inappropriate disciplinary measures and delayed payment of social security contributions or refused to pay them altogether. Telekom had already imposed strict measures on the supplier within the scope of an audit in October 2011. However, the follow-up audit conducted in July 2012 showed that the supplier had not yet complied with these requirements. As a result, Telekom sent the supplier an internal corrective measure plan in August that was created in consultation with BuyIn and then verified the implementation status on-site at the end of August. We were able to identify initial positive trends at that time. A crisis meeting was held by Telekom representatives and the supplier's management to discuss the working hours, which were still too high. In addition, a high-ranking delegation from Deutsche Telekom visited the company in September, following which the supplier formally agreed to the corrective measure plan sent to them by Telekom in November 2012 and, in their agreement, stated that their objective was to become a model company in the region and within the industry.

Each month, Telekom monitors the supplier's efforts initiated in August 2012 to ensure that improvement measures such as a pay increase, gradual reduction of weekly working hours to the legal 49 hours a week, building collective and individual showers and drawing up a new cafeteria concept are indeed implemented.

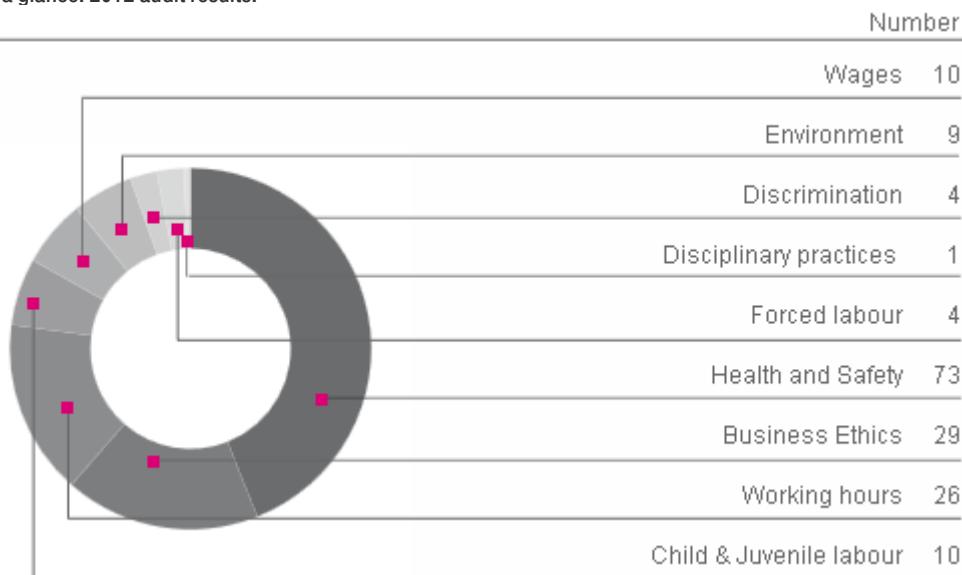


## 2012 audit results.

A total of 33 social audits were conducted on direct and indirect suppliers of Deutsche Telekom in 2012 through the auditing program set up and managed at Group level. As in previous years, we focused our audit activities particularly on suppliers in Asia. However, we also conducted social audits in Latin America and Eastern Europe.

Among the suppliers audited were manufacturers/suppliers from the terminals, IT services, IT hardware/software and network areas. The audits did not uncover any cases of corruption.

At a glance: 2012 audit results.



### Results and improvement.

In 2012, a total of 33 audits were conducted by external and internal auditors. 26 of these audits were conducted within the scope of the Joint Audit Cooperation (JAC). We did not find any cases of corruption.

However, we identified key weak points and considerable need for improvement particularly in the following areas:

- Occupational health and safety
- Corporate ethics
- Working hours

We found violations against Telekom supplier requirements in a total of 166 cases, 42 of which must be considered critical. Based on these findings, measures were immediately introduced to improve conditions on site.

[Last year's CR report](#)

### Work and ethics.

Issue	Key findings	Measures and improvements made
<b>Working hours</b>	<ul style="list-style-type: none"> <li>Systematically exceeding legally permitted normal working hours (including overtime regulations)</li> <li>Unacceptable amount of overtime, in some cases more than 80 per month</li> <li>Employees working on 20 consecutive days without getting a day off</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of a monitoring system to automatically record time worked and to provide the executive management with adequate information</li> <li>Agreement to gradually comply with national laws regarding working hours, to the extent these exceed the ILO guidelines</li> <li>Introduction of a day-off policy after working seven days in a row</li> <li>SA8000 certification</li> </ul>
<b>Discrimination</b>	<ul style="list-style-type: none"> <li>Conducting pregnancy tests before hiring</li> <li>Selecting employees based on ethnic background as well as religion and sexual orientation</li> </ul>	<ul style="list-style-type: none"> <li>Elimination of pre-hire pregnancy tests</li> <li>Introduction of a policy for conducting interviews. Ethnic background and religion no longer allowed as part of the selection criteria; interviewers are prohibited from asking questions about sexual orientation.</li> </ul>
<b>Disciplinary measures</b>	<ul style="list-style-type: none"> <li>Deducting pay for mistakes made at work</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of a policy to regulate disciplinary measures. Deducting pay for mistakes made at work is now strictly prohibited. Introduction of regular informational and training measures for production managers.</li> </ul>
<b>Youth employment</b>	<ul style="list-style-type: none"> <li>16 - 18 year-olds working the night shift</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of a policy to regulate employment of young people. Young people only be hired for less strenuous positions; night shifts and overtime are prohibited.</li> </ul>

## Environment, health and safety.

Issue	Key findings	Measures and improvements made
<b>Environment</b>	<ul style="list-style-type: none"> <li>No environmental management system in the production area</li> </ul>	<ul style="list-style-type: none"> <li>ISO14001 certification</li> </ul>
<b>Occupational health and safety</b>	<ul style="list-style-type: none"> <li>Protective clothing for hazardous working conditions either not available or defective</li> <li>Risks at the workplace that could lead to accidents, injury or work-related illnesses were not being reviewed</li> <li>No safety information available for chemicals</li> <li>No regular informational or training measures on occupational health and safety</li> </ul>	<ul style="list-style-type: none"> <li>Free provision of adequate protective clothing for hazardous working conditions</li> <li>Regular monitoring of risk factors involved in work processes and conditions</li> <li>Provision of safety information on chemicals and hazardous goods</li> <li>Regular instructions on occupational health and safety for employees</li> </ul>

## Corporate ethics.

Issue	Key findings	Measures and improvements made
<b>Corporate ethics</b>	<ul style="list-style-type: none"> <li>Sub-suppliers were not required to comply with environmental, social and ethical standards</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of environmental and social standards for suppliers including regular review</li> </ul>



## International collaboration.

The innovation cycles in mobile technology are growing steadily shorter. More and more raw materials are needed to manufacture new products, some of which are extremely rare and are extracted and processed under critical conditions in newly industrialized and developing countries. At the same time, devices are used for ever shorter periods and many disposed of without considering the value of the materials they contain. We can only indirectly impact suppliers and subcontractors at the start of the complex value chain for ICT products, for example by refusing to buy products from dubious sources. We are aware of our responsibility and are convinced that we can make a real difference by taking comprehensive solution approaches. That is why we participate in industry-wide collaborations like the [Global e-Sustainability Initiative \(GeSI\)](#).

### Switch Asia project completed.

In February 2013, the Switch Asia project sponsored by the EU came to an end. The purpose of the project was to improve the sustainability efforts of small and medium-sized companies (SMEs) in China's ICT industry. The project was initiated because SMEs are responsible for a large amount of air and water pollution in Asia. European companies can help them develop environmentally-friendly processes. Deutsche Telekom sponsored the project as a strategic partner. Various measures were conducted from 2009 until 2013 within the scope of Switch Asia, including 23 workshops for SMEs as well as development programs for twelve pilot companies and two network events. More than 1,600 companies participated in one or several of the events.

Telekom presented its sustainability strategy and its contributions to the project at the final event of the Switch Asia project in January 2013. Telekom's contributions included preparing and conducting workshops, receiving a high-ranking Chinese delegation in Germany and passing on its knowledge of environmentally relevant characteristics of products and possible sustainability standards.

### Conflict-Free Smelter Program improves safety in the raw materials supply chain.

In cooperation with the Global e-Sustainability Initiative (GeSI) and the Electronic Industry Citizenship Coalition, we helped expand the [Conflict-Free Smelter Program](#) in 2012. The point of the program is to make it possible for companies to procure conflict-free raw materials. Another goal is to establish industry standards that cover the extraction and processing of raw materials, with the objective of preserving peaceful co-existence and human rights.

The program focuses its controls on metal processing and smelting companies, which make up the "bottleneck" of the entire supply chain for mineral resources (from the mines

to the final product). Independent auditors control companies to make sure that sourced raw materials are not related to armed conflicts.

We made progress in the following areas during the reporting period:

- Introduction of an independent audit of the Conflict-Free Smelter Program
- Definition of new audit indicators
- Development of an audit protocol that can be viewed by the public for each metal worked by smelting companies
- Installation of a whistleblower process for people to anonymously report shortcomings of smelting companies
- Expansion of the program to include the automotive industry as a result of the US-based Industry Action Group becoming a member
- Inclusion of jewelry makers

In order to increase its influence, the initiative is planning to expand its efforts to include other stakeholders and to consider collaboration with initiatives engaged in areas such as sustainable forestry, diamond mining and fair trade.

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Numerous metals are used in wireless and landline phones as well as other ICT products. Most of these metals come from newly industrialized and developing countries, where they are often mined or extracted under problematic conditions. That's why we actively support the efforts of the Global e-Sustainability Initiative (GeSI) industry association to increase the transparency of the raw materials extraction process and minimize the negative social and environmental impacts of raw materials extraction.

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## Climate & Environment.

### #RECYCLED

Telekom recycles  
more than 1,500 km  
of cable in Germany alone.

#### Find out more

The ICT industry plays a key role when it comes to curbing climate change. This was proven by scientific studies such as the SMARTer2020 study, which was published on December 3, 2012. Telekom played a decisive role in designing this study, especially the Germany addendum. The study was presented by Luis Neves, Chairman of the Global e-Sustainability Initiative (GeSI) and Board Representative for Climate Protection and Sustainability at Deutsche Telekom, and Christiana Figueres, UN Executive Secretary of the UN Framework Convention on Climate Change, at the 18th UN Climate Change Conference in Qatar.

According to the study, a total of 16.5 percent of the annual emissions expected to be generated globally by 2020 could be avoided by employing smart information and communications technologies. That comes to a total of 9.1 billion metric tons of CO<sub>2</sub> emissions, which is about ten times the amount of total greenhouse gas emissions produced in Germany and about seven times the amount produced worldwide through the use of ICT. The study identified smart agriculture as another new potential area for emissions reduction.

We believe that Germany, and therefore Telekom, needs to assume a leading role when it comes to fighting climate change through the use of ICT. We are developing our products and services within the scope of our "low carbon society" action area, making it possible for our customers to engage in green consumption with our innovative ICT services and solutions. We are also investing heavily in the expansion of a climate and environmentally friendly network infrastructure.

What's more, we take a host of measures to continuously reduce the impacts that our own business activities have on the climate and environment. Reducing the Group's CO<sub>2</sub> emissions is a focal point of our climate protection strategy. During the reporting period we concentrated on implementing our climate protection strategy throughout Europe.



## Climate protection.

According to the SMARTer 2020 study, around 16.5 percent of all CO<sub>2</sub> emissions worldwide could be avoided through use of information and communications technology (ICT). That is seven times the amount that is being caused by the ICT industry itself.

For this reason, we support consumers and business customers who are looking to optimize their energy consumption and energy management. A few examples that show how the carbon footprint of enterprises and consumers can be reduced with ICT are cloud services, smart clients, video conferences, and smart grids. Simultaneously, we are systematically reducing our own CO<sub>2</sub> emissions. To this end, we are shifting our network technology away from the traditional telephone network over to the Internet protocol, replacing second generation mobile technology with new technologies and improving the utilization and energy efficiency of our data centers.

Target in Germany for 2020: 40 percent less CO<sub>2</sub> than in 1995.

Telekom in Germany plans to make a contribution to creating a low carbon society by 2020. Our ambitious goal is to reduce CO<sub>2</sub> emissions by 30 percent by 2020 compared to 2008 levels. That will be the equivalent of more than 40 percent compared to emissions recorded in 1995. It is realistic to say that we can achieve this goal based on the general conditions given in Germany. Unlike emissions in global growth regions, CO<sub>2</sub> emissions have decreased in Germany over the last two years. According to measurements conducted by the United

Nations Framework Convention on Climate Change, UNFCCC, the amount of CO<sub>2</sub> emissions produced in Germany, measured based on CO<sub>2</sub> equivalents, decreased from 1,246 million tons in 1990 to 937 million tons in 2010. By introducing more efficient information and communications technology (ICT), Deutsche Telekom contributes significantly to continuing this trend. Even the increasing transmission capacities and telecommunications services resulting from this do not necessarily lead to higher emissions thanks to the use of state-of-the-art technology.

CO<sub>2</sub> reductions at Telekom in Germany will primarily result from the transition to the more energy-efficient Internet protocol (All-IP). We can also make a contribution to this development with the implementation of our Green Car Policy, which was introduced in 2010, with savings in the area of facility management and with load-adaptive control of network components. We use the CO<sub>2</sub> emissions CR KPI to measure overall emissions trends. In 2012, the entire Telekom Group emitted a total of 3,647,359 tons of CO<sub>2</sub>. If you also take the emissions saved with RECS (Renewable Energy Certificates System) and other certificates, the Group only produced 2,235,388 tons of CO<sub>2</sub>. At the end of 2012, the International Energy Agency (IEA) completely revised the emission factors it had published for emissions resulting from electricity consumption. This was taken into account for the 2012 emissions and resulted in a rise in the emissions figure.

#### Last year's CR report

### Internationalization of the climate protection strategy.

We have not yet achieved our interim goal, which was approved in 2011, of expanding our climate protection strategy to 13 European Telekom subsidiaries and 11 European T-Systems branches by May 2012. This can be attributed to uncertain forecast data on emissions-heavy segments such as fixed-line, mobile networks, data centers, IT, car fleet, facility management and business travel. Even the definition of personal climate protection goals for our European subsidiaries depends on this data to a certain extent.

Telekom has also initiated this process at international subsidiaries outside of Europe regardless of the still pending specification of climate protection goals at European units. Reference values from 2008 have been determined for all areas as for the European subsidiaries. The next step is to identify specific measures and create a prognosis for target values in 2020. The climate protection strategy is currently being extended to include eight T-Systems LBUs outside of Europe: Brazil, Malaysia, Singapore, Russia, North America, Mexico, South Africa and China. T-Systems Japan and T-Mobile USA have not yet been included.

By determining their own climate protection goals and relevant implementation measures by 2020, our international subsidiaries outside of Germany are laying the groundwork for being able to implement the climate protection strategy. After this process has been completed, we are planning to conduct regular checks of CO<sub>2</sub> emissions and measure implementation to ensure the targets are met. The CR Manager Network is also planning to strengthen collaboration between our international subsidiaries and to encourage them to share their experiences from climate protection efforts. This should further promote internal communication of best practices.

### Climate-friendly network infrastructure solutions.

As part of the Climate Change Group (CCG), the expert group CCG@TDG from DT Technology is developing and initiating specific measures in collaboration with Power and Air Solutions in order to reduce CO<sub>2</sub> emissions generated by the network infrastructure in Germany between 2008 and 2020. The group meets regularly, analyzes current CO<sub>2</sub> values and, if necessary, develops new measures to meet the Group's 2020 target for CO<sub>2</sub> emissions.

Here is a list of exemplary projects in the area of climate-friendly network infrastructure solutions that were

developed by the expert group in 2012:

- Load-adaptive control
- Analysis of smart grid potential and conducting initial pilot projects
- Highly-efficient network devices
- Increase power usage effectiveness of the control stations
- Dismantling outdated technology

Load-adaptive control of information and communications technology (ICT) is a field of research on how to reduce CO<sub>2</sub> emissions in order to make our network infrastructure more climate friendly. Traditional ICT technology always uses the same amount of power regardless of the amount of data that is being transferred or processed. Load-adaptive control systems allow us, to a certain degree, to adjust electricity usage in line with the capacity needed.

We have also analyzed and implemented possible energy savings potential in the context of designing smart grids (DESI project). Smart grids allow network operators to control the generation and use of electricity in such a way that supply and demand are coordinated more effectively and the voltage in the grid remains stable. This will make it possible for grids and power plants to work together in a more efficient, climate-friendly way (Smart grids & smart metering).

Additionally, the PUE value was further reduced from 1.8 to 1.48 at around 8,000 operating units between 2005 and 2012. The PUE value compares the total amount of power that is used at a data center with the power consumption of the computers (total facility power/ICT power) and indicates how effective operating units are in terms of securing availability (cooling and powering). The more the value approximates to 1, the higher is the energy efficiency. In 2012, we conducted a number of measures, e.g., increased usage of direct fresh air cooling, waste heat recovery from central cooling and compact systems and rectifier station efficiency improvements. This resulted in further reductions of energy consumption in the network infrastructure.

We also continued to dismantle outdated technology in 2012. Telekom was able to save around 16,900 tons of CO<sub>2</sub> emissions in 2012 by shutting down power-intensive network systems, compared with approx. 16,000 tons in 2011. After dismantling outdated systems, we have them recycled so that valuable raw materials such as copper can be reused.

### Compensating for 12,139 tons of CO<sub>2</sub> with climate protection projects.

Telekom compensated for the carbon footprint left behind by events, products and services totaling at 12,139 metric tons of CO<sub>2</sub> during the reporting period. Our event policy specifies that climate certificates must be purchased to compensate for all events that cause CO<sub>2</sub> emissions of more than ten metric tons. CO<sub>2</sub> compensation for events with emissions below this limit is voluntary. Project managers responsible for events need to take climate protection-related issues into account even during the planning phase. They can use an emissions calculator to calculate values such as the emissions that will be generated by participant travel to and from the event.

We also compensate for the CO<sub>2</sub> emissions produced by some products and services, e.g., phone and web conference systems or software for downloading videos and music by (neutralizing the carbon footprint of our download portals).

Avoiding and reducing greenhouse gas emissions has top priority at our company. We are investing more and more in certified climate protection projects—for example, a biogas project in India—to compensate for CO<sub>2</sub> emissions that cannot be avoided. 30 percent of the climate certificates comply with the Gold Standard, the

strictest requirements for emission reduction projects worldwide, and 70 percent comply with the Voluntary Carbon Standard, which is recognized internationally as well.

In 2013, we are planning to increase the volume of high-quality climate compensation efforts and get involved in further projects.

## Measuring emissions along the value chain.

In the last few years, Telekom has initiated the measurement of Scope 1 and Scope 2 emissions  at its international units. To do this, we use the data provided by them in the Group-wide CR data collection system, in which each company records the number of kilometers driven, consumption of fossil fuels and electricity consumption. Based on this data we calculate the scope 1 and 2 CO<sub>2</sub> emissions using coefficients defined by the International Energy Agency (IEA).

We are aware that this only reflects part of our impact on the climate. Additional emissions are generated in particular during the production and transport of the goods that we purchase from our suppliers as well as when customers use our services. So far, we have only been partially recording scope 3 emissions for Telekom in Germany, including emissions produced by our business trips taken by rental car, train or airplane.

With support from Öko-Institut e. V., we also developed a guideline for calculating a product carbon footprint (PCF). To create transparency on greenhouse gas emissions at the customer end, we have tested the first draft of the guideline in practice on the basis of our Entertain product. During the process, we found that the receiver's standby function is a high power consumer. We therefore plan to optimize the product and move it over to the Internet in the medium term. However, the largest single part of the carbon footprint, namely 35 percent, is generated in conjunction with the TV set itself, on which we have no direct influence.

 One tricky aspect about recording Scope 3 emissions  is evaluation of emissions from the pre-supply chain. In order to obtain the information we need, we hold intensive talks with our suppliers. In 2012, we staged two supplier workshops on this aspect.

 In 2012 we developed a concept to record our indirect emissions as defined under GHG Scope 3. At the end of the reporting period, we submitted our draft for review by a verification company of international repute. The results are expected by mid-2013. We continue to participate in industry initiatives to ensure that our data can be compared with that of other companies.

Our calculations of the Scope 3 emissions  are based on the internationally recognized Greenhouse Gas (GHG) Protocol Standard. Deutsche Telekom is involved in further advancing the protocol, especially for companies in the information and communications industry (ICT). The plan is to pass and publish a sector supplement amendment for the industry in 2013.



## Climate protection initiatives.

Fighting global warming will be one of the main issues in our future. Close collaboration between the worlds of business, politics and society is very important in developing effective approaches to climate protection. That is why Telekom is involved in numerous initiatives to protect the climate and the environment within the scope of its "low carbon society" focus.

We also made efforts to drive the topic during our participation in the United Nations' COP <sup>i</sup> 18 climate protection conference, which was held in Doha, Qatar in December 2012, together with the Global e-Sustainability Initiative (GeSI). At the conference, we emphasized the central role of the ICT industry in realizing CO<sub>2</sub> reduction targets as well as the necessity of developing specific, mandatory objectives.

### 2° – German CEOs for Climate Protection initiative.

Deutsche Telekom supports the German federal government at a national and international level in creating an effective policy to protect the global climate as a member of the 2° – German CEOs for Climate Protection foundation. On the occasion of the United Nations' climate change conference (COP <sup>i</sup> 18) in Doha, Qatar in December 2012, the CEOs of the companies supporting the foundation made an appeal to the German federal government. They demanded that Germany help develop a common position for the EU member states in which they commit to raising their CO<sub>2</sub> reduction targets for 2020 from 20 to 30 percent. At the beginning of the climate change conference on November 26, 2012, the CEOs paid German Minister for the Environment, Peter Altmaier, a visit. They discussed topics such as the contributions being made to climate protection by the energy turnaround in Germany and efforts to make buildings more energy-efficient.

The goal of the 2° – German CEOs for Climate Protection foundation is to limit global warming in the long term to a maximum of 2° compared to the preindustrial level. The initiative considers its most important contribution to German climate protection policy to be the development of technologies, procedures and services that can be used worldwide to reduce greenhouse gas emissions.

### Involvement in the Global e-Sustainability Initiative.

Telekom is a founding member of the Global e-Sustainability Initiative (GeSI). Our Board Representative for Climate Protection and Sustainability has been chairing this initiative since 2006. Telekom representatives were involved in all five current working groups during the reporting period: Here is a summary of their activities:

- **Climate change:** The main focus of this working group in 2012 was to carry out the SMARTer2020 study. The original plan for 2012 was to identify the potential for reducing water consumption in processes used to manufacture network infrastructure systems and end devices. However, this project could not be implemented because of the SMARTer2020 study. No decisions as to when the project would be initiated had been made by the end of the reporting period.
- **Supply chain:** Standards for a transparent raw materials supply chain, e.g., within the scope of the Conflict-Free Smelter Program conducted by EICC (Electronic Industry Citizenship Coalition) – GeSI

Extractives Working Group - were developed further during the reporting period.

- **Energy efficiency:** In 2011, we participated in a benchmark study on the energy efficiency of fixed-line network providers. The results were published in 2012. British Telecom, KPN, Telecom Italia and Telefonica also participated in the study. The results showed that there are many differences between the network providers. Some of the differences include outside air temperature at the sites where technical systems are installed. That leads to a strong variation in the amount of energy needed to cool network nodes. Population density as well as the access technology being used also lead to significant deviations in energy consumption values. One key factor in improving energy efficiency is switching digital legacy systems over to state-of-the-art IP-based systems. All parameters analyzed in the study showed increasing efficiency in the period between 2008 and 2010. Deutsche Telekom's values were above average. However, only a limited comparison of the data can be made due to the differing general conditions, which must also be taken into consideration when factoring in successful improvement programs.
- **E-waste:** In order to establish capacities for the international management of electronic waste in developing countries, the working group initiated the [E-Waste Academy](#) in 2012 in collaboration with Solving the E-waste Problem (StEP) and the United Nations Environment Program (UNEP). The focal point of the conference was sharing experiences and examining effective waste management and regulatory systems for e-waste. The first convention of the E-waste Academy took place in Accra, Ghana, from June 25-29, 2012. The convention was co-financed by GeSI, the Netherlands Association for the Disposal of Metal and Electrotechnical Products (NVMP Association) and the United Nations Industrial Development Organization (UNIDO). An interactive online toolkit for e-waste management was developed in the context of the convention. It is available to any parties interested in the e-waste sector and provides tools for creating guidelines and business models as well as system solutions. The final version of the toolkit is scheduled to be completed in spring 2013. Participants responded to the event very positively and it was reported on extensively by the media. You can find more information on the E-Waste Academy on [YouTube](#), [Facebook](#) and [Twitter](#).
- **Public policy:** GeSI used the United Nation's COP 18 climate conference in Doha, Qatar, as an opportunity to initiate a number of activities in which Telekom participated as a member of GeSI. One highlight was the press conference presentation of the SMARTer2020 study, which we helped develop as part of our commitment to GeSI. The study focuses on the potential of ICT (information and communications technology) to reduce greenhouse gas emissions. A video of the event is available on [YouTube](#).

Participants at the ninth GeSI general meeting in Shenzhen, China, in October 2012, approved a new organizational structure. The new structure focuses on project-based collaboration instead of permanent working groups. GeSI plans to focus on three areas: climate protection, human rights and the supply chain. Under these topics, participants will develop content on areas such as energy efficiency (climate protection) and conflict minerals (supply chain). Deutsche Telekom will be participating in all of the new project groups.

### **ICT as a solution engine.**

The SMARTer2020 study is an update to the SMART2020 study that was published in 2008. The potential reduction of 16.5 percent of all CO<sub>2</sub> emissions by 2020 indicated by the study exceeds the results of the earlier study by far. Deutsche Telekom was heavily involved in developing the study. In Germany, one of the study's focal countries, the study examined greenhouse gas reduction potential particularly in the energy generation and industrial production sectors.

### **Broadband's potential to reduce CO<sub>2</sub> emissions in the U.S. and Europe.**

In 2012, GeSI commissioned the Yankee Group to conduct a [study](#) on the current energy savings potential of online activities. The study looked at eight areas: telework, the Internet as a primary news source, online banking, e-commerce, media downloads and streaming, e-learning, digital photography and e-mail. The results showed that using these applications can help reduce total energy consumption by around 2 percent in the U.S. as well

as in Germany, France, the UK, Italy and Spain. To sum up the results, the annual energy savings potential in the five EU countries is the equivalent of 123 million barrels of crude oil and as much as 205 million barrels in the US (1 barrel = 158.9873 liters). This correlates with CO<sub>2</sub> emission totaling around 39 and 79 million tons respectively. Telework solutions were rated as being particularly effective. Telekom supported the study financially and provided information.

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Telekom has been involved in the [Global e-Sustainability Initiative](#) (GeSI) since 2001 as a founding member. This industry initiative is dedicated to fully exploiting the global CO<sub>2</sub> reduction potential that state-of-the-art information technology offers society. GeSI also works to make the extraction of raw materials more transparent and to improve social and environmental conditions in raw material extraction.

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## Energy management.

To help us achieve our ambitious climate protection goal, we are working on gradually reducing the electricity consumption involved in our business processes. One of our measures is to use energy-efficient information and telecommunications technology to continually optimize our operational processes and our network infrastructure. We have tracked progress in this area using the Energy Consumption CR key performance indicator (CR KPI) since 2010. This KPI shows the amount of energy consumed compared to our revenue figures. We also record the carbon footprint of our business activities using the CO<sub>2</sub> emissions CR KPI. Due to the price erosion in ICT services and the resulting decrease in revenues, our Energy Consumption CR KPI continued to increase despite the clear improvements in energy efficiency we achieved in 2012. We are therefore currently looking into designing a KPI that more effectively reflects our performance in the area of energy efficiency. For a detailed description of the CR KPIs, go to Strategy & Management.

### 2020 Energy Concept focuses on reducing consumption.

Experts from Power and Air Condition Solution Management GmbH (PASM) reviewed energy use and procurement at Telekom for efficiency, environmental friendliness and supply reliability in 2011. Following up this review, the 2020 Energy Concept was discussed internally.

That is why we decided not to purchase RECS (Renewable Energy Certificates System) certificates in 2013 for energy used from the German power grid, which totaled at around 2,965 GWh in 2012. In our opinion, it makes more sense both environmentally and economically under CR strategy to instead invest in reducing our energy consumption and increasing our energy efficiency.

One important objective is to optimize consumption (demand site optimization) through avenues such as generating our own power to cover peak loads. We are setting up additional, highly efficient cogeneration plants for this purpose. We also use the waste heat produced by our ICT equipment to heat our buildings and are reducing energy consumption by using fresh air for cooling.

Six cogeneration plants were set up in 2012 with an electrical output of 50 to 250 kW and 15 more are planned to be installed in 2013. We also optimized more than 100 air conditioning systems in 2012 and are planning to commission the optimization of another 150 in 2013. In addition, we conducted three pilot projects on waste heat recovery in early 2013.

#### **40 percent higher energy efficiency for central cooling system for network node in Munich.**

We developed and commissioned an innovative energy concept in the course of an integral planning process to update our central cooling system for the supraregional network node in Munich, Germany.

From now on, the central cooling system will not just cool the network node in summer, but also be used to recover ICT waste heat to heat the building in the winter. This means that energy will be used twice: firstly, for network infrastructure operations and, secondly, for heating our building in the form of waste heat.

However, the cogeneration plant used to generate the power with an installed electric output of 250 kW will do more than just generate local power and heat. With a peak load management system developed especially for the plant, it will also be able to balance out peak loads in the power grid. In order to optimize our air conditioning systems, we equipped 15 large ventilation systems with new, highly efficient radial fans that cool the network

node with fresh air via a self-optimizing control system. This enabled PASM to considerably improve the energy efficiency of cooling and power supply to the network node. Efficiency increased by more than 40 percent.

PASM (Power and Air Condition Solution Management GmbH) is a subsidiary of Deutsche Telekom AG. PASM is responsible for procuring, provisioning and delivering power, including the associated support services, within the Deutsche Telekom Group.

### ISO 50001 certification for PASM.

The Group subsidiary, Power and Air Condition Solution Management GmbH (PASM), was certified under the new ISO 150001 standard for energy management systems in 2012. In addition to requiring extensive energy data management and technical measures, the ISO 50001 <sup>i</sup> standard, which went into effect in Germany in April 2012, also requires strategic and organizational innovation. PASM set up a systematic innovation management process to meet these requirements. The company collects and analyzes suggestions for improvement and new ideas from the Group as well as from external parties in an ongoing process. If assessed positively, the suggestions are then integrated into PASM's energy management system. In 2012, PASM set up systems for fresh-air cooling at data centers and network nodes on the basis of suggestions made. In addition, systems that use waste heat generated by data processes were installed to heat buildings. PASM also integrated its available energy storage systems as key components of its smart energies power supply grid.

The company is planning to conduct a monitoring audit in 2013. In preparation of the audit, PASM has taken various measures including revising its energy policy and modifying operative processes in order to more firmly integrate energy efficiency into the daily work routines of planners and service technicians. Under the 2012/2013 energy program, the company is planning to set up additional cogeneration plants to generate both electricity and heat with a primary energy efficiency of up to 90 percent. The program also includes other pilot projects on waste heat recovery, a program to eliminate deficiencies in network nodes and upgrading around 150 air conditioning units with energy-efficient fans.

### Increased use of renewable energy.

Throughout the Group efforts are under way to increase the proportion of energy generated from renewable resources in overall energy consumption.

In 2012 Magyar Telekom Plc. purchased 53,816 GWh of renewable energy, which accounts for almost 25% of its total electric energy consumption.

In Croatia, two new wind-solar electricity-generating systems were installed for base stations in the Hrvatski Telekom mobile networks during the reporting period.

In October 2012 T-Mobile Netherlands started using the 286 solar panels installed on the roof of its headquarters in The Hague. The move is in line with the company's sustainability policy and was developed in cooperation with the city authorities. T-Mobile Netherlands expects a saving of 55,000 kWh representing the average energy consumption of 15 households.

### Solar energy programs

Installation of two integrated rooftop photovoltaic systems with a total capacity of 222.64 kWp on OTE buildings in Attica began in the first quarter of 2013. Globul installed nine new hybrid systems with photovoltaic panels in the reporting period, bringing the total number of photovoltaic sites to ten. At Cosmote 19 base stations are now supported by hybrid photovoltaic systems and four new wind turbines were installed.

## Greater energy efficiency and savings.

Besides increasing the amount of renewable energy consumed, Deutsche Telekom subsidiaries are implementing a range of measures to save energy and make their operations more energy-efficient.

- At the Montenegrin subsidiary Crnogorski Telekom, for example, energy consumption was reduced through a number of different measures in the reporting period. Rectifier [i](#) plants with a low efficiency factor were replaced by ones with a high efficiency factor, which saved 700 MWh/year. Additional savings were achieved by replacing the central air-conditioning system (303 MWh/year) and by introducing an automatically delayed start for backup diesel generators (159 MWh/year).
- For the first time, Hrvatski Telekom reported a reduction in electricity consumption. Total electricity consumption in 2012 was 1.3 percent lower than in 2011.
- T-Mobile Austria is promoting an energy-efficient infrastructure to combat the increasing amount of energy being used by information and communications technology (ICT) and steadily reduce its own carbon footprint. In a pilot project, T-Mobile enacted a hybrid concept for renewable energy from photovoltaics and wind with an energy storage back-up system.
- A photovoltaic system and a wind turbine were installed in December 2012 as part of the project and will be connected to the power grid by May 2013. T-Mobile Austria provided the space to set up the systems as well as the structural analysis for additional masts and energy storage facilities. The goal of the research project, 80 percent of which is being financed by the Climate and Energy Fund, is to gain enough renewable energy expertise to be able to install additional systems in the future.
- In the Czech Republic T-Mobile is determined to minimize any increase in power consumption caused by new sites or new services such as 3G [i](#). In developing its 3G [i](#) network T-Mobile therefore decided to share sites with a competitor. Through shared MW links T-Mobile saved 500,000 kWh more in 2012 than it would have done if it had exclusively owned the site. Instead of indoor technology rooms and containers, T-Mobile is, wherever possible, building RRH/RRU-type sites. Since these remote radio head/unit sites consume less power than indoor sites, no air-conditioning is needed and there is no feeder loss. This saves 5,800 kWh per site and year.
- Thanks to a variety of measures implemented in the reporting period and before, T-Mobile Czech saved a total of 54,812,636 kWh of electricity. The measures included 2G [i](#) network modernization and the installation of solar and wind energy systems, more modern air-conditioning systems and more efficient temperature management technology in company buildings.
- In 2012 a number of measures were implemented to reduce the electricity consumption of OTE's telecom equipment. The completed shutdown of the HellasPack infrastructure (a digital telecommunications network) brought an estimated gain of around 720 MWh. The set temperature in all cooled premises was increased by 2 ° C (from 24° to 26°), saving an estimated 750 MWh of energy per year while switching off unused equipment is bringing savings of up to 7,162 MWh a year. In 2012 a start was made with the modernization of rectifiers by replacing old equipment with new high-efficiency rectifiers (estimated annual energy savings: 550 MWh), and with the modernization of air-conditioning equipment by installing new split or VRV systems with an ecologically sound refrigerant (estimated annual energy savings: 500 MWh).
- Cosmote is working on the renovation of its main datacenter to reduce air-conditioning losses and consequently lower overall energy consumption. Furthermore, 100 new cooling systems in base stations and 11 new air-conditioning cabinets now use outside air to cool the telecom equipment room when environment conditions permit. 39 new rectifier cabinets with a special battery isolation compartment allow a higher temperature to be set in the telecom equipment room. And the single RAN technology rollout is in progress at base stations with old telecom equipment being replaced by new equipment that consumes less energy.
- Globul has continued to install free-cooling (alternative air-conditioning) and hybrid (diesel-battery-Photovoltaic)

systems at its base stations. This has reduced their generators' diesel consumption and thus helped to reduce the company's CO<sub>2</sub> emissions.

- During the reporting period Cosmote Romania advanced its trials on different means of energy consumption reduction and two measures were selected for implementation: base stations were retrofitted for improved free cooling at 300 sites; and cooling efficiency was enhanced by separating hot aisles from cold aisles and/or creating plenums for improving the efficiency of air-conditioning units at two core network sites.
- In 2012 Magyar Telekom continued with its fresh air cooling system program at its data centers. This reduces the need for air conditioning and hence electricity consumption. Moreover, the company initiated a smart cooling technology pilot project to optimize air conditioning systems so that they consume less energy. A battery cooling pilot project is also being implemented with aim of safeguarding batteries so they can tolerate greater fluctuations in temperature. In order to save energy from gas and distance heating Magyar Telekom once again replaced some furnaces and modernized heating centers as well using the waste heat from some datacenters for heating purposes.

## Energy-efficient facility management.

Effective facility management is a key component in Telekom's efforts to achieve its ambitious climate protection goals. That is why Telekom conducts an energy-related inspection of heating and ventilation systems as part of all facility renovation work and are constantly working to make our facility management practices even more energy-efficient.

- **Energy analysis and measures:** In order to lay the foundation for targeted energy efficiency improvements, we continued the studies initiated in 2012. We conducted six microanalyses as well as pilot projects on waste heat utilization at two Munich sites in 2012. The results of these pilot projects should enable us, for example, to generate heat from central cooling equipment and using large heat pump systems located in ventilation ducts. This means that we can tap the energy used to operate the Telekom networks to heat our offices. Another waste heat project that had been planned at a location in Frankfurt was not realized. The project proved not to be economically feasible, contrary to our initial estimates. The results of the six microanalyses will be put into practice in 2013.

We developed a series of measures based on the results, including adjusting the operating times for room ventilation of office and warehouse areas to the need for fresh air in those areas. This project is scheduled to start in October 2013 and to be completed in 2015.

- **LED lighting:** We began switching over to LED lighting in common areas such as stairwells, hallways and basements in December 2011. An additional twelve locations in Germany were equipped with LED retrofit lamps in 2012 as part of this program. The lamps can be used with traditional sockets. Under the LED@Office project, which was initiated in 2011, we are also planning to equip all Telekom offices in Germany with LED lighting as a standard fixture. In 2011, we equipped some rooms with the new lighting and discussed the results in cooperation with different Telekom departments in Germany in order to identify in advance possible advantages and disadvantages of using LED lighting in offices and technical rooms. We then commissioned the technical services provider TÜV Rheinland to analyze the results and switched over to LED lighting at other test sites. The analysis showed that the number of test sites was not sufficient to provide us with statistically sound conclusions. That is why we decided to postpone our evaluation of the project, which was originally scheduled for 2012, to 2013. In early 2013, we drafted a decision proposal to evaluate the advantages and disadvantages of using LED lamps compared to T5 fluorescent lamps. We are also planning to use LED lighting in Telekom Deutschland's technical areas. We conducted a pilot project at the end of 2012 in the technical rooms at a location in Frankfurt, which were partially refitted with LED lighting. We also equipped the Entertain showroom at the same location with LED lamps.

Green buildings are a key factor in reducing energy wastage and promoting the efficient use of this valuable resource. The measures mentioned below are symptomatic of Deutsche Telekom's Group-wide efforts to improve its energy efficiency performance.

- T-Mobile Macedonia and Makedonski Telekom moved to a new office in an energy-efficient building, which is expected to lead to reduced energy consumption in 2013.
- In Croatia Hrvatski Telekom's energy certification project involved issuing and publicly displaying energy certificates for buildings in its ownership, and by the end of 2012, energy certificates for 16 buildings had been issued. This project is not important only in terms of meeting legal provisions in Croatia, but also because it represents an important strategic guideline for future management and maintenance of properties owned by the company. Hrvatski Telekom systematically applies innovative solutions in the green building and energy efficiency field to reduce energy consumption and greenhouse gas emissions as well as to increase the quality of working space.
- In Greece a recently completed Cosmote office building in Paiania has been certified to Class A in terms of energy consumption. The building's sustainability-enhancing features include an innovative elevator design using regenerative technology, highly energy-efficient equipment (e.g. shading systems, free night cooling and lighting with dimming and occupancy sensors), a sophisticated air-conditioning system with reduced greenhouse gas emissions, and solar thermal water heating as an on-site renewable energy source. As a result, a marked reduction in energy consumption is expected from 2013 onwards. Moreover, this is the first office building in Greece to be registered for the prestigious LEED® Gold Certification.
- In April 2012 the Polish subsidiary PTC signed a leasing agreement that foresees its headquarters being transferred to a "green" building in June 2013.

### **Significant improvement in Romtelecom's carbon footprint**

In order to reduce fuel consumption and flue gas emissions Romtelecom installed new heating boilers (with an overall thermal capacity of approx. 1.5 MW) in its condensing operations at nine sites. This led to a reduction in fuel consumption of around 15,000 Nm<sup>3</sup> per year and flue gas emissions by 40 percent. By installing new inverter-type air-conditioning equipment in all its new projects, the company cut its electricity consumption by 50 percent. Since this new air-conditioning equipment also uses ecologically sound refrigerants, there has also been a reduction in harmful atmospheric emissions. The installation of PVC windows in 25 new projects reduced heat losses by 20 percent while the installation of motion sensors in hallways and twilight sensors for exterior lighting in ten new projects cut the company electricity consumption by 30 percent.



## Environmental management.

We want to make sustainability a component of all our business processes and of our employees' everyday lives. Our health, safety and environment (HSE) management system helps us make this possible. The system is based on the international standards OHSAS 18001 [■](#) for occupational health and safety and ISO 14001 [■](#) for environmental management. Key components of the environmental management system include a consistent environmental policy, a Group-wide manual, central document management and standardized Group-wide processes.

### ISO 14001 umbrella certificate covers 21 companies.

We renewed or obtained the ISO 14001 [■](#) umbrella certificate for environmental management systems of the International Organization for standardization (ISO) for 21 of Deutsche Telekom's international subsidiaries in December 2012. Other international subsidiaries, such as those in [Romania and Albania](#), were certified under ISO 14001 [■](#) independently.

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Telekom has been using an environmental management system that complies with the international ISO 14001 [■](#) standard since 1998.

### Progress in implementing HSE management.

17 international subsidiaries have recently been certified in accordance with OHSAS 18001 [■](#). Each business unit makes the decision to apply for certification themselves. Certification is not mandatory under Telekom's CR strategy. However, the Group does provide central support for subsidiaries that choose to apply for certification.

We incorporated 13 international subsidiaries into our health, safety and environmental (HSE) management system during the reporting period, with a total of 30 out of 59 international subsidiaries involved in the system by the end of 2012.

### Globul, Cosmote Romania, AMC obtained ISO 14001 certification.

In 2012 Globul and Cosmote Romania applied for and obtained ISO 14001 [■](#) certification. In addition, Cosmote Romania was certified to OH SAS 18001 and recertified to ISO 9001 [■](#) in the same audit. After building up an integrated environment, quality, operational health and safety management system, AMC was externally audited and also received ISO 14001 [■](#) certification.

#### **Development of environmental management system at OTE.**

After starting development of an environmental management system in the reporting period, OTE has set itself

the goal of obtaining ISO 14001 certification in 2013. An environmental team was specifically set up to achieve this goal.

## Development of occupational safety indicators.

Deutsche Telekom has been collating two indicators (KPI) at the international level to analyze the quality of its occupational health and safety system since January 2012. All of our international subsidiaries have been involved in this process since January 2013.

- The "Number of work-related accidents resulting in absence from work" KPI states the frequency of accidents at our Group units per 1,000 employees and will be used for a benchmark within the Group.
- The "Duration of absence from work following (a) work-related accident(s)" KPI serves as a benchmark for the number of days lost. It will enable us to support the quality of local occupational health and safety systems in combination with the frequency of work-related accidents.

Deutsche Telekom strives to comply with Group-wide, standardized occupational health and safety policies. To help us accomplish this, we shared experiences with other companies and defined our first comprehensive health and safety (H & S) standards in cooperation with those responsible for this area at the international subsidiaries. The standards address the topics of protecting non-smokers, building evacuation, hazard analyses, air conditioner maintenance and first-aid organizational structures. We have been communicating our own standards throughout the Group and implementing them locally since 2013. Our health and safety standards add to the Group's international occupational health and safety management policies. We plan to develop additional H & S standards and introduce these at the Group units starting in the second quarter of 2013.

## Environmental training at Romtelecom.

An environmental induction training course was staged for new Romtelecom employees and environmental training sessions were held on selective waste collection, saving natural resources, environmental legislation and environmental protection for all employees from departments in which the Health, Safety and Environmental (HSE) management system has been introduced. In total, 11 percent of the entire workforce received training in environmental issues.

## Internal Eco-Campaign at PTC in Poland.

At Deutsche Telekom's Polish subsidiary, an internal "Green Company" awareness campaign was launched in December 2012 with the aim of reducing PTC's energy, water and paper consumption and informing employees about the company's green activities. Each month, there is a new keynote topic (e.g. energy, water or paper consumption) that illustrates the company's CR engagement and encourages employees to behave more ecologically. One of the chief means of communicating the purpose of the campaign is through stickers on light switches, electronic devices, and toilets and basins – in each case encouraging staff to save energy or water through switching or turning off the devices in question. Other communication channels include the intranet, office posters and leaflets suggesting more eco-friendly behavior in everyday life.



## Resource efficiency at the workplace.

Telekom wants to keep the negative impact of its business practices on the environment to an absolute minimum. We are committed to the responsible handling of natural resources throughout the Group. For example, we use our [cell-phone recycling program](#) to motivate our customers and employees to make a personal contribution to the conservation of natural resources. We also make our workstations environmentally friendly through measures such as using low-energy devices. Sustainability criteria also play a key role in the procurement of office supplies.

### Using recycled paper.

We have been able to cover almost 100 percent of demand for paper in our offices with recycled paper since January 2012. This is the result of our modified paper procurement process, which we introduced in 2011. The new process requires individual approval for purchasing fresh-fiber paper, which was only given in two exceptional situations. The amount of fresh-fiber paper currently used at our offices is less than 0.0005 percent.

This measure is in line with the [five-point statement](#) that we support as members of the [Pro Recyclingpapier initiative](#) that promotes the use of recycled paper.

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### Conserving resources with state-of-the-art printers.

By the end of June 2012, we had installed a total of 5,050 environmentally-friendly, multi-functional printers at Group offices in Germany, each of which can be used from several workstations. Almost 85,000 workstations have access to these printers. The printers bear the [Blue Angel](#) and [Energy Star](#) seals for being particularly low-energy and climate-friendly products. With the printers, we can reduce our energy consumption by 1,019.6 kWh a year, reducing emissions by 470 tons of CO<sub>2</sub>. They also help us save costs of around EUR 155,000.

Our Montenegrin subsidiary, Crnogorski Telekom, was able to reduce its consumption of paper by 30 percent, for example by changing printer settings.

T-Mobile USA reduced the number of printers (including fax machines, multi-functional printers, etc.) by 1,212, saving around 288,223 kWh or 191 tons CO<sub>2</sub> annually. T-Mobile also optimized printer solutions (printers, scanners, fax machines and copy machines) at all offices in the U.S. and Puerto Rico (not including retail stores) in order to provide employees with expanded, secure printer features and improve the company's carbon footprint. Changes particularly included the introduction of cloud printing. With this technology, employees can send documents to be printed without having to select a specific printer.

Multi-functional printers at Telekom in Germany have been configured to print on both sides as a default setting since November 2011. This printer function conserves resources and reduces costs by using less paper.

### Green office supplies.

We encourage the purchase and use of green office supplies at Telekom in Germany by giving these products

priority in our central ordering system, eBest. We also informed our employees and raised their awareness of green approaches at the office in 2012 via internal media such as the Telekom Social Network (TSN) and the intranet.

Our employees in Germany can use an intranet training tool called Green Office Supplies to find out more on the topic and use their new-found knowledge to earn a certification.

As a major purchaser of green office supplies, Telekom in Germany was awarded the special prize for the Easy Tree Award by our main supplier of office supplies, Staples Advantage. Staples Advantage also donated one percent of the money we spent with them on green and socially acceptable office supplies to fund the planting of 691 trees in Germany.

eBest offers a large selection of sustainable products. These products are labeled with a green tree to make it easier for users to choose environmentally friendly supplies. And our employees use the offer, too.

Approximately 40 percent of the office supplies ordered in 2012 met Telekom's sustainability criteria. These criteria require the use of recycled or repurposed material, biodegradable material or paper that has been certified by the Forest Stewardship Council®(FSC) or Program for the Endorsement of Forest Certification (PEFC). Our goal is to increase the number of office supplies that meet these criteria to at least 50 percent by 2015.

Our central ordering system, eBest, offers a selection of over 1,120 environmentally friendly articles. These include recycled products and refillable pens and pencils made from recycled material. Employees can easily find green supplies with the help of the search engine and then place their order.

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#### Tablets for troubleshooters.

To replace the previous paper-based documentation, technicians at Magyar Telekom who are responsible for troubleshooting and configuring services were provided with tablet PCs featuring applications developed by their specific unit (scanning, electronic signing features, etc.). This not only helps them to organize their work better but also results in cost, time and energy savings and reduces paper consumption.



## Waste management & disposal.

The amount of waste produced throughout the Group increased slightly compared to 2011. The waste we produce is primarily comprised of office waste and dismantled equipment from our network infrastructure throughout Germany. In order to make our waste management processes more efficient, we coordinated our new international waste management approaches developed in December 2011 with our international subsidiaries in 2012. However, we had to postpone implementation of the operative processes and systems at the Group units, which was scheduled for 2012, because of the ongoing coordination process. Mandatory policies and key performance indicators (KPIs) will be key components of our international waste management activities. Each international subsidiary will use these as a basis for setting clear goals and developing effective measures locally.

### Experts manage systematic network upgrade.

The removal of outdated technology that is no longer necessary is an important measure against the backdrop of ongoing all-IP network expansion to help us conserve energy and save costs in the years to come. The Retire project at Telekom in Germany identifies which of the components that are no longer being used can be removed from the network at reasonable cost and effort.

By shutting down systems with a total electricity consumption of 4.51 MW in 2012, we are able to prevent CO<sub>2</sub> emissions amounting to 18,213 tons. The valuable components will then be recycled.

For example, we shut down all of our transmission systems with bandwidths of less than 2 Mbit/s in 2012. In 2012, this was the equivalent of 1.05 MW of saved energy (2011: 2.4 MW) with a reduction in our annual CO<sub>2</sub> emissions of 3,941 metric tons. All of the 25,000 or so network components with bandwidths below 2 Mbit/s are going to be recycled.

### T-Systems Czech Republic: Waste management renewed.

T-Systems in the Czech Republic undertook a radical renewal of its waste management system in the reporting period. Hazardous waste (e.g. fluorescent lamps, batteries, chemicals, et cetera) is handled in a legally compliant manner by a specialist waste management company. Waste responsibilities within the company have been stringently defined with one waste manager per site controlling waste management implementation. The company's logistics department is now responsible for returning and recycling electronic waste. A specialist company deals with common waste and all waste-related information is integrated and monitored by the company's internal process system. During the reporting period the company collected 381 kilogram of electronic waste and batteries, 30 kilogram of cartridges and 2,650 kilogram of waste paper.

### Recycling 9,000 metric tons of cable.

In 2012, Telekom removed more than 9,000 tons of copper cable from duct systems in Germany alone. The cable was processed in accordance with environmental standards at certified waste disposal facilities and up to 90 percent of the material was recycled.

Over the course of network upgrading, Telekom conducted a pilot study to assess resource efficiency and the

contribution to reducing CO<sub>2</sub> resulting from recycling cables. We used values on energy consumption, climate change and resource consumption to calculate the results. They were presented in March 2013 and showed that recycling copper generates significantly less greenhouse gas emissions than primary source extraction. Resource consumption during cable recycling was only a small fraction of the primary resources regained from the process.

#### Last year's CR report

Recycling enables most metals and plastics to be introduced back into the production cycle in high quality. There are only minimal production losses involved in dismantling cables and recycling copper. Depending on the composition of the waste, we are able to achieve reuse rates of approximately 70 to 90 percent. Telekom initiates annual audits of cable disposal facilities. We use the results of these audits to optimize dismantling processes together with the firms commissioned and to maximize the amount of copper recovered. We guarantee a high degree of safety and seamless traceability with our control procedure, which is compliant with the statutory waste disposal regulations, and additional internal transportation documentation.

#### Recycling electronic waste.

The exponential growth figures for cellphone and smartphone usage hide a serious problem: What do you do with your old phone? Throughout the Deutsche Telekom Group subsidiaries are tackling this key issue.

In Poland, PTC's mobile phone and battery recycling campaign resulted in the collection of 1,119.65 kilogram of mobile phones, 669.23 kilogram of accessories and 940.34 kilogram of chargers during the reporting period.

At Slovak Telekom a prize competition to find the company's "biggest mobileecologist" was staged for four weeks from November to December 2012. The idea was that employees clean up their houses before Christmas and get rid of old cell phones by handing them in at their place of work or bringing them to one of Slovak Telekom's shops. Ecological recycling was assured since 90% of material was to be reused. In all, nearly 1,000 old cell phones were collected as a result of the competition.

T-Mobile in the Czech Republic is participating in a project that aims to heighten children's recycling awareness and education. One aspect of the project is an old phone collection competition for schools. As a result, a total of 22,782 phones were collected. The winning schools were invited to an award ceremony at T-Mobile headquarters, where they also had the chance to see the company's alternative energy sources.

#### Recycling programs at OTE & Cosmote.

A systematic recycling program was introduced at the Group's two largest office buildings employing some 4,000 people in all. This program involves recycling office paper, plastic, aluminum and other packaging materials, batteries and electric or electronic waste.

In the reporting period both companies continued with their programs for monitoring and measuring the separate collection of different types of waste, which is then delivered to recycling companies through subcontractors.

#### Romtelecom waste competition.

A "Collect batteries and Win" competition offered prizes to Romtelecom employees for collecting waste batteries and accumulators. A campaign to promote environmental awareness and the selective collection of electric or electronic waste involved distributing 20,600 flyers via the company's shops as well as posting messages on its

website and Facebook. Containers for selective collection of waste cartridges and toners were placed at Romtelecom sites. Last but not least, new recycling contracts were signed for all types of waste generated by the company's activities.

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## Climate-friendly mobility.

With some 28,000 vehicles registered in Germany alone (including transporters and small transporters), our company fleet is one of the largest in Europe. Our fleet's carbon footprint reflects approx. 10 percent of our direct and indirect emissions (scope 1 and 2 according to the Greenhouse Gas Protocol) in Germany. That is why measures for sustainable, low-emissions mobility make an important contribution in helping us achieve our climate protection goals within the scope of "low carbon society" CR action area.

Telekom is pursuing a three-pillar strategy in order to reduce the greenhouse gas emissions of its fleet:

- **Rightsize:** By choosing state-of-the-art, efficient vehicles, we are working toward making our fleet more environmentally friendly. Telekom's mobility services provider, Telekom MobilitySolutions, has always explicitly selected low-emissions models for our service vehicles. Greater emphasis is now also being placed on this aspect for company cars. Our Green Car Policy [■](#) is paving the way.
- **Economize:** Our employees who use company cars learn how to drive as efficiently as possible in special driving courses.
- **Substitute:** We are testing different mobility concepts with the goal of being able to use low-emissions drive systems in the future.

### New cars: CO<sub>2</sub> emissions reduced to 120 g/km.

We were able to make further progress toward establishing a sustainable fleet during the reporting period due to our strict Green Car Policy [■](#). The average CO<sub>2</sub> emissions of our new company cars decreased from 131 g/km in 2011 to 128 g/km (based on manufacturers' standard mileage information). If we include service vehicles in this calculation, the average CO<sub>2</sub> emissions of all new vehicles were down from 125 to 120 g/km. That means that we have already met the European Union's climate protection targets set for 2015 for new cars at 120 g/km and are well below the national average in Germany of 142 g/km CO<sub>2</sub> (exclusively manufacturer data based on information provided by the German Federal Motor Transport Authority).

### Last year's CR report

On April 1, 2010, Telekom Deutschland introduced its Green Car Policy [■](#) for company cars and revised its previous car procurement strategy to include environmental aspects. The policy sets forth a CO<sub>2</sub>-based selection procedure when purchasing new company cars. These include vehicles provided by Telekom to employees on account of their position or function that can also be used privately.

The intention is to reduce standard emission levels of all new fleet vehicles to an average of 110 g/km by 2015, an objective that is also supported by purchasing energy-efficient service vehicles. This corresponds to an average consumption of 4.2 liters of diesel per 100 kilometers. Even today, Telekom MobilitySolutions only provides cars with a maximum CO<sub>2</sub> emissions level of 190 g/km.

We introduced a bonus/penalty program on April 1, 2010 as part of the Green Car Policy [■](#) in order to motivate employees to choose low-emission cars. Employees share the increased costs of both mobility and greater strain on the environment in the form of a penalty if they choose a car with a high CO<sub>2</sub> emissions level. Users

who choose a low-emission car receive a bonus in relation to the savings in fuel costs. Profits generated from the penalties are donated each year to environmental projects.

### Critical assessment by Deutsche Umwelthilfe.

As in previous years, the German environmental organization Deutsche Umwelthilfe (DUH) reviewed the CO<sub>2</sub> emissions of different vehicle fleets in Germany and presented them with a red, yellow or green card again in 2012. Together with six other companies, Deutsche Telekom was presented with a yellow card despite its exceptional car fleet. Only four of the 162 companies reviewed received a green card and 151 companies were given a red card. That included the 112 companies who did not provide any information for the review. That puts Telekom among the top 10 percent. DUH justified the rating by stating that, even though environmental management policies are visibly in effect at our company, they are not extensive enough. According to DUH, the CO<sub>2</sub> emissions produced by the company cars used by Telekom Board members, an average of 185 g/km, are inconsistent with a low-emissions fleet.

We addressed the criticism and looked deeper into the matter. However, we do not feel that it applies in all regards. Some of our Board members even chose to forgo a car completely. We have been able to significantly reduce the emissions generated by the remaining six cars of Board members over the past few years. What's more, these vehicles are only a small part of the more than 23,000 cars that make up our entire fleet. However, it is important to select cars for our Board members that set an example. That is why our Board members voluntarily decided to follow the Green Car Policy [□](#), which is valid in Germany, when selecting company cars.

Under this policy, we are promoting a constant improvement process throughout the Group with the goal of reducing the average CO<sub>2</sub> emissions of new cars in our fleet to 110 g/km by 2015, putting us below the European Union's target of 120 g/km. This also includes the cars used by our Board of Management members.

### 1,600 employees receive driver training.

Our employees who use our service vehicles can learn how to drive as efficiently as possible in special driving courses, an important component in our efforts to reduce CO<sub>2</sub> emissions. Around 1,600 of our employees participated in some 80 eco-driving courses in 2012. The offer was targeted specifically at our technical field service employees, Deutsche Telekom trainees and employees with hearing impairments.

We also plan to offer our eco-driving courses at the Group level. We are planning to employ a combined eco-driving and driver safety training for employees of Telekom's technical departments in Germany in 2013. Eco-driving and safety training courses continue to be an integral part of vocational training for apprentices in their second year at the company. The course are offered in collaboration with the German motor and driving service company, ADAC, and Post and Telekom Accident Insurance Fund, UKPT. We will also continue our training offer for employees with hearing impairments.

### Last year's CR report

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The training program is an effective tool to reduce our fleet's fuel consumption and a significant contribution by Telekom MobilitySolutions to achieving Telekom's climate protection objectives. A study on driving behavior of around 540 drivers of T-Systems International company cars from 2011 indicated savings of around 5 percent.

### Using alternative drive systems.

Telekom MobilitySolutions, Telekom's mobility service provider, has considerably reduced its natural gas fleet over the past few years. Manufacturers did not offer cars in the required categories in 2012 either. Telekom was still using 93 natural gas-powered cars at the end of 2012, which emit less CO<sub>2</sub> and other pollutants than other vehicles.

Telekom has been testing other alternative drive systems besides natural gas-powered engines for years. During the reporting period, we continued to work on different projects and tested the suitability of the cars for our service.

We were able to complete the pilot test featuring two electric cars by Renault, which was launched in North Rhine-Westphalia in spring 2011, on schedule during the reporting period. The results of the test showed that the cars are definitely suitable to be used as service vehicles for special purposes in cities and conurbations but that their range is too limited for them to be used as fleet vehicles. We saw the same results during test operation of a small electric car by Volkswagen at a Telekom site in Berlin. The e-car's daily mileage cannot exceed 120 kilometers.

Deutsche Telekom has also been supporting the e-Mobility Berlin project, which is one of the most extensive field tests with electric cars worldwide, since 2010. In this project, Telekom MobilitySolutions and other Group units have been testing the use of four electric Smart cars. We also tested two Smart electric drive cars in an e-mobility project at our Bonn location during the same period of time. The projects are expected to continue until 2014. Telekom employees have been able to test electric Smarts during service trips since January 28, 2013, as part of this pilot project. All they have to do is sign up and then pick up their electric Smart from the charging station and use it for short trips. Two of the cars, which are being used as rental cars, are located in Berlin and one in Bonn.

## Green business trips.

We are trying to make employee business trips within Germany as green as possible in cooperation with Deutsche Bahn. In February 2010, we signed an agreement with Deutsche Bahn AG to eliminate the carbon footprint caused by employees traveling by train. According to the certificate granted by TÜV Süd technical services company, Deutsche Telekom compensated for around 4,500 tons of CO<sub>2</sub> by investing in climate protection projects in 2012. The partners have compensated for a total of around 13,800 tons of CO<sub>2</sub> since beginning the collaboration in February 2010.

## Green commuting.

An average of 23,700 Telekom employees in Germany used a discount season ticket to commute to work during the reporting period. The number of users did not increase for the first time during the reporting period compared to the previous year. According to a representative survey, our employees commute an average of 30 kilometers twice a day. That means CO<sub>2</sub> savings of around 11,376 metric tons compared to taking the car. In our calculations we assume that a car emits an average of 120 g CO<sub>2</sub>/km compared to 80 g CO<sub>2</sub>/km in public transport.

A regional season ticket offer is available at many Telekom offices, particularly those located in large conurbations in Germany. We signed a new agreement with the Ruhr-Lippe traffic association during the reporting period. Thanks to this agreement an additional 43 employees are now using the discount season ticket in these areas. Due to the lack of demand, we were unable to make any additional offers during the reporting period.

We plan to introduce a discount season ticket in the public transport areas in and surrounding the German cities of Kassel, Siegen and Schwäbisch Hall as well. We intend to provide parking spaces for our employees at these locations for a fee and use the money to subsidize the discount season tickets. That way we can promote the use of climate-friendly public transportation by providing even more affordable discount season tickets and lay the foundation for cutting back on parking lots or planting them with plants and trees that will benefit the climate.

## Climate-friendly mobility in National companies.

A telecommunications company needs a large fleet of company vehicles – for maintenance, customer service and other related purposes. Consequently, there is a great deal of potential for introducing more climate-friendly solutions, such as less thirsty engines and electric-powered vehicles.

- At Makedonski Telekom, for example, GPS  systems in the company car fleet are helping to save fuel. In the reporting period GPS  systems were installed in 330 cars in the company fleets of the Deutsche Telekom subsidiaries, Makedonski Telekom and T-Mobile Macedonia.
- By changing its vehicle purchasing policy to go for cars with smaller engines (1.6 instead of 2 liters) and replacing 9 percent of its fleet, the Montenegrin subsidiary Crnogorski Telekom reduced the average consumption from 8.6 to 6.8 liters/100 km.
- T-Systems and T-Mobile Austria's shared fleet is now being used more efficiently thanks to the T-ePower car sharing solution. Employees used to have to book one of the 24 pool cars via e-mail or Outlook calendar. It wasn't possible to book a car spontaneously or pick it up outside of specified hours. With T-ePower, employees can use a booking portal to reserve a car. No more keys—just make a phone call and the car door opens. The car keys and registration papers are kept in the trunk of the car. T-ePower doesn't use the car's electronics, so it is not dependent on the manufacturer and can be used with any model. In 2012, T-Mobile Austria also added an electric Smart car to its car sharing pool, which currently features around 220 cars.
- In September 2012 T-Mobile in the Czech Republic organized an educational campaign during European mobility week and ran a competition to find the T-Mobile Eco Driver of the year 2012. The campaign addressed T-Mobile employees and included renewable resources as well as mobile phone recycling.
- Makedonski Telekom staged an eco-driving campaign, which included advice for its employees on more economical driving practices.
- In Washington State, USA, the T-Mobile Rideshare Program encourages employees of T-Mobile USA to participate in ridesharing in order to reduce the number of commute trips. Ridesharing is defined as carpooling, vanpooling, riding a bike or bus, walking, being dropped off or telecommuting. To encourage more eco-efficient travel the company offers employees who participate in the Rideshare Program a subsidy of between \$40 and \$75 per month and/or a free bus pass. Approx. 1,500 T-Mobile employees are taking part.



## Biodiversity.

Plant and animal diversity is crucial to human existence and can facilitate adjusting to changing environmental conditions, such as those resulting from global climate change. In light of these facts, the United Nations has named the years 2011 to 2020 the UN Decade of Biodiversity.

Telekom is involved in helping conserve a diverse plant and animal population as well. Telekom Deutschland has been cooperating with the Deutsche Umwelthilfe (DUH) environmental organization for 13 years and had sponsored a total of 779 environmental protection and nature conservation projects as well as environmental education activities as of the end of February 2013.

### The Living Forests nature conservation fund to continue.

We have decided to extend the duration of our Living Forest nature conservation fund until further notice. The following projects were conducted or supported by the fund during the reporting period.

#### ▪ **March 2012: Planting beech trees with the city of Bonn.**

24 Deutsche Telekom employees planted new trees in the Bonn city forest on March 3, 2012, as part of the Living Beech Forest campaign. Together with the German environmental organization, Deutsche Umwelthilfe (DUH), Telekom provided the city department for green spaces with a total of 4,000 young beech trees. Beech trees are native to our region. They help improve the soil and provide numerous animals and plants with a natural habitat suitable to their needs. Our employees planted 1,000 of the young trees themselves with the help of city forestry employees.

#### ▪ **February/March 2012: Habitats for lizards in the Dellbrücker Heide nature conservation area.**

The fund also provided financial support to a project conducted by Friends of the Earth Germany (BUND) in the state of North Rhine-Westphalia to create habitats for endangered sand lizards in Dellbrücker Heide. BUND volunteers and students from the neighboring Willy Brandt school created microhabitats for the lizards to hide in and places for them to lay in the sun as well as other features. The BUND organization has been voluntarily caring for the city's part of the conservation area on behalf of the city of Cologne since 2009. The organization is planning to continue the project supported by Telekom beyond the reporting period.

#### ▪ **Continued in 2012: Renaturalization of the Eschenkahr wetlands.**

The fund also sponsored a project by the GNA association for natural conservation and wetland development in the Bad Orb city forest. The project focused on restoring former moorland areas, which will give many types of insects as well as fire salamanders, yellow-bellied toads and other amphibians the chance to repopulate their original habitat.

#### ▪ **December 2012: Collaboration on the DUH convention.**

The Deutsche Umwelthilfe environmental organization held a convention in Berlin on December 12, 2012, under the slogan, "Companies and NGOs working together for nature conservation," to improve networking between companies and environmental organizations. Deutsche Telekom co-financed the convention through its Living Forests nature conservation fund and presented its own experiences with nature conservation projects in cooperation with NGOs.

Telekom founded the [Living Forests nature conservation fund](#) in 2009 in collaboration with the German environmental organization, Deutsche Umwelthilfe (DUH). The fund sponsors exemplary nature conservation projects in Germany that are committed to conserving forests as well as the plants and animals that live in them. The sponsored projects are selected by Deutsche Umwelthilfe and recommended for implementation by a committee of recognized nature conservation experts.

## Financing moorland renaturalization.

### **Green car penalties create ecological rewards in Biesenthaler Becken.**

Employees who use Telekom company cars with high CO<sub>2</sub> emissions support returning the Biesenthaler Becken moorland in the state of Brandenburg to its natural state. This is due to Telekom's [Green Car Policy](#), which specifies strict limits for CO<sub>2</sub> emissions produced by our employees' company cars in Germany. Employees share the increased costs of both mobility and greater strain on the environment in the form of a penalty if they choose a car with a high CO<sub>2</sub> emissions level. This money is used to finance additional fuel costs as well as internal and external projects that contribute to the protection of the climate and the environment.

### **Buying and renaturalizing original moorlands.**

We donated EUR 30,000 from this fund to a local project conducted by the environmental organization, Naturschutzbund Deutschland e. V. (NABU). The goal of the project is to "re-flood" areas that used to be moorland in Biesenthaler Becken north of Berlin and return them to their natural state. This will not only help protect rare moor plants and the animals that live there but also reactivate the moor's ability to extract CO<sub>2</sub> from the air for the long term. A layer of peat only 15 centimeters thick can extract as much CO<sub>2</sub> as a 100-year-old forest in Germany. As long as the water level does not fall, the moorland will not release the CO<sub>2</sub> back into the atmosphere.

To date, the land has been constantly drained through trenches to use it for agricultural purposes. NABU has started purchasing plots of moorland or trading them for other plots of land to put an end to this practice. Around 350,000 square meters were still up for sale for an average price of EUR 2,000 per 10,000 square meters. The NABU foundation is planning to retain permanent ownership of the purchased land CO<sub>2</sub> sink and as a habitat for numerous endangered plants and animals.

### **Employees choose donation recipients.**

In 2012, surplus from the penalties paid in Germany came to around EUR 400,000, some EUR 100,000 more than in the previous year. We used these extra funds internally to finance eco-driving courses for apprentices, purchase electric cars and set up charging stations for e-cars. As in the previous year, we let our employees decide what to do with the remaining EUR 300,000. 6,000 Telekom employees participated in the vote in 2012. We donated between EUR 10,000 and EUR 50,000 to each of the ten projects presented, based on the number of votes the projects received.



Life is for sharing.

2012 Corporate Responsibility Report

We take responsibility.

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[Home](#) > Facts & figures

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## Facts & figures.





## Socially responsible investment.

### CR KPI „Socially Responsible Investment“.

In 2012, 12 percent of Deutsche Telekom AG's shares were held by investors who take SRI/ESG criteria into account at least partially in their investment decisions. Around 2 percent of T-Shares were held by investors who give priority to SRI/ESG aspects when managing their funds.

CR KPI „Socially Responsible Investment“ Deutsche Telekom AG.

The Socially Responsible (SRI) CR KPI indicates the percentage of Deutsche Telekom T-Shares held by investors who show concern for environmental, social and corporate governance criteria in their investment strategy. Due to annual updating of the calculation criteria, comparisons with the previous year may only be conclusive to a limited extent.

### Reporting against standards.

The KPI is relevant for criteria 1 (Strategic analysis, strategy and goals) and 7 (Rules and processes) of the German Sustainability Code.

#### Listing of the T-share.

#### Listing of the T-Share in sustainability indices/ratings.

Rating agency	Indexes/ratings/ ranking	Successfully listed in index			
		2012	2011	2010	2009
SAM	DJSI World	✓	✓	✓	✓
	DJSI Europe	✓	✓	✓	✓
Oekom	"Prime"	✓	✓	✓	✓
VIGEO	ASPI	✓	✓	✓	✓
	ESI	-	✓	✓	✓
imug/EIRIS	FTSE4Good	✓	✓	✓	✓
Sarasin	DAX Global Sarasin Sustainability	✓	✓	✓	✓
CDP	Carbon Disclosure Leadership	-	-	-	-
	Carbon Performance Leadership (new since 2010)	-	-	✓	n.a.
MSCI *	MSCI Global Climate	-	✓	✓	✓
Newsweek 2012 Green Rankings	Rank Germany #6, Global #80, Technology #12	✓	✓	✓	n.a.
STOXX	STOXX Global ESG  Leaders (new since 2011)	✓	✓	n.a.	n.a.

✓ Successfully listed.

- Not listed.

\* Previously RiskMetrics/KLD.

**Reporting against standards.**

The information is relevant for criterion 1 (Strategic analysis, strategy and goals) of the German Sustainability Code.

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## Suppliers.

### CR KPI „Sustainable Procurement“.

The Sustainable Procurement CR KPI measures the share of procurement volume we obtain from suppliers where one or several companies of the corporate group have been audited for compliance with our social and environmental standards. Key in this context is the industry information system, [Electronics Tool for Accountable Supply Chains \(E-TASC\)](#). We were able to considerably increase the procurement volume reviewed according to sustainability criteria by 16 percent to a total of 54 percent in 2012.

CR KPI „Sustainable Procurement“ Deutsche Telekom Group.

In percent.

This increase can in part be attributed to the fact that since 2012 we have been using additional supplier data from our Supplier Management Portal in our CR KPI calculation. In this way, we focus above all on suppliers who are of strategic relevance and have a higher CR risk. Other measures introduced in 2012 contributed to this result as well. For example, we increased the number of suppliers that we require to undergo a prequalification process. This process is now mandatory for all suppliers with whom we expect an order volume of more than EUR 100,000. We have also developed a matrix that categorizes suppliers according to specific, risk-relevant criteria including procurement volume, country, material group and strategic significance for Telekom. The matrix helps us identify potential suppliers for audits as well as those suppliers who we would like to provide us with a self-assessment.

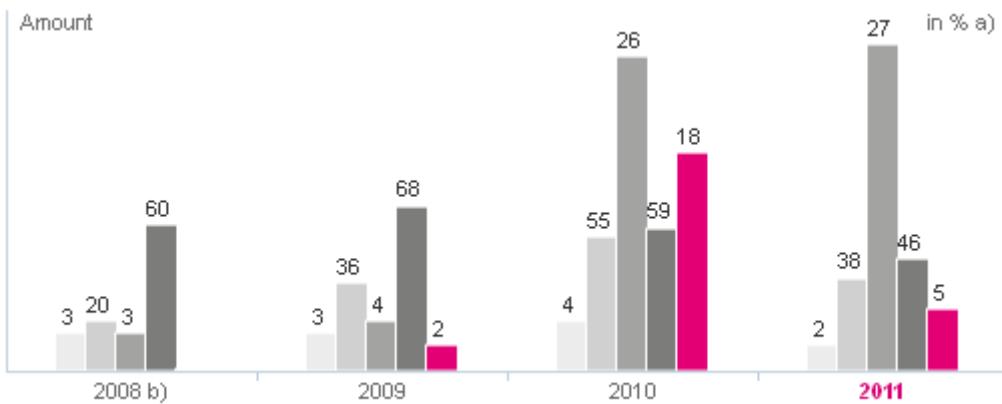
### Reporting against standards.

The Sustainable Procurement CR KPI together with information about our strategic approach fully covers the HR 1 (Human rights), HR 2 (Suppliers and human rights) and HR 10 (Impact assessments) GRI performance indicators. By providing this information, we cover the V28-04 EFFAS indicators (Supply chain). It is also relevant for criteria 1 (Opportunities and risks), 3 (Sustainability goals), 4 (Value added chain), 6 (Rules and processes), 7 (Performance indicators) and 17 (Human rights) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact <sup>1</sup> principles 1 (Supporting and respecting human rights), 2 (No complicity in human rights abuses) and 5 (Effective abolition of child labor).

### Supplier relationships.

The percentage of procurement volume generated with companies registered in the industry information tool [E-TASC](#) (Electronics Tool for Accountable Supply Chains) decreased significantly from 38 percent in the previous year to just under 15.7 percent in 2012. The percentage of procurement volume generated with audited companies increased from 5 percent to around 36 percent. We were able to further expand the auditing practices conducted by the [Joint Audit Cooperation](#) during the reporting period. For the first time, companies were also assessed through prequalification via the [Supplier Management Portal](#) (SMP). Prequalification is now also mandatory for suppliers with whom we expect to place orders totaling at over EUR 100,000.

Risk management for supplier relationships at the Deutsche Telekom Group.



- █ Workshops conducted
- █ Percentage of procurement volume covered by E-TASC b)
- █ Audits conducted c)
- █ Percentage of procurement volume addressed by E-TASC b)
- █ "Percentage of audited procurement volume b)"

a) Procurement volume from Procurement's global database (GDB).

b) Data verified by PwC. Social audits conducted internally as well as externally were taken into consideration only for 1st tier suppliers. Based on procurement volumes at Central Procurement. Values cannot be directly compared to the previous year.

c) Social audits conducted internally as well as externally were taken into consideration (both Deutsche Telekom as well as those conducted by [JAC - Joint Audit Cooperation](#)). Audits also include follow-up audits.

## Reporting against standards.

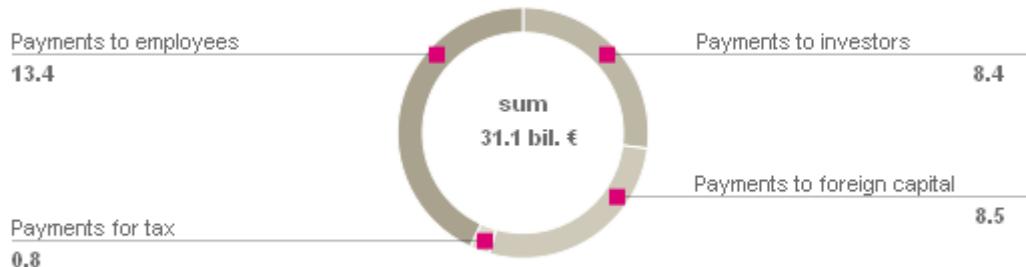
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## Financial indicators.

### Net value added.

The figures on net value added indicate the extent to which individual stakeholders of the Group participate in the company's performance in the form of wages or taxes, for example. Deutsche Telekom's net value added is the result of adding sales revenue to cash inflow from the sale of assets less operating costs and other expenditure. Net added value increased to EUR 31.2 billion in 2012 from EUR 31.1 billion in the previous year.

Net value added.



### Reporting against standards.

With this KPI, we fully cover the EC 1 GRI performance indicator (Direct economic value generated and distributed).

### Net revenue, EBITDA and net profit.

A detailed definition of our financial KPIs is available at [www.telekom.com/investorrelations](http://www.telekom.com/investorrelations).

Net revenue, EBITDA/EBITDA margin (adjusted for special factors), and net profit of the Deutsche Telekom Group.

### Personnel costs and personnel cost ration.

The personnel cost ratio came to 23.2 percent during the reporting period, the same result as in the previous year.

Personnel costs and personnel cost ration for the Deutsche Telekom Group worldwide.

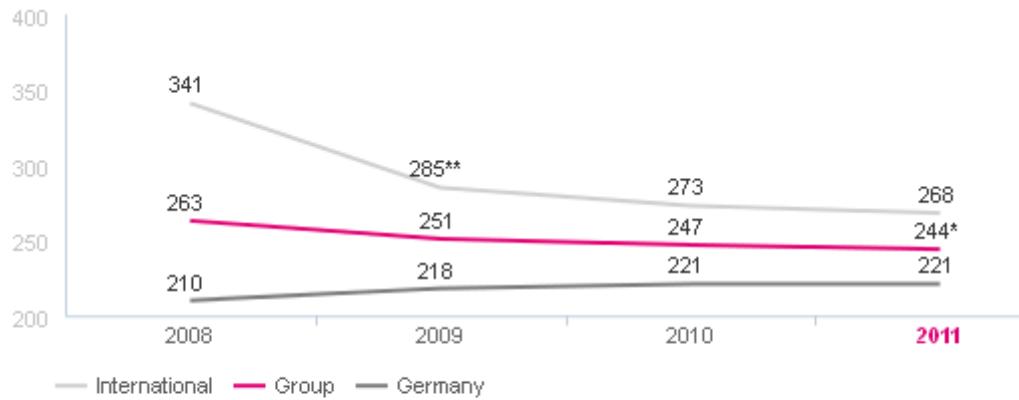
By operating segments, per employee (FTE), in thousands of EUR.

### Revenue per employee.

Group-wide revenue per full-time equivalent (FTE increased during the reporting period to EUR 250,000.

**Revenue per employee.**

In thousands of EUR.



\* The reason for the revenue trend is that international pressure on revenues is affecting the Group as a whole. The trend in Germany is almost constant.

\*\* 2009: OTE acquisition resulted in a disproportionately high increase in international employees in relation to revenue growth



## Energy.

### CR KPI „Energy Consumption“.

Deutsche Telekom measures the Energy Consumption CR KPI as a Monetary Power Efficiency Index (MPEI) which shows the ratio between developments in energy consumption (in thousands of MWh) and revenue (in billions of euros). In 2012, this value increased slightly by 3 percent compared to the previous year. Electricity consumption throughout the Group increased slightly by 3.5 percent, while the associated revenue remained stable.

CR KPI „Energy Consumption“ Deutsche Telekom Group <sup>a)</sup>.

The constant growth in data volumes was one of the reasons for the increase in electricity consumption. Nevertheless, our considerable efforts to save energy and to increase energy efficiency prevented the increase in energy consumption from being much higher. The Group-wide Energy Consumption CR KPI is calculated based on total electricity consumption at the international subsidiaries in relation to the consolidated net revenue of these subsidiaries. The revenue of the Group units included in the CR report, which was taken into consideration in this calculation, covers 96 percent of Group revenue.

### Reporting against standards.

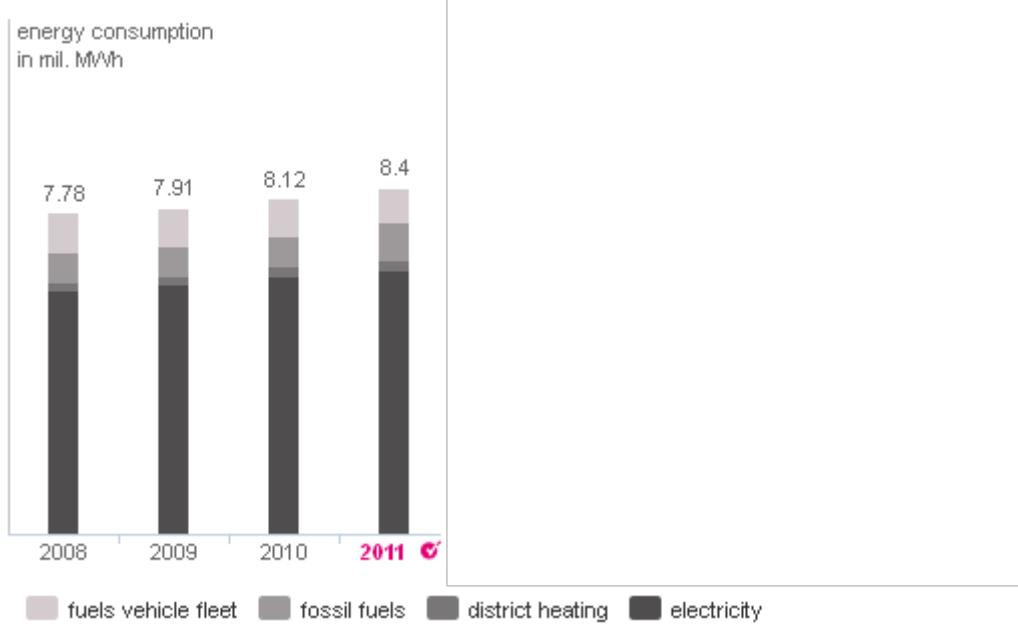
By reporting our electricity consumption as a source of indirect energy consumption in relation to our revenues for the reporting period, we partially cover the EN 4 GRI performance indicator (Indirect energy consumption) and the E01-01 (Energy consumption, total) EFFAS indicator and we fully cover the E01-02 (Energy consumption, specific) EFFAS indicator. This data is relevant for criteria 7 (Rules and processes), 11 and 12 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>i</sup> principles 7 (Precautionary approach) and 8 (Environmental responsibility).

#### Total energy consumption.

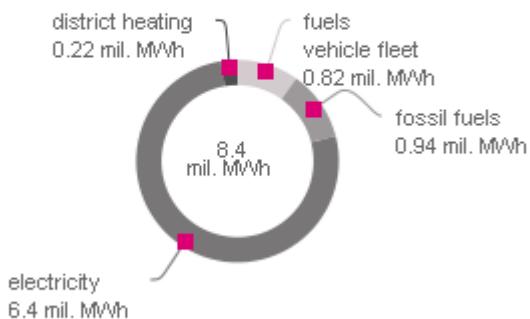
The constant growth in data volumes was one of the reasons for the increase in electricity consumption. Nevertheless, considerable efforts to save energy prevented the increase in energy consumption from being much higher. Use of fossil fuels decreased by a whole 12 percent compared to the previous year, which is partly due to modernization work at Magyar Telekom and energy savings made by some international subsidiaries on account of the relatively mild winter.

Total Energy Consumption Deutsche Telekom Group.

MWh



**Total energy consumption**    **2011**



Data verified by PwC. For detailed audit comments see "DT Group in Germany" and "T-Mobile USA".

In general, our energy consumption increased slightly by one percent compared to the previous year. This can primarily be attributed to increased consumption of electricity at many of our international subsidiaries. Detailed comments on each subsidiary's data are included in the interactive subsidiary benchmarking tool.

### Reporting against standards.

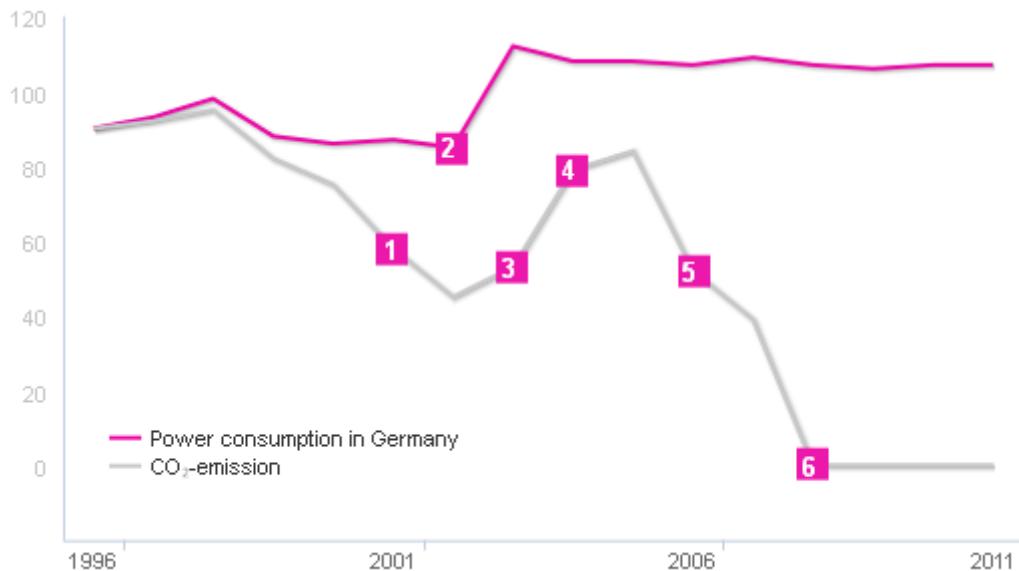
By reporting our energy consumption by primary sources, we fully cover the EN 3 (Direct energy consumption) and EN 4 (Indirect energy consumption) GRI performance indicators as well as the E01-01 (Energy consumption, total) EFFAS indicator. By reporting fleet energy consumption, we partially cover the EN 29 (Environmental impact of transportation) GRI performance indicator. This data is also relevant for criterion 11 of the German Sustainability Code (Usage of natural resources). It is also used for reporting on the Global Compact principles 7 (Precautionary approach) and 8 (Environmental responsibility).

### Decoupling power consumption and CO<sub>2</sub> emissions.

We were able to reduce emissions resulting from our electricity consumption in Germany to zero as was the

case in previous years. We covered all of our electricity requirements in Germany from renewable energy sources, either directly or indirectly, in 2012 as well. We purchased RECS (Renewable Energy Certificate System) certificates in the amount of 2,965 GWh as proof of the amount of renewable energy taken from indirect sources.

Decoupling Power Consumption and CO<sub>2</sub> Emissions of the Deutsche Telekom Group in Germany.



### Reporting against standards.

By providing this information we partially cover the EN 6 (Initiatives for energy-efficiency and renewable Energy) and EN 18 (Initiatives to reduce greenhouse gas emissions) GRI performance indicator and fully cover the E16 -05 (Total alternative energy consumption) EFFAS indicator. Further, the information is relevant for criteria 3 (Strategic Analysis, Strategy and Goals), 11 and 12 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact <sup>1</sup> Principles 7 (Precautionary approach) and 8 (Environmental responsibility).



## CO<sub>2</sub> emissions.

### CR KPI „CO<sub>2</sub> Emissions“.

The CO<sub>2</sub> Emissions CR KPI increased by around 4 percentage points on the previous year and by 17 percent compared with the 2008 base value. Altogether, 530,000 more tons of CO<sub>2</sub> were produced than in 2008. This can partially be attributed to a slight increase in energy consumption throughout the Group. Renewable energy certificates purchased by the Group (such as RECS—Renewable Energy Certificate System—certificates) were not taken into consideration when calculating the CO<sub>2</sub> Emissions CR KPI.

CR KPI „CO<sub>2</sub> Emissions“ Deutsche Telekom Group.

Progress was measured as part of Deutsche Telekom AG's comprehensive climate protection strategy. We calculated our CO<sub>2</sub> emissions values based on different energy and fuel consumption data. Calculation complied with the Greenhouse Gas (GHG) Protocol and was based on emission factors set forth by the International Energy Agency (IEA) and/or the GHG Protocol calculation tools. Deutsche Telekom in Germany, for example, set an ambitious climate target in this climate protection strategy: By 2020 the company plans to reduce its CO<sub>2</sub> emissions by up to 30 percent compared to values from 2008. Differences in the values reported for the years 2008 to 2011 compared to those stated in the CR Report 2011 can be attributed to adjustments made to reporting parameters. Our international subsidiary at that time, T-Mobile UK, was not included in the values for 2008, for example. This subsidiary is no longer included as a separate company in this reporting format due to a change in ownership. Instead, the three companies new to the CR data collection process, Globul (Bulgaria), Cosmote Romania and AMC (Albania), were included in data calculation retroactively for 2008 to 2011. Additional changes can be attributed to data corrections made to the energy consumption values used in our 2011 calculations. The International Energy Agency (IEA) published revised emissions factors for emissions produced by energy consumption in late 2012. This was taken into account in calculating the 2012 emissions and resulted in a rise in the emissions values.

### Reporting against standards.

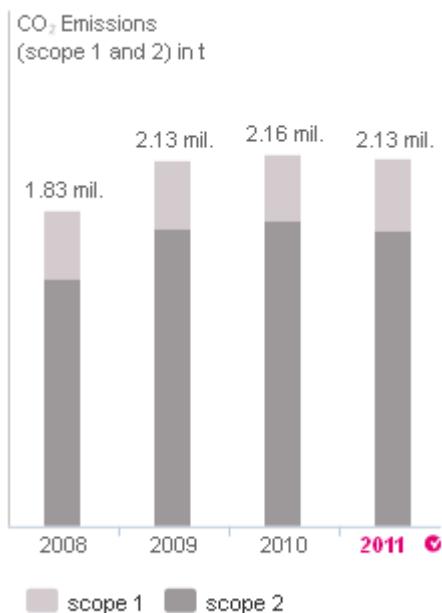
By measuring progress based on our CO<sub>2</sub> Emissions CR KPI, we report our CO<sub>2</sub> emissions in accordance with the Greenhouse Gas Protocol together with our self-defined CO<sub>2</sub> reduction goal, thereby complying with criterion 13 of the German Sustainability Code (Greenhouse gas emissions). By reporting this data, we fully cover the EN 16 (Total direct and indirect greenhouse gas emissions by weight) GRI performance indicator and partially cover the E 02-01 (Scope 1-3 greenhouse gas emissions) EFFAS indicator. This data is also relevant for criteria 7 (Rules and processes), 11 and 12 (Usage of natural resources) and 13 (Greenhouse gas emissions) of the German Sustainability Code. It is also used for reporting on the Global Compact principles 7 (Precautionary approach) and 8 (Environmental responsibility).

Total CO<sub>2</sub> Emissions (Scope 1 & 2) Deutsche Telekom Group.

GHG Scope 1 and 2 emissions increased by around 6 percent during the reporting period. This can primarily be attributed to an increase in indirect (Scope 2) emissions throughout the Group by around 9 percent resulting from increased energy consumption at several of our international subsidiaries. This value also increased because the International Energy Agency (IEA) published fundamentally revised emissions factors for calculating emissions produced by energy consumption in late 2012. These changes were taken into account when

calculating the emissions values for 2012. In addition, we included several international subsidiaries, such as Cosmote Romania, into our reporting process for the first time this year.

Total CO<sub>2</sub> (Scope 1 and 2) Emissions Deutsche Telekom Group.



We calculated our CO<sub>2</sub> emissions values based on different energy and fuel consumption data. Calculation complied with the Greenhouse Gas (GHG) Protocol and was based on emission factors set forth by the International Energy Agency (IEA) and/or the GHG Protocol calculation tools. The total value reflects direct (Scope 1) and indirect (Scope 2) emissions. Changes resulted from the associated change in consumption values and from revised emission factors. You can find detailed comments in the appropriate breakdowns of direct and indirect emissions and/or in the energy and fuel consumption values on which these are based. Renewable energy certificates purchased by the Group (such as RECS— Renewable Energy Certificate System— certificates) were taken into consideration when calculating the Scope 1 and 2 emissions produced throughout the Group. These certificates, however, were not included in calculations of the CO<sub>2</sub> Emissions CR KPI.

Under our climate protection strategy, Deutsche Telekom in Germany is aiming to reduce CO<sub>2</sub> emissions by up to 30 percent by 2020 compared to the 2008 values. Detailed comments on each subsidiary's data are included in the interactive subsidiary benchmarking tool.

We were able to reduce emissions resulting from our electricity consumption in Germany and the Netherlands to zero as in the previous year. We covered all of our electricity requirements in Germany from renewable energy sources, either directly or indirectly, in 2012 as well. We purchased RECS certificates in the amount of around 2,965 GWh as proof of the amount of renewable energy taken from indirect sources. We were also able to reduce Group-wide direct emissions by 8 percent thanks to modernization measures taken by Magyar Telekom and reductions achieved by several international subsidiaries as the result of a mild winter.

### **Reporting against standards.**

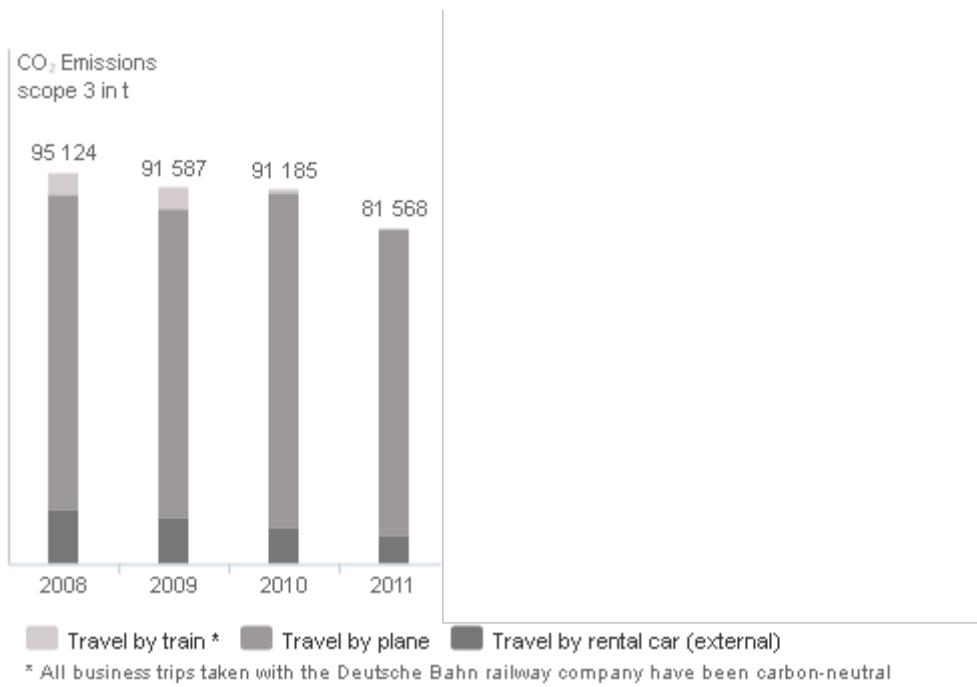
By reporting our direct and indirect CO<sub>2</sub> emissions (Scope 1 & 2) in accordance with the Greenhouse Gas Protocol, we fully cover the EN 16 (Total direct and indirect greenhouse gas emissions by weight) GRI performance indicator and we partially cover the E02-01 (Scope 1-3 greenhouse gas emissions) EFFAS indicator. This data is also relevant for criteria 11 and 12 (Usage of natural resources) and 13 (GHG emissions) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>i</sup> principles 7

(Precautionary approach) and 8 (Environmental responsibility).

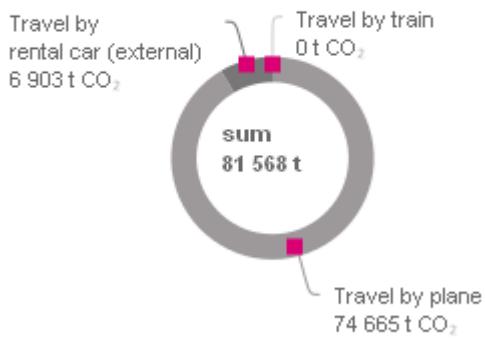
## CO<sub>2</sub> emissions from business travel (Scope 3 emissions).

As in the previous year, Deutsche Telekom was able to significantly reduce Scope 3 emissions <sup>i</sup> during the reporting period. On February 15, 2010, we signed an agreement with Deutsche Bahn AG to eliminate the carbon footprint caused by employees traveling by train. We were also able to reduce emissions generated by plane travel and the use of external rental cars. Reducing Scope 3 emissions <sup>i</sup> is part of Deutsche Telekom's climate protection strategy, the goal of which is to systematically minimize all CO<sub>2</sub> emissions (Scope 1+3).

CO<sub>2</sub> Emissions from Business Travel Deutsche Telekom Group in Germany (Scope 3 Emissions).



### CO<sub>2</sub>Emissions from business travel (Scope 3 emissions) 2011



### Reporting against standards.

By providing this information we partially cover the EN 16 (Total direct and indirect greenhouse gas emissions by Weight) GRI performance indicator as well as the E02-01 (Greenhouse gas emissions, total) EFFAS indicator. Further, the information is relevant for the criteria 11and 12 (Usage of natural resources) as well as 13 (Greenhouse gas emissions) of the German Sustainability Code. It is also used for reporting in accordance with

the Global Compact <sup>i</sup> Principles 7 (Precautionary approach) and 8 (Environmental responsibility).

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## Mobility.

### Number of vehicles.

The total number of vehicles was reduced by 5 percent compared with 2011. T-Mobile USA contributed to this result considerably by reducing its fleet of gasoline-powered vehicles. Slovak Telekom also optimized its fleet. Detailed comments on each subsidiary's data are included in the interactive subsidiary benchmarking tool.

Number of Vehicles Deutsche Telekom Group.

The total number of diesel-powered vehicles in our fleet decreased by around 6 percent. This can be attributed to the fact that many international subsidiaries reduced the number of diesel-powered company cars and service vehicles in their fleets. The total number of vehicles with alternative fuel powertrains decreased significantly by around 22 percent. This can be attributed to a strong decrease in the number of our natural gas-powered vehicles resulting from poor choice offered by the manufacturers in the range of vehicles required by us and continued sluggish progress in expanding the gas station infrastructure. We are nonetheless consistently working toward reducing the environmental impact of our need for mobility and promoting low-emissions mobility.

### Reporting against standards.

Logistics and transport are carried out by service providers at Telekom. The environmental impacts of transportation are influenced by the contractual arrangements with the service providers. By reporting additional vehicle fleet data we fully cover the EN 29 (Environmental impact of transportation) GRI performance indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code.

### Mileage.

As a result of fleet reductions at many international subsidiaries such as Deutsche Telekom in Germany, T-HT Hrvatski Telekom and Slovak Telekom, mileage also decreased throughout the Group by around 4 percent. Detailed comments on each subsidiary's data are included in the interactive subsidiary benchmarking tool.

Mileage Deutsche Telekom Group.

In thousand km.

### Reporting against standards.

Logistics and transport are carried out by service providers at Telekom. The environmental impacts of transportation are influenced by the contractual arrangements with the service providers. By reporting additional vehicle fleet data we fully cover the EN 29 (Environmental impact of transportation) GRI performance indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code.

### Fuel consumption.

Group-wide fuel consumption also decreased by around 3 percent due to the fleet reductions implemented at many international subsidiaries and the resulting reduction in vehicle mileage. This decrease can mainly be attributed to reduced fuel consumption at Deutsche Telekom in Germany, PTC and Slovak Telekom. Detailed comments on each subsidiary's data are included in the interactive subsidiary benchmarking tool.

#### Fuel Consumption Deutsche Telekom Group.

In liters.

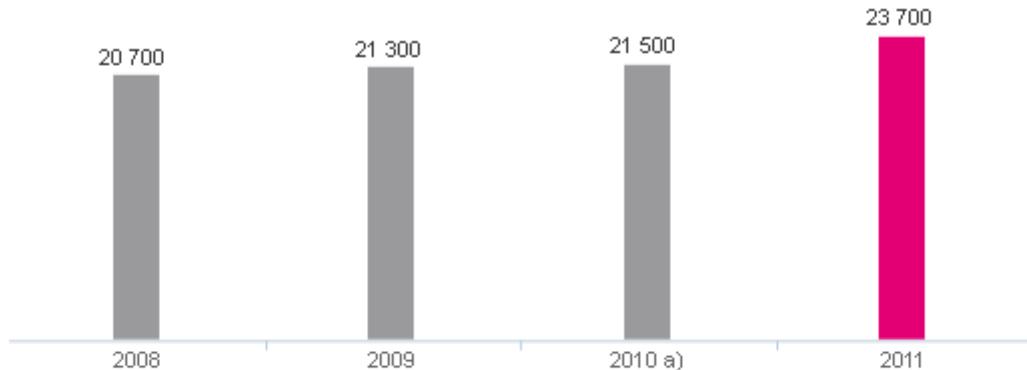
### Reporting against standards.

Logistics and transport are carried out by service providers at Telekom. The environmental impacts of transportation are influenced by the contractual arrangements with the service providers. By reporting additional vehicle fleet data we fully cover the EN 29 (Environmental impact of transportation) GRI performance indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code.

### Jobticket.

In 2012 some 23,700 employees of the Telekom Group in Germany used a discount season ticket ("Jobticket") to travel to and from work.

#### Jobticket Deutsche Telekom Group in Germany.



80% of the data was taken from the online registration tool for Jobticket administration.  
20% of the data was provided by transportation companies.

a) Data has been recorded as an average annual value since 2010. The end-of-year value was listed in previous years.

A regional season ticket offer is available to our employees at many Telekom offices in Germany, particularly those located in large conurbations. We signed a new agreement with the Ruhr-Lippe traffic association during the reporting period. Thanks to this agreement even more employees are now using the discount season ticket in this area. We plan to introduce a discount season ticket in the public transport areas in and surrounding the German cities of Kassel, Siegen and Schwäbisch Hall as well. We are using different offers to make use of the discount season ticket even more attractive to our employees.

### Reporting against standards.

By providing this information about the use of the discounted season ticket (Jobticket) we partially cover the EN 18 (Initiatives to reduce greenhouse gas emissions) GRI performance indicator as well as the V04-13 (Percentage of services for offsetting carbon emissions) EFFAS indicator. Further, the information is relevant for the criteria 2 (Implementation of the sustainability strategy) and 10 (Innovation and product management) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact Principles 7 (Precautionary approach) and 8 (Environmental responsibility).





## Used cell phone collection & waste generation.

### CR KPI „Used Cell Phone Collection“.

The number of cell phones collected decreased compared to the previous year in which we conducted a cell phone collection campaign to benefit the BILD hilft e.V. – Ein Herz für Kinder children's aid organization. We collected 207,543 cell phones in Germany in 2012. Various cell phone collection initiatives were conducted throughout the Group.

CR KPI „Used Cell Phone Collection“ Deutsche Telekom Group in Germany.

Our Used Cell Phone Collection CR KPI indicates the number of cell phones collected (in thousands) in relation to the number of mobile customers (in millions). Data is recorded in kilograms or in units. Detailed comments on each subsidiary's data are included in the interactive subsidiary benchmarking tool.

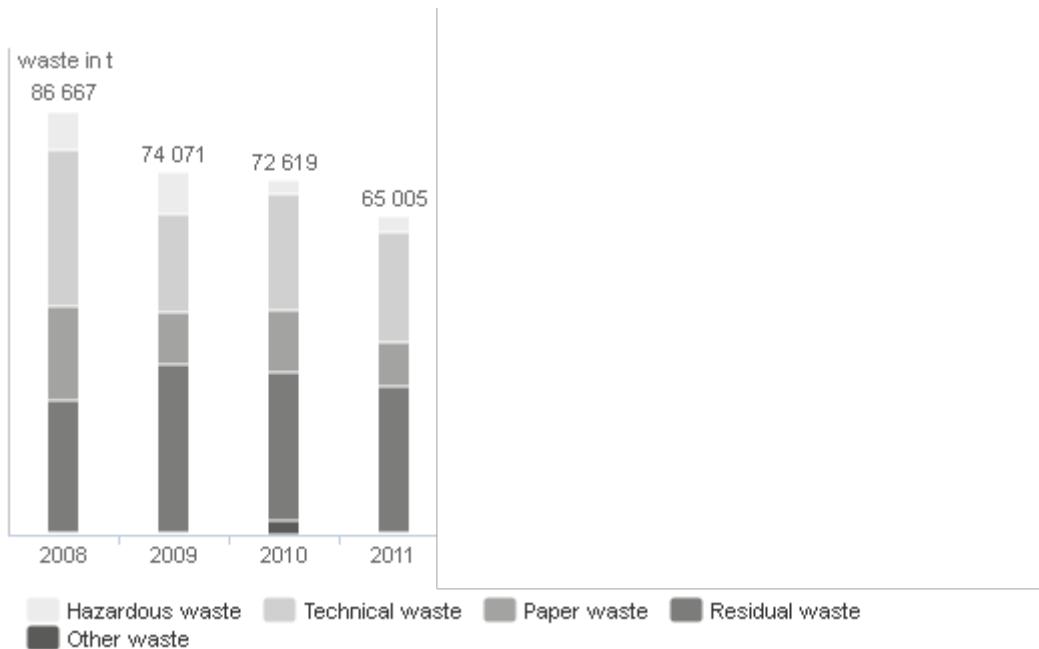
### Reporting against standards.

By reporting the Used Cell Phone Collection CR KPI as an indicator of progress achieved in the resource-efficient and environmentally friendly use of products, we fully cover the EN 26 (Initiatives to mitigate environmental impacts), PA 11 (Initiatives to inform customers about product features and applications that will promote responsible, efficient, cost effective, and environmentally preferable use) and TA 1 (Examples of the resource efficiency of telecommunication products and services delivered) GRI performance indicators. By reporting this data, we also partially cover the EN 27 (Percentage of products sold and their packaging materials that are reclaimed by category) GRI performance indicator and the E14-01 (Recycling ratio) EFFAS indicator. This data is also relevant for criteria 7 (Rules and processes), 10 (Innovation and product management), 11 and 12 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting on the Global Compact principles 7 (Precautionary approach) and 8 (Environmental responsibility).

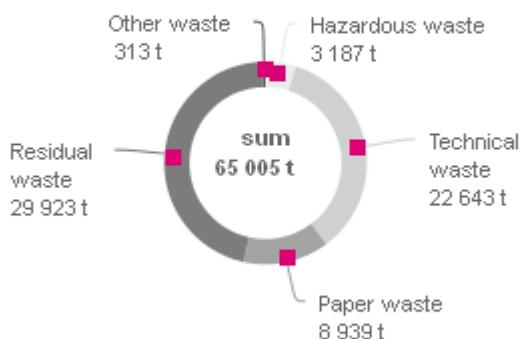
### Waste generation.

The amount of waste produced throughout the Group increased slightly compared to 2011. We were able to reduce the amount of technical waste produced throughout the Group by around 7 percent year $\square$ on $\square$ year. However, the total amount of hazardous, non $\square$ technical waste increased due to significantly higher waste production at T $\square$ Systems Austria and Magyar Telekom. In addition, the higher amount of "other waste" can be attributed to increased production of wooden packaging waste at our Hungarian subsidiary as well as the fact that our Austrian subsidiary shut down its archives, which involved increased waste disposal.

Waste Generation Deutsche Telekom Group.



**Waste Generation 2011**



The remaining waste was disposed of in an ecologically sound manner. Individual values for Telekom in Germany from 2011 were subsequently changed in order to correct inaccuracies. Detailed comments on each subsidiary's data are included in the interactive subsidiary benchmarking tool.

### Reporting against standards.

By reporting the amount of waste we generate, we fully cover the EN 22 (Total weight of waste by type and disposal method) GRI performance indicator and the E04-01 (Total waste in tonnes) EFFAS indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting on the Global Compact principles 7 (Precautionary approach) and 8 (Environmental responsibility).



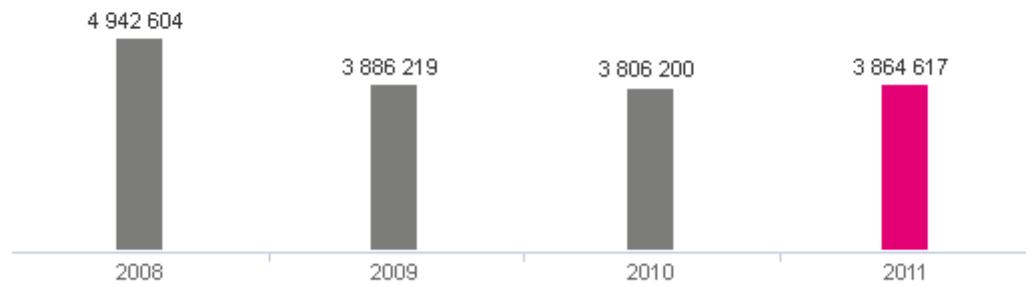
## Other environmental indicators.

### Water consumption.

The decrease in Group-wide water consumption by around 7 percent can partially be attributed to the introduction of new water conservation measures at the international subsidiaries Slovak Telekom, T-Systems Mexico and T-Mobile USA. T-Mobile USA was able to reduce its water consumption by 22 percent compared to the previous year.

Water Consumption Deutsche Telekom Group.

In m<sup>3</sup>



Our Macedonian subsidiary, MakTel, reported success in its water management activities. By consolidating three locations into one, shared headquarters, MakTel was able to reduce its water consumption during the reporting period by 35,367 liters. Detailed comments on each subsidiary's data are included in the interactive subsidiary benchmarking tool.

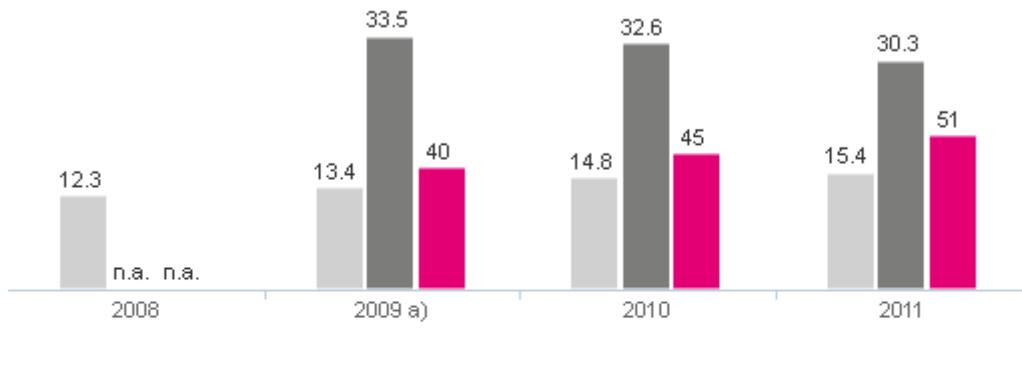
### Reporting against standards.

By reporting water consumption we fully cover the EN 8 GRI performance indicator (Total water withdrawal by source) and the E28-01 (Total water withdrawal) EFFAS indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting on the Global Compact principles 7 (Precautionary approach) and 8 (Environmental responsibility).

### Online customer bills.

16.2 million online bills were sent out in 2012. This is the equivalent of 55 percent of all customer bills issued. This indicates that the percentage of online bills has grown continuously over the past four years.

Online Customer Bills Deutsche Telekom Group in Germany.



Total number of new online customer bills (in millions)  
 Total number of new customer invoices (in millions)  
 Share of electronical bills (in %)

a) T-Home adjusted its counting method in 2009

### Reporting against standards.

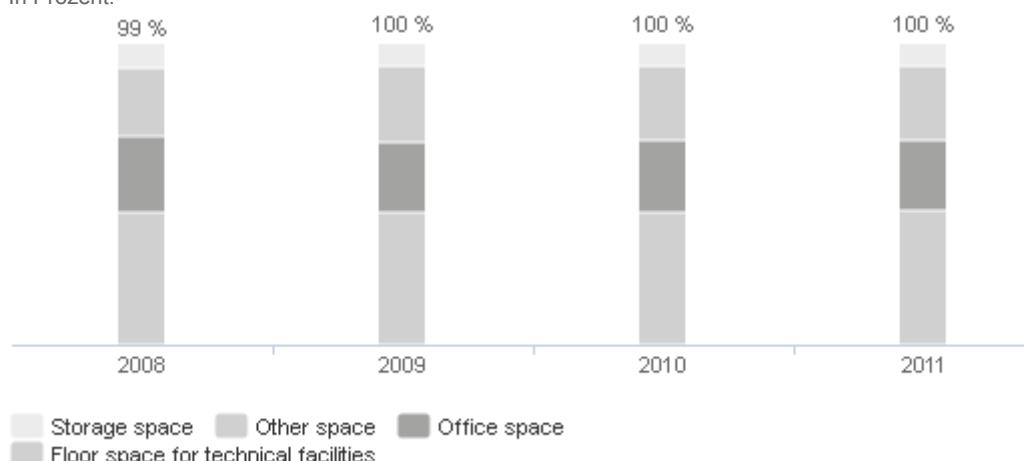
By reporting data on the number of online customer bills, we fully cover the EN 26 (Initiatives to mitigate environmental impact) and TA 1 (Examples of the resource efficiency of telecommunication products and services delivered) GRI performance indicators and partially cover the EN 7 (Initiatives to reduce indirect energy consumption) GRI performance indicator and the V04-13 (Percentage of services or products for increasing eco-efficiency of own products) EFFAS indicator. This data is also relevant for criteria 2 (Implementation of the sustainability strategy) and 10 (Innovation and product management) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>1</sup> principles 7 (Precautionary approach) and 8 (Environmental responsibility).

### Land use.

The property used by Deutsche Telekom in Germany covers most of our demands for technology, office and storage space and well as providing space for other needs. Total take-up decreased slightly in 2012 compared to the previous year with a total of 8,960,339 square meters of space being used.

#### Land Use Deutsche Telekom Group in Germany.

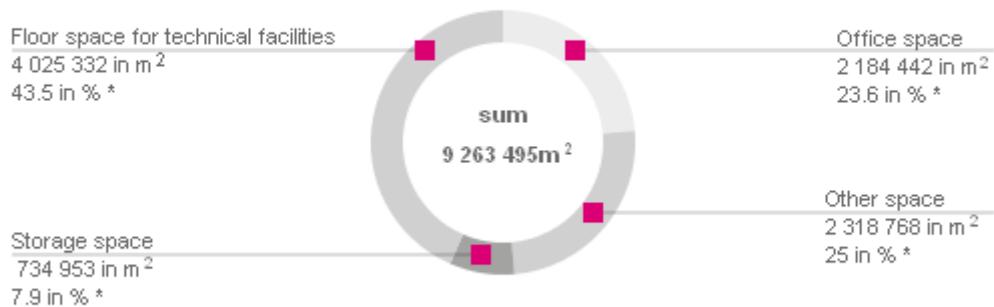
In Prozent.



Storage space     Other space     Office space  
 Floor space for technical facilities

Individual figures have been rounded.

#### Land Use Deutsche Telekom Group in Germany.



\* Individual figures have been rounded.

### Reporting against standards.

This data is relevant for criterion 11 (Usage of natural resources). It is also used for reporting on the Global Compact <sup>1</sup> principles 7 (Precautionary approach) and 8 (Environmental responsibility).



## Social commitment.

### CR KPI „Social Commitment“.

The Social Commitment CR KPI indicates the discrepancy between perceived importance of social commitment and perception of Deutsche Telekom's actual involvement in this area. Awareness of Deutsche Telekom's CR commitment in Germany declined by one percentage point in 2012. At the same time, the public's view of the importance of social commitment fell appreciably from 58 percent to 50 percent. This reduced the difference between theory and practice to 6 percentage points.

CR KPI „Social Commitment“ Deutsche Telekom Group in Germany.

We use an exclusive telephone survey of 1,000 people from the German residential population conducted by TNS Infratest to measure our Social Commitment CR KPI. To measure the importance of involvement in the community, TNS Infratest asked the following question: "How important do you think it is for companies to be involved in the community?" The KPI contains the number of those surveyed who responded with "extremely important" or "very important." To assess the performance of the Deutsche Telekom Group in Germany, TNS Infratest read the names of several companies to the participants and then asked them to indicate whether or not these companies were involved in the community by answering "yes" or "no." The KPI contains the number of those surveyed who answered "yes" for the Deutsche Telekom Group in Germany.

### Reporting against standards.

By reporting our Social Commitment CR KPI as an indicator of progress regarding the effectiveness of our community involvement we partially cover the SO 1 (Impacts of operations on communities) GRI performance indicator. This data is also relevant for criteria 18 (Corporate citizenship) and 7 (Rules and processes) of the German Sustainability Code.

[engagement@telekom.com](mailto:engagement@telekom.com)

We measured indicators on our employees' corporate volunteering activities for the first time in 2012 as part of the international roll-out of our engagement@telekom platform. These include the number of projects initiated in 2012, the number of volunteers and the number of hours spent working in volunteer programs. Part of the data is based on an extrapolation of average values. The data provided indicates extensive involvement at the majority of our international subsidiaries.

[engagement@telekom.com](mailto:engagement@telekom.com)

## Employee satisfaction.

### CR KPI „Employee Satisfaction CR“.

We use the CR Employee Satisfaction KPI to assess how well our employees identify and how satisfied they are with our CR activities. The calculation is based on an employee survey that is conducted at the international subsidiaries every two years. This KPI serves as the basis when defining future targets. The first employee survey took place in 2010.

CR KPI „Employee Satisfaction CR“ Deutsche Telekom Group.

The 2012 survey indicated a considerable increase in employee satisfaction with regard to our CR activities. One example of these activities is the "Sustainability for breakfast" campaign that we launched in 2012. Deutsche Telekom's Corporate Responsibility department handed out breakfast boxes at different corporate locations. The contents gave insight into the many ways in which the company contributes to sustainability. We are planning to continue the campaign in 2013. In addition, many Telekom employees also make a very personal contribution to society by volunteering their time, breathing life into our CR strategy. Our employees throughout the Group work for a clean environment and for climate protection and nature conservation, for example. Please see the section on Society for more detailed information on our corporate volunteering and corporate giving activities.

### Reporting against standards.

This data is relevant for criteria 7 (Rules and processes) and 14 (Employee rights and diversity) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>i</sup> principles 3 (Freedom of association) and 6 (Elimination of discrimination).

#### Pulse survey.

The results of the 2012 pulse check on employee satisfaction were very good as well. More than 76 percent of employees participated throughout the Group. The results for nine out of eleven topics showed improvement compared to the previous year. Almost 70 percent responded positively when asked how they felt at the company. Satisfaction with our products was very high in 2012 as well. 78 percent of the employees surveyed recommended our products and services to family, friends and acquaintances. At 80 percent, this figure was even higher at Telekom in Germany.

#### Pulse check.

Results from the pulse checks conducted from 2007 to 2012 (in percent).

### Reporting against standards.

This data is relevant for criteria 14 (Employee rights) and 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>i</sup> principles 3 (Freedom of association and the right to collective bargaining) and 6 (Elimination of discrimination).



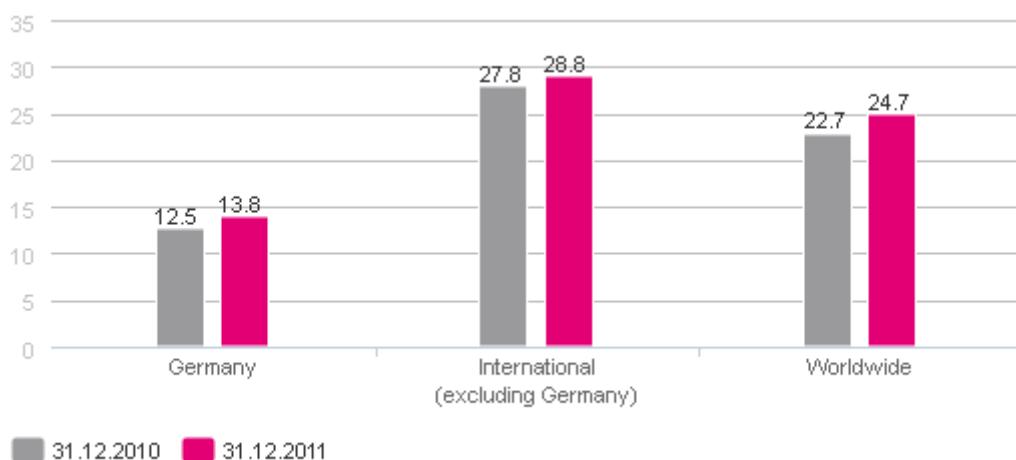
## Diversity & company pension scheme.

### Women in the group.

Within the scope of introducing a quota for women's positions, we were able to increase the number of women holding positions at the top and middle management levels in Germany as well as internationally (not including Germany) in 2012. Between December 2012 and December 2011, the figure underwent a slight 0.7% drop owing to reorganization (including the sale of parts of the company) at T-Mobile USA. In all other segments the figure continued to rise, as in previous years.

Women in the Deutsche Telekom Group in Germany.

In percent.



By the end of 2015, 30 percent of upper and middle management positions are to be filled by women. This rule applies to all of Telekom's international subsidiaries.

### Reporting against standards.

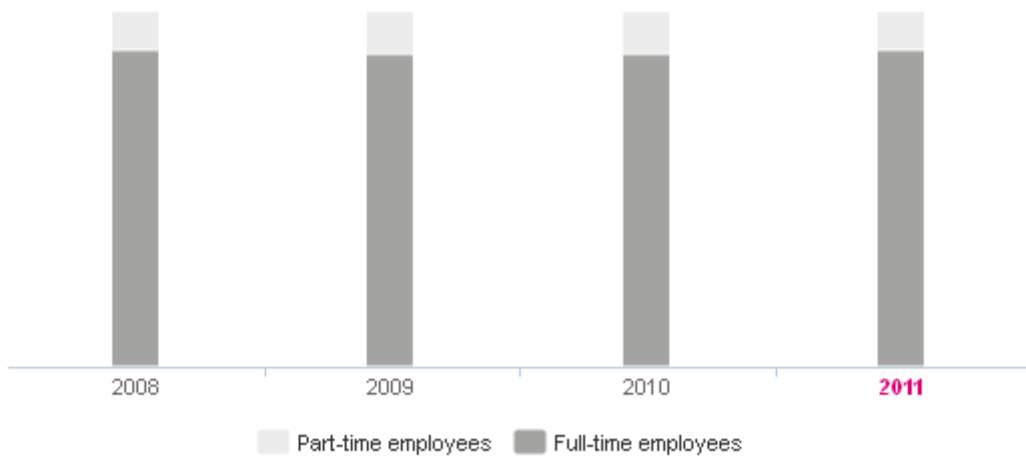
By reporting data on the percentage of women holding positions in middle and top management, we partially cover the LA 13 (Composition of governance bodies and breakdown of employees per employee category) GRI performance indicator and the S10-01 (Percentage of female employees in relation to total employees) EFFAS indicator and fully cover the S10-02 (Percentage of female FTEs in senior positions) EFFAS indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>1</sup> principle 6 (Elimination of discrimination).

### Part-time employees.

The share of part-time employees came to around 12 percent in 2012, approximately one percentage point more compared to the previous year.

Percentage of part-time employees in the Deutsche Telekom Group in Germany.

In percent.



### Reporting against standards.

This data is relevant for criteria 14 (Employee rights) and 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>1</sup> principles 3 (Freedom of association and the right to collective bargaining) and 6 (Elimination of discrimination).

#### Employees with disabilities.

Supporting and integrating people with disabilities is important to us. At 6.4 percent, the share of disabled employees in Germany put us well over the statutory quota of 5 percent. This value has been steadily increasing since 2009.

Employees with disabilities Deutsche Telekom Group in Germany.

By operating segments.

### Reporting against standards.

This data partially covers the LA 13 (Composition of governance bodies) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>1</sup> principle 6 (Elimination of discrimination).

#### Age structure.

The age structure at Telekom in Germany remained unchanged for the most part in 2012 compared to the previous year. The majority of our employees are between the ages of 46 and 55. We experienced a clear decrease in the age group between the ages of 36 and 45 in the three-year trend. The percentage of employees in this age group decreased from 34 to 31 and then, finally, to 28 percent. The share of employees between the ages of 56 and 65 increased from 7 to 9 percent compared to the previous year.

Age structure at Deutsche Telekom Group in Germany.

In percent.



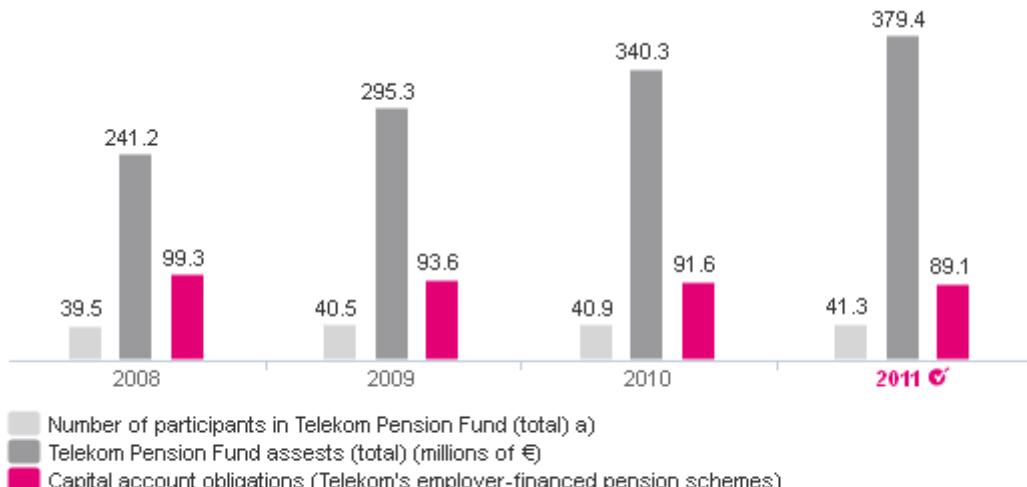
### Reporting against standards.

This data partially covers the LA 13 (Composition of governance bodies and breakdown of employees per employee category) GRI performance indicator and fully covers the SO3-01 (Age structure/distribution) EFFAS indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact [principle 6](#) (Elimination of discrimination).

### Company pension.

The increase in fund assets can be attributed to the payments of the increasing number of plan participants (as was the case in previous years). Because the majority of participants in the 2001 pension plan are still active, i.e., still paying into their retirement plans, this increase will remain steady over the next few years.

Company Pension Deutsche Telekom Group in Germany.



a) The volume comprises the assets of the Telekom-Pensionsfonds in the 2001 pension plan.

### Reporting against standards.

This data fully covers the EC 3 (Coverage of the organization's defined benefit plan obligations) GRI performance indicator.

## Training & development.

### Further education at Deutsche Telekom.

We conducted 87,074 seminars with 281,555 participants in Germany in 2012 within the scope of Deutsche Telekom's training measures. Based on the number of days completed, the average comes to 5.9 days of training per employee. We also conducted 699,500 online training courses.

#### Further Education at the Deutsche Telekom Group in Germany.

By key themes.



Seminars: 40,965

Participants: 284,044 {Ø of 2 seminars attended per employee}

Participant days: 734,237

Ø number of training days per participant: 2.6 ; per employee: 6.0

Number of web-based trainings carried out (content usages on internal e-learning platform): 813,235

### Reporting against standards.

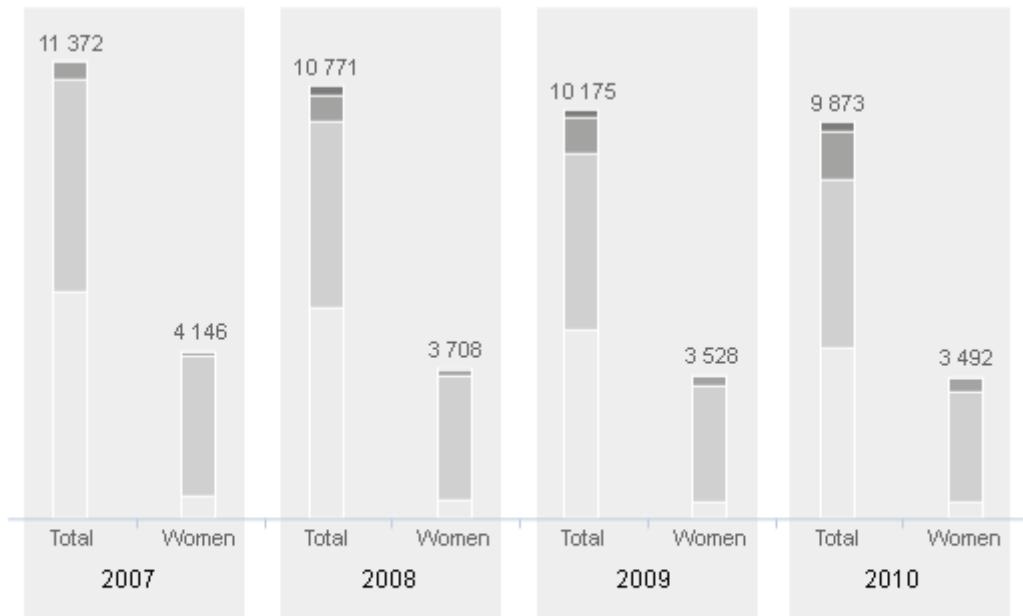
By reporting this data, we partially cover the LA 10 (Average hours of training per year per employee by employee category) and LA 11 (Life-long learning) GRI performance indicators and the S02-02 (Average expenses on training per FTE p.a) EFFAS indicator. This data also covers criterion 16 (Steps taken to promote the general employability of all employees) of the German Sustainability Code.

### Trainees and training programs.

The number of trainees (including students) decreased slightly from 9,873 in the previous year to 9,565. The number of female trainees, on the other hand, increased from 3,492 to 3,586.

#### Apprentices and training programs in Germany.

Total and percentage of women.



■ TechnicalMT ■ Business administration ■ Cooperative students ■ On-campus student

### **Reporting against standards.**

The data also partially covers the LA 10 (Average hours of training per year per employee by employee category) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code.



## Employee health.

### Health rate.

The health rate at Telekom in Germany remained constant at a high level over the course of the past four years at just over 94 percent.

Health rate at Deutsche Telekom in Germany.

By operating segment, in percent.

### Reporting against standards.

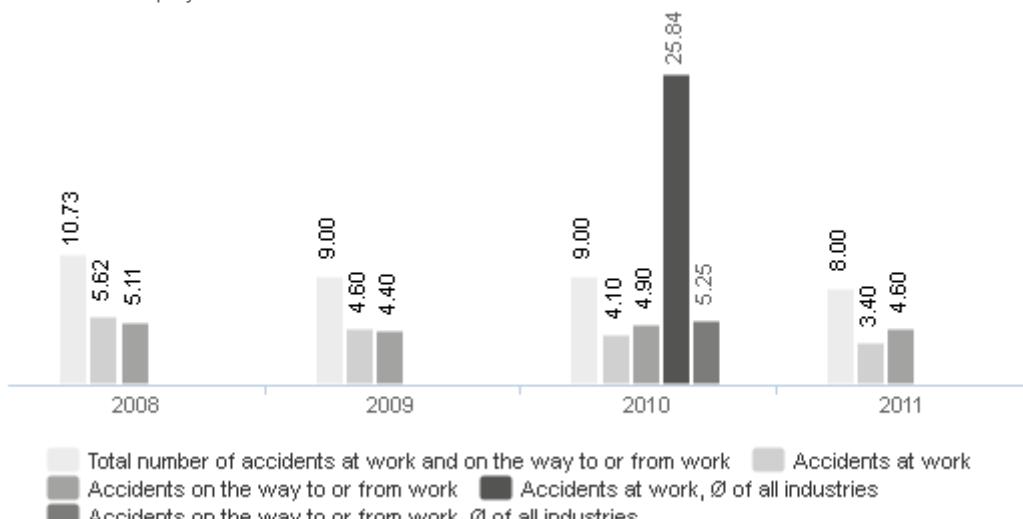
In combination with data on work-related accidents, the health rate data fully covers the LA 7 (Rates of injury, occupational diseases, lost days, and absenteeism) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code.

### Occupational accidents.

The total rate of work and travel-related accidents was reduced from 8 to 7.8 accidents per every thousand employees. Fortunately, there were no fatal accidents during the reporting period.

Occupational accidents Deutsche Telekom Group in Germany.

Per thousand employees



### Reporting against standards.

In combination with the health rate, the data on work-related accidents fully covers the LA 7 (Rates of injury, occupational diseases, lost days, and absenteeism) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code.



## Workforce.

### Workforce development worldwide.

The number of employees decreased in 2012 compared to the previous year. You will find more information in our Human Resources Report.

#### Workforce development worldwide.

By operating segments, in employees (FTE).

#### Reporting against standards.

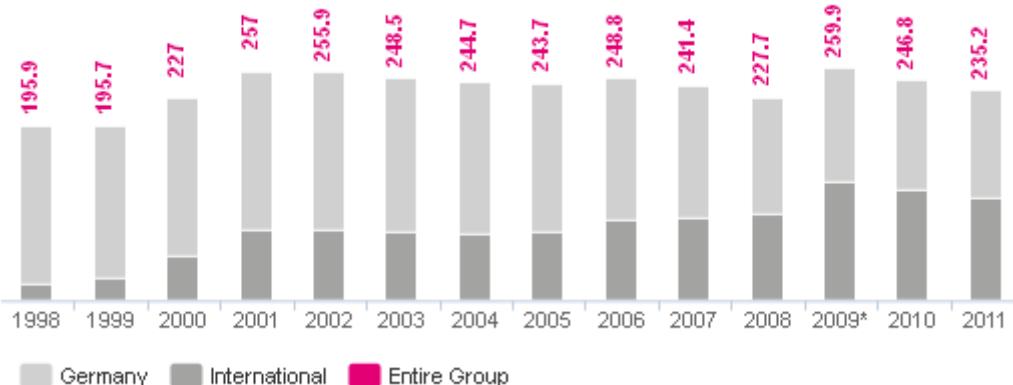
In combination with additional data on the number of employees, the data on the trend in employee numbers worldwide fully covers the LA 1 (Total workforce) and LA 2 (Total number and rate of employee turnover) GRI performance indicators. It also partially covers the S01-01 (Percentage of FTE i leaving p.a.) EFFAS indicator.

### Deutsche Telekom workforce 1998 to 2012.

As in previous years, the number of employees continued to decrease in 2012. You will find more information in our Human Resources Report.

#### Deutsche Telekom workforce 1998 to 2012.

By location, in thousands of employees (FTE), as of Dec. 31 each year.



#### Reporting against standards.

In combination with additional data on the number of employees, the data on employees in the German Group and at international level fully covers the LA 1 (Total workforce) and LA 2 (Total number and rate of employee turnover) GRI performance indicators. It also partially covers the S01-01 (Percentage of FTE i leaving p.a.) EFFAS indicator.

### Proportion of Civil Servants Deutsche Telekom Group in Germany.

The number of civil servants employed in Germany decreased from 40,828 in 2011 to 38,224 in 2012 as a result

of the general employee trend. You will find more information in our Human Resources Report.

Percentage of civil servants Deutsche Telekom Group in Germany.

In employees (FTE).

### Reporting against standards.

In combination with additional information on the number of employees, the data on the proportion of civil servants fully covers the LA 1 (Total workforce) and LA 2 (Total number and rate of employee turnover) GRI performance indicators.

### Vivento workforce.

The number of employees at Vivento decreased slightly to 6,739 compared to 6,853 in 2011. A total of 781 employees found new jobs. Our target for 2013 is to help an additional 378 employees to find new employment. You will find more information in our Human Resources Report.

#### Vivento workforce.

Incl. business models and projects.



Permanent employees and support staff incl. Vivento Customer Services: 742  
umber of employees who found new employment through Vivento in 2011: 770  
number of employees who are to be placed through Vivento in 2012: 560  
additions to employees in Vivento since it was established: 48,510  
left Vivento since it was established: 39,988

\* All figures calculated on the basis of more precise detailed data.  
Since figures are rounded, totals may differ.

### Reporting against standards.

In combination with additional information on the number of employees, the data on employees at Vivento fully covers the LA 1 (Total workforce) and LA 2 (Total number and rate of employee turnover) GRI performance indicators.

### Tools for socially acceptable staff restructuring.

We continued our efforts to engage in socially acceptable staff restructuring in 2012. We use internationally proven tools giving employees the option to voluntarily leave the company as part of this process. You will find more information in our Human Resources Report.

Tools for socially responsible staff restructuring at the Telekom Group in Germany.

In employees (FTE).

### Reporting against standards.

This data is relevant for criteria 6 (Rules and processes) and 14 (Employee rights) of the German Sustainability

Code.

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## Ideas management.

genial@telekom. Ideas management.

In 2012, employees submitted 13,043 suggestions for improvement using the [genial@telekom](#) ideas platform, which was introduced in previous years. The savings generated by these improvements came to EUR 104 million. We registered 151 patents in the reporting period as well.

genial@telekom. Ideas management.

### Reporting against standards.

Employee involvement is encouraged via the genial@telekom ideas management platform. This data is relevant for criterion 14 (Employee rights) of the German Sustainability Code.

Portfolio of intellectual property rights.

The portfolio of intellectual property rights has increased continuously over the past four years and came to 7,600 in 2012.

Portfolio of intellectual property rights at the Telekom Group in Germany.

Industrial property rights include inventions, patent applications, patents, utility models and registered designs. The latter give their owners the sole right to use an aesthetic format (design, color, form). The IPR portfolio is reviewed on a regular basis and those rights that are no longer relevant are eliminated. We manage these property rights based on cost□utilization criteria.

### Reporting against standards.

This data partially covers the TA 5 (Practices relating to intellectual property rights) GRI performance indicator as well as the V04-05 (Number of patents registered within the last 12 months) and V04-06 (Percentage of patents registered within last 12 months in relation to total number of patents) EFFAS indicators.