

Comsign Ltd.

Certification Practice Statement (CPS)

Procedures Regulating the Activity of a Time Stamping Authority - TSA

Version 1.0

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Comsign Ltd.

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The Hebrew version of the current CPS can be found at: http://www.comsign.co.il/repository The Israeli CA Registrar web site can be found at:

http://www.justice.gov.il/En/Units/ILITA/Pages/certification-authorities-registrar-.aspx



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Preamble

Comsign Ltd. (the "Company") is a qualified certification authority as per the Electronic Signature Law, 5761-2001 (the "Law"). The Company issues its subscribers qualified electronic certificates within the meaning given to it in the Law. The Company also provides its subscribers time stamping services. This CPS states the rules governing the provision of time stamping services by the Company in its capacity as a time stamping authority (TSA) and details the organizational and technological procedures regulating the Company's activities. These procedures apply the rules of the Law, of international standardization in line with the rules of the Law and of the CA Registrar's guidelines.

1. General Overview

The Company's time stamping services are based on a PKI infrastructure and on reliable time data and are intended to provide a reliable and trustworthy time indication for electronic signature users. Within its capacity, the Company acts as an independent third party that verifies the exact time an electronic file was electronically signed by an electronic signature that includes a time stamp.

1.1. Name of Document and Identification

This document shall be named "Certification Practice Statement (CPS) regulating the activity of a Time Stamping authority". This document can be viewed at: http://www.comsign.co.il/repository.

The identifier of Comsign's time-stamp policy specified in the present document is OID: 1.3.6.1.4.1.19389.8.1.1

1.2. Policy and Procedures

1.2.1. Who is responsible to apply the policy and the procedures?

The person responsible for the application of the Company's policy and procedures is the security manager. Email: security@comsign.co.il. Mailing address: Comsign Ltd, Atidim Tech Park, building 4, floor 11, POB 58007, Tel-Aviv 6158001, Israel. Tel: 972-3-6443620, Fax: 972-3-6491092.

1.2.2. Support and Customers Services

Information and support concerning time stamping services can be obtained from the Company by electronic mail: support@Comsign.co.il. Additional support can



be obtained from customers' services representatives using electronic mail at: customer_services@Comsign.co.il, Tel: 972-3-6443620, Fax: 972-3-6491092.

2. References and Referrals

These procedures were prepared in accordance with RFC 3161 and ETSI TS 102 023.

3. Terms and Definitions

3.1. The following terms and definitions shall have the following meaning in This CPS (as defined below):

<u>Time Stamping Authority</u>: The Company acts as a time stamping authority.

Certification Authority: As defined in the Law and its ordinances.

The Registrar or Registrar of Certification Authorities: As defined in the Law.

<u>This CPS</u>: The procedures detailed hereunder regulating the activity of the Company as a certification authority for time stamping services (TSA).

<u>CPS of the Certification Authority</u>: The document regulating the activity of Comsign as a qualified certification authority as per the Law. The document can be viewed at http://www.comsign.co.il/repository

<u>Time Stamp</u>: An electronic batch binding a given time with a given data, thus providing proof that the data existed at a prior to the given time stated in the electronic batch.

<u>Time Stamping System</u>: A time stamping server based on satellite use (GPS) that provides a reliable and trustworthy time indication, date and a time stamp verifying the identity of the device that created the stamp on the date and time the time stamp was applied. The date and time stamp represents Greenwich Time (GMT) and adopts universal time conventions (UTC). The Company's date and time stamp is based on a reliable time source that provides, at any given time, readings of the official universal time.

<u>Time Stamping Unit (TSU)</u>: The component of a subscriber that supplies the time of signature. Usually, a software operating together with the subscriber's signature component and applies for confirmation of the time of signature from the TSA server of the certification authority.



<u>Validity of the Time Stamp</u>: The validity period of the Time Stamp in relation to the Time Stamping Unit that jointly operates with the subscriber's signature component equals the validity period of the electronic certificate issued by the Certification Authority. Otherwise, the validity period will be defined by the Time Stamp Authority that issued the Time Stamping Unit.

<u>Time Stamping Server</u>: The qualified certification authority's server that provides the Time Stamp services, monitors and controls the Time Stamp activity, including its synchronization with the time source reference to UTC, in accordance with This CPS. In addition, the server issues an electronic certificate that verifies the stamped time.

<u>Parties</u>: The Company and its representatives on one hand and the users of the Time Stamp services, namely, the subscriber and the relying party, on the other hand.

<u>Coordinated Universal Time (UTC)</u>: The time range, scaled to the second, as defined by the International Telecommunication Union Radio ITU-R, the TF.460-5 committee and approximately corresponds to Greenwich Time TMT.

3.2. Table of abbreviations used in This CPS:

TERM	DESCRIPTION
CP/CPS	Certificate Policy/Certification Practice Statement
CRL	Certificate Revocation List
CSP	Certificate Service Provider
ETSI	European Telecommunications Standards Institute
HSM	Hardware Security Modules
PKI	Public Key Infrastructure
TSA	Time Stamping Authority
TST	Time Stamp token
TSU	Time Stamping Unit
UTC	Coordinated Universal Time

4. General Principles

4.1. <u>Time Stamp Services</u>

The Time Stamp services include the following:

- Time Stamping: The technical component that issues the Time Stamping Unit.
- Time Stamping Management: The service component that monitors and controls the operation of the time-stamping services by the Time Stamping Authority.



4.2. <u>Time Stamping Authority</u>

The authority trusted by the Time Stamping services users (subscribers and relying parties) to issue a trustworthy and reliable Time Stamp. The Time Stamping Authority operates and is responsible for the Time Stamping system. The Time Stamping Authority may operate through others acting on its behalf and under its responsibility. The Time Stamping Authority operates under the supervision of the Registrar.

The Company may operate more than one Time Stamp. Should it operate more than one, each Server will be issued with a separate signing device.

The Company operates the Time Stamping services within its PKI infrastructure. The electronic certificate issued by the Company as a Time Stamping Authority identifies the Company as the issuing authority.

4.3. Subscribers and Relying Parties

- **4.3.1.** The subscribers of the Time Stamping services may be either a natural person or a corporation. The subscriber agrees, explicitly or otherwise, to the service terms. In the event of a corporation or public institution, the subscriber is responsible for the acts and/or omissions of its organs and/or authorized bodies acting on its behalf.
- **4.3.2.** A relying party is a third party receiving an electronic message stamped with a Time Stamp that acts or refrains from acting, based on the Time Stamp.

4.4. Time Stamp Policy and TSA Practice Statement

- **4.4.1.** This CPS combines the Company's certification policy (CP) and its certification practice statement (CPS) as a TSA.
- **4.4.2.** This CPS states, in its relevant sections, topics that are not dealt with in Comsign's certification practice statement that is included in This CPS by reference. In any event of contradiction between the two documents, the terms of This CPS shall have precedence.



4.4.3. This CPS regulates policy and procedures but does not set work and operation procedures. These are regulated in separate documents that are not open to the public for reasons of data security.

5. Time Stamp Policies

The Company's policy is to ensure a reliable process for issuing a Time Stamping Unit in accordance with the Law and the guidelines of the Registrar. The signature device and This CPS conform to the technical requirements of ETSI TS 101.861 and RFC 3161.

The Company's Time Stamping signature device is reserved for Time Stamping services and will not be used for other purposes. Each Time Stamping Unit contains a pointer to This CPS. A Time Stamping Unit is issued with time accuracy of ± 1 second with respect to the Coordinated Universal Time.

6. Liability and Obligations

6.1. Liability of the Time Stamping Authority

The Time Stamping Authority is responsible for maintaining and applying all the requirements stated in Chapter 7 below and which correspond to the Time Stamp policy applied by the Company.

The Time Stamping Authority is responsible to coordinate its activity with the Company's time stamping policy, including whilst most or all of its activity is performed through others.

The Time stamping Authority is responsible to comply with additional requirements applied to its activity, including the Registrar's guidelines.

The Time Stamping Authority will employ all required means to ensure full compatibility between its services as a Time Stamping Authority and This CPS.

Subject to This CPS, the Time Stamping Authority is liable toward both, the subscriber and the relying party.

6.2. Liability of the Subscriber

The hardware component that contains the Time Stamping Unit may be supplied by the Company or by the subscriber. In the event the hardware component is supplied by the subscriber, the Company reserves the right to refuse issuing a Time Stamping Unit on a



hardware component that, in the Company's professional discretion, does not comply with legal and other standards that apply to Time Stamping services.

The subscriber must protect the component embedded with the Time Stamping Unit from risks of damage, loss, disclosure, change or unauthorized use.

The subscriber undertakes not to copy, duplicate or reverse engineer the technology used by the Company in providing the Time Stamping services.

The subscriber undertakes to use the Time Stamping Unit in a manner compliant with the rules of law and This CPS.

The subscriber undertakes to inspect the Time Stamping Unit immediately upon installment, verify that it is in proper order and advise the Company on any fault and/or malfunction in the Time Stamping Unit immediately upon becoming aware of it.

A subscriber wishing to limit the usage of its issued Time Stamp, must advise the Company in writing and refrain from any use of the Time Stamping Services prior to verifying that the Company embedded the limitation in the Time Stamping Unit and/or the electronic certificate in a manner accessible to any relying party.

6.3. <u>Liability of Relying Parties</u>

When relying on a Time Stamp, a relying party must:

- **6.3.1.** Verify that the Time Stamp was signed with a valid signature and that the signature device used is valid at the time of verification.
- **6.3.2.** Consider the limitations, whatsoever, on the use of the Time Stamp as specified in the Time Stamp and in This CPS.
- **6.3.3.** Employ all security and control measures, whether stated explicitly in any agreement or other document and whether practiced upon relying on electronically signed messages.

A relying party electing to rely on a non-valid Time Stamp and/or on a Time Stamp which validity cannot be verified, will bear all resulting risks.

6.4. Liability of the Time Stamping Authority

6.4.1. The Company may limit its liability, including the types of usage or the



transactions amounts employing Time Stamping Services. The Company shall not be liable for any damages resulting from usages exceeding the limits stated on the Time Stamp. Furthermore, the Company may limit its liability toward subscribers in the subscription agreement.

- **6.4.2.** However, the Company's limit of liability may not contradict the Law, the terms of This CPS and the rules regulating the Company's activity as a qualified certification authority.
- **6.4.3.** Limitations on the usage demanded by a subscriber require the subscriber's explicit request.
- **6.4.4.** The Company and/or its representatives
 - **6.4.4.1.** Do not warrant that a subscriber will not renounce a Time Stamp or an electronic message signed by a Time Stamp.
 - **6.4.4.2.** Do not warrant the proper state and/or compatibility to standards and/or to any rule of law of any software other than the technology and software serving the Company's Time Stamping System and the Time Stamping Unit if supplied by the Company.
 - **6.4.4.3.** Are not responsible for any damages caused as a result of relying on a non-valid Time Stamp, provided the Company proved it employed all reasonable measures needed to fulfill its duties according to the Law and This CPS.
 - **6.4.4.4.** Are released from any liability for indirect and/or consequential damage of any type, and are only responsible for direct damage, not exceeding the Time Stamp usage limitations, resulting from reliance on a Time Stamp seemingly in proper state that was proven to be faulty.
- **6.4.5.** Time Stamping services are not intended for use with control equipment and/or with usages requiring fail proof performances such as nuclear facilities, air navigation, communication systems, air control systems, weapon control systems and/or any failure that may directly result with death, bodily injury or environmental damage.
- **6.4.6.** The Company and its representatives shall not be liable for any breach of duty,



delay or refraining from performing Time Stamp services, including This CPS, resulting from events outside their control, such as force majeure, wars, economy emergency periods, plagues, electricity stoppages not within the control of the Company and its representatives, earthquakes and other disasters, provided the Company and its representatives were not able to reasonably prepare to these events.

6.4.7. Whenever the Time Stamp issued by the Company is part of an electronic message signed by a qualified electronic signature certified with an electronic certificated issued by the Company in its capacity as a qualified certification authority, the Company's liability for Time Stamping services shall not exceed its total combined liability as a qualified certification authority. In any other event, the total liability of the Company and its representatives toward the Parties shall not exceed NIS 50,000 (fifty thousands) for all transactions executed or related to the same Time Stamp and not more than NIS 10,000 (ten thousands) for a single transaction executed or related to a certain Time Stamp.

The limit of liability and compensation refers to any type of loss or damage, including direct, indirect special, consequential, punitive or ancillary damages/compensations sustained by any Party as a result of relying on a Time Stamp issued by the Company's Time Stamping services to its subscribers. Such limit also applies to any contractual, in tort or any liability claim. In the event the amount of claims exceeds the limit of liability, the liability limit shall first be applied to earlier claims in order to finally settle them, unless a competent court orders otherwise. In no event shall the Company be liable to pay any amount exceeding the total limit of liability for any specific Time Stamp, without allocating the payment between the numerous claimants.

7. Procedures for Time Stamping Services

The Company Time Stamping services are provided at its absolute discretion and subject to the execution of a service agreement with its subscriber.



7.1. <u>Disclosure and Procedures Statements</u>

This CPS defines the set of rules regulating the activity of the Time Stamping Authority. The Company applies a risk assessment policy and a program addressing malfunctions as further detailed hereunder in this chapter.

7.2. <u>Time Stamp Management</u>

- 7.2.1. The Company also acts as a qualified certification authority according to the Law. The size of the signing device (private key) of the Time Stamping Authority is 2048 bits and it is installed on a reliable hardware component (FIPS 140-1Level 3). The key pair of the Time Stamping service are valid for 4 years from date of issue. The key pair may be replaced prior to the date of expiration, inter-alia for reasons of legal changes as well as changes in the guidelines defining the size and/or the type of algorithm of the Company's signing device (private key), or for any other reason requiring such replacement. Whenever a replacement takes place, the Company will publish its new public key in its repository.
- **7.2.2.** The algorithms used for Time Stamping and their parameters will comply, at all times, with the requirements of the Law, the ordinances and the Registrar's guidelines. If any matter is not dealt with by the above, international standards recognized by standardization bodies will be used.

7.3. Time Stamping

- **7.3.1.** The Company utilizes the following technical means in order to ensure that the Time Stamp is securely produced and maintains the correct time:
 - **7.3.1.1.** The Time Stamping Unit will include a representation (e.g. hash value) of the datum being time stamped as provided by the subscriber.
 - **7.3.1.2.** A unique serial number that may be used to order Time Stamping and identify a specific signer.
 - **7.3.1.3.** A time value. Calibrated to ± 1 second of UTC, for tracing the UTC(k) source.



- **7.3.1.4.** The electronic signature is created by a key used for Time Stamping only.
- **7.3.2.** The Company's Time Stamping Server provides exact time of up to ±1 second based on queries against a GPS based time server, which acts as a primary time source at the level of Stratum 1. The time server is kept in a secure location within Comsign's offices. The Company warrants that clock synchronization will take place when a leap second occurs as notified by an authorized body. The Company possesses adequate technical means that ensure that the time will be accurately synchronized with the UTC. Should the TSU clock deviate outside the exact time declared and the calibration fails, the TSA will not perform Time Stamping until the correct time is restored. Manual management of the TSU clock may be performed only by authorized personnel.

7.4. TSA Management and Operation

7.4.1. Security Management

The Company and its representatives will use only reliable systems that comply with the technical requirements set by universal TSA standards as stated in this CPS.

The Company uses reliable data security systems. These systems are not open to the public but are audited by external bodies. As part of the annual ongoing audit conducted by an independent auditor, the reliability of the systems and adherence to the practices and the Registrar's guidelines are audited.

The Company conducts an annual system's risk review by an independent external data security expert approved by the Registrar. The Company fulfills ISO 27001 data security standards and is audited for this effect by independent bodies.

7.4.2. Security Policy

The Company operates according to "Separation of duties Annex No. 4a" which is part of Comsign's procedures and which was presented and approved by the Israeli Standards Institute according to Israeli Standards 27001 and 9001 as well as presented and approved by the Registrar. The Annex includes employees' authorization permits and physical access authorizations to different Comsign facilities. The Annex contains a separation of duties process and describes the



ability to supervise and ensure that every critical activity will require the participation of at least 2 persons.

A senior managerial security forum, including data security, operates in The Company and convenes one a month on a regular basis. The security forum includes Comsign's CEO, security manager, senior technical representative and members of the certificates' issuing team. The security forum reviews a monthly security report by the security manager and instructs the security manager.

7.4.3. Personnel Management and Security

The Company employs experienced personnel with appropriate and required knowledge, expertise and qualifications for the job requirements and the services supplied by the Company. The Company operates under personnel management procedures intended to ensure reliable, professional and trusted employees able to fulfill their tasks with special emphasize on managing and recruiting employees for trust positions.

These procedures deal with the appointment of functionaries in the Company, including the required documents, background check, experience and qualifications of the candidates, executing confidentiality and no conflict of interest undertakings and conducting additional reliability checks. The procedures further regulate the instruction and drilling of employees in data security and the manner of terminating the employment of an employee.

Managerial employees must possess know how in time stamping technology, electronic signatures and coordinating time and data security.

Trusted employees will include, amongst others, those dealing with security, Time Stamping System managers, Time Stamping System operators and systems auditors. Trusted employees will be appointed by their superiors and demonstrate total freedom from any conflict of interest.

The company maintains an employees' instruction program as part of an annual instructions program. The instructions include knowledge of the Law and the procedures. Job definitions are refreshed and conclusions are drawn from security and other events. The instruction program is prepared during the last annual calendar month and presented to the Registrar.



In every engagement of the Company with sub-contractors for the execution of activities involving permission of the sub-contractor to participate in any Time Stamping activities which are limited in access, the sub-contractor must assume a contractual undertaking to maintain the strictest security requirements to which the Company is committed by This CPS, the Law and ordinances, and in addition they are required to compensate the Company for any damage resulting from a data security breach.

7.4.4. Physical Security

The Company operates under a security system based on strict security standards, computer hardware, software and work procedures that are audited and approved by the Registrar. These provide a high level of availability, uninterrupted activity and enforcement of security procedures as well as a satisfactory answer to security threats.

The Company operates with respect to physical security procedures in accordance with the procedures in Comsign's "Physical and Environmental Security Procedures" file which was presented to the Registrar as part of the application for Comsign's licensing as a qualified certification authority. These procedures include the structure and position of the facility in which the computing system and Comsign's offices are located, physical access procedures to the different facilities, air conditioning, water exposure, fire prevention and protection, storing and protecting data, backups and refuse handling.

Comsign conducts a risk assessment to determine the security requirements and the required operational procedures. Risk assessment, together with the existing security policy and procedures, are examined by risk auditors as well as by the Registrar in order to ascertain that all identified risks were indeed dealt with.

Risk review is conducted at least once annually by an external independent data security expert who was approved by the Registrar. Comsign is committed to address all malfunctions immediately following receipt of the risk review. A report on the execution of repair activities is filed with the Registrar.



7.4.5. Logical Security of the Time Stamping Services Signature Device

The Time Stamping Services signature device (private key) is encrypted, in full, on a hardware security module (HSM) and stored in a server located in the Company's secure zone. Access keys to the security module are stored in an external safety deposit box with access limited to the security manager only and subject to the Company's separation of duties (SOD) procedures.

In its capacity as a qualified certification authority, the Company's signature device used for Time Stamping electronic certificates, is created by Comsign only and is under its exclusive control. The signature device of the Company and/or of any of its representatives is protected by reliable hardware in accordance with the requirements of the Electronic Signature Ordinances (software and hardware systems) – namely, Comsign's signature device fulfills all of the following:

- It is based on a RSA or DSA key of at least 2048 bits.
- It is protected with a device satisfying, at least, FIPS 140-2 level 3 requirements.
- It is backed up using protected and secured means, to the satisfaction of the Registrar; the backup is separately kept.
- It fulfills whatever additional requirements of the Registrar designed to maintain a reasonable level of security against breach, disruption or mal use.

7.4.6. Compromise of TSA Services

Compromise of the Company's signature device is defined as a disaster. In order to handle such a disaster, the Company prepares and maintains a continuous business program for a disaster event. The Company's continuous business program (or the disaster recovery plan) presents a solution in the event of a compromise or suspected compromise of Comsign's signatory device and/or the TSA signatory device. Therefore, for example, Comsign's systems' data required for its continuous activity are backed up and kept in adequate and secure places, in a manner that will enable Comsign to return to activity within a reasonable time following a disaster event. The backup and restoring functions will be performed by employees in trusted positions. Comsign's disaster recovery program will be applied to the Time Stamping Services. Due to data security reasons, this activity,



which was audited and approved by the Registrar, will not be published in This CPS.

7.4.7. Operational Controls

The Company maintains operational controls that include organizational control, human resources control, control of external bodies and other organizational controls. These controls contain requirements that refer to training and instructing Company employees and/or representatives, setting a policy that regulates the allocation of duties inside the Company, documentation requirements and pre-set procedures and audits.

The security manager employs operational controls that verify operation in accordance with the procedures. An employee that does not perform its defined position in accordance with the procedures will be disciplinary dealt with up to terminating its employment.

7.4.8. Termination of the Company's TSA Services

Termination of the Company's TSA Services is subject to the terms of section 5.8 of the qualified certification authority CPS.

7.4.9. Backup and Records Security

The Company and/or its representatives will maintain, in a reliable manner, records concerning the Time Stamping Unit issued to electronic certificates of the Company in its capacity as a qualified certification authority for the term stated in the qualified certification authority CPS. Records dealing with a Time Stamping Unit that were not issued as part of Comsign's qualified electronic certificates will be kept for a 7 years period commencing on the date the Time Stamping Unit was issued. Records may be stored as electronic messages signed with a qualified electronic signature containing a Time Stamp. The records will be kept in a secure server and will be subject to the Company's procedures that apply to the protection of confidential data and preventing the compromise of its privacy.

The Company's data bases are registered with the Data Bases Registrar in accordance with the Privacy Protection Law, 5741-1981 and the Company will operate in accordance and subject to this law and the instructions and guidelines of the Registrar, as in effect from time to time.



Queries to receive information on the date a Time Stamping Unit was issued, the date a Time Stamp was created and the duration of the validity of the Time Stamp can be addressed to the Company. The Company may charge a payment for these services. To avoid any doubt it is hereby clarified that changes in the Company's price list will not take effect retroactively.

8. The Validity of This CPS

This CPS, and any change and or amendment therein, shall come into effect and revoke the previous version, immediately upon publication in the Company's site at: http://www.comsign.co.il/repository

Amending This CPS can take place by way of a partial amendment. The procedures, as amended from time to time, will remain in effect until replaced by a new version.

These procedures replace any previous version that was published in the past, no other version, written oral or otherwise, explicit or implicit, shall be valid, other than in accordance with the terms of This CPS, as amended.

No waiver, relief, extension, delay of refraining from timely action by the Company and/or a subscriber and or a relying party shall be interpreted as a waiver of rights stated in This CPS and will not serve as a claim argument or a claim debarment.