



# **Open Measurement SDK**

## **Integration Validation Compliance Guide**

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<b>Executive Summary</b>	<b>3</b>
<b>Certification Process</b>	<b>4</b>
Application	4
Certification Fees	4
Qualification	4
Geographic Applicability of Certification	5
Certification Testing	5
Publication of Certification Status	6
Continued Certification	6
<b>Appendix A: Application Information</b>	<b>7</b>
<b>Appendix B: Validation Test Cases</b>	<b>8</b>

# Executive Summary

The Open Measurement Software Development Kit (OM SDK) is designed to facilitate third party viewability and verification measurement for ads served to mobile app environments without requiring multiple Ad Verification Service Providers (Measurement Provider) SDK.

The OM SDK consists of a native library for iOS & Android as well as a JavaScript API named Open Measurement Interface Definition (OMID) that is integrated by the Integration Partners (mobile app or Ad SDK developers) . The native library collects various signals, such as ad container geometry and playback events in the case of video, via direct communication with the mobile device's native operating system (OS) and video players, and publishes these signals via the OMID JavaScript API.

The collection, processing, analysis, and reporting of information surfaced by the OM SDK is the responsibility of the Measurement Provider using their respective JavaScript tag that is served with the ad creative.

Completing the SDK integration alone does not guarantee that it will be compatible with Measurement Provider tags or be accepted as valid for the purposes of measurement due to implementation errors or other issues. To ensure that the Measurement Provider is collecting data from a reliable implementation of OM SDK by the Integration Partner, IAB Tech Lab has developed a certification program for validating the integration. The certification program outlined in this document is voluntary and serves to ensure that your integration is compatible with Measurement Provider measurement tags.

This guide describes the requirements and process of the OM SDK Integration Validation Compliance (OM IVC)

OM SDK is developed and managed by the [Open Measurement Working Group](#)

## Certification Process

The OM SDK Integration Validation Compliance (OM IVC) is voluntary and certifies an Integration Partner's implementation of OM SDK against a set of well defined test cases and results based on the output of the OMID API. The OM IVC is designed to ensure the compatibility of Integration Partner's implementation of OM SDK with Measurement Provider measurement tags.

The certification is performed at the app and operating system level. For e.g. a publisher may have two versions of its app - one for iOS and one for Android. In this case the publisher will need to get both implementations certified.

All test cases are executed by IAB Tech Lab for purpose of compliance process.

## Application

To apply for the OM IVC certification, the Integration Partner must have integrated the OM SDK in their app or Ad SDK. OM SDK can be downloaded from IAB Tech Lab tools portal by sending an email request to [omsdksupport@iabtechlab.com](mailto:omsdksupport@iabtechlab.com).

The Integration Partner must provide the information in Appendix A as part of the application for certification

## Certification Fees

There is an annual fees for certification program that covers initial setup and multiple annual certifications. Please check for pricing with [compliance@iabtechlab.com](mailto:compliance@iabtechlab.com).

## Qualification

Any company that is an OM SDK integration partner i.e. an app publisher or an Ad SDK provider that has integrated the OM SDK for Ad verification purpose is eligible to apply for IVC compliance. It is not required to be an IAB Tech Lab member to become an integration partner.

### Geographic Applicability of Certification

The OM IVC certification is a global program and applies to all geographic regions. Since the certification is for an app on a specific operating system, it applies to any installation app on a device using that operating system.

### Certification Testing

IAB Tech Lab applies validation test cases (see Appendix B) based on the OMID API outputs to certify the OM SDK integration.

The scope of validation testing covers the following:

1. Basic setup: The OM SDK is providing the basic app and namespace data correctly via the API
2. Initialization: All OMID initialization parameters and events are captured
3. Ad Format Types: Comprehensive test cases are applied for each ad format type to test for viewability data and required OMID outputs e.g. video events

Following process must be followed for certification testing:

1. Integration Partner implements the OM SDK in their app
2. Integration partner includes the Verification JS tag provided with OM SDK in their ad creatives
3. Integration Partner schedules ad creatives to be served in their app
4. Integration partner provides the test app to IAB Tech Lab compliance team and walks through the navigation and placement of ads
5. Tech Lab Compliance team executes the validation test cases and compiles the results
6. Tech Lab Compliance team will report any issues to integration partner and rerun the tests once issues are resolved
7. Once all required tests are executed successfully, Tech Lab will compile the results
8. The results of the integration validation test cases are reviewed by the Open Measurement Commit Group members for final approval of validation
9. After approval, the Integration Partner is issued compliance certificate of OM IVC.

### Publication of Certification Status

Upon successful completion of the certification testing process and approval of OM IVC certification, the Integration Partner is issued the OM IVC certificate and IAB Tech Lab compliance seal. They can use the seal to publicly communicate their OM IVC certification. In addition IAB Tech Lab will also list the Integration partners who have been issued IVC certification on our website here: <https://iabtechlab.com/technology-compliant-companies/>

### Continued Certification

Integration Partners who have achieved the OM IVC certification must maintain the certification continuously. This does not require that a recertification is required every time they change the OM SDK version or their software version. To maintain continuous OM IVC certification, the Integration partner must submit their OM SDK implementation for recertification when:

1. There is a change of ad placements for existing ad types or introduction of new ad placement- eg a banner position has been changed from top banner of page to inline between page content or in article video ad has been introduced
2. New ad format types have been added . E.g. native video has been added or interstitial ad type has been added
3. Integration Partner has made a significant change to the way they serve or render ads
4. Integration Partner has adopted significant new capability of OM SDK as identified and recommended by IAB Tech Lab
5. 12 months have passed since last certification test

## Appendix A: Application Information

Please click [OMSDK Intake Form](#) to fill out the live form for the questionnaire below.

General	Please answer all questions. If not applicable, type (N/A).
What is your expected date for integrating OMSDK?	
Please describe your development timeline deadlines that impact app(s) release(s)?	
When will you be ready to begin the certification process?	
Do you deploy frameworks that support multiple apps? Or Do you plan to implement OMSDK in a framework that support multiple apps?	
Display	Please answer all questions. If not applicable, type (N/A).
Are you creating and managing your own custom ad containers or are you using an ad serving framework or SSP?	
If you are creating and managing custom ad containers, are display ads served natively or via a WebView?	
If you are using an ad serving framework, what ad types are you using from that ad serving framework?	
Video	Please answer all questions. If not applicable, type (N/A).
What ad serving or player framework are you using for video ads?	

Are your video ads being served natively or via a WebView container, if WebView, please confirm the video player?	
Are you utilizing a third party for ad stitching?	
Native	Please answer all questions. If not applicable, type (N/A).
Are you creating and managing your own custom ad containers or are you using an ad serving framework or SSP?	
If you are using an ad serving framework, what ad types are you using from that ad serving framework?	
Are you using native video ads?	

## Appendix B: Validation Test Cases

S.No.	Ad Type	Test Case	Scenario	Event/ Signal	Expected Result/ value/ comment
1	All	Set-up testing	Confirm that the app can be installed and from what source Should testing be targeted to specific devices? Device types?	App installation	App installed without error, and can be opened
2	All	Set-up testing	Did the int partner provide any specific credentials for testing?	Log-in screen	Log-in successful
3		Set-up testing	Does the app reuse the same code for multiple placements, so that they can be checked as a group rather than individually?	Confirmation from Integrator	Confirmation from Integrator
4	All	Set-up testing	Is the generic verification script trafficked with the ad?	Check ad / impression events	Signals from generic verification script
5	All	Set-up testing	Only ads to be tested are being served with tracking	Confirmation from Integrator	Confirmation from Integrator
6	All				
7	All	Check OMID compatibility and whether active	Load the app page with the ad	isCompatibleWith OmidApiVersion	version number of OMID library and application context. Also if active=true
8	All	Ad session is correctly instantiated	Load the page with the ad or reload the page with the ad	ad session id	return new ad session-unique ad session id, timestamp
9	All	Ad session is correctly instantiated	Ad session context is established properly	environment	app
10	All	Ad session is correctly instantiated		adSessionType	native or html
11	All	Ad session is correctly instantiated		supports	clid for all ad types except vlid for video
12	All	Ad session is correctly instantiated		omidNativeInfo	partnerName and partnerVersion
13	All	Ad session is correctly instantiated		omidJsInfo	serviceVersion, sessionClientVersion,

					partnerName,partnerVersion
14	All	Ad session is correctly instantiated		app	libraryVersion and appld (com.example.appname)
15	All	Ad session is correctly instantiated		customReferenceData (not required)	any string value
16	All	Ad session has error instantiating		errorType	Generic or Video when video ads
17	All	Ad session has error instantiating		message	string value describing the error
18	All	Ad session slow to instantiate	Ad is slow to load, eg from throttling	ad loaded	Impression events fire only once the ad has loaded
19	All	Ad session has finished	End of ad session by closing the ad or starting a new page in app that will dismiss the current ad	sessionFinish	Finish
20	All	Impression has occurred	As soon as the ad is displayed on the page	mediaType	display or video
21	Video	Impression has occurred		videoEventAdaptorType	jcustom or nativecustom if the media type is video
22	Video	Impression has occurred		videoEventAdaptorVersion (not required)	version number is media type is video
23	All	Impression has occurred		viewport	viewport size of the device in height and width
24	All	Impression has occurred		adView	This is geometry change data- to be defined later in detail with different ad types
25	All	Geometry Change data	All the geometry events are to be displayed for all ads	percentageInView	value between 0-100
26	All	Geometry Change data		geometry	value like this: { x: 0, y: 0, width: 320, } height: 50
27	All	Geometry Change data		onScreenGeometry	{ } x: 0, y: 0, width: 320, height: 50, obstructions:[
28	All	Geometry Change data	Obstruction is present in onScreen geometry	Obstruction data	{ x: 0, y: 0, width: 320, } height: 50
29	All	Geometry Change data	Reason for obstruction	reason	one or more of: notfound, hidden, backgrounded, viewport,obstructed, clipped

30	Video	Video player interaction and events	Events for video ads	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll, midroll, postroll, standalone (when it is not in video content)
31	Video	Video player interaction and events	Start playing the video	start	{ duration: <float>, videoPlayerVolume: <float>, deviceVolume: <float> } The videoPlayerVolume range is between 0 and 1. The deviceVolume range is between 0 and 1.
32	Video	Video player interaction and events	Play at least 1/4 of video length	firstquartile	firstquartile
33	Video	Video player interaction and events	Play at least half of video length	midpoint	midpoint
34	Video	Video player interaction and events	Play at least 3/4 of video length	thirdquartile	thirdquartile
35	Video	Video player interaction and events	Play full video	complete	complete
36	Video	Video player interaction and events	Pause the video	pause	pause
37	Video	Video player interaction and events	Resume after the pause	resume	resume
38	Video	Video player interaction and events	Start playing video	bufferstart	bufferstart
39	Video	Video player interaction and events		bufferfinish	bufferfinish
40	Video	Video player interaction and events	Use skip video is skip is available	skipped	Only for skippable videos
41	Video	Video player interaction and events	Change player volume or device volume	volumeChange	values are between 0 and 1- { videoPlayerVolume: <float>, deviceVolume: <float> }

42	Video	Video player interaction and events	Hide Video by scrolling or expanding another page component so the video is hidden	playerStateChange	minimized
43	Video	Video player interaction and events	Change player volume	volumeChange	playerVolume should change, but deviceVolume should not
44	Video	Change device volume	volumeChange	deviceVolume should change, but playerVolume should not	
45	Video	Video player interaction and events	Mute player volume	volumeChange	{ videoPlayerVolume: 0, deviceVolume: <float> }
46	Video	Video player interaction and events	Mute device volume	volumeChange	{ videoPlayerVolume: <float>, deviceVolume: 0 }
47	Video	Video player interaction and events	Minimize the video or reduce in size if ap allows that action	playerStateChange	collapsed
48	Video	Video player interaction and events	Play video in player default size	playerStateChange	normal
49	Video	Video player interaction and events	Expand the player if app allows or the app expands the video when it plays the video	playerStateChange	expanded
50	Video	Video player interaction and events	Tap on video to go full screen	playerStateChange	fullscreen
51	Video	Video player interaction and events		geometry	value like this: { x: 0, y: 0, width: 320, } height: 50
52	Video	Video player interaction and events	Click on video to open advertiser landing page- execute click through	adUserInteraction	{ interactionType: <click> }
53	Video	Video player interaction and events	Tap on video to engage with another ad experience	adUserInteraction	{ interactionType: <invitationAccept> }
54	Display	Banner ad session basic check	Load the banner ad	Check all ad session and impression events have occurred	see above for ad session and impression event

55	Display	Banner ad session basic check	Reload the banner ad	Check all ad session and impression events have occurred	see above for ad session and impression event
56	Display	Banner ad session basic check	On Android rotate the banner- this should start a new ad session	Check all ad session and impression events have occurred	see above for ad session and impression event
57	Display	Banner ad viewability geometry	Ad fully in view	percentageInView	this should be 100- also chekc other geometry values- they shoudl reflect device size in view port and ad size in X,Y parameters
58	Display	Banner ad viewability geometry	Scroll ad partially out of view < 50% in view	percentageInView	value should be < 50
59	Display	Banner ad viewability geometry	Scroll ad partially back in view > 50% but < 100% in view	percentageInView	value should be >50 and < 100
60	Display	Banner ad viewability geometry	Scroll ad fully out of view	percentageInView	0
61	Display	Banner ad viewability geometry		reason	hidden and / or viewport
62	Display	Banner ad obstructions	Background the application (go to another app or start camera or lock the screen)	percentageInView	between 0 and 100
63	Display	Banner ad obstructions		obstruction data	as described above
64	Display	Banner ad obstructions		reason	backgrounded
65	Display	Banner ad obstructions	Hide with another view by opening or expanding another component on the page in the app. e.g open a link that opens another web view	reason	obstructued and/ or hidden
66	Display	Banner ad interactions	Click to advertiser landing page	adUserInteraction	{ interactionType: <click> }
67	Display	Banner ad interactions	Tap to engage with ad component like expand the ad	adUserInteraction	{ interactionType: <invitaitonAccept> }
68	Display	Ending the ad session	Tap on close button if there is e.g. anchored banners or	session Finish	Finish

			refresh the app page to get a fresh ad session		
69	Interstitial	Pre load scenario (confirm with app if this applies)	Load the app	Check all ad session and impression events have occurred	see above for ad session events
70	Interstitial	Ad shown in pre load scenario	Go to the interstitial page in the app (navigate from one page to another until interstitial is shown)	Check all impression occurred events	see above for impression events
71	Interstitial	Ad load and shown at the same time	GO to the interstitial page in the app (please confirm navigation with app owner)	Check all ad session and impression events have occurred	see above for ad session and impression event
72	Interstitial	Interstitial ad viewability geometry	Ad fully in view	percentagelInView	90% or greater
73	Interstitial	Interstitial ad obstructions	Background the application (go to another app or start camera or lock the screen)	percentagelInView	betwen 0 and 100
74	Interstitial	Interstitial ad obstructions		obstruction data	as described above
75	Interstitial	Interstitial ad obstructions		reason	backgrounded
76	Interstitial	Interstitial ad interactions	Click to advertiser landing page	adUserInteraction	{ interactionType: <click> }
77	Interstitial	Interstitial ad interactions	Tap to engage with ad component like expand the ad	adUserInteraction	{ interactionType: <invitaitonAccept> }
78	Interstitial	Ending the ad session	Tap on close button if there is or use app navigation to move out of the interstitial ad experience	session Finish	Finish
79	Video	Ad session start and impression for ads in video content	Play video content until pre roll or mid roll or post roll	Check all ad session and impression events have occurred	see above for ad session events
80	Video		When video ad appears additional video events need to be verified	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)

81	Video	Ad session start and impression for standalone ads-autoplay native or outstream ads	Load the page with the video ad	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)
82	Video	Video ad viewability geometry for videos inline of the view	Ad fully in view	percentagelInView	this should be 100- also check other geometry values- they should reflect device size in view port and ad size in X,Y parameters
83	Video	Video ad viewability geometry for videos inline of the view	Scroll ad partially out of view < 50% in view	percentagelInView	value should be < 50
84	Video	Video ad viewability geometry for videos inline of the view	Scroll ad partially back in view > 50% but < 100% in view	percentagelInView	value should be >50 and < 100
85	Video	Video ad viewability geometry for videos inline of the view	Scroll ad fully out of view	percentagelInView	0
86	Video	Video ad viewability geometry for videos inline of the view		reason	hidden and / or viewport
87	Video	Video ad viewability geometry for videos inline of the view	Background the application (go to another app or start camera or lock the screen)	percentagelInView	between 0 and 100, video events available
88	Video	Video ad viewability geometry for videos inline of the view		obstruction data	as described above
89	Video	Video ad viewability geometry for videos inline of the view		reason	backgrounded
90	Video	Video ad viewability geometry for videos inline of the view	Hide with another view by opening or expanding another component on the page in the app. e.g open a link that opens another web view	reason	obstructed and/ or hidden
91	Video	Video playback events	Refer above test case for Video player interaction and events and execute all scenarios	see Video player interaction and events scenarios	see Video player interaction and events scenarios.

92	Video	End session	Click on close to close the video, stop the video or move to another page creating a new app page session	Session Finish	Finish
93	Native	Native ad viewability	Same as banner ads		Ensure ad session type is native and OMIDnative event has the right parameters