Additional technical explanations - Appendix 1

		adledge	adloox	comScore	Integral Ad Science	MEETRICS ATTENTION COUNTS	MOAT	appnexus	Google
	Are you a platform?	No	No	No	No	No	No	Yes	Yes, an AdNetwork, a publisher and a DSP
	Are you a third-party vendor?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
METHOD OF MEASUREMENT OF VIEWABILITY	**In which contexts or circumstances is a geometric method used?**	Used for non-IFrame or friendly-Iframe (the ad position and size are compared to the viewport)	Undisclosed	Used for non-IFrame and friendly-IFrame (the ad position and size are compared to the viewport) and for cross-domain in non-webkit browsers including IE9, IE8, Firefox (all versions). For IE10 and above, we also use specific browser API functions. Used for cross-domain-IFrame for webkit browsers (Chrome, Safari) (specific browser API ; analyses indirect properties of the ad)	Direct placements / Friendly iFrames / Cross-domain iFrames (Firefox)	Used for non-IFrame or friendly-IFrame (the ad position and size are compared to the viewport) + the detailed vertical and horizontal scrolling history of the user in milliseconds	Used for non-IFrame or friendly-IFrame (the ad position and size are compared to the viewport)	Used for non-IFrame or friendly-Iframe (the ad position and size are compared to the viewport) Moreover there is a combination with browser API for Internet Explorer (versions 7 to 10) and Firefox (all versions)	Used for non-IFrame or friendly-IFrame (the ad position and size are compared to the viewport)
	In which contexts or circumstances is browser optimization used?	Used for non-friendly-IFrame for IE11, Edge, Chrome and Safari Exploit Flash plugin specific properties	Undisclosed	Implementation of multiple patent-pending techniques to find out if the user has the opportunity to see the ad and if more than 50% of the ad surface is visible: --> evaluating the relative positions of the mouse cursor within the screen area and the ad container (IFramed) object's X,Y coordinates relative to the screen to be able to derive the location of the tagged ad container for comparison to the browsers viewport area --> use "browser state" properties --> use of the Page Visibility API	Cross-domain iFrames (Chrome, IE, and Safari)	Used for non-friendly-IFrame in webkit browsers (specific browser API ; analyses indirect properties of the ad)	Used for non-friendly-IFrame (specific browser API ; analyzes indirect properties of the ad to determine viewability) MOAT Proprietary technology available for both display and video ad impressions	Used for non-friendly-Iframe on all webkit browsers (Safari, Chrome and Internet Explorer 11+)	Used for non-friendly-IFrames where browser-specific capabilities do not exist that allow measurement using the geometric method
TAGGING PROCESS	**How do you ensure that the data collected by your measurement servers really come from the relevant tags and can't be tampered by malicious attackers?**	* We discard obsolete versions and soon obsolete code revisions, * We check the format validity of the data * We check the coherence of the whole data as numerous fields' presence and value are correlated with others. * We are developing the encryption of the data, made on the server side and using a secret phrase (not present on the client code obviously). The encrypted data will contain a server stamp, so it will always differ from one call to another. Therefore we will filter all data with an abnormally old (or futuristic) timestamp.	- use of heavy obfuscation on the client js code - only allow js action from our domain name if the use of https - use of an unique id for each of the impression - daily check of the data by our fraud application (looking for repetitive patterns in the campaign)	We only allow the code to be loaded from our domain (no self hosted JS). The measurements get transmitted straight from our code at the end-user to our domain. HTTPs transfers are used where needed. The code does not allow for external manipulation. Bad client and campaign IDs are rejected as are malformed URLs (these records would be rejected) Additionally, if we see a client generate more than 10k unique campaign IDs in a day we consider it a tagging error and alert our ad operations team to investigate.	IAS leverages a series of detection methods which includes but not limited to: analyzing browser signals in comparison to user agent, period manual checks for expected values and sophisticated invalid traffic detection.	We are using encrypted feedback that use a meetrics specific structure including validation tokens to transmit the data back to our server.	We have various proprietry checks which we are happy to share with you but do not want published in the appendix	Each impression is uniquely identified and matched to a unique traded impression.	There is no tag insertion