THE EUROPEAN VIDEO MEASUREMENT MATRIX

A ROBUST VIEW OF INDUSTRY METRICS

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#measurementmatrix

There is unprecedented demand from advertisers to fully understand audiences across TV and digital video: which consumers were reached and how they responded to their ads across all platforms means accurate measurement is more critical than ever.

Today's consumers have access to a plethora of screens and devices on which to view video content. It is essential for premium video providers to use accurate ways of measuring total audience, as this determines their trading currency. They need trusted, independent metrics with coverage across all platforms, including TV, apps, web, over-the-top (OTT) devices and set-top box (STB) video-on-demand (VOD). As TV and digital video are converging, so too are campaign metrics. This is where the complexities of bringing together different measures and making sense of it all lies.

Fragmentation has led to confusion, making it even harder to measure the true value of advertising. Non-premium video and bad digital players have created the need for better verification of delivery, but consistency across platforms and providers create challenges. The industry has reached an inflection point, and the time is now for all key players – brands, agencies, publishers and technology providers - to work together to bring greater clarity.

The European Video Measurement Matrix helps provides a unique reference tool on different audience and verification measurement providers' capabilities and methodologies. Through this overview, the FreeWheel Council for Premium Video, Europe (FWCE) aims to shed light on similarities and differences across the region and open up a dialogue on how metrics should evolve over time to serve the interests of brands and premium video providers alike. The FWCE stands ready to work with industry bodies and key stakeholders to adapt to this new video measurement landscape where screens and wires should be just details.

#measurementmatrix

	Nielsen	Kantar	GfK	comScore
TV	• Panel-based data via proprietary metering using audio watermarking technology.	• Panel-based data via portable and fixed meters using audio watermarking/fingerprinting technologies.	• Panel-based data via portable and fixed meters using audio watermarking/fingerprinting technologies.	• Proprietary measurement methodology on 30M+ households and 60M+ STBs (US only).
Mobile Apps, Mobile Web and PC	• Proprietary on-device metering technology and census-style data from 3rd party. • Census-based measurement: tracking and analysis of site performance and audience consumption/engagement with streaming media. • Can perform General Invalid Traffic (GIVT) filtration procedures. Filtration and detection is available through Nielsen's viewability partners including IAS, Moat and DoubleVerify.	• On-device people-meter embedded at panel level to determine what is being watched. • Tagging or content metadata in the video stream via plug-in.	• Proprietary on-device metering technology (Android and iOS) for total online and apps usage. • Census measurement of tagged websites; adding census from specific global digital publishers via partnerships. • Integrating census measurement via unique *Audience Attribution Model*.	• Census Network: provides behavioural insights based on all tagged sites visited by exposed cookies, not just sites where the campaign ran. • Partner Census Data: supplements behavioural insights with demographic insights provided by vetted third parties. • comScore Panel: provides person-level data for benchmarking both census network and partner demographic data.
VOD and OTT	• VOD/OTT on TV sets and connected devices: panel-based measurement through people meters and audio matching. • Digital devices: panel-based measurement through Streaming Meter (IP traffic related to video streaming in the panel household). Census data is collected through Nielsen SDKs in the publishers' apps and players.	• Tagging on broadcasters' web players to measure online TV viewing. • Time-shift reporting up to 28 days. • Long-tail viewing reporting using advanced statistical methods and PayTV services' set-top-box (STB) data.	• Measured through national TV panels using router and site-centric measurement. • Time-shift reporting up to 28 days.	• OTT measured via census-based reporting for content. • VOD measurement via *On Demand Essentials*. Measures transactions across 50+ MVPD providers at a census level (US only). • Measured via the *Total Homepanel* (US based audiences).
Cross-platform	• TV/online *Data Fusion* provides cross-media measurement at household level. • Cross-platform view of digital audiences across mobile and connected devices. • Total Ad Ratings (TAR) connects online and TV campaigns to report the audience exposed only online, only on TV, and de-duplicated across both online and TV (no mobile currently). • Next-day view of a campaign's unique audience, reach, frequency, GRPs, and on-target percentage across digital platforms. • Metrics are reported by demographic, expanded demographics and segmentations. • *More info: bit.ly/2mmA2ZH*	• Household level cross-media measurement, based on fusion of TV and online data. • Delivers a complete unduplicated view of video consumption, combining TV with online multi-platform measurement. • Total Video rating captures a holistic view of video consumption across platforms for all demographic groups. • Kantar-comScore alliance: the partnership focuses on cross-media audience and campaign measurement in non-U.S. markets. It combines products, technology, data assets and research panel elements to deliver audience/campaign measurement across multiple platforms. • *More info: bit.ly/2D1PnbL*	• Measurement at individual level for PC, smartphone and tablet via proprietary cross-media panels. • Data integration combining user-centric and site-centric measurement, via unique *Audience Attribution Model*, to provide cross-media and target group data at individual level. • Complete coverage and unbiased tracking of tagged websites, apps, media players and campaigns at census level; unique browser and gross performance of webpages; adding census from specific global digital publishers via partnerships. • *More info: bit.ly/2CXLVzm*	• comScore-Kantar alliance: the partnership focuses on cross-media audience and campaign measurement in non-U.S. markets. It combines products, technology, data assets and research panels elements to deliver audience/campaign measurement across multiple platforms. • Covers: Core TV (linear TV, TV content delivered as VOD, any TSV), Extended TV (simulcast or on-demand via mobile or OTT devices), total video (online platforms) and total view (online video, accessed through mobile - app or web - and OTT devices). • Delivers a complete unduplicated view of digital and TV consumption. • *More info: bit.ly/2B79Y9z*
Countries operating in	• Digital Audience measurement in US, APAC and including in Europe: Germany, Italy, UK. • DAR: 30+ countries globally including the following in Europe: Belgium, Czech Republic, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Spain, UK. • TAR: availability in the following European countries: France, Italy, UK.	• 40 countries globally including in Europe: Belgium, Denmark, Germany, Spain, Finland, France, Greece, Iceland, Ireland, Luxembourg, Malta, Netherlands, Norway, Portugal, Sweden, Switzerland, UK.	• Over 20 markets across LATAM, EMEA, APAC.	• 40+ countries globally including in Europe: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Poland, Spain, UK.

	BARB	Médiamétrie	SKO	MMS
TV	• Panel data and analysis using Kantar metering technology. • Panel = 5,100 households (~12,000 individuals). • Joint Industry Currency.	• Panel data and analysis using Médiamétrie metering technology. • Panel _Mediamat_ = 5,000 households (~11,000 individuals).	• Proprietary data and analysis using Kantar metering technology. • Panel = 1,250 households (~2,800 individuals) executed by GfK.	• Proprietary data and analysis using Nielsen metering technology. • Panel = 3,000 households.
Mobile Apps, Mobile Web and PC	• Panel-based: on-device app measuring individual panellists' viewing on PC and tablet (no mobile currently). • Census-based: measurement SDK developed by Kantar embedded into broadcaster players providing to-the-second record of viewing, for live and VOD (tablets, PCs and smartphones).	• Joint-venture Mediametrie/NetRatings. • Content : Internet Global (all mobile platforms, apps and web); Panel = 30K (incl. 4K+ single source multi-screen panelists); hybrid methodology combining meters and certificated site census metrics; provides monthly ratings for brands and apps. • Advertising : Nielsen _DAR_; combines 3rd party data provider and panel metrics for calibration; daily KPI for cross device digital campaigns: reach, frequency, GRP (incl. split by demo).	• Panel-based: on-device via Kantar virtual meter software and online _MediaPanel_ of 2,700 households (~5,600 individuals). • Census data: online video commercials and content tagged.	• Census-based measurement provided by comScore with tagged content and commercials combined with online panel from Kantar (20,000 panellists).
VOD and OTT		• Census-based: via MM site-centric solution embedded into broadcaster or aggregator players for linear and non-linear online TV consumption.	• Online TV content reporting live, TSV 0-6 days, TSV 7-27 days. • Reports also non-linear and online-only content. • VOD reporting from apps and sites of participating broadcasters only. • No measurement of TV stream through PayTV or Telco apps.	• Census measurement of TV broadcasters' video and ad content using comScore's _Stream Sense_ (live, TSV 7 days viewing figures). • Specific premium OTT platforms being measured (e.g. Svtplay, Viafree, etc.) - YouTube is not currently measured.
Cross-platform	• _Dovetail Fusion_ (2018 launch) combines census data collected via SDK across all devices (via all tagged players) with panel data, collected by device and router meters. • Programme consumption and audiences reporting: raw consumption, reach and frequency. • Commercials reporting: average commercial streams and reach at a campaign and product category level. • Gives broadcasters, advertisers and other interested parties a minute-by-minute breakdown of viewing levels for planning purposes. • _More info: bit.ly/2EtGcha_	• _Cross Media_, partnership with several institutes for a data fusion survey with all media and based on 5 media currencies (TV, radio, Internet, press, outdoor). • Provides media brand audience exposure and helps build media strategies with a media planning base. • _Total TV solution:_ uses a single source panel (Google and Médiamétrie) of 3K households and site-centric measurement; daily online content ratings (linear/non linear) and linear TV ads, no demographics; monthly online ratings and online contribution for TV ratings for channels (linear/non linear), with demographics. • Advertising: _Cross Campaign Ratings_ (XCR); measures digital incremental reach to TV; fusion of _Mediamat_ (TV currency) and Médiamétrie/NetRatings Internet panel; digital campaigns are tagged with Nielsen DAR (CESP audited). • More info: bit.ly/2EvKZii	• TV/online data fusion (executed by Kantar). • Single source online devices integrated with census data provide online video measurement at household and individual level. • Measures the online contribution to TV ratings. • Delivers daily online TV ratings, enabling advertisers, agencies and broadcasters to monitor and monetise online reach and viewing behaviour across online TV programme audiences. • _More info: bit.ly/2ANbKwe_	• _Total TV_ solution using fusion across the existing TAM panel (Nielsen), online panel (Kantar) and census-level source (comScore). Currently available for ads analysis (to be extended to content later). • Working towards a total audience model and currency with GfK that combines data from TV, PC, mobile and detailed panels together with census-level measurement for programmes and advertising using a fusion model. • _More info: bit.ly/2D0qRsg_
Countries operating in	• UK	• France	• The Netherlands	• Sweden

	comScore		Meetrics		Integral Ad Science		Moat	
	Brand Safety/Fraud	Viewability	Brand Safety/Fraud	Viewability	Brand Safety/Fraud	Viewability	Brand Safety/Fraud	Viewability
Mobile Apps, Web and PC	• Brand Safety: _Validated Campaign Essential_ (_vCE_) allows blocking based on a wide variety of conditions (blacklist, whitelist and more). _vCE_ blocks the ad from being seen by rewriting the HTML DIV (an alternative ad can be delivered). • Pre-bid blocking (via Programmatic API): categorises content based on proprietary technology _Pattern Profiling_. Patterns found on the page are mapped to an internal set of over 350K+ topical nodes, and to non-brand safe categories, via a proprietary crawler. • Fraud: _Triple Detection Technology_ to measure IVT: _Ad Tag™_ (ad tag to remove some IVT at the event level). _Panel_: gives insight to online activity, to distinguish NHT. _Census Network (CCN)_ for IVT measurement.	• Geometric: uses the x,y coordinates of the ad to determine the exact location of the ad on the screen (MRC-accredited). • Timing: uses clues associated with the page content to determine whether that creative is in-view. • Projection: using a sophisticated modelling technique (and reported in the Audience portal). Based on the observed viewability rates for individual campaign-level placements to deliver an accurate projection for that given publisher.	• Scans the URL and domain information, the rate of customer black- or white-listed deliveries, the contents according to defined categories and critical keywords, such as adult pages, illegal content promotion or violent content.	• Via VAST ad-tag wrapping (if player support for VPAID and MRAID is given). • Native player integration with TrackerClass.js - an SDK integrated within the player (MRAID, no VPAID support necessary). • Via VAST 4.0 if player and adserver support is given via JavaScript tag implementation in VAST XML Verification node.	• Uses proprietary machine learning, data science intelligence and algorithmic modelling to rate the risk and context of individual web and app pages. Data is analysed to score/categorise/rate pages and create models that can be applied to further protect ad campaigns online, typically in the programmatic space. • _Fraud detection_ relies on three approaches to identifying IVT: behavioural and network analysis (bulk collection of data and modelling to distinguish human behaviour from bots and identify abnormalities); browser and device analysis (probing the user's environment - browser and device - for traces of particular software); malware analysis (construction of botnets and associated malware).	• _Viewability Rating Platform_ uses the standard geometric and browser optimisation (including API) methods. (Flash deprecated). • Uses two approaches to mobile app viewability: a tag-based MRAID solution using standard viewability detection methodology and the Mobile InApp SDK via the Open Measurement Initiative (_OMI_). • The OMI which is built on IAS's AVID (Ad Verification Interface Definition) consists of a native library for iOS, Android and a JavaScript ad tag solution, attached to the ad creative. It covers all typical display banner types in app, as well as VAST video for both native and HTML5 video players.	• Proprietary methodology for NHT detection, identifies and provides email alerts on dozens of forms of invalid ad traffic. • Identifies general and sophisticated IVT. IVT is checked via dual-pass filter, excluding browsers on the IAB known spiders and bots lists. • Uses robots.txt file on its pixel servers to prevent crawlers from sending invalid data.	• Positional measurement using JavaScript to determine the position of the ad and browser-resource techniques to determine if the ad is visible. • Census-based reporting, no sample impressions. • Metrics based on all impressions activity.
Technology	• Direct and indirect IVT detection. • Direct detection: measures detailed ad delivery data and detects the characteristics that signal invalid activity, such as bots, click farms and content scrapers. • Indirect detection: applies proprietary data science algorithms to identify threats beyond those found through the ad tag.	• Household viewing of content via comScore _Total Home Panel_ (see Kantar audience measurement).	• Suspicious impressions can be detected with JavaScript code on the page, checking for hundreds of different biometric flags and detecting inconsistencies in selected hardware and claimed usage features that uncover fraudulent behaviour. • Viewable impressions are filtered for general and sophisticated IVT.	• Partnering up with different qualitative panels in order to collect cookies from panel users to match these with socio-demographic data (deterministic data only, no sampling). • Within apps - as no cookies can be dropped or collected - working on a solution together with respective panels based on the device's advertising ID.	• Deconstructs fraudulent malware and botnets in order to understand their typical traits. • General and sophisticated IVT are identified and audited by the MRC. • Filtering includes IAB robots and spider lists. • IVT is excluded from viewability measurement.	• Video viewability measurement platform utilises both VPAID and video SDK solutions for interacting with the publisher's player (VAST and VPAID). • For mobile web environments, the measurement process is identical to the PC methodology (with the exception of Flash based implementations).	• Uses activity-based filtration and other fingerprinting techniques to identify and investigate suspicious and potentially fraudulent impressions. • Grapeshot partnership for brand safety analytics - contextually categorizes URLs through the use of page crawling algorithms and keywords analysis. URLs are classified into pre-defined or custom defined categories.	• Census-based reporting, no sample impressions. • For video analytics, impression counts when the VAST 'impression' event is fired; impression is counted once the ad is loaded and rendered.
Methodology	• Measurement determined post-delivery of the content creative. • Visibility of the ad is checked every 100ms. • Provides solutions for agencies, publishers and ad networks. • vCE measurement is enabled through the use of a single ad tag. • Enables de-duplicated reporting of delivery across key dimensions, such as in-target and in-view. • Can integrate both audience and viewability figures so the net audience and non-viewable data are interlinked. Provides validated in-target impressions.		• Measurement determined post-delivery of the content creative. • Visibility of the ad is checked every 100ms. • Provides solutions for both agencies and publishers. • The content is measured (not the container). • In-view impression for IAB viewable video impressions 50/2 and other flexible metrics.		• Measurement determined post-delivery of the content creative. • Visibility of the ad is checked every 100ms (display)/200ms for video. • Provides solutions for both agencies, publishers and programmatic channels. • The content or container is measured, depending on configuration. • Part of the _Open Measurement Initiative_ (OMI) providing participating measurement vendors access to in-app viewability data for their verification and analytics.		• Measurement determined post-delivery of the content creative. • Visibility of the ad is checked every 200ms. • Provides solutions for both agencies and publishers. • Data can be broken down based on the ID passed to the Moat tag at impression time, or by day or date range. • Part of the _Open Measurement Initiative_ (OMI) providing participating measurement vendors access to in-app viewability data for their verification and analytics.	
Countries operating in	• 40+ countries globally including in Europe: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Poland, Spain, UK.		• Global presence including in Europe: Austria, France, Germany, Italy, Poland, Switzerland, UK.		• 13 countries including in Europe: France, Germany, Italy, Spain, UK.		• Global presence including most countries in Europe.	

Key abbreviations and definitions

NHT: Non-Human Traffic

IVT: Invalid Traffic

TAM: Total Audience Measurement

GRP: Gross Rating Point

TSV: Time-Shift Viewing

- Brand risk refers to web pages that contain content that is damaging to brand image and reputation through association.

- All verification players follow the IAB guidelines for video viewable impressions and require that at least 50% of the pixels of the player must be visible on-screen, the page must be focused, and the ad must be playing for at least two continuous seconds.

COUNCIL FOR PREMIUM VIDEO

EUROPE