egta
Insight

INNOVATION IN
TOTAL TV MEASUREMENT

An overview of best practice and
key developments in TV measurement around the world

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FOREWORD

"One of egta's roles is to closely follow all changes, initiatives and innovation in audience measurement across the world and to create benchmarks. It is also to encourage all its members to see and adopt the benefits of a total video era, where all media are compared in a fair manner.

We need to be open-minded and confident in the strengths and values of TV assets as the industry evolves. We need to accept that measuring audience reach and frequency is only part of the equation, and that new currencies and KPIs are gaining traction.

Audience measurement has been one of the most important and fastest developing topics in our industry in recent years, and it is our hope that innovation will be based on alignment, cooperation and interoperability so that we will not see an even greater fragmentation where each industry stakeholder ends up designing its own proprietary solution.

egta's ambition is to stay informed and continue to build bridges across the industry to accelerate this process while we strive to reach a point when all stakeholders can move on with full confidence that all eyeballs are accounted for through solutions based on principles of accountability and transparency.

This publication and its latest update is a step along that way."

Walter Zinggl
President, **egta** and
CEO, **IP Österreich**

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INTRODUCTION

TV/video audience measurement is undergoing a period of unprecedented change and development. When the last version of this publication was released in June 2021, we observed that several factors had accelerated the speed of audience measurement developments, including the rapidly changing viewing behaviours exacerbated by Covid 19 lockdown policies, increasing online viewing across devices, and competition from new measurement initiatives. Here two years later, we can conclude that the rate of change has only increased, with many of those measuring audiences around the world expanding measurement systems or exploring entirely new approaches to adapt to the changing environment.

The US is a prime example of a market that is going through radical changes. Nielsen, despite recently regaining its MRC accreditation for its TAM services, which it had lost in 2021, is no longer the sole provider of TV ratings, as the industry is transitioning to a multi-currency marketplace. An increasingly competitive and innovative market is forming as new measurement providers and partnerships have emerged and deals signed on new currencies are now a reality.

Throughout Europe, traditional TAM panels are under pressure as linear viewing is in decline, so we see a continuous adoption of cross-platform measurements and a maturing use of hybrid methods to leverage more granular data. These advances continue to be driven by the national JICs/MOCs rather than new competitors.

Meanwhile, the World Federation of Advertisers' (WFA) cross-media measurement *North Star* initiative keeps developing, with national pilot projects taking shape in the UK and the US. These projects were born as a result of advertisers not having their needs satisfied by existing measurement systems, and they are likely to soon launch with real data for planning purposes. In addition, we are also witnessing increased demands, particularly from advertisers, to move beyond the measurement of reach and frequency to encompass effectiveness KPIs, such as engagement, attention and outcomes.

Despite all these changes and subsequent challenges for measurement, there is unprecedented interest and momentum among all parts of the industry to collaborate and to advance measurement, as well as a willingness to abandon or transform the status quo.

egta continues to take part in industry activities to foster dialogue and to promote robust and future-looking measurement solutions for the TV industry and beyond. We believe that it is paramount to meet the needs of advertisers, as well as to uphold the high quality, transparency and independence of TV measurement. This becomes particularly important in a cross-media context, where there are still discrepancies in visions and a lack of alignment between broadcasters and online platforms that will need to be ironed out.

2024 is announced as the year in which significant change will happen, which could have important impacts on local markets, including the launch of Nielsen One, Project Origin, and several cross-media and hybrid developments in TV markets covered in this publication. We are hopeful that the lessons learned between now and then will pave the way for meaningful innovation and greater satisfaction for the entire industry.

This publication aims to give an overview of the many efforts and creative solutions that are currently being tested and adopted, all of them with merit.
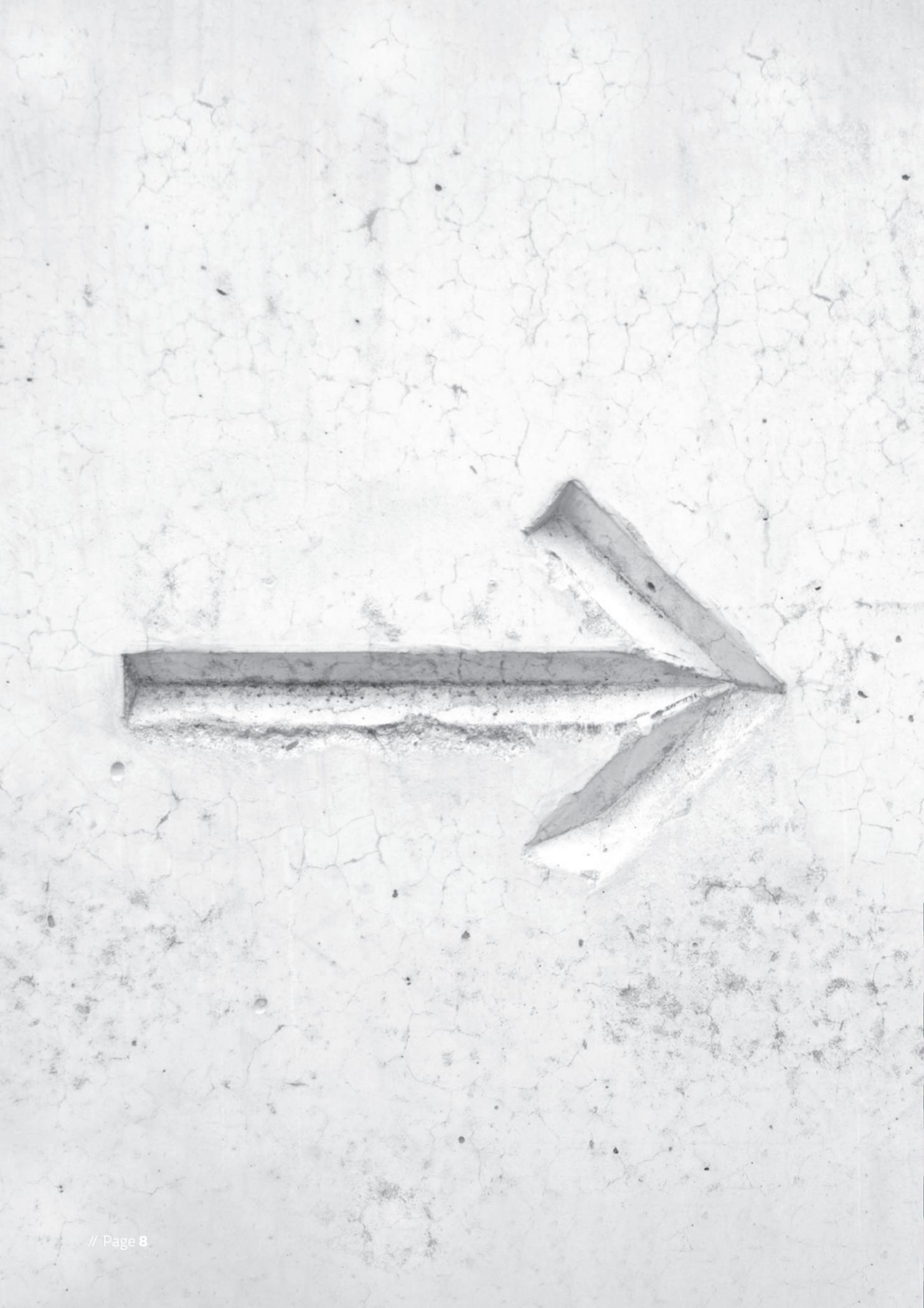
ABOUT THIS PUBLICATION

This report is an update of egta's *Advances in Hybrid Television Audience Measurement*, last published in June 2021. While the structure is similar, all the content has been reviewed and updated throughout the spring of 2023. It includes highlights of key developments and innovation in TV/video audience measurement by industry measurement bodies (JICs/MOCs) in 19 countries. This report also provides an overview of TV/video measurement services offered by global vendors, as well as an explanation of various industry collaborations. This report is not intended as an exhaustive account of all current developments taking place in the field of measurement, rather it offers a comprehensive overview of a topic that is in a constant state of evolution.

HOW DID WE GET HERE?

By Ivor Millman, Special Advisor to egta on Television Audience Measurement

In the autumn of 2019, I wrote a contribution to the previous edition of this publication. It examined the history of the measurement of television audiences, the pressures and processes that led to where we were, and looked to the future. The intention of this short piece is to provide a few thoughts on where TV audience measurement is heading, considering the developments which have taken place since 2019. If you want to read the full article of how TAM has developed over the last decades, it can be accessed here.

TAM – Why do we need it?

The measurement of television audiences was a high priority for broadcasters from the earliest days, particularly for television channels whose finances depended on selling advertising. The advertiser would need to know how many people had seen their advertising. These data could not be generated internally, so external measurement was required.

As the measurement of the most effective and thus accountable advertising medium, Television Audience Measurement (TAM) systems have been more complex and costly than the measurements generally used by other media. Over the decades, TAM systems have grown and developed to match the increasing demands for accurate data and to measure audiences as television itself has gone through numerous technological and audience behavioural changes. With the greatest of respect to television programme makers and schedulers, such a complex and costly system would never have been developed had it not been for the imperative to trade airtime.

The panel-based model that was developed in the 1950s, to allow for TV audience trading, has in its basic form remained in use until today and has worked quite well. Traders in the airtime market have been able to trade and television airtime markets have flourished.

The changing media environment and the effects on TAM

TAM panels are only ever samples with the statistical and potential methodological limitations inherent in that situation, and cracks in the systems began to appear throughout the 1990s. Whilst TAM systems were generally able to manage the many developments in television over the years, these cracks were widened by the explosion in the numbers of channels which introduced a statistical challenge. Additionally, the introduction of video content served over the internet and to screens which could not be metered in the traditional fashion presented new challenges.

Though existing TAM systems may have not coped well with all these changes, these developments have also not been critically damaging to airtime trading. However, whilst the currencies exist for trading, advertisers and their agencies have lacked a single measurement to answer their core questions: *I am advertising across channels, platforms and screens. How many people saw my advertising? How many times? Who are they?*

Those running TAM systems have not been idle in facing this changed environment. If only to maintain the integrity and status of TAM systems, it has been the opinion of many of those involved with them that
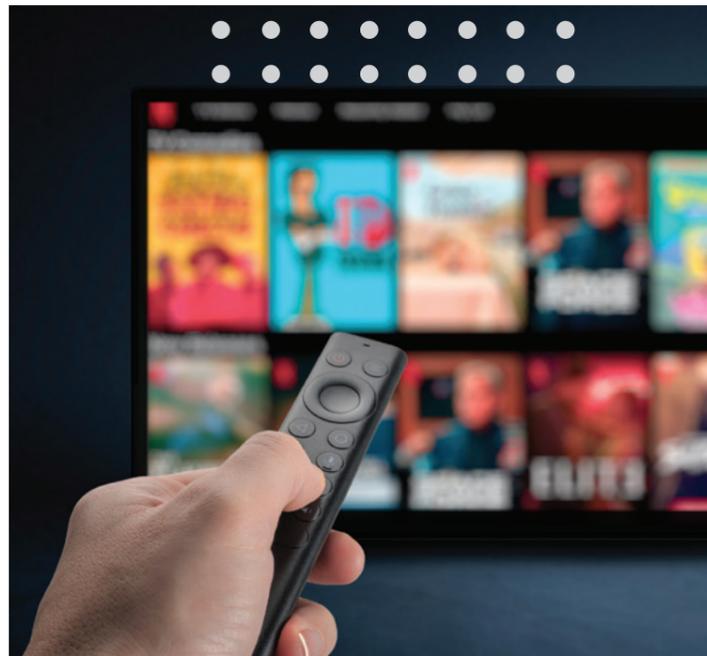
the systems need to extend and develop their coverage to keep up with the current environment.

Sample panels have been, and continue to be, vital in telling us about people's viewing behaviour, but will always be limited statistically. Return path data (RPD) or near-census data should solve the statistical problems that come with relatively small samples, but can only tell us about delivery to machines. If we can bring sample panels and RPD together, we can benefit from the advantages of each and minimise the drawbacks of each. That is the essence of what we call the hybrid solution. As we shall see in this publication, hybrid approaches are being advanced in many countries.

The complicated journey towards hybrid measurement solutions

The hybrid solution has been a simple objective to state but a very complicated one to realise, and it has taken longer than may have originally been expected. When I sat on the Board of BARB in the UK, we first started to talk about this around 2006/2007. A lot has been developed since then but the work continues in the UK and in many other countries. Those of us involved in this activity would be asked why it is taking so long.

Firstly, the environment keeps changing. It can seem as if no sooner has a technical solution been found to a problem than a new problem is diagnosed or arises, a new type of screen comes to the market, a new delivery system is developed, viewer behaviour changes and so on.

Secondly, whilst those involved in developing hybrid solutions have largely been familiar with the strengths and weaknesses of panel data, the use of RPD has proven to be voyage of discovery.

Thirdly, what in detail are we trying to do with the data from panels and RPD? Is this fusion, data integration, data merger? How is this to be done when the nature of panel data and RPD can be different? How are data on a given number of individuals to be brought together

with much larger quantities of data from machines? Particularly for the measurement of coverage and frequency, there needs to be a methodology to deduplicate, to trace the same individual across different screens and platforms. It has all proved to be a much bigger task than originally anticipated. Very importantly now, as compared to what may have been prioritised years ago, this all needs to be done in an environment which is at least GDPR[1], or equivalent, compliant.

Fourthly, is there agreement regarding what the final objective is? Will the hybrid measurement be the only trading currency for all advertising sold by broadcasters irrespective of platform and screen? Or will trading continue as it has developed with the hybrid data filling the gap for campaign planning and evaluation, programme performance measurement, programme scheduling, programme promotion scheduling and evaluation, broadcaster performance measurement, and so on. What about the other participants in the audio-visual space?

Within egta, in addition to publications such as this one, we have held periodic meetings of our own audio-visual measurement committee so that broadcasters, JIC's and research agencies can update each other on their plans, learn from each other and work to develop hybrid solutions. We have also done this in communication with the WFA for the advertisers and EACA for the advertising agencies. In addition, we have met periodically to further these discussions amongst others with important industry bodies from outside Europe, including the Coalition of Innovative Media Measurement (CIMM) and the Media Rating Council (MRC).

Where are we heading?

The years since 2019 have not been idle ones.

As we will see in this publication, there are now countries where hybrid measurements are in use and even a

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[3] The General Data Protection Regulation is a regulation in EU law on data protection and privacy in the European Union.

few where trading is done with hybrid data. In many other countries, it is now in sight that there will soon be hybrid measurements operating as radically enhanced TAM systems. For countries not yet going down this road there will be established models, methods and mechanisms to follow should they choose to do so.

At the very least, TV broadcasters and airtime traders will be able to measure the audiences of their programmes and the airtime that they have sold, irrespective of the platform delivering the content or the screen it is being seen on. It is likely that these measurements could be extended to cover the audiences in other audio-visual spaces, such as those of the large global platforms. Whether this happens may be more a matter of competitive pressures, industry politics and willingness to align standards than any technical obstacles.

In addition, there is the WFA's *North Star* initiative to develop cross-media measurement, which started in 2019. The ambition was and remains enormous in seeking to spread audience measurement across multiple media and delivery modes. The aim of this initiative is to be able to answer the advertisers' key questions: having advertised across multiple media, *how many people saw the advertising, how often* and *who are they*? As of 2023, pilot work goes on especially in the UK and the US, but initiatives are being discussed in other countries as well.

Is that it then?

Will the era of revolutionary change for television, audience behaviour and measurement have come to an end? Do stable times beckon? They say that the future already exists but it is small. Are there already technical electronic developments, maybe currently only on drawing boards, which will come to market, be widely accepted by consumers, and once again lead to upheaval in the audio-visual space?

Additionally, will some of the themes that seem to come and go in salience in the airtime market come to impinge on airtime trading and thus audience measurement? For example, the role of attention measurement has grown in importance in recent years, as has the measurement of outcomes. Perhaps they

will force their way into audience measurement via airtime trading? This is a huge and controversial issue that will undoubtedly be debated in the years to come.

Maybe we will look back to 2023 and conclude that the developments we have lived through, and are living through, seemed big at the time but are overshadowed by what is still to come.

TV MEASUREMENT AROUND THE WORLD

Examples of the current work, recent developments and future plans of the governing bodies in charge of delivering TV/video ratings, and thus trading currencies, in the following countries:

- Australia
- Austria
- Belgium
- Brazil
- Canada
- Denmark
- Finland

- France
- Germany
- Ireland
- Italy
- Netherlands
- Norway
- Singapore

- Spain
- Sweden
- Switzerland
- United Kingdom
- US

AUSTRALIA:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	▪ **OzTAM** covers Australia's five mainland metropolitan TV markets. ▪ **Regional TAM** covers the five east coast aggregated regional markets including its 19 component sub-markets, and the regional Western Australian market.
TAM panel size:	▪ OzTAM's Metropolitan panel includes 5250 homes (around 13,500 people) across Sydney, Melbourne, Brisbane, Adelaide and Perth. ▪ Regional TAM's regional panel includes 3200 homes (around 7000 people) across Regional Queensland, Northern New South Wales, Southern New South Wales, Regional Victoria, Tasmania and Regional Western Australia.
Does the TAM panel include households without TV sets?	No
Does the TAM panel include foreigners?	The TAM panels include all residential households within the TAM markets, representing the diversity and demographic profile of the Australian population.
TV Panel measurement is carried out by:	Nielsen TAM (on behalf of both OzTAM and Regional TAM).
End-date of the current contract:	Rolling contract
Digital video measurement is carried out by:	OzTAM operates the Video Player Measurement (VPM) service to measure BVOD viewing.
End-date of the current contract:	N/A

What is included in the TV measurement?	
Which 'extensions' of TV viewing are measured?	
Time-shifted:	Yes (7 & 28 days), via audio matching.
Guest viewing:	Yes, via viewer registration
Out of home, e.g., bars, pubs:	No
Second homes/holiday homes:	No
Is TV broadcaster content/advertising measured beyond television sets?	
All devices (PCs, smartphones, tablets)	Yes
Content and/or ads?	Content only.
Measured in TAM or separate panel?	N/A
Measured with router meter and/or RPD?	SDK in Broadcasters players; OzTAM's own collection service (VPM).

What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes	No	–
TV output on non-TV platforms	No	No	All connected screens: TV, Computer, Tablet, Phone

Which video platforms are measured within the TAM system?	Content/ advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	No	No	No
Other (e.g. local) video platforms	No	No	No

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Cross-platform TV measurement is done under Virtual Australia (VOZ). It is a proprietary method of creating a synthetic population of approx. 26 million individuals representing the Australian population. Broadcast TV and BVOD viewing from the TAM panels and VPM (BVOD census measurement) is assigned to the synthetic population to create a daily delivered database for Total TV reporting, planning and post-evaluation for cross-screen campaign R&F.
Which data sources are used?	Viewing data sources used include: TAM Panel TV people-meters & streaming TV meters, and Broadcaster Video Player SDK integration tags.
How are the different data sources integrated?	N/A
How is deduplication of audience reach and frequency done?	Every person modelled within the synthetic population is assigned Broadcast TV viewing and BVOD viewing, daily, during the VOZ data base construction. The calculation for R&F over the synthetic population is a simple count of the people exposed to the broadcast spots and/or the digitally delivered ads during the advertising campaign.
Does the measurement of digital broadcaster content/advertising count people or devices?	The digital BVOD measurement services reports counts of devices and people.
Does the measurement of digital broadcaster content/advertising include first party data?	Anonymised first-party data contributes to the digital broadcaster measurement service, underpinning demographic and digital population modelling, as well as the integration into the VOZ Total TV data base.
What is the data distribution frequency?	Daily
Developments planned to any part of the measurement system over the next two years (by end-2024):	The 2023/2024 period will see the phased transition to the VOZ Total TV service Total TV currency.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Linear and time-shifted linear TV.

TV MEASUREMENT IN AUSTRALIA

OzTAM is an independent company owned by Australia's major commercial television broadcaster networks – Nine, Seven and 10. OzTAM owns and manages the official TV ratings services for Australia's five mainland metropolitan total television markets (since 2001) and the subscription television homes nationally (since 2003).

Data is collected from 5250 panel homes in the regional capital cities – Sydney, Melbourne, Brisbane, Adelaide, and Perth – in addition, OzTAM draws upon 2120 homes from OzTAM's metropolitan TV service and from the regional TV service, which is owned and operated by a separate organisation, Regional TAM, to produce OzTAM's national subscription television service.

Regional TAM is a separate organisation to OzTAM, being a joint venture comprising the five free-to-air regional commercial networks – NBN Limited, Prime Television Pty Ltd, Seven Queensland, Southern Cross Austereo, and WIN Corporation Pty Ltd. Regional TAM covers the five east coast aggregated regional markets including its 19 component sub-markets, and the regional Western Australian market.

Within Australia, Nielsen TAM is the research supply company that collects and produces TV ratings data on behalf of the OzTAM and Regional TAM Services.

The panel size is among the world's largest relative to the overall population (Australia's population is 25 million) and OzTAM uses a sophisticated people metering system, which captures viewing to all broadcast television channels on all TV sets in panel homes.

From 2010, both the OzTAM and Regional TAM services commenced the measurement and reporting of time-shifted viewing of television within homes.

Measuring BVOD since 2016

In February 2016, OzTAM launched the Video Player Measurement (VPM) Report which measures the device-level count of Broadcaster Video on Demand (BVOD) minutes consumed across major demographics.

VPM provides Australia's official figures for viewing of internet-delivered TV content whether streamed live or on demand.

OzTAM measures viewing based on minute-by-minute census-level data, providing a highly detailed and granular view of how Australians are consuming BVOD. VPM offers consistent metrics across online video player services, measurement of actual video player activity and market-level (census) data.

The VPM reporting service developed modelling techniques to provide demographic profiles for BVOD content viewing, leveraging available signals, such as:

- Panel-based measurement of household members' viewing across devices.
- Total device viewing information (VPM census data).
- The repertoire of programs watched on a particular device over time.
- Insights derived from the audience profile to the corresponding broadcast program (e.g. OzTAM TV ratings).

From September 2020, OzTAM further developed the demographic modelling to account for the co-viewing to BVOD via connected TV sets, which contributes toward overall BVOD audience estimates. Co-viewing can account for up to an additional 30% of viewing to BVOD via connected TV sets.

VOZ – Total TV viewing across devices

In Australia, as in most countries, the reach of broadcast TV has grown beyond the TV set as audiences embrace a diverse, and growing, array of content, screen, and platform choice.

One of the media industry's biggest puzzles over the past decade has been ascertaining exactly how much connected device viewing contributes to the total audience watching broadcast TV. It has been unclear, though, to what extent 'any time, any place, any screen' viewing impacts the total TV picture.

Virtual Australia (VOZ) is a total TV data product by OzTAM, Regional TAM and Nielsen TAM, which brings together broadcaster content viewing on TV sets as well as connected devices (smart TVs, desktop/laptop computers, tablets, and smartphones) to provide all-screen, cross-platform planning and reporting for Australia's television industry.

The first milestone of a multi-phased rollout of VOZ was the regular delivery of VOZ data for industry familiarisation and system requirements planning in 2021. This provided the market participants the first view into audience estimates of the broadcast content Australians are watching via broadcast or streaming and across different screens.

During 2022, developments continued for the next phase of VOZ, with availability scheduled over 2023.

Most importantly, VOZ removes the need for broadcasters and their clients to plan and trade linear TV and BVOD in silos.

VOZ brings TV viewing ratings estimates derived from 20,000+ sampled people within OzTAM and Regional TAM panel homes, and from the census collection of millions of connected devices, together into a single,

detailed database. VOZ creates an anonymised, virtual profile of Australia's population of over 25 million people, using:

- OzTAM and Regional TAM Establishment Survey data (80,000+ surveys per year, conducted since calendar 2000).
- Actual viewing behaviour of 20,000+ individuals in OzTAM and Regional TAM panel homes.
- Information from streaming TV meters installed in a third of TV panel homes.
- Census-level OzTAM VPM (Video Player Measurement) data on 14 million connected devices playing BVOD content.

VOZ is being built to allow for the development and inclusion of advanced targets (audience segments) to support planning and post-analysis beyond standard age/sex demographics.

Privacy compliant measurement

All OzTAM and Regional TAM TV audience measurement panel household's opt-in with full consent and no information that can identify the person that owns or uses individual devices is collected.

With respect to viewing on connected devices, users have given their consent to the broadcasters to use broadcasters' websites and/or apps. The streaming TV meters only look for broadcast viewing activity and platform-level IP addresses for over-the-top and subscription video-on-demand (SVOD) services.

AUSTRIA:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	The TAM panel system is run by: AGTT (MOC)
TAM panel size:	1,623 households (3,462 individuals)
Does the TAM panel include households without TV sets?	No
Does the TAM panel include foreigners?	Yes. Only the head of household needs to have Austrian citizenship
TV Panel measurement is carried out by:	GfK Austria
End-date of the current contract:	2029
Digital video measurement is carried out by:	GfK Austria
End-date of the current contract:	2029

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (7 days)		
Guest viewing:	Yes		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	Yes		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Yes		
Measured in TAM or separate panel?	Census-measurement in combination with a separate panel		
Measured with router meter and/or RPD?	Measured as part of streaming census-measurement		
What is the scope of digital TV broadcaster measurement?	**Content?**	**Advertising?**	**On all screens?**
BVOD	Yes	Yes	Yes
TV output on non-TV platforms	No	No	No
Which video platforms are measured within the TAM system?	**Content/ advertising?**	**Measured to what extent?**	**On all screens?**
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	No	No	No
Other (e.g. local) video platforms	Yes	Yes	Yes

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Yes
Which data sources are used?	Census, Online-Panel
How are the different data sources integrated?	N/A
How is deduplication of audience reach and frequency done?	Concept is, again, in development after an audit
Does the measurement of digital broadcaster content/advertising count people or devices?	People
Does the measurement of digital broadcaster content/advertising include first party data?	No
What is the data distribution frequency?	Daily
Developments planned to any part of the measurement system over the next two years (by end-2024):	Inclusion of HbbTV Return Path Data to provide more robust data, that is available in real-time and can be used to optimise TV-ads live (TV-Insight project)

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No. The measurement of audio/video will not be used as trading currency for advertising. Trading currency is still the site centric billing of ad impressions.
Which data are included in the market trading currency currently in use?	Live + VOSDAL + 7 days

TV MEASUREMENT IN AUSTRIA
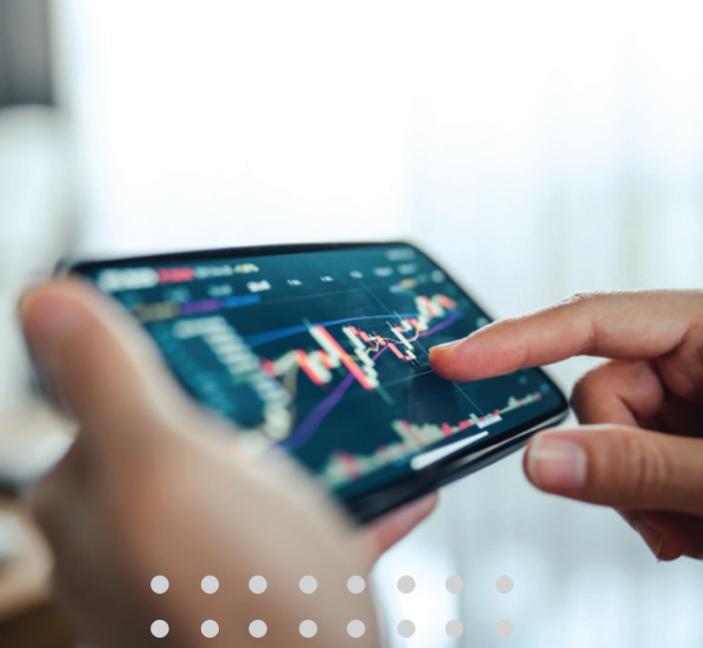
Austria's new approach to TV measurement

AGTT is the TV Audience measurement committee of Austria, representing all broadcasters. Its core business is to provide a currency for TV viewing data, which is currently done through a panel-based approach and audio matching as in many other countries. However, this approach has its limitations, mainly zero ratings and strong fluctuations, especially in the long tail.

To improve the currency, AGTT has been testing a new innovative solution, which will be rolled out in 2023. Together with Red Tech, a media IT company founded by Red Bull, AGTT founded a joint venture under the name *TV-Insight*, which is set to deliver a first real-time TV Currency.

At its core, it is based on technology that allows for the measurement of all connected TVs via return path data (RPD) from more than a million devices in Austria. The device-level data is modeled using the AGTT TAM data, which helps convert machine-level data into people-level data and can be extrapolated in real-time. The extrapolation combines the best of both worlds: large, robust numbers from RPD, and data on a personal level from the established panel research. At the same time, fluctuations in the TAM panel data are compensated by the stable return path figures, and the anonymity of the machine data can be adjusted/calibrated by panel-data.

TV-Insight overview

TV-Insight has developed a solution to help Joint Industry Committees (JICs), broadcasters and advertisers to improve and evolve the data quality of existing TV measurement panels, using return path data from connected devices. The essential difference

Model training

TV-Insight provides a state-of-the-art infrastructure and a data science team that enable the import of necessary data and train the extrapolation models (see Fig. 2). This allows for the identification of the representative twins for all existing panel participants within the return path data set. During that process, all steps and results are visible and shared with the JIC, broadcaster and/or advertiser to make sure that the final model is reaching the maximum market acceptance. Once a model is finalised, it will be retrained approximately every quarter to make sure that possible changes within the TAM panel are also integrated in the synthetic panel.

Data usage and export

To make the integration of TV-Insight as easy as possible, the synthetic panel data is delivered in the same format as currently used by the market. This ensures that existing tools and processes will not have to be changed and market participants do not need any technical integration lead times.

How it is used for TV research: Live analysis

With the current live board, schedulers, editors, researchers and programme representatives all have an easy-to-handle interface for analysing their channels' real-time data. This enables an instant overview of the current performance of the programme (see Fig. 3).

A variety of the most important performance indicators provide context for the running programmes. This includes basic indicators, such as the current number of people watching, gained and lost viewers per second, and more specific information, such as an age group and gender breakdown or a comparison graph indicating the performance of the current versus past airings.

These insights enable live programme decisioning to optimise a programme's current viewership, for example live moderations and live talks.

between TV-Insight and all other "panel boosting" initiatives and products is that TV-Insight is using real-time data and can, therefore, provide a live, always-on TV reach, which can also be used for live decisioning of normal linear TV ad breaks.

How it works

TV-Insight uses multiple months of existing panel and return path data, which is used to generate representative households and twins within the return path data. The result of this training is a new synthetic panel, around 50 times larger than the existing one. Because of the size of the new synthetic panel, it consequently eliminates the currently known issues with high fluctuations and zero ratings, especially for smaller target groups, while keeping the market representativeness and target group information of the original panel (See Fig. 1).

Measurement and import of return path data

TV-Insight provides an easy to integrate measurement for connected TVs and set-top-boxes, using hybrid broadcast standards, and it can import already existing return path session data.

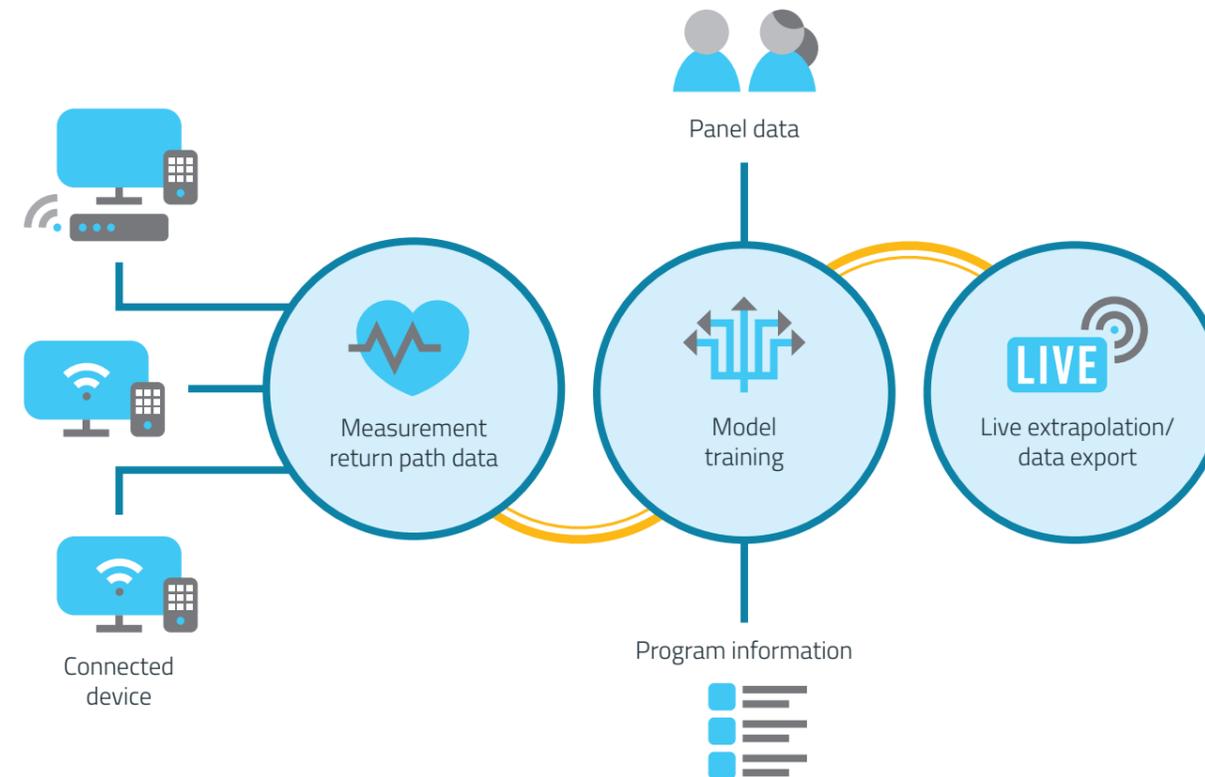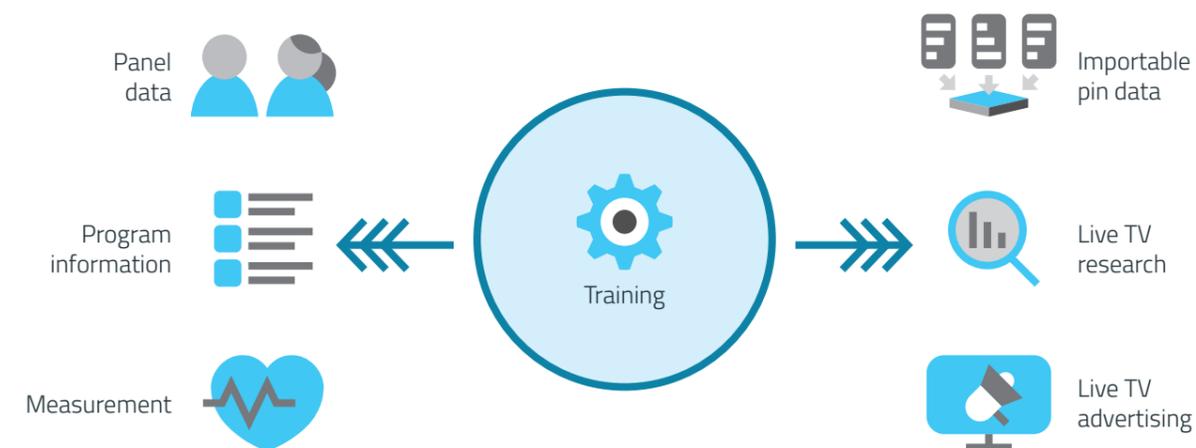### FIGURE 01: TV INSIGHT -SOLUTION OVERVIEW


FIGURE 02: MODEL TRAINING

Historical analysis

The Channel Daily Dashboard offers the possibility to understand the 24h performance of a programme on any past day (see Fig. 4). The analysis is again supported by visual performance indication together with a KPI comparison for every aired programme; for example, insights on good and bad performers as well as the overall channel development over a specific time frame.

Historic dashboards enable the user to investigate the channel's development over a self-defined period, or to analyse the performance development of a specific programme with multiple airings in the past. Both live and historical analysis are also possible for broadcasters' digital channels and apps, providing one total video reach.

FIGURE 03: TV INSIGHT, LIVE BOARD EXAMPLES
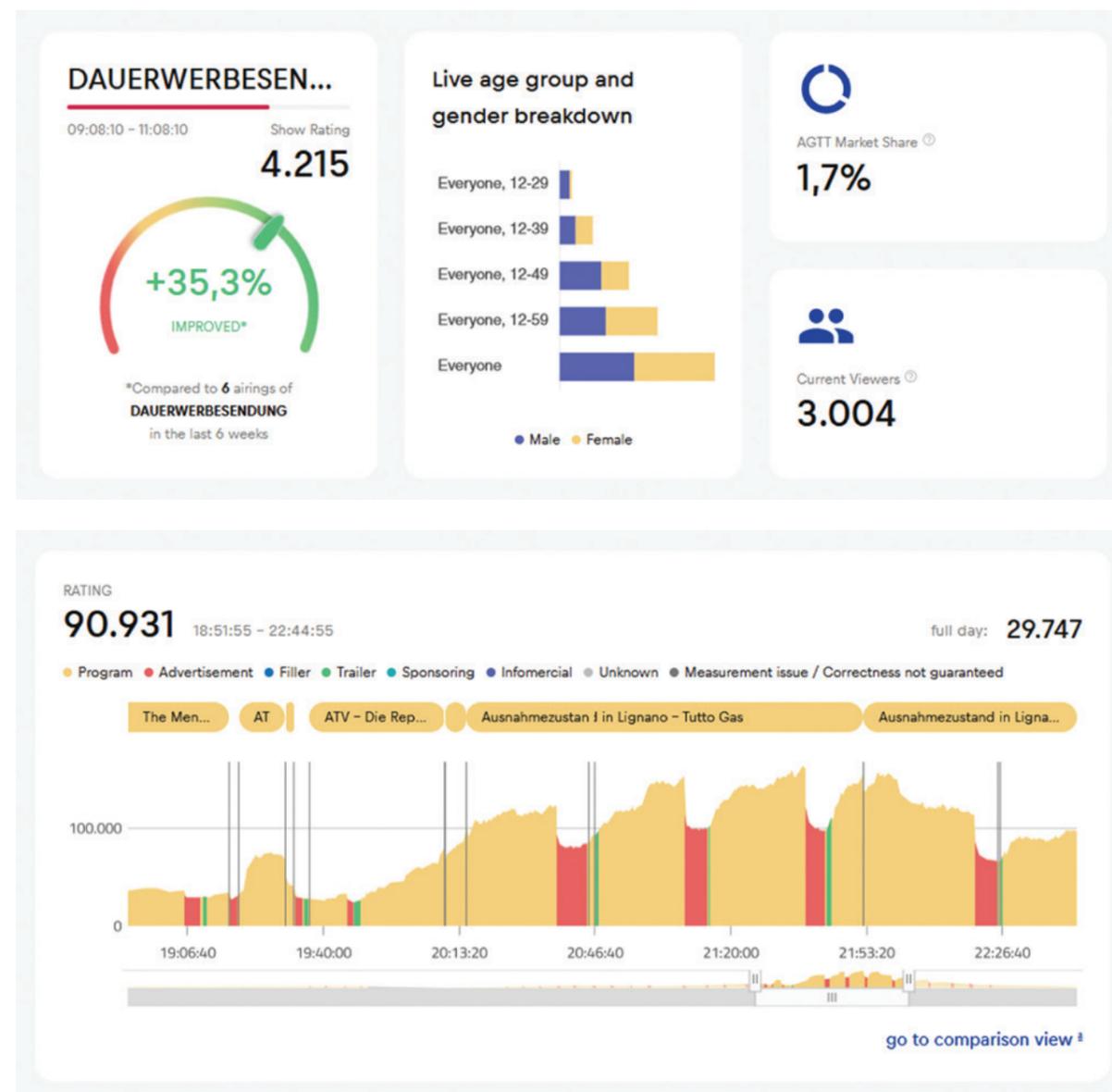
How the ad product is used

Tracking and extrapolation happen in real-time. Consequently, it provides a live rating segmented into pre-defined target groups, which can be provided to an ad-serving technology. The best fitting advertisement for the current overall TV audience (also viewers on non-connected TVs) can therefore be selected on the fly and can then be integrated into a channel's playout system in real-time.

Due to this real-time measurement and target group segmentation, the likelihood of achieving better target-group affinities during ad airings is improved considerably. This leads to improved inventory exploitation. In general, especially for younger target groups, it can depict more stable and plausible reach usage histories. Also, zero-ratings are eliminated due to the high number of synthetic panel participants.

The presented system is in the final testing and auditing phase and is scheduled to be launched on the Austrian market in 2023.

FIGURE 04: TV INSIGHT ADVERTISING MEASUREMENT
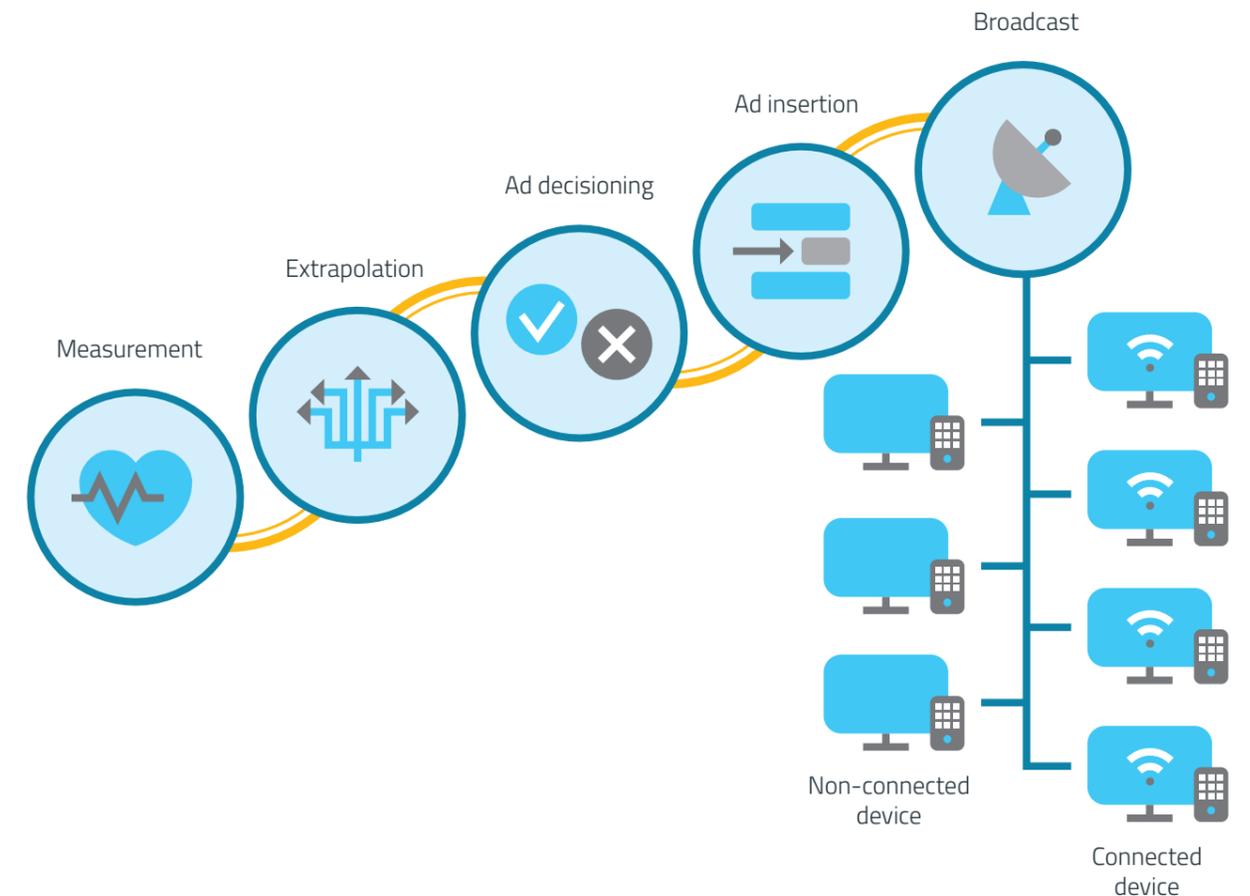
BELGIUM:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	CIM, the Centre of Information about Media (JIC in Belgium for TV, radio, press, OOH, digital).
TAM panel size:	1500 households (at least 750 in the northern, Dutch-speaking part of Belgium and at least 750 in the southern, French-speaking part), 3600 individuals (including guests).
Does the TAM panel include households without TV sets?	No
Does the TAM panel include foreigners?	Yes, if they are Belgian residents and speak Dutch or French.
TV Panel measurement is carried out by:	Gfk
End-date of the current contract:	2025
Digital video measurement is carried out by:	Gemius
End-date of the current contract:	2023

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (7 days) – Enhanced audio matching		
Guest viewing:	Yes – Registration via remote control of the people meter.		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	No		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Content only		
Measured in TAM or separate panel?	In separate panel (Gemius cookie panel)		
Measured with router meter and/or RPD?	No (broadcasters' video players are scripted using the Gemius tag and SDK)		
What is the scope of digital TV broadcaster measurement?	**Content?**	**Advertising?**	**On all screens?**
BVOD	Yes	No	Video consumption on smart TV, home PC/laptop, work PC/laptop, tablet smartphone, using apps installed or built-in on set-top-boxes, using casting devices
TV output on non-TV platforms	No	No	N/A

Which video platforms are measured within the TAM system?	Content/ advertising? Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	Yes, identified as 'other screen usage' without distinction between platforms, content and ads, and type of content/ programme.	On TV (big) screen only.
Other (e.g. local) video platforms		

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	The TV currency is based on a single method, using the TAM panel. Next to that, CIM publishes total video ratings (not official currency), which are a combination of: • TV ratings (video consumption on the TV screen, based on the TAM panel). • Web ratings (consumption of TV-identical content on other screens; PC/laptop, tablet, smartphone, based on the Gemius tag and SDK).
Which data sources are used?	The households of the TAM panel have the telecontrol people meter installed. Online video consumption is census based, using the Gemius tag and SDK.
How are the different data sources integrated?	The TV and web ratings for a given episode of a programme are combined using a unique identifier (episode ID) in both the TAM and the digital measurement. A web rating is calculated for online video consumption for which the episode ID appears in the time logging files provided by Nielsen.
How is deduplication of audience reach and frequency done?	Web ratings to be combined with TV ratings are only calculated for video consumption on other screens. Online video consumption on the TV screen (through the STB or a casting device) are filtered out. The underlying assumption is that you can sum up the TV and web rating because people are considered not to watch the same episode twice in the same month (on the TV screen, on other screens). Also, the calculation of web and total video rating is done for the total TV audience (4+), not for specific target groups.
Does the measurement of digital broadcaster content/advertising count people or devices?	In the context of web ratings, digital broadcaster content is measured by counting devices. Note that the measurement by Gemius covers a broader scope in the CIM internet study by measuring traffic and audience of websites, apps, video and audio streaming content of broadcasters, publishers, etc.
Does the measurement of digital broadcaster content/advertising include first party data?	No
What is the data distribution frequency?	TAM data and web ratings are published daily in the TV software.

Developments planned to any part of the measurement system over the next two years (by end-2024):	▪ Measurement of streaming services: identification of streaming services consumption on episode level.
	▪ Further development of the Total Video Advertising (ToVA) planning tool. Currently for strategic planning of TV and instream video, but the following components will be added:
	» Strategic planning for TV, instream, outstream, streaming services and social media
	» Tactical planning
	» Post-buy campaign evaluation

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	TV live+7, including guests, meaning TV consumption on the big screen.

TV MEASUREMENT IN BELGIUM

CIM and its TV study

CIM is the Belgian Joint Industry Committee (JIC), responsible for audience studies on individual media (TV, radio, press, OOH, digital) and cross-media. CIM provides the standard for media measurement in Belgium and set currencies for media trading. It is a non-profit association made up of the main actors in the industry: media owners, advertisers and media agencies.

The CIM TV study consists of 2 parts:

- TAM: The measurement of TV audiences, measured by GfK

- Horodatage (*timestamp*): The identification and time logging of TV programmes, breaks and commercials, carried out by Nielsen. In 2023, broadcasters can opt to have the identification of programmes done by Nielsen (visual based), or to use As Run files delivered by broadcasters and validated by Nielsen.

GfK measures all video consumption on the big screen through a representative panel (4+) where panellists have a functional TV set and are equipped with a telecontrol meter. Measurement is carried out 24/7 and second-by-second, and enhanced audio matching technology is used to identify broadcast viewing.

The official currency includes live TV consumption, time-shifted viewing up to 7 days after broadcast for 4+ individuals and guests for 122 TV channels. Other screen usage and TV consumption later than 7 days after broadcast is reported as 'other screen usage'.

Total video ratings

To measure the volumes of broadcast content on TV and other screens, CIM publishes on its site and in TV software *Total Video Ratings*, a combination of TV and web ratings. These ratings result from a hybrid measurement, combining TAM data and census data (the latter provided by Gemius, who is CIM's research partner for the CIM Internet study), using a unique identifier across data sets. Today, total video ratings are calculated for 19 channels. The scope of digital (web rating) has been gradually extended: starting with on-demand episodes in January 2020, extended to include video clips in January 2021, live streaming in June 2021 and previews in 2022. In 2023, the scope is being further extended by adding online video consumption on the big screen which is not covered by TAM (preview, time-shifted viewing 8 days after broadcast). In the future, CIM envisions the publication of web-exclusive content, such as native web series and TV series spin offs.

Measuring other types of viewing

The TAM measures TV viewing and other screen usage. For the latter, there is currently no identification of player, content nor ads. Therefore, CIM will launch two initiatives in 2023:

- The measurement of main streaming services. The solution is panel-based and will be separate from the TAM panel, at least in the first phase.

- The measurement of global online platforms, traditionally not part of the local, census-based measurement. Through a dedicated panel where members add a software extension to their browser or install an app on their phone, CIM can identify internet activity at a player level (no content identification). This project is part of the CIM internet study, so separate from TAM.

Project ToVA: Media planning of local and global players

In 2022, CIM launched the Total Video Advertising (ToVA) planner as a standard for media planning for cross-platform video campaigns. For now, the tool enables strategic planning of TV and instream video of local players and YouTube. In 2023, ToVA will be extended to campaigns that also run on other instream video platforms, outstream, social media and streaming services. Later, the tool will be configured to enable tactical planning and post-buy campaign evaluation.

The tool draws up a plan based on the available TV GRP's and video impressions and calculates the optimal scenario for users' objective (effective reach, budget, OTS, etc.) The tool is based on the following core datasets: TAM (to deliver the actual GRPs), CIM internet and duplication data from the single source cross-platform survey (to estimate video impressions and match with TAM data).

The cross-platform survey is carried out by IPSOS Belgium, the fusion of data sets is awarded to GfK Netherlands. To compare apples with apples between TV and online video contacts, a concept of 'effective factor' is used to express the proportion of online video impressions that meet the definition of a TV ad contact (50% of the ad seen on 100% of the screen).

BRAZIL:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	In Brazil, there is no JIC, nor a formal MOC. There is a regime that self-regulates between Kantar IBOPE Media and the market.
TAM panel size:	6110 households and around 20,000 panellists.
Does the TAM panel include households without TV sets?	No
Does the TAM panel include foreigners?	No
TV Panel measurement is carried out by:	Kantar IBOPE Media.
End-date of the current contract:	N/A
Digital video measurement is carried out by:	Kantar IBOPE Media.
End-date of the current contract:	N/A

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (7 days)		
Guest viewing:	Yes - the guest is registered on the meter. The consumption is added to the measurement fused with data from an alike panellist who was out of tab.		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	No		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Content on platform-level measurement (BVOD). No ads.		
Measured in TAM or separate panel?	In TAM Panel with Focal Meter installed.		
Measured with router meter and/or RPD?	Router meter.		
What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Only BVOD platform-level measurement.	No	CTV, desktops and home computers, tablets, and smartphones.
TV output on non-TV platforms	No	No	-
Which video platforms are measured within the TAM system?	Content/advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	Content measurement only.	Service level.	CTV, desktops and home computers, tablets, and smartphones.
Other (e.g. local) video platforms			

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Single-source panel with people meter and Focal Meter.
Which data sources are used?	People meter and Focal Meter.
How are the different data sources integrated?	We perform integration in data processing. Based on market-defined rules, processing identifies and assigns VOD consumption, replacing what was previously non-identified or even non-linear consumption in regular measurement (TAM).
How is deduplication of audience reach and frequency done?	We use a single-source panel with people meter and Focal Meter, combined with using devices in a self-declared way (claimed usage).
Does the measurement of digital broadcaster content/advertising count people or devices?	People.
Does the measurement of digital broadcaster content/advertising include first party data?	No
What is the data distribution frequency?	Daily.
Developments planned to any part of the measurement system over the next two years (by end-2024):	Yes, we will launch Total Viewing Audiences, a solution that uses TAM data and data integration to report digital content-level data.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Linear and non-linear TV content consumption which is matched.

TV MEASUREMENT IN BRAZIL

Kantar IBOPE Media serves Brazil as an independent and neutral provider of television audience measurement. Since 1951, the Brazilian market has relied on Kantar IBOPE Media to provide broadcast TV ratings through a model that delivers the industry-wide credibility required to underpin the trading currency and TV advertising for Brazil's broadcast TV content.

A representative panel of around 20,000 panellists (4+) in 6110 households with installed people meters enables Kantar IBOPE Media to capture broadcast in-home viewing, both linear and on demand. The panel represents urban household viewing behaviour in 15 regions, and Kantar IBOPE Media deploys an ad-hoc diary service to measure other markets across the country.

By consulting closely with broadcasters, advertisers and media agencies, Kantar IBOPE Media provides real-time and consolidated overnight broadcast ratings to represent TV viewing. The sole provider of real-time measurement capabilities in Brazil, Kantar employs audio matching technology to generate live viewing data for every minute of the broadcasting window. These ratings are made available through an intuitive web platform that provides broadcast viewership and audience share for all channels in real-time.

Real-time ratings provide an instant snapshot of how audiences respond, and enable broadcasters and

content owners to make live programming decisions. Designed to give preliminary audience insights, Real-time ratings complement subsequent overnight TV ratings, the official currency for television audience measurement in Brazil.

Kantar IBOPE Media's media software specialist TechEdge processes and delivers overnight ratings via Instar Analytics, a flexible suite of tools used by broadcasters to access and analyse audience viewing data.

Integrated approach to audiences

The service will soon move to a cross-media audience measurement solution that provides deduplicated viewing data and audience demographics on all platforms across screens.

In 2021, Kantar IBOPE Media started the rollout of its Focal Meter across 3,891 households in the current TV panel to measure online video viewing in the home. The Focal Meter identifies viewing at a device level and attributes individual viewing to provide demographic profiles, cross-platform behaviours, and reach estimates. The Focal Meter also measures non-cooperating players at the service level, meaning that both viewing time and reach are measured.

Kantar IBOPE Media will deploy video tagging technology and data science solutions to enrich currency measurement with census viewing data. In conjunction with metering technologies, content tagging and direct integration with panel data will ensure comprehensive measurement of all online activity, including total minutes viewing of all programmes and total viewing by programme, device, or player.

With the Focal Meter implementation, Kantar IBOPE Media is moving towards a single-source panel solution that integrates census data to provide a complete picture of the Brazilian market. When combined with TV set viewing, the enhanced service will measure and report all viewing of broadcaster content and aggregated usage on native VOD platforms and video-sharing platforms on all devices.

In 2022, an industry committee was formed, composed of agencies, advertisers and media owners, to build a tool for cross media planning, which should be available to the market in 2023.

CANADA:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Numeris (JIC).
TAM panel size:	4500 households (around 11,000 individuals).
Does the TAM panel include households without TV sets?	Yes
Does the TAM panel include foreigners?	No
TV Panel measurement is carried out by:	Numeris (JIC Operator)
End-date of the current contract:	N/A
Digital video measurement is carried out by:	Numeris (JIC Operator)
End-date of the current contract:	N/A

What is included in the TV measurement?	
Which 'extensions' of TV viewing are measured?	
Time-shifted:	Yes (7 days in currency and 8-28 days).
Guest viewing:	No
Out of home, e.g., bars, pubs:	Yes - Included in currency. Measured with portable people meter (PPM).
Second homes/holiday homes:	Yes - Included in currency if in Canada and if trip is less than 7 days. Measured with PPM.
Is TV broadcaster content/advertising measured beyond television sets?	
All devices (PCs, smartphones, tablets)	Yes
Content and/or ads?	- Content yes. - Advertising only when live streamed and signal is encoded. Advertising break are measured and reported under total programme (e.g. programme ratings include ad breaks).
Measured in TAM or separate panel?	Part of TAM when live streamed – same panel – picked up by PPM.
Measured with router meter and/or RPD?	Yes, via a router meter and under VAM (not under TAM).

What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes, when live streamed and signal is encoded on BVOD offerings.	Only when part of live TV streams on BVOD offerings.	All screens.
TV output on non-TV platforms	Yes, when live streamed and signal is encoded on FAST channels.	Only when part of live TV streams on FAST channels.	

Which video platforms are measured within the TAM system?	Content/ advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)			
Other (e.g. local) video platforms	None, TAM only reports linear broadcast TV		

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Enhanced TAM - development is in progress; result of incorporating Return Path Data (RPD) from set-top-boxes with pre-existing TV data. VAM fuses TAM with census streaming data sets to achieve cross-platform video measurement.
Which data sources are used?	- People meter (PPM), router meter and census data (tags) all in production under current VAM product. - STB data integration with TAM data is currently in development.
How are the different data sources integrated?	- TAM data and digital data are fused together – currently 2 separate panels. Census data is used to calibrate digital data. - STB data is fused with TAM data (in development).
How is deduplication of audience reach and frequency done?	Deduplication is modelled via the fusion of digital tuning with TAM. In future, when our single-source panel is complete, this will be inherent in the data at source with no need for fusion. Frequency is not currently reported.
Does the measurement of digital broadcaster content/advertising count people or devices?	People and devices.
Does the measurement of digital broadcaster content/advertising include first party data?	Yes, in the sense that data collected via PPMs and Focal Meters is first-party data collected by Numeris.
What is the data distribution frequency?	Monthly.
Developments planned to any part of the measurement system over the next two years (by end-2024):	- Integration of STB data on TAM. - National roll-out of cross-platform video measurement (currently only available for Québec and Ontario province, approx. 50% of Canadian population) under a single-source panel to capture linear TV, digital video and OTA radio.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Linear including live streams on all screens + 7-day catch-up done on PVR.

TV MEASUREMENT IN CANADA

Numeris' Measurement Foundation – TAM and RAM

Canadian linear television and radio audiences are currently measured by a single-source panel using the portable people meter (PPM), supplemented by a twice-yearly online diary released under continuous measurement for radio to cover smaller market areas. This work is carried out by the Canadian audience data company and non-for-profit joint industry committee (JIC), Numeris.

Under the existing TAM and RAM models, any online live-streamed viewing or Radio live streams are folded into the regular television and radio currencies. Additionally, significant developments to the core measurement of video and audio in Canada are now underway:

Enhanced TAM - Targeting completeness and stability of linear TV measurement with RPD at scale

Supporting the depth needed today for more accurate and robust measurement, the goal of Enhanced Television Audience Measurement (Enhanced TAM) is to increase the depth of TAM.

Supported by a decision from Canada's broadcasting and telecommunications regulator, the CRTC, Enhanced TAM is the result of incorporating return-path data (RPD) from set-top boxes (STBs) into pre-existing TV data; more specifically, fusing Numeris TV panel viewing data with STB data from Canada's largest cable companies. Working with large datasets significantly

improves Numeris' ability to capture total viewing of TV content consumed in Canada, helps provide more precise audiences and allows programme-level audience estimates for niche and/or spill stations for which these are not currently available.

Numeris anticipates sharing the first data of that national solution with its clients in 2023.

Cross-platform video measurement: From VAM to national roll-out

With video measurement, Numeris is expanding its television measurement solution to include video consumption on all platforms and devices for a complete and true understanding of the Canadian video landscape. By unifying online video behaviours and consumption with linear television viewing at a national level, Numeris' Cross-Platform Video Measurement solution will provide the media industry reliable, consistent, trendable, standardised and neutral video audience data and metrics. Aligned to global standards, this measurement solution will provide greater transparency of cross-platform video consumption, add context to TV viewership and streaming and provide the media industry with the ability to compare behaviours across the video landscape, by audience demos, devices and platforms.

Numeris' Cross-Platform Video Measurement journey started when the first iteration of VAM launched in autumn 2021. This innovative solution is based on the fusion of Numeris' online and television panels viewing, resulting in cross-platform audience measurement. Currently, and starting with content measurement, the service is operating in Ontario and French Quebec (representing more than 50% of the Canadian market) and data is available to clients monthly.

Through the current VAM solution and the future National Cross-Platform Video Solution, Numeris is extending the measurement of Canadian video viewing to include as much of the digital video landscape as possible. VAM currently captures and reports video content consumption from linear television and BVOD services on all devices. VAM also provides audience time-spent measures per device of streaming services and digital video platforms such as YouTube, Amazon Prime, Disney+, Netflix and TikTok.

While Numeris' clients are currently getting familiar with cross-platform video data, Numeris is actively working on the deployment of its single source panel at the national level. By converting its current two separate panels (one that captures linear TV and radio and one that captures digital video consumption), Numeris will be able to deliverer more accurate cross-platform audience data as this solution will require less modelling.

Cross-media audience measurement

Numeris is also currently working on its audio strategy to expand radio measurement, starting with a proof of concept to validate the design of the first phase of this strategy. This critical phase is designed to bring scale to radio measurement with the integration of radio broadcasters census streaming data with the radio meter service data (RAM).

The second phase of Numeris audio strategy plans to measure all publishers and audio streaming services by using its existing meter technology (currently capturing online video audiences). This phase would provide a full view of the audio landscape, including deduplicated audiences between radio and streaming services (Spotify, Apple Music, Amazon Music, YouTube Music, etc.) and insights by device.

With audio measurement, Numeris cross-platform measurement strategy has evolved to cross-media; one panel capturing consumption of linear and digital video and audio content, reporting audience behaviours from all platforms and devices on a duplicated and deduplicated basis.

DENMARK:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	MOC (driven by TV 2, Viaplay Group, Discovery Warner Bros., Danmarks Radio).
TAM panel size:	Single-source panel of 1750 households (3500 Individuals and 10,000 devices), incl. a virtual panel expansion 24 times the size to report streaming on digital and connected TV devices.
Does the TAM panel include households without TV sets?	Yes. The panel includes households with non-traditional TV reception who use TV sets for streaming only or not having one at all.
Does the TAM panel include foreigners?	Yes, the panel can include people who live in Denmark with a legally registered address and national number.
TV Panel measurement is carried out by:	Nielsen
End-date of the current contract:	December 2026
Digital video measurement is carried out by:	Nielsen
End-date of the current contract:	December 2026

What is included in the TV measurement?	
Which 'extensions' of TV viewing are measured?	
Time-shifted:	Yes (1-28 days). Done with watermarking and audio-matching for TV sets; Census data integration for TV on digital devices.
Guest viewing:	Yes, via Nielsen TV-meters.
Out of home, e.g., bars, pubs:	Partially: Only for digital devices and for streaming services with integrated Nielsen SDK. Done via census data integration
Second homes/holiday homes:	No
Is TV broadcaster content/advertising measured beyond television sets?	
All devices (PCs, smartphones, tablets)	Yes
Content and/or ads?	Both content and ads.
Measured in TAM or separate panel?	TAM single source panel.
Measured with router meter and/or RPD?	Nielsen streaming meter.

What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes	Yes	Computer, smartphone, tablets, smart TV, CTV devices (Chromecast, Apple TV, gaming consoles and set-top box)
TV output on non-TV platforms	Reporting Time spent at platform level.	–	

Which video platforms are measured within the TAM system?	Content/ advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	No	Only time spent on service.	Yes (computer, smartphone, tablets, Smart TV, CTV devices like Chromecast, Apple TV, gaming consoles and set-top box)
Other (e.g. local) video platforms	Both content and ads on participating BVOD (MOC) platforms.	At programme level	

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Yes, through single-source panel and census measurement.
Which data sources are used?	TV meter (nano-meter), router meter (streaming meter), census measurement (SDK & Cloud API).
How are the different data sources integrated?	The single-source panel data acts as the basis of the Total Audience Measurement. Census data is integrated to provide robustness and granularity to the streaming measurement, adding out of home (off WiFi streaming) and programme level data.
How is deduplication of audience reach and frequency done?	Impressions are first matched to devices in the Nielsen ID system, then devices are mapped to people and lastly scaled to corrected census impressions.
Does the measurement of digital broadcaster content/advertising count people or devices?	People: viewer assignment is done through assigning a primary and/or secondary user to each digital device.
Does the measurement of digital broadcaster content/advertising include first party data?	Yes, house and individual level demographics are collected for all panellists.
What is the data distribution frequency?	Daily.
Developments planned to any part of the measurement system over the next two years (by end-2024):	Reporting demographics for addressable TV ads on broadcasters with census integration.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	Yes, for planning, reporting and trading.
Which data are included in the market trading currency currently in use?	Live, VOSDAL, TSV 1-7 for linear, computer, smartphone and tablets.

TV MEASUREMENT IN DENMARK

Total audience in Denmark

Denmark's Measurement of Viewers (MOV) solution is based on a full integration of the digital census data into the single-source panel (min. 1750 households / min. 3500 individuals), measuring all video consumption from all devices in the household (TV, computer, smartphones, tablets and connected devices like Chromecast, Apple TV or gaming consoles). The panellists' devices are identified in the census data (panel to census match) and used for a demographic details attribution to a large portion of the census data with a virtual expansion of the panel size. The virtual expansion of the panel allows for more precise reporting on the fragmented audience we commonly see with streamed programmes, and reduces significantly the reporting of zero ratings.

This new measurement was launched on 1st January 2022, with Nielsen as the provider of the service for the Media Owned Contract (MOC) consisting of Viaplay Group, Warner Bros. Discovery Networks, Danmarks Radio (DR) and TV 2 Denmark. The new measurement of viewers in Denmark is developed to measure content and advertising across all formats and all devices. The addressable ads (DAI) portion of the measurement is currently being developed and expected to be launched in 2024.

Technology and methodology

Nielsen conducts an annual establishment survey with over 6000 randomly selected households providing an updated picture of the demographics of Danish households, and everyone in the household's access to and use of TV and streaming content across TV, smartphones, tablets and PCs.

Aiming at the highest possible panel balance, weighted results are used to ensure that a representative section of the Danish population participates in Nielsen's TV and streaming panel.

Nielsen measures households' TV viewing via a nano-meter and a new simplified technology to capture streaming viewing. The Nano People Meter collects audio signatures, watermarks and infrared remote detections used to identify content and source, while the Nielsen Streaming Meter collects the streaming activity, device and the streaming service by capturing high-bandwidth activity. For the measurement at the census level, the Nielsen Software Developer Kit (SDK) is integrated into participating streaming services to measure all in-home and out-of-home streaming across all devices for all tagged content.

Reporting and insights

Already during the first year of the new measurement with Nielsen, the Danish market has had access to more data granularity with the viewing of streamed content from digital and connected TV devices. The number of VOD programmes reported with ratings per day has increased significantly, which allows the participating broadcasters to analyse their VOD content performance at the genre and title level. This is especially valuable for content produced for niche audiences that are available on VOD only. Furthermore, pre-broadcast viewing or content only available on streaming is now included in the reported data. Time-shifted reported includes viewing from up to 28 days after linear broadcast day.

The reported ratings also reflect non-broadcaster streaming players (e.g. Netflix, Amazon Prime Video, or YouTube and TikTok) for time spent at the player level based on the panel viewing activity across screens in the house. This allows the market to see where the different segments of the population spend its time viewing video content and from which device.

FINLAND:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Finnpanel (Research Agency)
TAM panel size:	1000 households (around 2100 individuals)
Does the TAM panel include households without TV sets?	Some households, but not representing the market according to establishment survey.
Does the TAM panel include foreigners?	No
TV Panel measurement is carried out by:	Finnpanel Oy
End-date of the current contract:	No end date but can be terminated in 12 months' notice.
Digital video measurement is carried out by:	Total TV measurement is run by Finnpanel, while digital (BVOD) is run by different companies, eg. Adobe (different measurements are regularly audited).
End-date of the current contract:	N/A

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (7 days)		
Guest viewing:	Yes		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	Yes: partially measured in TAM.		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Content only		
Measured in TAM or separate panel?	In TAM		
Measured with router meter and/or RPD?	Router meter + census data (BVOD players)		
What is the scope of digital TV broadcaster measurement?	**Content?**	**Advertising?**	**On all screens?**
BVOD	Yes	No	TV, PC, tablet, mobile
TV output on non-TV platforms	No	No	–
Which video platforms are measured within the TAM system?	**Content/advertising?**	**Measured to what extent?**	**On all screens?**
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	Content on YouTube, Netflix, Disney+.	Via home wifi, reported in Total TV-measurement at service level (not content).	Yes
Other (e.g. local) video platforms	Content on HBO Max		

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Yes, TAM and BVOD census data
Which data sources are used?	The TAM panel also has router meters, and broadcasters deliver BVOD census data for calibration.
How are the different data sources integrated?	Calibration by Kantar, BVOD player data as census (total level), and Focal Meter data give profile.
How is deduplication of audience reach and frequency done?	BVOD viewing on a TV screen is dedicated to BVOD players and deducted from TV viewing (TAM-dataset). R&F by Kantar calibration method.
Does the measurement of digital broadcaster content/advertising count people or devices?	People
Does the measurement of digital broadcaster content/advertising include first party data?	Not the registration data (user ID, gender/age), but all viewing incidents and their lengths by each piece of content.
What is the data distribution frequency?	Daily
Developments planned to any part of the measurement system over the next two years (by end-2024):	Total TV Advertising Measurement (TTVAM) is in industrialisation phase from Q2 2023. It uses the current Finnpanel single-source (TAM and router) and ad-server and first-party data. Data modelling is done by dataBreeders.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	Yes, content reporting currency for broadcasters (not used by agencies).
Which data are included in the market trading currency currently in use?	Linear and time-shifted viewing (TSV) +7

TV MEASUREMENT IN FINLAND

Total TV content measurement has been up and running in Finland since 2018. It is a single-source measurement solution based on Finnpanel's TV and Focal Meters, and broadcaster census data of BVOD usage. Total TV measurement delivers ratings and deduplicated reach for programmes viewed on any platform, channel or service. Since this system began, Finnpanel has added features like separate AVOD/SVOD reporting and the usage of other VOD services (e.g. YouTube, Netflix, Disney+) at service level only and on home Wi-Fi networks.

Introducing Total TV Advertising Measurement in Finland

Overall, total TV content measurement has served the broadcasters' needs for content planning and analysis well, but the larger ad industry also needs unified viewing metrics for forecasting, sales and post-analysis. In April 2021, Screenforce Finland, the industry trade body representing all commercial broadcasters, issued a request for proposal for Total TV Advertising Measurement (TTVAM). Responding providers were asked to base their proposals on the WFA's Global Cross-Media Measurement Principles (privacy safety, fair and objective metrics, trust and transparency, ads and content). Screenforce and the broadcaster task force was assisted by media consultancy, Pure X Media.

The open tender generated many professional offers for different stages of the TTVAM process. After careful evaluation and proof of concept testing in 2021/2022, a contract for delivering the full TTVAM was signed with dataBreeders.

The solution is based on the modelling of existing data sets, so no new measurement as such is needed. Modelling was chosen as the preferred approach, as panels can rarely deliver accurate census data for a very fragmented VOD advertising market. Broadcasters deliver VOD ad server data and profile information from registered users, which comply with existing privacy regulations. Finnpanel's panel measurements provides co-viewing and fine-tunes the profile data. Spotgate, a platform that advertisers use to deliver spots to broadcasters, assigns each creative an ID, which is available in all viewing datasets for both linear TV and VOD, and makes it possible to combine viewing data from different sources. As the current TV measurement does not include VOD advertising, VOD advertising is simply an add on.

In a nutshell, broadcasters' ad server device impressions are turned into people and impacts in various age and gender target groups. A total campaign report also includes reach and frequency. Reporting is done daily, as it is done for traditional TV measurement. The existing TAM measurement stays the same, and trading can be done either with TAM for linear only or with the new TTVAM for TV and VOD campaigns.

TTVAM is a cross-platform video solution which fulfils the WFA's Global Principles on broadcasters' side, which means it can stand very confidently alongside any wider cross-media measurement system. Any other company with video ad sales can join if it follows the requirements for viewability, data delivery and Spotgate IDs.

The model can incorporate new data sets, so it is modular and flexible and will be reviewed and updated regularly to ensure it remains relevant to an evolving video ecosystem.

The total TV advertising measurement will be developed under a joint entity governed by commercial broadcasters in Finland (MTV, Sanoma and Warner Bros. Discovery as of 2023). A post-analysis or reporting tool will be in use as the TTVAM is launched during the spring of 2023.
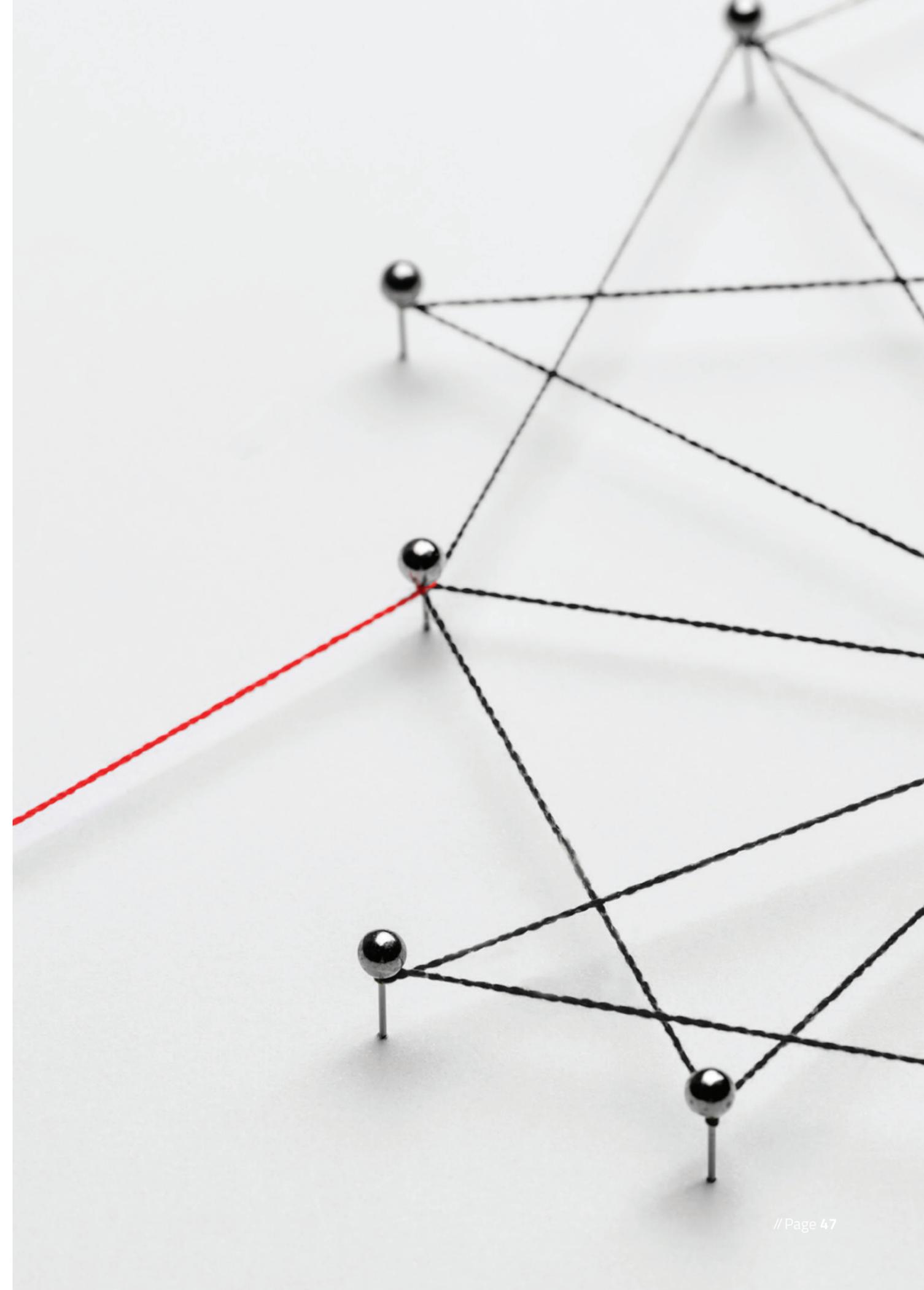
FRANCE:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Médiamétrie acts as a measurement company and as a JIC for TV, radio and internet measurement.
TAM panel size:	▪ Médiamat in-home TV Panel: 5000 households (11,300 individuals). ▪ Portable Meter Panel: 4500 individuals.
Does the TAM panel include households without TV sets?	Médiamétrie plans to include households without TV sets by January 2024.
Does the TAM panel include foreigners?	Yes, those living in the mainland French territory.
TV Panel measurement is carried out by:	Médiamétrie
End-date of the current contract:	N/A
Digital video measurement is carried out by:	Médiamétrie
End-date of the current contract:	N/A

What is included in the TV measurement?		
Which 'extensions' of TV viewing are measured?		**How?**
Time-shifted:	Yes (7 days in currency, 28 days outside currency).	In Médiamat. Collected by fixed and portable meters on watermarked content.
Guest viewing:	Yes	Measured in Portable Meter Panel (PPM). Collected by portable meters (ROA) on watermarked content.
Out of home, e.g., bars, pubs:	Yes	
Second homes/holiday homes:	Yes	
Is TV broadcaster content/advertising measured beyond television sets?		
All devices (PCs, smartphones, tablets)	Yes	
Content and/or ads?	Both TV content and ads consumed OOH are currently part of the TAM currency. Content and ads consumed in-home will be added to the currency as of January 2024.	
Measured in TAM or separate panel?	Measured in the Portable Meter Panel and fused daily to the Médiamat Panel.	
Measured with router meter and/or RPD?	Collected by Portable Meters (ROA) + Video Analytics Tag	

What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes	Yes, but not part of the currency. Ad hoc campaign reports on IPTV inventory are available.	On TV sets all locations, incl. computers, tablets, and smartphones out-of-home.
TV output on non-TV platforms	No	No	–
Which video platforms are measured within the TAM system?	**Content/ advertising?**	**Measured to what extent?**	**On all screens?**
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	Since 2019, YouTube content (not ads) is published in VAM alongside other online video publishers in the Internet Video Measurement.	Service level.	On Internet devices only (computers, laptops, tablets, and smartphones).
Other (e.g. local) video platforms	Broadcasted content and ads on local platforms (e.g. MyCanal, Molotov, B.tv, etc.)	Programme and service level.	On TV sets all locations + computers, tablets, and smartphones out-of-home.

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	▪ Yes, streaming data from Internet devices are available using the eStat tag, implemented by all major channels. ▪ Under development: POC ongoing with 4 major telecom and pay-TV operator in France to strengthen TAM's currency by combining panel and STB data.
Which data sources are used?	▪ TAM: data collected by fixed meter (DMD, TVM3) in the Médiamat panel measuring TV set consumption at home and by Portable Meter for OOH consumption. ▪ Streaming measurement: data collected by census data / eStat tag and SDK.
How are the different data sources integrated?	▪ TAM: OOH viewing collected in the Portable Meter Panel is added by daily fusion to the Mediamat panel. ▪ Hybrid measurement (under development): Fusion between TAM and operators' sample and application of an individualisation model learned from the TAM panel.

How is deduplication of audience reach and frequency done?	Using a single source panel measuring TV and Internet consumption.
Does the measurement of digital broadcaster content/advertising count people or devices?	Both. People are counted in TAM, and devices in the census data solution based on eStat Streaming logs. All major French broadcaster platforms are measured based on implemented tags.
Does the measurement of digital broadcaster content/advertising include first party data?	Not for the content measurement for now. We are planning to use first-party data from media players to improve our advertising measurement. We are already collecting and using the data from a player, other major French broadcasters' data are in the process of being included as data providers.
What is the data distribution frequency?	Daily for TAM and monthly for VAM.
Developments planned to any part of the measurement system over the next two years (by end-2024):	Throughout 2023 and 2024, Médiamétrie will focus its efforts on three main projects as part of its strategic plan: Total video Measurement, Cross-Media Advertising Measurement, and hybrid solutions development. Read more about those in the description on the following pages.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	▪ Content: Not yet, but total Video measurement expected for a pre-launch by the end of 2024 aim to establish a new currency for the market. ▪ Advertising: Not yet, but a new cross-media advertising currency will be launched in 2024 on broadcasters' inventory before expanding to all video and digital platforms.
Which data are included in the market trading currency currently in use?	Linear TV (PVR included) and TSV (C+7).

TV MEASUREMENT IN FRANCE

The end of an era and a new paradigm for audience measurement

In a context of growing video usage via new platforms and new editorial strategies, Médiamétrie is currently working on new measurement solutions designed to answer the market's needs and expectations. The new measurement covers three main areas:

▪ Measure new video platforms with the same granularity as for TV

▪ Adapt methods and measurement to include new editorial strategies carried by online platforms. Live and +7 can no longer be the only norm

▪ Build new measurement with more granularity by connecting them to big data ecosystems

Mediamat 2024: Moving to a new TAM currency covering all screens across all of France

On January 2024, Médiamétrie plans to extend the French TV currency to cover all screens as well as households without a TV screen to cover all TV media touch points. As of 2023, TV audience measurement in France covers all in-home TV sets, including time-shifted viewing (programmes viewed via digital video recorders - DVD-R & PVR), catch-up (services provided by channels that let viewers watch TV programs on demand for free), and out-of-home TV consumption (measured since 2020).

Building a new data hub for hybrid measurement

Médiamétrie has launched several POCs with major French telcos and pay TV operators (Orange, Bouygues, SFR, Canal+). The aim of this initiative is to build a future hybrid measurement combining assets from panels and return path data to address challenges from the increasingly digitalised and fragmented media landscape. In terms of value, the goal is to overcome legacy panels' statistical limitations and to increase the accuracy and granularity of measurements (e.g. more sophisticated audience targets, faster data delivery, less zero ratings, and more analytical opportunities due to larger sample sizes). Pilot work is ongoing as of Q1 2023.

Towards a new editorial measurement for total video

By the end of 2024, Médiamétrie will begin to report viewing data from streaming platforms at both service and programme levels. The goal is to provide the French market with comparable and unified metrics across platforms, rather than ad hoc insights of streaming consumption. To achieve this, Médiamétrie will add new measurement devices and methods.

Panels and watermarking will remain the backbone of TV measurement, but streaming meters, adapted logs and tags, and fingerprinting technology will be added. Two technological partnerships have been announced to accelerate this transformation:

▪ Nielsen will provide Médiamétrie with its technologies for measuring digital consumption at home via Internet routers, including content from VOD platforms. By using these passive data collection techniques, Médiamétrie will be able to deliver ratings without explicit cooperation from individual services.

▪ Kantar will provide Médiamétrie with the new generation of its watermarking technology, which will improve the accuracy of TV and video measurement of both content and advertising, regardless of when and where they are consumed and the device used by the audience.

These partnerships will strengthen Médiamétrie's ability to bring valuable and fair figures to both new and established players in the market.

2024: The next milestone in cross-media / video advertising measurement

Answering the pressing need of the industry for cross-campaign reports, Médiamétrie is working on a new cross-media / video measurement that will be launched during the first half of 2024.
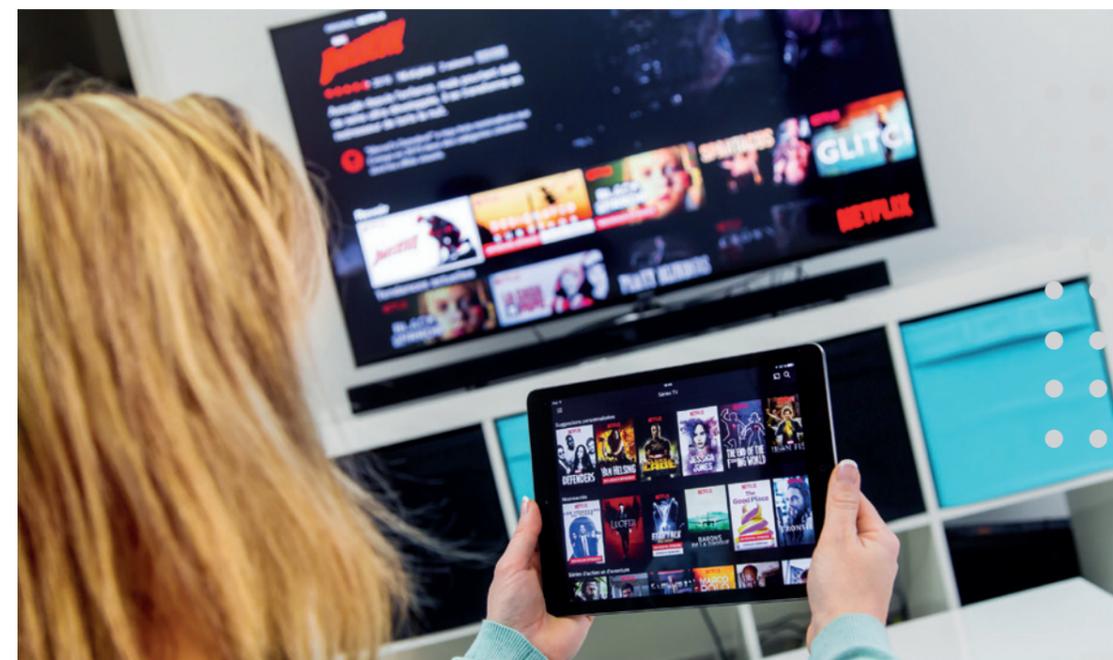
The goal is to provide the industry with a holistic view of campaigns based on comparable and deduplicated metrics across screens and platforms. Campaigns must be marked with watermarking technologies or tagging solutions, and legacy panels remain relevant as the core source of truth. Beyond panels, Médiamétrie is also working on data integration, filling the gaps with different types of additional return-path data (RPD) sources (STB, ad servers logs, manufacturers data, etc.) to improve the granularity and the robustness of the campaign measurement.

For several years, Médiamétrie had already delivered (cross-campaign reach) XCR, a solution which provides deduplicated reach of ad campaigns across digital, linear, and non-linear TV ads. The new measurement will improve many aspects, including:

- A solution connected to planning tools.

- An "always-on" solution to track hundreds of campaigns (or more)

- A solution using internationally recognised viewability norms

- A solution open to all type of video inventories

Meanwhile, Médiamétrie has set up a steering committee, which has brought together a range of stakeholders from both the sell and buy side to periodically discuss how progress can be achieved in cross-media and total ad measurement.
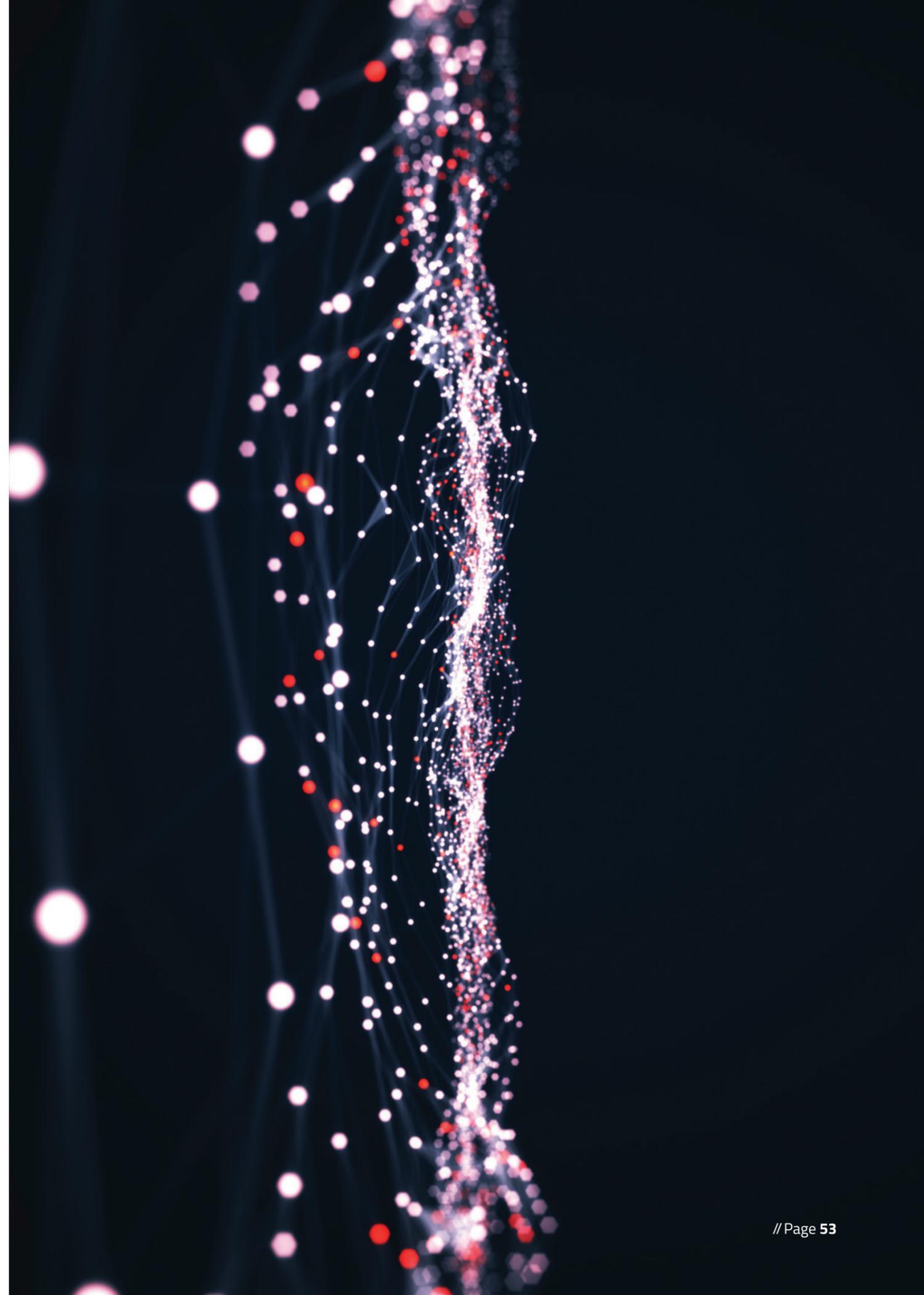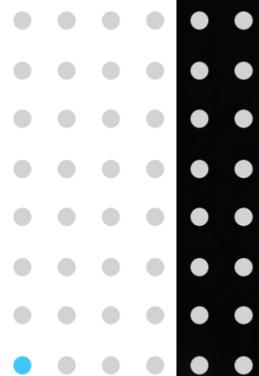
GERMANY:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview

The TAM panel system is run by:	AGF Videoforschung GmbH (JIC)
TAM panel size:	5400 households (11,000 individuals)
Does the TAM panel include households without TV sets?	Yes, it includes households who do not have a TV set in operation but at least one device capable of streaming; these are called non-TV households and are included at market standard "video".
Does the TAM panel include foreigners?	Yes, it is only necessary that the main income earner speaks German.
TV Panel measurement is carried out by:	GfK Media Measurement
End-date of the current contract:	31/12/2027
Digital video measurement is carried out by:	Nielsen
End-date of the current contract:	31/12/2023

What is included in the TV measurement?

Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (VOSDAL + 3 days)		
Guest viewing:	Yes: Guest viewing is transferred by fusion to panel members who have not watched TV in a blanket interval of 60 minutes before and after the guests' usage. Age and gender are the shared characteristics for the fusion.		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	No		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Content only		
Measured in TAM or separate panel?	Both		
Measured with router meter and/or RPD?	Both (census data and router)		
What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes	No	Yes, TV, smartphone, tablet, pc, laptop.
TV output on non-TV platforms	No	No	–

Which video platforms are measured within the TAM system?

Which video platforms are measured within the TAM system?	Content/ advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook) Other (e.g. local) video platforms	Yes, content only.	Service level.	TV screen.

How is the hybrid measurement currently done?

Is TV viewing being measured using a hybrid method?	No, just panel measurement. Proof of concept (PoC) running for integration of return-path data (RPD).
Which data sources are used?	People meter for TV and router meter for single source measurement of streaming usage within the AGF panel. For measurement of SVOD services on a service level; device meter and census measurement for streaming usage.
How are the different data sources integrated?	Streaming panel data is fused into the AGF panel and calibrated on the census usage data.
How is deduplication of audience reach and frequency done?	Deduplicated reach is measured via panel measurement and this data is used for modelling.
Does the measurement of digital broadcaster content/advertising count people or devices?	People
Does the measurement of digital broadcaster content/advertising include first party data?	No
What is the data distribution frequency?	Daily
Developments planned to any part of the measurement system over the next two years (by end-2024):	PoC for measurement of Static usage, Integration of RPD for TV, and further development of SVOD measurement.

Currencies

Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	A cross-platform video planning currency for content will become standard from 01/01/2024.
Which data are included in the market trading currency currently in use?	Linear and time-shifted usage of TV.

TV MEASUREMENT IN GERMANY

Focus on cross-media

The AGF Videoforschung (AGF) is a neutral entity responsible for independent video measurement and research in Germany. It continuously collects and analyses quantitative data on the usage of video content and advertising. The company invests more than €35 million a year in optimising its system and consults closely with all market partners, including broadcasters, advertisers and media agencies. Besides the permanent quality control of the existing system and its adaption to market developments, AGF's central theme is the expansion of cross-media measurement.

The AGF system currently comprises three panels for TV, desktop and mobile. The AGF panel operated by GfK, consisting of around 11,000 panellists in 5400 households, primarily surveys TV usage. Today, TV usage is measured via audio matching using the TC UMX measurement technology. In addition, AGF has integrated single-source measurement elements to capture online video usage by installing routers in AGF households: the router measurement provides data from more than 2900 panel households (as of 2023). The use of a router measurement technique developed by GfK on behalf of AGF enables the measurement of the use of streaming services on smart TVs in the AGF panel. In this way, the average daily viewing of selected video platforms such as Netflix and Amazon on smart TVs can be determined. This is an additional measurement to AGF's video streaming measurement with Nielsen. The next step will be to measure other devices used by household members, such as smartphones and tablets. By 31st December 2024, at least 3600 households are to be under digital measurement.

Measuring video streaming and non-video content usage

AGF has been measuring linear and non-linear video streaming with Nielsen since 2017 via a desktop panel that includes approx. 15,000 panellists. It tracks PC and laptop usage and has reported this data regularly since 2019. In addition, AGF cooperates with Nielsen in measuring video usage on smartphones and tablets via a mobile panel with around 6300 participants. Mobile streaming data has been available to the market since May 2019. These data from desktop and mobile measurement are calibrated to the parallel census measurement.

Both the desktop and mobile panels provide information on demographics, net coverage, video views and duration, while the census measurement provides information on video views, total usage and duration. Since 2017, the desktop and mobile data have been merged with the TV panel data to form convergent usage data and can be evaluated in the analysis tools based on the new video standard.

In 2021, AGF expanded the scope of its measurement by introducing the X-Reach project, where measurement of non-video content will be tested. With this project, AGF is responding to a market requirement to establish a uniform standard for TV and digital media. The project builds on the existing streaming measurement with Nielsen and AGF's infrastructure for TV measurement. Publishers from outside the broadcasting world are also taking part in the test. In 2023, AGF will decide whether X-Reach will go into regular operation.

Market standard video

2023 is a year of transition for AGF. From the start of 2024, the market standard video will be the default in evaluation and planning systems. In contrast to the current TV market standard, the market standard video will also take into account households that do not own a TV set but have at least one streaming-capable device in the household. In addition, convergence analyses also take into account linear and non-linear usage of streaming services via almost all devices, in addition to linear TV usage. 24/7 live online video usage with direct link to broadcast will be attributed to the TV usage. With the conversion of the market standard to video, AGF is pursuing the goal of adequately mapping the changed structure of offerings and competition.

As of the beginning of 2023, AGF provided a new, browser-based evaluation software, which will replace the currently leading reference system after a parallel phase. The planning software offered by AGF is also ready to evaluate in the market standard TV as well as in the market standard video. The default in the planning systems will also change to the market standard video as of the start of 2024.

During this transition, AGF is also offering new evaluation aggregates and has introduced so-called *programme brands*, which map cross-media reach for strong media brands across all platforms.

WFA-XMM

The German advertiser association, OWM, has asked AGF to examine a Minimal Viable Product (MVP) for the measurement of TV and digital for the local implementation of the WFA's cross-media measurement initiative. As an institution in a large and relevant market, AGF has a high interest in exploring the possibilities of implementation in its cross-media-strategy.

Smart data meets big data

AGF is investigating how large anonymous data sets, like return path data, can be integrated into the AGF system. To this end, AGF is testing an approach that integrates sources from three data providers. AGF is convinced that for further development of the audience measurement systems, high-quality panel measurement must be combined with device data and seeks to integrate these approaches in its portfolio.

clients have indicated for the first time that they want to actively participate in the funding. My feeling is that the requirement for one comparable standard and its value has increased dramatically in the recent past due to the multitude of different data sources.

INTERVIEW WITH
KERSTIN NIEDERAUER-KOPF,
CEO OF AGF VIDEOFORSCHUNG GMBH

egta: *AGF is pushing ahead with the X-Reach project and, in parallel, is looking into implementing an MVP for the WFA-XMM. Why is AGF pursuing two approaches to measuring cross-media?*

Kerstin Niederauer-Kopf: It is important for us to be able to offer the market a one-stop solution for TV and digital media in a timely manner. To be able to compare different offers, a cross-media standard according to comparable and transparent criteria in a neutral and open set up is becoming increasingly important for all market participants. The WFA's approach focuses primarily on the advertising perspective, while the X-Reach project is content-related. At their best, the approaches can complement each other. In any case, we have already been able to gather valuable experience in the X-Reach project that could be incorporated into the MVP. However, we do not rule out reviving test projects that have already been carried out, such as Follow the Campaign. This approach, which we have advanced with Nielsen DAR, also has cross-media campaign measurement at its core. By pushing ahead with different projects, we increase the chances of this succeeding. Which path we ultimately take will be decided together with the market players, because AGF offers a standard from the market for the market.

egta: *But such projects always involve costs. How do you finance the approaches?*

Kerstin Niederauer-Kopf: AGF is a company that offers data products and corresponding tools for different purposes to market partners. This means that the products and tools must be aligned with market needs in order to generate relevance. In the WFA approach,

IRELAND:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	TAM Ireland (JIC).
TAM panel size:	1111 households (around 3000 individuals).
Does the TAM panel include households without TV sets?	No
Does the TAM panel include foreigners?	Yes
TV Panel measurement is carried out by:	Nielsen
End-date of the current contract:	31/08/2025
Digital video measurement is carried out by:	Nielsen
End-date of the current contract:	31/08/2025

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (7 days in currency, 28 days outside currency).		
Guest viewing:	Yes		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	No		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	No, service level only.		
Measured in TAM or separate panel?	Subset of TAM panel.		
Measured with router meter and/or RPD?	Router meter.		
What is the scope of digital TV broadcaster measurement?	**Content?**	**Advertising?**	**On all screens?**
BVOD	No	No	Service level on all screens
TV output on non-TV platforms			
Which video platforms are measured within the TAM system?	**Content/ advertising?**	**Measured to what extent?**	**On all screens?**
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	No	Service level.	Yes, on all screens.
Other (e.g. local) video platforms			

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	No, only panel measurement.
Which data sources are used?	People meter and router meter.
How are the different data sources integrated?	N/A
How is deduplication of audience reach and frequency done?	N/A
Does the measurement of digital broadcaster content/advertising count people or devices?	Currently only measured at a service level.
Does the measurement of digital broadcaster content/advertising include first party data?	No
What is the data distribution frequency?	N/A
Developments planned to any part of the measurement system over the next two years (by end-2024):	Video content will be tagged with Nielsen SDK.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Linear and time-shifted viewing data.

TV MEASUREMENT IN IRELAND

Total video panel

Using the Nielsen GTAM Meter and Streaming meter, TAM Ireland now has a sub-set of homes from the TV Panel that make up a Total Video Panel (475 individuals in total).

Having this panel in place, enables reporting on panellist viewing behaviour across all devices – TV sets, laptops, mobiles, tablets, games consoles - and deliver analysis into how Irish viewers are consuming content from all service providers. It also gives new insights into how the broadcaster OTT players perform alongside the traditional linear TV channels. Crucially, it captures digital services such as Netflix, Amazon Prime and YouTube, and provides insights of how these are performing on both TVs and other devices. In recent years, there has been a significant growth in unidentified viewing on TV sets and this development allows clients to understand the full competitive environment.

The BVOD planning aid: Providing an interim solution

Over the last years, TAM Ireland has been providing the Irish market with an annual update of the AV Data Solution; a snapshot of the total viewing market at a moment in time and provides reach, both net and incremental along with share. It covers all formats – live, recorded, BVOD, short-form and SVOD and all devices: TV set, PC/laptop, tablet, smartphone.

It provides the market with an overview at a very broad level using a combination of TAM data along with data from the establishment survey, and integrating this with a specially commissioned study – The Total Viewing Study.

Working with Nielsen's data science team in Ireland, all the above data sources are integrated to provide the
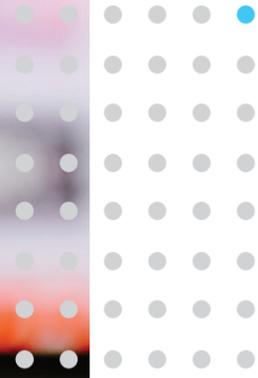
BVOD Planning Aid. The output provides estimated net reach and incremental reach data for live, recorded and BVOD viewing across 16 trading demographics, and has been widely used by the industry in Ireland to give a broad understanding of viewing trends.

This is intended to be a short-term interim solution until a more robust solution is put in place, and TAM Ireland has now moved on to the second phase of this plan.

What's next?

The next phase will introduce the implementation of the Nielsen SDKs on Irish players to report census-level data across programme content. It is expected the implementation will be complete by the end of 2023.

ITALY:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Auditel (JIC)
TAM panel size:	16,000 Households (40,000+ individuals)
Does the TAM panel include households without TV sets?	Yes
Does the TAM panel include foreigners?	Yes
TV Panel measurement is carried out by:	Nielsen for the traditional TV meter and panel management. Kantar provides the focal meter technology used in broadband households to measure streaming on TV.
End-date of the current contract:	31/12/2023
Digital video measurement is carried out by:	Comscore for SDK and Kantar for in home measurement using Focal Meter.
End-date of the current contract:	31/12/2023

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (28 days)		
Guest viewing:	Yes: Through remote control dedicated push buttons		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	No		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Both content and ads		
Measured in TAM or separate panel?	No		
Measured with router meter and/or RPD?	Router meter		
What is the scope of digital TV broadcaster measurement?	**Content?**	**Advertising?**	**On all screens?**
BVOD	Yes, for broadcasters integrating Comscore SDK		TV, tablet, PC and mobile phones
TV output on non-TV platforms	No	No	–
Which video platforms are measured within the TAM system?	**Content/ advertising?**	**Measured to what extent?**	**On all screens?**
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)		Not measured	
Other (e.g. local) video platforms			

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	No
Which data sources are used?	N/A
How are the different data sources integrated?	N/A
How is deduplication of audience reach and frequency done?	N/A
Does the measurement of digital broadcaster content/advertising count people or devices?	▪ People are counted for broadcaster content. ▪ Devices are counted for advertising, but work is in progress to have people instead.
Does the measurement of digital broadcaster content/advertising include first party data?	Some broadcasters' first party aggregated data is included.
What is the data distribution frequency?	N/A
Developments planned to any part of the measurement system over the next two years (by end-2024):	Plans are progress to extend the coverage of the solution to advertising, provide deduplicated reach figures for both content and advertising and to extend the demographic variables supported by the model (for now age, gender and macro region).

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Live +4 (for ads)

TV MEASUREMENT IN ITALY

Auditel: Super Panel

Work on the Super Panel project started in 2014, and became a currency in July 2017. The project was created as an answer to the fragmentation observed in various TV markets across the world, and particularly in Italy.

Another serious issue was the lack of capacity to measure TV and video content on devices other than TV sets. To tackle this, Auditel increased its measurement basis from 32 million traditional TV sets to 130 million total viewing devices including OTTs, smartphones and tablets where people are able to stream video and TV content. Auditel took major steps towards hybrid measurement in 2019, as it launched census measurement on browsers and mobile devices.

The Italian approach: Smart single source

The project started with an international benchmark to create a tailor-made solution which became the "Italian approach": Using all the benefits of a single-source approach without the typical issues of low collaboration level and low acceptance rate. The specificities of the approach involved:

▪ Tripling the panel size to get maximum benefits in terms of data quality and stability: the panel size went from 5600 to 16,000 households.

▪ Maximising effectiveness in terms of compliance from the panellists' perspective to create an economically sustainable 'smart single-source' model.

▪ Having an optimal collaboration with the people

in the measured households to ensure a stable panel.

- Providing an answer to the TV content measurement fragmentation and the need of incorporate a new digital measurement solution.

The Super Panel Currency

Auditel replaced the traditional people meter with a 'set meter panel' to create the Super Panel Currency. In terms of implementation, the two devices are exactly the same, they measure TV on and off, they are capable of measuring the device providing content on TV, they are equally able to measure the content tuned on TV.

The difference stands with how people are measured. With the people meter, there is a remote control and a traditional display where it is possible to detect who is actually in front of the TV. On the set meter panel, to have an optimal collaboration with the households, the people meter is not installed. This means that the measurement is very accurate for both panels. The two panels are equally balanced and equally representative of the Italian population.

The benefits of the Super Panel are the more granular data and a reduction of the zero ratings on the day of broadcast.

Towards full hybrid measurement

During 2019, Auditel completed SDK implementation on the major broadcasters' properties to enable census measurement on browsers and mobile applications, following a quality control process to ensure the same level of quality across multiple broadcasters. Census data was released in 2019, while smart TV SDK integration is ongoing, completing the portfolio of the measured platforms. To maximise the effectiveness of the control process, Auditel has created an internal technical team fully devoted to digital data production.

The data release was complemented by the introduction of a new "Digital Auditel Golden Rule" which sets the basis for the analysis software calculation procedures. The Golden Rule, coming from the experience with the Auditel Super Panel, is meant to ensure that the same

analysis made on different software provides the same results. Data is delivered daily (except Saturday and Sunday), as for the linear TV currency.

Single-source panel setup and cross-media currency launch

From a panel perspective, Kantar's Focal Meters were installed in more than 3600 TV panel homes in 2022. The major benefits of this solution are the low level of invasiveness, which provides a more stable data sample and covers of out-of-home viewing.

Auditel also implemented a solution to harmonise the broadcasters' metadata catalogue (the so-called content library) and launched the CUSV project that is the main enabler for cross-platform commercial ratings. The solution implies the creation of an "Unique Identifier for Commercials" (the so-called CUSV code) through a dedicate Auditel portal.

At the beginning of 2022, Auditel also completed the first release of its "Total Audience" for the Italian market based on a proprietary solution. In 2023, Auditel is planning to further develop its "Total Audience Solution" through the release of major updates that will involve both content and campaigns.

NETHERLANDS:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Stichting Kijkonderzoek, SKO (JIC). We plan to merge all audience measurement JICs into one cross media JIC (the Nationaal Media Onderzoek (NMO) in 2023.
TAM panel size:	1250 households (around 3900 individuals).
Does the TAM panel include households without TV sets?	Yes
Does the TAM panel include foreigners?	Yes
TV Panel measurement is carried out by:	▪ GfK ▪ In 2023, there will be a transition to a new TAM panel operated by Kantar (NMO TAM panel). In the new measurement, which is cross-media by design, a Multimedia Panel operated by IPSOS will also be integrated.
End-date of the current contract:	N/A
Digital video measurement is carried out by:	The online video panel measurement will be conducted by Kantar from the TAM/DAM panel which will launch in 2023.
End-date of the current contract:	Until 2028.

What is included in the TV measurement?	
Which 'extensions' of TV viewing are measured?	
Time-shifted:	Yes (7 days). TSV day 0 (broadcast day) up to 6 days
Guest viewing:	Yes: Guest viewing identification through people meter and fusion.
Out of home, e.g., bars, pubs:	No, but OOH measurement is planned through the Multimedia Panel in NMO TAM.
Second homes/holiday homes:	No
Is TV broadcaster content/advertising measured beyond television sets?	
All devices (PCs, smartphones, tablets)	Yes
Content and/or ads?	Both content and ads.
Measured in TAM or separate panel?	Single source in NMO TAM panel.
Measured with router meter and/or RPD?	Router meter and Census.

What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes	No	
TV output on non-TV platforms	Yes (white list including Netflix, YouTube and other services).	No	TV, computers, tablets and smartphones.

Which video platforms are measured within the TAM system?	Content/ advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	No	Service level.	All screens
Other (e.g. local) video platforms	Yes, both.	Service and programme level (if tagged).	All screens in and out-of-home if tagged.

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Not in current TAM research. In NMO TAM, online video will be measured using a combination of panel and census measurement (tags).
Which data sources are used?	People meter in current research. People meter, Focal Meter and census in NMO TAM.
How are the different data sources integrated?	Census measurements are integrated through calibration with panel data in NMO TAM.
How is deduplication of audience reach and frequency done?	In NMO TAM, the panel measurement is single source, and the census measurements of panellists are obtained and used to inform the model.
Does the measurement of digital broadcaster content/advertising count people or devices?	▪ The current measurement in census count devices. ▪ In NMO TAM the panel measurement and data integration provide the report based on people counts (reach and viewing time).
Does the measurement of digital broadcaster content/advertising include first party data?	Yes, in NMO TAM.
What is the data distribution frequency?	Daily.
Developments planned to any part of the measurement system over the next two years (by end-2024):	Publication of a full VAM dataset is the ambition for 2023 integrating census data. In addition, a PoC is currently running for Addressable TV and an RFP for a cross-media planning and insights dataset.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Linear and time-shifted viewing.

TV MEASUREMENT IN THE NETHERLANDS

NMO: the new Dutch audience measurement

The new total audience measurement solution, Nationaal Media Onderzoek (NMO), was launched in 2021. By combining audience viewing, listening, reading and browsing through a single integrated system, NMO aims to deliver deeper insights into Dutch audiences and enable richer trading currencies for each media. The new approach will facilitate advertisers and agencies to optimise the performance of media channels – both in isolation and when combined in a cross-media campaign.

Who is involved?

The Nationaal Media Onderzoek (NMO) is an initiative by the four organisations for media research in the Netherlands, which will operate jointly as of 2023, representing the interests of the Dutch Media Industry. All major Dutch publishers are involved through their industry bodies, as well as the Dutch association of advertisers (BVA) and the representative organisation of media agencies Platform Media Adviesbureau (PMA). The four associations forming the NMO are listed below:

- NOM (Nationaal Onderzoek Multimedia): The publishing JIC responsible for the reporting and publication of the official Dutch readership currency for published media.

- NLO (Nationaal Luister Onderzoek): The radio JIC responsible for the reporting and publication of the official Dutch audio trading currency.

- SKO (Stichting KijkOnderzoek): The TV JIC responsible for the reporting and publication of the official Dutch TV and video trading currency.

- VINEX (Vereniging Internet Exploitanten): The internet media owner committee responsible for NOBO, the Dutch online reach study.

In 2021, these four associations appointed Ipsos and Kantar to build a new integrated total media audience measurement solution to measure viewing, listening, online and reading audience consumption.

NMO Measurement design

The design is based on a single integrated measurement system designed with a consumer-centric, rather than media-first, approach that meets the highest standards for trading currencies, including design, data collection and processing. The total audience measurement system is designed to measure all media consumption of Dutch audiences – viewing, listening, online and reading – across all platforms, devices and environments (see Fig. 5). The design is flexible, enabling the measurement of new devices and technologies that may arise in the future.

Key points of the new NMO TV Audience Measurement system.

To make TV measurement future-proof, SKO invested heavily in scale and in technique to account for the decline in linear viewing and the increasing fragmentation of content consumption across devices.

- The panel size will increase to 1850 households (ca. 3900 individuals) and will integrate additional measurement from the Multimedia Panel, which will allow reporting of out-of-home viewing. By enlarging the panel, SKO can reduce the number of zero-rated ad breaks and will generate additional value for the broadcasters. Enlarging the panel base will also increase the reliability and stability of TV ratings.

- The new Kantar people meter measures with high granularity, which enable fast identification, this will be essential for the recognition of addressable ads.

- TV households have been equipped with Kantar's new Focal Meter to measure online behaviour. The benefits of this technology are twofold. First, it allows for the identification of 'other screen' usage on TV sets and for the reporting of TV viewing from SVOD platforms (such as Netflix) and Video Sharing Platforms (such as YouTube) at a service level. In the future, programme-level
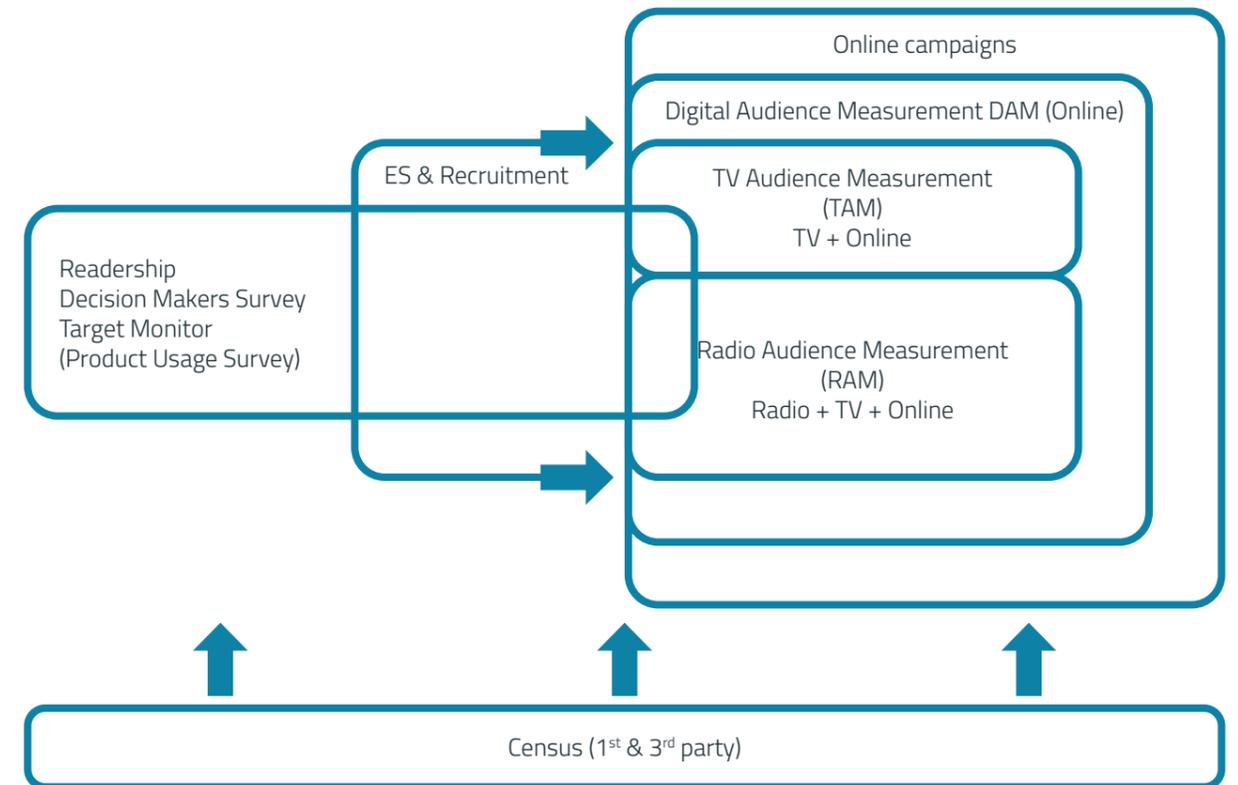
measurement may be possible (if Kantar builds an SVOD reference site). Secondly, online streaming from participating broadcasters, telcos and operators can be measured by capturing tagged content viewed in BVOD apps and websites. Online viewing reach and profiles through these platforms is reported by matching the census data with panel data through a data science process. This form of TV viewing will be added to the trading currency.

- Video viewing will also be measured within the multimedia panel using audio matching and the RealityMine technology included within the MediaCell app installed on smartphones.

- The single-source panel measurement of video and digital plus the integration of radio and digital multimedia panel measurement will facilitate cross-media measurement and enable

cross-media planning datasets and cross-media campaign analysis.

- The research design also includes overlap between respondents participating in the NRS survey, and TV and online video and digital measurement. The Ipsos Product Usage study from NRS will be integrated with TV data, which provides the opportunity to plan TV and online video campaigns on more sophisticated data (product, brand usage and purchase intention).

- Additionally, the new people meter techniques are required to support measurement of TV viewing on online devices and to prepare the measurement for upcoming addressable TV campaigns.
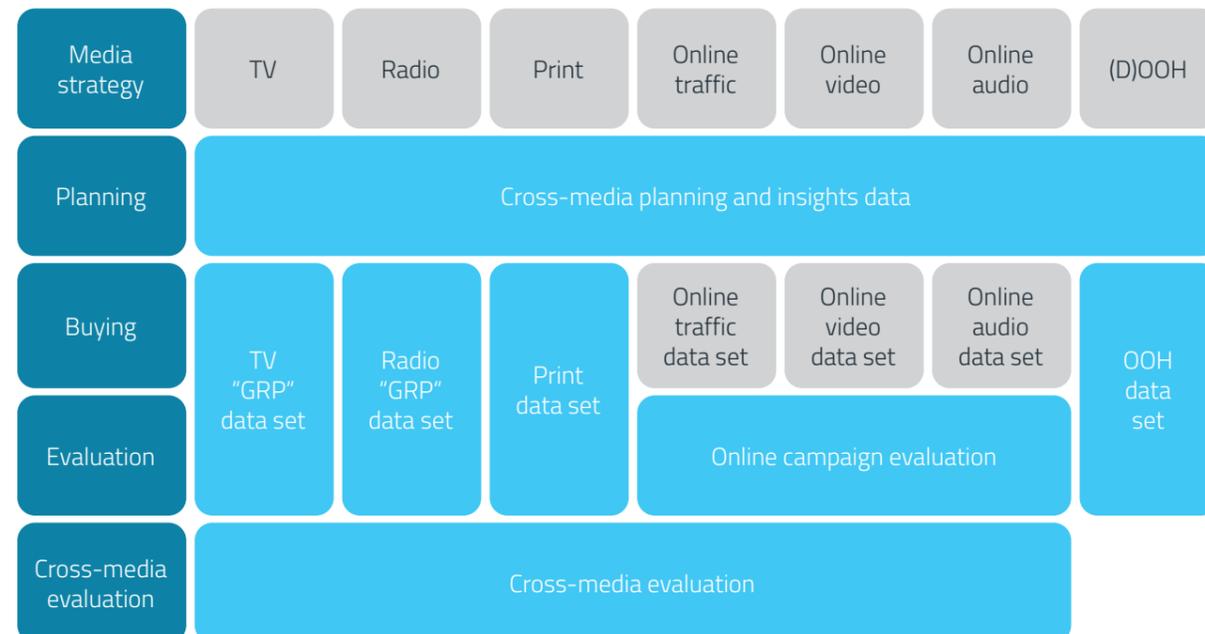
NMO datasets

The TV audience measurement data set will be renewed and improved, an additional online + video dataset will be made available. Additionally, these datasets will be combined with other NMO audience measurements in a true cross-media dataset to be used for strategic level planning (see Fig. 6). An RPF for NMO Cross-Media was issued in 2022, with an agency currently being appointed to deliver the NMO cross-media planning and insights.

Roadmap

Kantar recruited a completely fresh TAM panel which is planned to launch in September 2023. Following the launch, video total measurement including VOD measurement (non-tagged) and the combination of panel and census (tagged) measurement will be published. Afterwards, the integration of measurements from the Multimedia Panel will follow.

FIGURE 06: NMO MEDIA PLANNING DATASETS:

Media strategy	TV	Radio	Print	Online traffic	Online video	Online audio	(D)OOH
Planning	Cross-media planning and insights data						
Buying	TV "GRP" data set	Radio "GRP" data set	Print data set	Online traffic data set	Online video data set	Online audio data set	OOH data set
Evaluation				Online campaign evaluation			
Cross-media evaluation	Cross-media evaluation						

NORWAY:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Styringsgruppen TVOV (MOC).
TAM panel size:	• Panel A: 3000 individuals (about 1600 households). • Panel B: 1500 individuals (about 1200 households).
Does the TAM panel include households without TV sets?	Yes
Does the TAM panel include foreigners?	Permanent residents in Norway.
TV Panel measurement is carried out by:	Kantar Norway
End-date of the current contract:	31/12/2027
Digital video measurement is carried out by:	Kantar Norway
End-date of the current contract:	31/12/2027

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (99 days)		
Guest viewing:	Yes		
Out of home, e.g., bars, pubs:	Yes (out of home and second home viewing in same measurement). Watermark channels measured with Panel B. Portable meters (RateOnAir).		
Second homes/holiday homes:			
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Content and advertising.		
Measured in TAM or separate panel?	In TAM.		
Measured with router meter and/or RPD?	Router meter.		
What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes	Yes	All screens.
TV output on non-TV platforms	No	No	–
Which video platforms are measured within the TAM system?	Content/advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	No	Service level.	All screens.
Other (e.g. local) video platforms			

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Yes
Which data sources are used?	People Meter, RateOnAir meter (Panel B), Focal Meter, Census (tags).
How are the different data sources integrated?	Panel A: People Meter and Focal Meter. Online data is calibrated to Census targets. Panel B with RateOnAir meters are fused in to Panel A to represent Broadcast out of home viewing.
How is deduplication of audience reach and frequency done?	For online data separate reach targets are set with input from the panel as well as census.
Does the measurement of digital broadcaster content/advertising count people or devices?	People
Does the measurement of digital broadcaster content/advertising include first party data?	No
What is the data distribution frequency?	Daily
Developments planned to any part of the measurement system over the next two years (by end-2024):	None

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	Yes, for content (planning, reporting and trading).
Which data are included in the market trading currency currently in use?	Linear and time-shifted viewing.

TV MEASUREMENT IN NORWAY

In mid-2016, Kantar Media was awarded the contract to combine TV and online viewing in one measurement, also known as the Norwegian TVOV (TV and Online Video) measurement. Formally in place in January 2018, TVOV ties together the TV and online viewing of Norwegian households on all devices in and out of home, and provides a holistic view of all TV and online video consumption, as well as valuable insights of how viewing is distributed across screens and platforms.

Video measurement methodology

The TVOV measurement consists of two panels running in parallel (combined 2500 households) and one census measurement for online which are combined in one dataset through advanced data integration.

The main panel consists of 3300 individuals (2-79 years) deployed with Kantar People Meters and Focal Meters. Linear TV viewing in-home is identified by means of Kantar audio watermarking and audio matching technologies. All online devices in a household are measured, and the Focal Meters attached to the routers in Wi-Fi homes ensures an updated list of active household devices. Combined with Kantar's tagging technology, the Focal Meter measures viewing to the BVOD players in and out-of-home (OOH), both for content and ads. This online consumption is calibrated towards census levels and delivered as a part of the daily overnight audience files. The Focal Meter also measures non-cooperating players (Netflix, HBO, YouTube etc.) at service level, meaning that both viewing time and reach are measured, although not included in the official TVOV reporting.

In parallel, an additional panel of 1500 individuals (10–79 years) has been established to measure the high levels of OOH viewing in Norway, particularly viewing in second homes. The panel deploys Médiamétrie's RateOnAir portable people meter, while channel identification is based on Kantar's audio watermarks. OOH viewing to linear TV is fused to the main panel as a part of the overnight processing, replacing guest viewing for the channels and target groups measured in both panels.

Each participating broadcaster provides crucial inputs to the measurement by implementing watermarks in the audio feeds, providing as-run transmission logs and content metadata to Kantar and by implementing measurement codes with the required metadata into their online players. Commercial metadata is provided by Nielsen Media as an industry standard.

SINGAPORE:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Infocomm Media Development Authority (IMDA) - a statutory board of the Singapore government.
TAM panel size:	▪ TAM: 1000 households. ▪ Digital: 2000 individuals.
Does the TAM panel include households without TV sets?	No
Does the TAM panel include foreigners?	Yes
TV Panel measurement is carried out by:	GfK
End-date of the current contract:	N/A
Digital video measurement is carried out by:	GfK
End-date of the current contract:	N/A

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (28 days)		
Guest viewing:	Yes, by guest registration.		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	No, not applicable in Singapore.		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Content only		
Measured in TAM or separate panel?	TAM and digital measurement		
Measured with router meter and/or RPD?	No, with census		
What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes	No	All screens.
TV output on non-TV platforms	No	No	–
Which video platforms are measured within the TAM system?	Content/ advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)		N/A	
Other (e.g. local) video platforms			

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Yes, panel and census data.
Which data sources are used?	People meter, digital meter, census tagging.
How are the different data sources integrated?	Fusion and calibration.
How is deduplication of audience reach and frequency done?	Fusion and calibration.
Does the measurement of digital broadcaster content/advertising count people or devices?	People.
Does the measurement of digital broadcaster content/advertising include first party data?	Yes
What is the data distribution frequency?	Daily.
Developments planned to any part of the measurement system over the next two years (by end-2024):	Pilot for router/ streaming platform and consumer opinion on content viewed.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	Yes, both content and advertising (planning, reporting and trading).
Which data are included in the market trading currency currently in use?	Linear, non-linear, census, time-shifted viewing.

TV MEASUREMENT IN SINGAPORE

Bringing a fully-integrated audience measurement solution to Singapore

As audiences are spoilt for choice and the devices that TV content can be viewed on become ever smarter and prolific, the challenge for content producers and advertisers to reach audience targets becomes ever more complex. At the same time, there is a significant challenge for the industry in measuring the audiences of this content.
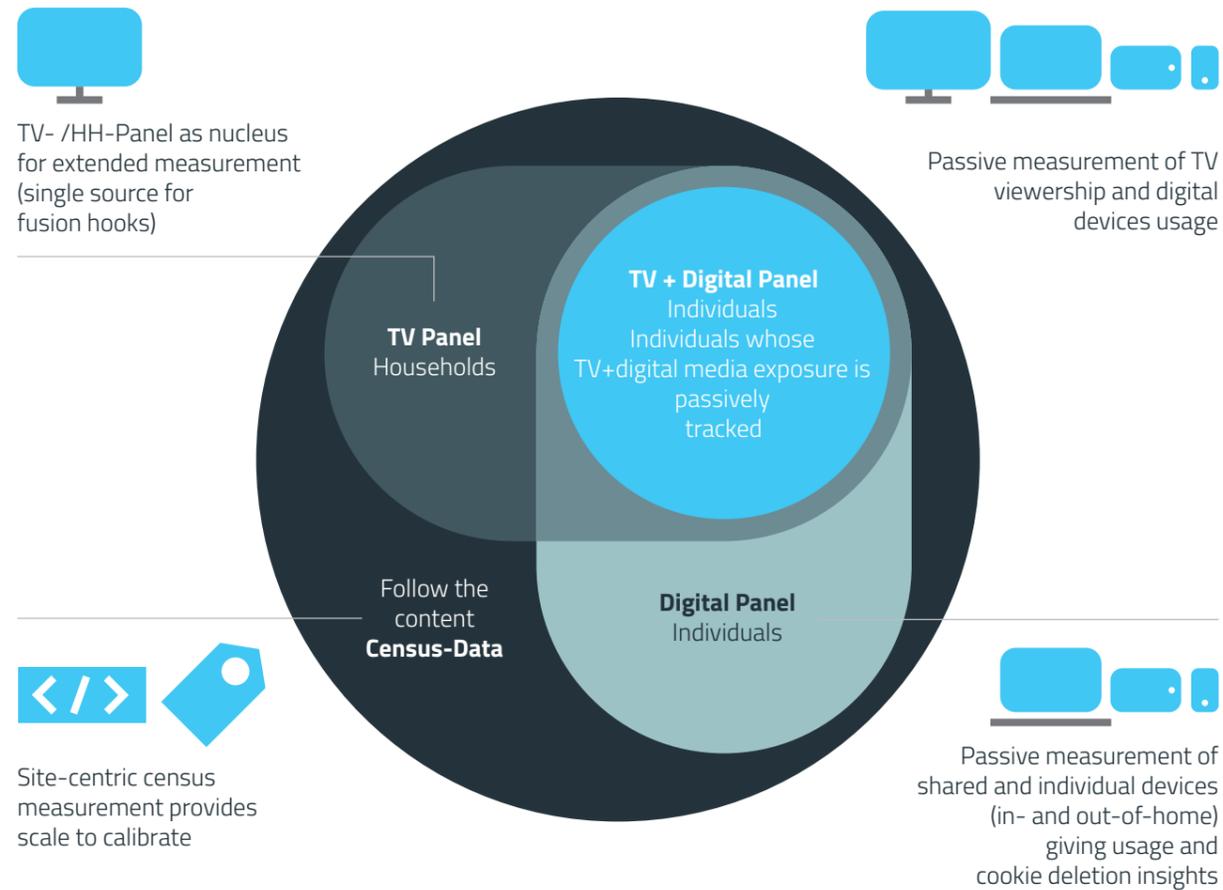
With this background, the Infocomm Media Development Authority (IMDA) - a statutory board of the Singapore government - commissioned GfK to set up a more extensive and inclusive measurement in 2015, resulting in the launch of the SG-TAM service in 2016. For the first time in Singapore, this service delivers total TV viewership, which integrates linear and non-linear viewing and reports with standard metrics of TV audience measurement. This is achieved via a 1200 TAM household panel, a 2000 individual digital panel with a single-source element and census data from contributing broadcasters.

The purpose of SG-TAM is to measure content ratings regardless of the device they are played on. Although traditional live TV viewing still dominates in Singapore, streaming services are growing in popularity. The streaming services of contributing broadcasters are tracked using a dedicated digital panel with passive meters on smartphones, tablets and PCs to collect all online activity (see Fig. 7).

With these developments, it is now possible to measure live viewing, catch-up viewing (up to 28 days) on up to 200 channels and streaming of TV content on partner broadcaster platforms. Advertising is measured on linear channels.

TV- /HH-Panel as nucleus for extended measurement (single source for fusion hooks)

TV Panel
Households

TV + Digital Panel
Individuals
Individuals whose TV+digital media exposure is passively tracked

Passive measurement of TV viewership and digital devices usage

Follow the content
Census-Data

Digital Panel
Individuals

Site-centric census measurement provides scale to calibrate

Passive measurement of shared and individual devices (in- and out-of-home) giving usage and cookie deletion insights

Data reporting

SG-TAM subscribers can access the daily results of the study (integrated viewership across platforms) through a GfK proprietary analysis and reporting tool. The tool allows users to measure the performance of different programmes, genres and channels across all screens (TV sets, desktops, smartphones and tablets) and consumption types (live, pre-broadcast, catch-up). It also reports the incremental reach of streamed views of TV content.

Hybrid system

SG-TAM provides converged video usage data (TV sets, desktops, smartphones and tablets) on a daily basis at programme level, with a time lag from measurement to disclosure of digital usage of just three days.

SG-TAM also includes a measurement of online only content (e.g. content from a broadcaster that is not on a live schedule) with co-operating broadcasters.

Such hybrid measurement covers not only the live consumption of TV content across different screens, but also the consumption of TV content, which is part of the broadcasters' online catalogue.

In order to measure the online consumption of TV content, both deterministic and probabilistic matching are performed:

- Deterministic matching: Sound matching for TV panellists, panel/census matching for digital panellists, calibration of the final result to the census figures.

- Probabilistic matching: A fusion is performed between digital and TV panels in order to attribute digital usage to all the online devices owned by TV panel household members.

In 2022, a pilot was carried out on extending the measurement to cover streaming platforms on all devices and investigating consumers opinions on the content they watch rather than just what they watch.

SPAIN:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Kantar Media
TAM panel size:	5720 households, 14,000 individuals.
Does the TAM panel include households without TV sets?	No
Does the TAM panel include foreigners?	Yes
TV Panel measurement is carried out by:	Kantar Media
End-date of the current contract:	N/A
Digital video measurement is carried out by:	GfK
End-date of the current contract:	N/A

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (7 days), with people meter		
Guest viewing:	Yes, with people meter		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	Yes, with people meter		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	No		
Content and/or ads?			
Measured in TAM or separate panel?			
Measured with router meter and/or RPD?			
What is the scope of digital TV broadcaster measurement?	**Content?**	**Advertising?**	**On all screens?**
BVOD	No	No	–
TV output on non-TV platforms			
Which video platforms are measured within the TAM system?	**Content/ advertising?**	**Measured to what extent?**	**On all screens?**
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)		No	
Other (e.g. local) video platforms			

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	No
Which data sources are used?	N/A

How are the different data sources integrated?	Through Instar Analytics software
How is deduplication of audience reach and frequency done?	Not needed as data comes out of the panel by declaration of individuals through the People Meter
Does the measurement of digital broadcaster content/advertising count people or devices?	N/A
Does the measurement of digital broadcaster content/advertising include first party data?	N/A
What is the data distribution frequency?	Daily
Developments planned to any part of the measurement system over the next two years (by end-2024):	Looking ahead, Kantar Media Spain is planning to move towards a hybrid measurement model that will integrate TV and online video viewing data. This has involved the rollout Focal Meters, which captures viewing behaviour across multiple devices, including TV sets, smartphones, tablets, and laptops. Kantar Media Spain has already deployed 3000 Focal Meters measuring over 16,000 individuals, yet not currently reporting this data to the market and only used internally.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Linear, time-shifted, second homes and guests

TV MEASUREMENT IN SPAIN

Kantar Media has been serving the Spanish market for several years, as the leading provider of television ratings which serve as the trading currency for TV. The core offering in Spain is its television audience measurement service, which provides in-depth insights into TV viewing behaviour across the country. The service leverages a representative panel of 5720 households, equipped with people meters that enable the capture of broadcast in-home viewing on DTV, cable, and satellite, both linear and on demand.

The audience measurement service is complemented by its Instar Analytics software, which provides broadcasters with access to overnight ratings data and advanced analytics tools to help them optimise their programming and advertising strategies. Instar Analytics is a flexible tool that can be customised to meet the specific needs of different broadcasters, agencies and advertisers.

Looking ahead, Kantar Media is planning to move towards an integrated approach to audiences to deliver TV and online video viewing data. This has involved the rollout of Kantar's latest router meter, the Focal Meter, which captures viewing behaviour across multiple devices, including TV sets, smartphones, tablets, and laptops. The meter provides granular data on individual viewing behaviour which can be combined with other data sources, such as content tagging and direct integration with panel data, to deliver a comprehensive overview of audience behaviour on all platforms across screens.

General overview	
The TAM panel system is run by:	MMS (JIC)
TAM panel size:	3000 TV-households + 200 virtual non-TV households.
Does the TAM panel include households without TV sets?	Yes, 200 virtual non-TV households.
Does the TAM panel include foreigners?	Swedish registered residents
TV Panel measurement is carried out by:	Nielsen
End-date of the current contract:	N/A
Digital video measurement is carried out by:	Nielsen
End-date of the current contract:	N/A

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (7 days in currency, 28 days in measurement). Measured via audio matching		
Guest viewing:	Yes, guests are registered with remote control		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	Yes, measured with people meter		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Content and advertising		
Measured in TAM or separate panel?	Measured in the Video panel (part of TAM)		
Measured with router meter and/or RPD?	Router meter/SDK		
What is the scope of digital TV broadcaster measurement?	**Content?**	**Advertising?**	**On all screens?**
BVOD	Yes	Yes	Yes
TV output on non-TV platforms	No	No	–
Which video platforms are measured within the TAM system?	**Content/ advertising?**	**Measured to what extent?**	**On all screens?**
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook) Other (e.g. local) video platforms	Content and advertising.	Service level.	Yes

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Yes
Which data sources are used?	People meter, router meter, census (SDK)
How are the different data sources integrated?	The SDK is integrated with the panel through the router meter
How is deduplication of audience reach and frequency done?	Currently by modelling, but working on another solution
Does the measurement of digital broadcaster content/advertising count people or devices?	People
Does the measurement of digital broadcaster content/advertising include first party data?	No
What is the data distribution frequency?	Daily, with two days delay
Developments planned to any part of the measurement system over the next two years (by end-2024):	MMS is looking to further develop the Total Video measurement to include new metrics and more demographics

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Live +7

TV MEASUREMENT IN SWEDEN

The main goal of Sweden's television and online video JIC, MMS, is to launch and maintain a fully accepted media currency covering all TV and online video viewing on all platforms, screens and in all situations. The first total video figures were delivered in 2017, and the method has since been further developed.

A new measurement set-up based on a single source panel

Television audience measurement in Sweden has been carried out by Nielsen since 1993, which today uses audio-matching technology. The panel consists of 3000 households after an expansion done January 2018, to be able to cope with growing viewing fragmentation. Since the panel expansion, Nielsen streaming meters have been installed in all eligible households. The streaming meter is connected to the router in the household and captures all streaming.

MMS has been measuring online video since 2011, which is currently based on Comscore SDKs for content and ad measurement. The previous TAM panel was transformed into a single-source video panel in 2022, which includes census data and measures all screens in the household. Census measurement is now also based on Nielsen technology.

This new solution reports both the TV currency and the online video currency. The TV currency covers 99.5% of linear TV viewing while the online video currency includes Sweden´s biggest television broadcasters, publishers, and multi-channel-networks. Ads through digital ad insertion (DAI) from the telecom's TVE-services are also included in the currency, while content from the same players are in process of being integrated as well. Data collected from these services are added to each channel/site and not reported separately.

After a successful pilot project in 2020, the technology is now in place to include census measurement of online programmatic campaigns. MMS' goal is for all programmatic campaigns to include a unique code, so that measurement is as granular as possible.

The first total video ratings previewed

MMS has been working towards the goal of publishing total video ratings. During 2022, the measurement set-up changed and opened some new solutions to reach this goal.

MMS is currently working with GFK to model the data. Since 2017, MMS has been publishing total viewing figures for ads by setting up an aggregated reach model that combines data sources to correct issues like cookie deletion, device sharing and overlap between platforms. The model follows a two-step routine: mapping cookies to users within each type of platform and then calculate the deduplicated cross-device reach. A representative online panel from Kantar with cross-device measurement was being used to estimate the parameters needed for this model. MMS was using the same method to introduce TV as an additional platform and completed the process of the fusion between TV and online data.

The aggregated reach model did not make it possible for MMS to deliver a panel data set to their clients, a demand made by the Swedish market. That was one of the reasons MMS launched data deliveries based on a virtual panel in May 2021. The virtual panel is a boosted sample size to enable reach and frequency calculations at programme, ads and site level. This process involves modelling steps that include imputation, panellist cloning, cookie deletion correction, weighting and calibration towards census measurement. The virtual panel was first used for programmes and sites but also replaced the aggregated reach model used for reporting ads during 2022. Data based on the virtual panel is delivered to the market daily with a two-day delay. The organisation has been working with GfK for all modelling, who does not deliver any data, but helps with the modelling processes, as well as with the audit of the different data sources.

While using different panel sources for the TAM and online video measurements, the original plan was to fuse these two sources: TAM and the virtual panel. The new measurement set-up, using the same single source panel for both TV and online video, has now made this easier. A fusion is no longer necessary and instead MMS introduced weighting and the calculation rules to deliver total video ratings to the market. In December 2022, the first preview reach figures at site level were delivered to clients, and from January 2023, total reach for site and programmes is delivered daily to the market with a two-day delay. The plan is to continue this development and to extend it to also cover other metrics, such as ratings and share, and to deliver total video reach for ads during the first half of 2023.

When will it be a currency?

MMS regards trust in the new currency as critically important, and the new methodology, therefore, needs to be open and transparent. MMS retains the TV and online currencies, alongside its new total video measurement – that is not yet a currency. How the market will use the total video data will be the key for the transition from measurement to currency.

SWITZERLAND:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Mediapulse AG (JIC for TV, Radio and Online).
TAM panel size:	▪ TAM Panel: 1870 households, around 4500 individuals ▪ Hybrid Panel: Around 20,000 individuals
Does the TAM panel include households without TV sets?	Yes, but non-TV households are only used for online data (websites, apps), not for TV data.
Does the TAM panel include foreigners?	Yes
TV Panel measurement is carried out by:	Kantar
End-date of the current contract:	N/A
Digital video measurement is carried out by:	Kantar
End-date of the current contract:	N/A

What is included in the TV measurement?			
Which 'extensions' of TV viewing are measured?			
Time-shifted:	Yes (VOSDAl +7 days).		
Guest viewing:	Yes		
Out of home, e.g., bars, pubs:	No		
Second homes/holiday homes:	No		
Is TV broadcaster content/advertising measured beyond television sets?			
All devices (PCs, smartphones, tablets)	Yes		
Content and/or ads?	Content and advertising.		
Measured in TAM or separate panel?	TAM panel.		
Measured with router meter and/or RPD?	Hybrid: router/tagging.		
What is the scope of digital TV broadcaster measurement?	**Content?**	**Advertising?**	**On all screens?**
BVOD	Yes	No	All screens.
TV output on non-TV platforms	Yes	Yes	Wilmaa, Teleboy = All screens. Zattoo, Blue TV = only big screen.
Which video platforms are measured within the TAM system?	**Content/ advertising?**	**Measured to what extent?**	**On all screens?**
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	Content measurement on all platforms (except Facebook).	Service-level.	All screens.
Other (e.g. local) video platforms			

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Yes
Which data sources are used?	Set top box data
How are the different data sources integrated?	Imputation
How is deduplication of audience reach and frequency done?	Not necessary in this approach
Does the measurement of digital broadcaster content/advertising count people or devices?	People
Does the measurement of digital broadcaster content/advertising include first party data?	No
What is the data distribution frequency?	Daily
Developments planned to any part of the measurement system over the next two years (by end-2024):	Inclusion of replay ads in the measurement, e.g. ads delivered via STB/OTT, when ad breaks are skipped during time-shifted viewing.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	No
Which data are included in the market trading currency currently in use?	Linear and time-shifted TV viewing (+7) measured via TAM panel and virtual STB panel.

TV MEASUREMENT IN SWITZERLAND

Mediapulse – The Swiss JIC for TV, Radio and Online

TV Research in Switzerland is steered by Mediapulse AG. As an independent research organisation, Mediapulse is commissioned with collecting data on the consumption of radio and TV programmes as well as websites, apps and video streams in Switzerland. This data claims the status of official currency and is used by the Swiss media market, the advertising industry, government agencies and academic research. Mediapulse stands for a neutral, independent, transparent, and scientific approach to media research and is under the supervision of the Federal Office of Communications (OFCOM). Most of the media market is represented on Mediapulse AG's Board of Directors and its other governing bodies.

Innovating the Swiss TV-Research in five steps

TV research in Switzerland is based on a Kantar-operated TV panel, which consists of around 4500 panel members in 1800 households, split into three sub-panels for the German, French and Italian-speaking parts of Switzerland. The TV panel represents 7.5 million individuals (age 3+) living in homes with at least one TV set. The measurement is done through audio matching and is based on live and time-shifted (+7 days) in-home viewing on big screens. The TV research has been developed and expanded over the past two years through the following five steps:

▪ Granularity of viewing data was increased with the integration of set top box data (Hi-Res TV data).

▪ Integration of addressable TV ads into TV campaign measurement was made possible by harnessing the potential of Hi-Res TV Data (Replay Ad data).

- The scope of measurement was broadened by capturing the consumption of video and streaming platforms (streaming data).

- Coverage of TV data was extended with the measurement of TV consumption on small-screen devices in- and out-of-home (online TV data).

- Comparison of TV audiences with online users was made possible by measuring websites and apps of Swiss publishers and broadcasters on the extended TV panel (online content data).

Step 1: Hi-Res TV data

Since July 2022, the Swiss TV currency has run on a hybrid data set. Hybrid means that viewing data from digital set top boxes are transformed and integrated daily into the TV panel data. This quadruples the sample size of the TV panel to around 20,000 individuals, leading to more granular and stable viewing data and to a significant reduction of TV ad beaks with zero ratings (see Fig. 8).

The development of this hybrid system under the project title "Hi-Res TV" was driven by the high level of fragmentation in the Swiss TV market and was made possible by the support of the two largest TV distributors.

New hybrid currency data are available eight days after broadcasting via a standard TV tool for the TV market and via a planning tool for the advertising market. Panel-only data are still delivered the next day, but is not included in the TV trading currency.

Step 2: Replay Ad data

In October 2022, the Swiss TV market launched the so-called Replay Ads (addressable ads delivered via set top boxes). Based on the already established Hi-Res TV approach, Mediapulse is able to measure reach and frequency of these Replay Ads and integrate these data into a holistic TV campaign report. Measurement of Replay Ads started in January 2023, and first results are expected in early summer 2023.

Step 3: Streaming Data

At the end of 2020, Kantar equipped all panel households with a router meter. This enables the registration of online devices in the household and is able to measure the in-home usage of video and streaming services at platform level (see Fig. 9). Starting in spring 2021, these data are aggregated and published by Mediapulse in quarterly reports, giving broadcasters and sales houses the opportunity to observe the demand for non-TV video content (Netflix, YouTube, Amazon Prime, Disney+, Apple TV+, etc.) based on established TV metrics like reach and duration.

Step 4: Online TV data

Since January 2021, Mediapulse has offered broadcasters the possibility to measure their video content provided over the top and used on small screen devices such as PC, tablet or smartphone at home or out-of-home, and to integrate the online TV data into the TV currency. To make this possible, broadcasters and OTT platforms have to implement a measurement tag into their video players. This tag can then be linked to the online devices of TV panel members identified by the router meter. This hybrid approach is developed, implemented and operated by Kantar, using tagging technology delivered by Comscore.

Since May 2021, online TV consumption data from tagged platforms of broadcasters and OTT services can be analysed in the standard TV tool. However, as the entire market has still not been tagged, online TV is not yet part of TV currency.

Step 5: Online content data

In 2020, Mediapulse was mandated by the Swiss online publishers and broadcasters to develop a solution for measuring the usage of online brands. To meet this mandate, Mediapulse asked Kantar to expand the TV panel to a media panel by including non-TV households and to modify the hybrid approach for online TV, to capture the usage of websites and apps in addition to TV content. As a first step, a traffic measurement was implemented for participating publishers and broadcasters based on a Comscore tagging solution.

In summer 2021, Mediapulse started to publish the results of the Online Content Traffic Data on its website.

After completing the panel extension, Kantar started to measure the usage of tagged brands in the media panel by using the router meter technology. The measurement of the online audience data was launched in summer 2022, and first results were published in October 2022.

Measuring TV, online TV, websites and apps in a single-source media panel gives the Swiss TV market the opportunity to analyse cross-media usage second-by-second, to quantify overlaps between TV and online brands and to understand audience flow and customer journey in a more comprehensive way.

Conclusion

As a result of the different steps, both the granularity and the coverage of TV research in Switzerland have increased significantly. With the additional coverage of new TV advertising formats and online brands using the infrastructure of TV measurement, there is now a clear way to overcome existing silo boundaries, and to enable a convergent view of the use of different media and their outlets.

FIGURE 08: MEDIAPULSE HI-RES TV DATA: LESS "ZERO-RATINGS"

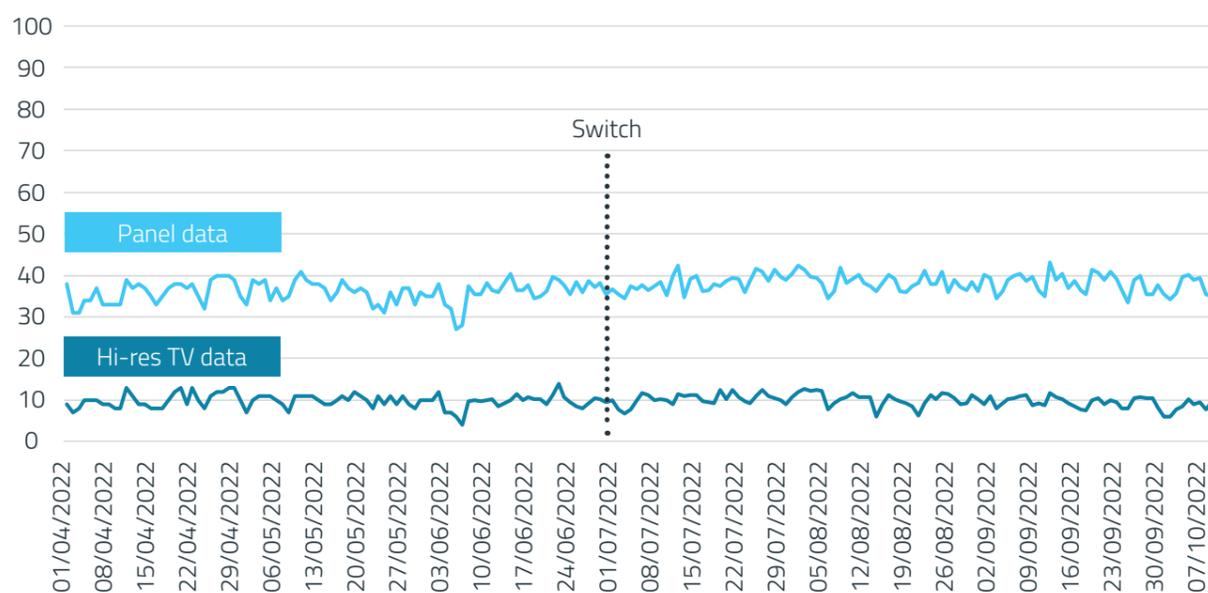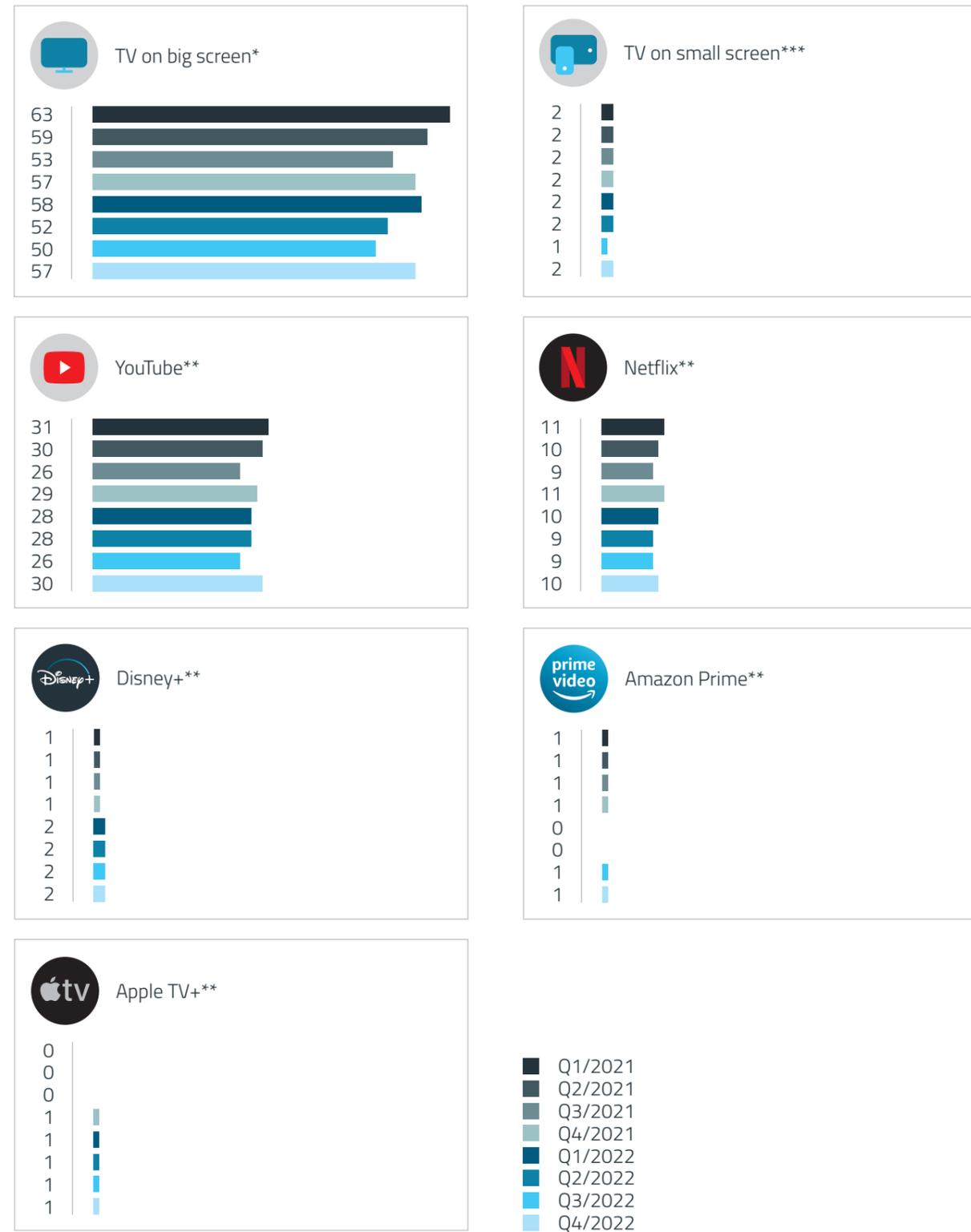Switzerland, individuals 3+, whole day, share of ad breaks with zero-rating in percent.

Switzerland, individuals 3+, whole day, daily reach in percent.

TV on big screen*

63	
59	
53	
57	
58	
52	
50	
57	

TV on small screen***

2	
2	
2	
2	
2	
2	
1	
2	

YouTube**

31	
30	
26	
29	
28	
28	
26	
30	

Netflix**

11	
10	
9	
11	
10	
9	
9	
10	

Disney+**

1	
1	
1	
1	
2	
2	
2	
2	

Amazon Prime**

1	
1	
1	
1	
0	
0	
1	
1	

Apple TV+**

0	
0	
0	
1	
1	
1	
1	
1	

- Q1/2021
- Q2/2021
- Q3/2021
- Q4/2021
- Q1/2022
- Q2/2022
- Q3/2022
- Q4/2022

UNITED KINGDOM:
OVERVIEW OF TV/VIDEO AUDIENCE MEASUREMENT

General overview	
The TAM panel system is run by:	Barb Audiences Ltd (JIC)
TAM panel size:	5150 TV households + 200 non-TV household (around 11,000 individuals 4+ on a typical day). The panel size is planned to increase to 7000 homes in mid-2024.
Does the TAM panel include households without TV sets?	200 non-TV homes who only view on non-TV devices.
Does the TAM panel include foreigners?	It is representative of individuals living in private residential addresses in the UK. The nationality of panel members is not captured, so it may well include foreigners
TV Panel measurement is carried out by:	Kantar operates the TAM panel, RSMB have the methodology contract and Ipsos operates the Establishment survey.
End-date of the current contract:	The panel operation and methodology contracts run until the end of 2023 but the next contracts have been awarded until the end of 2029. The Establishment survey contract runs until the end of 2024.
Digital video measurement is carried out by:	Kantar operates this for Barb via Dovetail for BVOD and router meters for other streaming services.
End-date of the current contract:	There are two Dovetail contracts. The first is for the BVOD census data collection, which runs until 2029. The second is for the Dovetail fusion, which calibrates the people-based viewing data with the census.

What is included in the TV measurement?	
Which 'extensions' of TV viewing are measured?	
Time-shifted:	Yes (up to 28 days) – measured with PPM
Guest viewing:	Yes – measured with PPM
Out of home, e.g., bars, pubs:	No
Second homes/holiday homes:	No
Is TV broadcaster content/advertising measured beyond television sets?	
All devices (PCs, smartphones, tablets)	Yes
Content and/or ads?	Content only
Measured in TAM or separate panel?	In TAM via Dovetail fusion for BVOD
Measured with router meter and/or RPD?	Router meter

What is the scope of digital TV broadcaster measurement?	Content?	Advertising?	On all screens?
BVOD	Yes	No	TV, tablet, PC, smartphone.
TV output on non-TV platforms	Yes; Netflix, Amazon Prime, Disney+, Now TV, Paramount+ and Apple TV+.	No	TV only for content. Service use across all screens.

Which video platforms are measured within the TAM system?	Content/ advertising?	Measured to what extent?	On all screens?
Global streaming platforms (Netflix, Prime, Disney, YouTube, Facebook)	Content measurement for Netflix, Prime, Disney+	Programme and Service level (YouTube, service-level only).	Programme on TV sets. Service on all screens (via router meter)
Other (e.g. local) video platforms	Content measurement for Paramount+, AppleTV+ & Now TV	Programme and service level	

How is the hybrid measurement currently done?	
Is TV viewing being measured using a hybrid method?	Yes, TV set via panel and other BVOD use via census and calibration.
Which data sources are used?	People meter, router meter, census (tags), audio-reference generation for content on streaming services.
How are the different data sources integrated?	▪ The TV set viewing data is from the people meter but enriched by the data from the router meter on the service being used if watched via the internet. For non-TV set usage, the router meter is used for services that are not part of the Dovetail. Dovetail itself collects census level programme viewing across devices for BVOD via tagging. This is then turned in to people-based audiences through the process of Dovetail fusion that outputs this in an expanded TV panel that uses replicates to make it c.15 times as large as the main TV panel. ▪ Alongside this, content is measured for streaming services on the TV set via the main panel. Audio-references are created for the content launched on these services every week that enable this viewing to be measured.

How is deduplication of audience reach and frequency done?	The Dovetail fusion effectively creates a single-source dataset that allows reach and frequency to be calculated, but there is guidance issued to users explaining how the data should be used to ensure that the limitations of the modelling are taken in to consideration.
Does the measurement of digital broadcaster content/advertising count people or devices?	It counts devices, but the Dovetail fusion process converts it to people for broadcaster content on tablets, PCs and smartphones.
Does the measurement of digital broadcaster content/advertising include first party data?	Yes, from the census tags if you consider this first party data. There is no direct server integration yet or use of RPD, though RPD have been tested.
What is the data distribution frequency?	Daily
Developments planned to any part of the measurement system over the next two years (by end-2024):	Barb plans several developments by the end of 2024, incl.: 1. Launch of an API to distribute Barb data in a more modern way and to enable direct ingestion to users' tools and systems. 2. Expansion of the TV measurement panel from 5150 to 7000 homes. 3. Roll out of new metering software, Kantar's PM7, across the panel. 4. Upgrade of processing systems to provide more reliable and consistent data delivery.

Currencies	
Is there currently a measurement of cross-platform video inventory that is regarded as a "currency" by most of the market?	Yes, for planning.
Which data are included in the market trading currency currently in use?	TV trading is based on consolidated +7-day TV set viewing to linear channels (live, VOSDAL, time-shifted 1-7 days).

TV MEASUREMENT IN THE UK

A single source panel for viewing data

Barb operates a panel of 5350 television and broadband-only households (over 12,000 individuals aged 4+) which represents television viewing across the UK. Broadcast viewing is measured with Kantar's TV set meter, which uses audio matching and watermarking technologies. Panellists use handsets or a tablet device to register when they are in front of a TV set, to ensure that the number and demographic identity of people watching is recorded. Complementing this, a router meter is installed in all homes with a home broadband connection (see Router meter rollout below).

Project Dovetail & BVOD services

Since 2015, Barb has been developing its service to integrate viewing of broadcaster VOD services across tablets, PCs and smartphones. Project Dovetail was established to deliver deduplicated reach of programme and commercial audiences across multiple screens. The method relies on combining single-source panel data with device-based census data through a process called Dovetail Fusion, run by Kantar.

As of June 2021, deduplicated programme reach and time spent viewing across TV sets, tablets, smartphones and PCs is reported. This four-screen viewing is reported alongside consolidated seven-day TV set viewing, which remains the currency.

Complementing this has been the development of the Advanced Campaign Hub, to facilitate multi-screen campaign planning. Launched in June 2020, it helps agencies, advertisers and broadcasters plan advertising campaigns across Barb-reported broadcasters' linear and BVOD services. Barb has enhanced this tool over time, integrating improved visualisation, budget optimisation and enabling users to plan for specific screens. Barb will extend it to enable users to plan sponsorships in 2023.

Router meter rollout

In November 2021, Barb completed a once-in-a-generation upgrade in audience reporting when it started reporting viewing from router meters attached to the broadband routers in Barb panel members' homes. This enables Barb to:

- Distinguish whether post-broadcast viewing was done through a tagged BVOD service or via playback of a PVR recording.

- Measure panellists' viewing on smartphones and provide richer data on consumption via PCs and tablets.

- Provide greater insight into unidentified viewing. A significant portion of unidentified viewing comprised of viewing to SVOD and online video services; router meters facilitate the reporting of aggregate-level viewing of these services.

The measurement of viewing is restricted to a list of sites that are known to panel members, called the whitelist. The new data means that Barb has updated its definition of total television viewing to total identified viewing, with three constituent parts:

Total broadcaster viewing: Time spent watching linear broadcast channels and BVOD services, including live viewing, pre- and post-broadcast viewing and viewing to archive box-sets on a BVOD service.

Total SVOD/AVOD viewing: Time spent viewing AVOD and SVOD services, including Amazon Prime Video, Disney+ and Netflix.

Total video-sharing viewing: Time spent viewing platforms such as TikTok, Twitch and YouTube.

SVOD and video-sharing data are now part of Barb's daily reporting for underwriters and clients with the appropriate licence.

SVOD content measurement

Barb also started to report the viewing of SVOD content on TV sets from November 2021. This initially covered content on Netflix, Amazon Prime Video and Disney+, and has since been extended to include Paramount+ and Apple TV+. Kantar captures audio signatures for content released on these services and includes them in the audio-matching run each evening, so that viewing of new SVOD titles can be measured and reported alongside broadcaster services. This measurement uses data from the router meter to determine which VOD service is being used, which is particularly important where content is shared across more than one VOD service.

2024 contract changes

New Barb contracts for the provision of the methodological support and the administration of the panel start in January 2024. The Barb service will start using the Kantar PM7 meter, which is a step forward in meter design and functionality and is being introduced now to panel member homes. The panel itself will expand to 7000 homes from the middle of 2024, which will mean more stable estimates and a reduction in the incidence of zero-rated spots.

Improved data availability

Barb appreciates that users of its data expect it to be available in formats and via systems that are up to date. In recognition of this, and to drive improved acceptance and innovation, Barb has developed a beta release of its data via an Application Planning Interface (API). Available to subscribers from Q1 2023, it can be used to ingest basic campaign and programme performance into reporting systems. It will be developed further during 2023, to enable users to access all of the panel viewing data.

An eye on the future and 'fit-for-TV' content

There remain several other priorities that Barb is actively pursuing. These include improvements to Dovetail, quicker availability of data, reporting of silence and enhancing the metadata provided to Barb subscribers. Following a consultation in autumn 2022, Barb also intends to start reporting viewing of 'fit-for-TV' content on video-sharing platforms like TikTok and YouTube and is engaging with the industry on how to do this. Please check out the Barb website for updates: www.barb.co.uk.

UNITED STATES:
TV MEASUREMENT IN THE US

By **Jon Watts**
Managing Director,
The Coalition for Innovative Media Measurement

May 2023

The US measurement marketplace is experiencing a period of significant change and development, as viewing continue to change, becoming more fragmented and widely distributed, TV datasets proliferate, and major industry participants look to support the transition to a multi-currency marketplace. The major US TV networks, facing significant commercial pressures and growing competition, are strongly committed to supporting this transition, arguing that a more competitive measurement marketplace, with a range of currency-grade providers competing to deliver the best possible solutions, will deliver lower prices, improved products, more accurate measurement, and a faster pace of innovation.

Although this transition is well underway, 2023 will be a transitional year, an important step on the journey, but some way away from the desired marketplace. However, the rate of progress is rapid.

To understand where the market is heading, it is worth looking back at how we got here.

Historical context – a fragmented, fast-changing market

The US is a large, complex TV market, with a population of 331.9m (in 2021) and 131m households (HHs, as of 2022), across 50 states, divided by Nielsen into 210 designated market areas (DMAs) – ranging from New York, with 7.4m HHs, to Glendive, with 3900 HHs. During the last 15 years, the distribution environment for TV services has become far more complex, with pay TV penetration falling from around 91% in 2010, to just above 50% by end-2022, while broadband-only households (BBO), including those subscribing to virtual MVPD (vMVPD) services, increased to around 31% of all US households.

Estimates of broadband-only (BBO) households do range widely, from 20% to more than 40%, largely relating to a debate in the industry about how best to categorise vMVPD such as Hulu + live TV and YouTube TV, which use a broadband signal, but, like traditional pay TV, charge monthly fees for live TV reception. Typically, vMVPDs have been categorised as broadband, rather than pay TV, households, but most major TV networks would prefer to see vMVPDs categorised alongside their traditional pay TV counterparts. If BBO households with access to linear TV through their vMVPD subscriptions are classified as pay TV services, pay TV penetration is over 60% and BBO penetration falls to 20%[2].
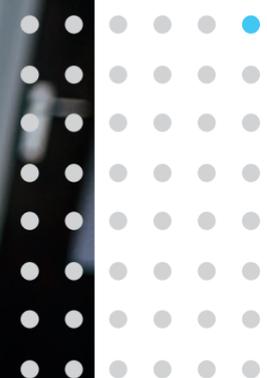
Importantly, new distribution platforms and delivery partners provide new sources of data into the market, creating new opportunities for measurement providers. There is a growing availability of second-by-second tuning data from both smart TVs and set-top boxes. Additionally, TV networks have all become digital publishers who have proprietary site and app data across all their digital properties, and they receive data back from the AVOD and SVOD platforms on which they distribute their content. However, historically, there has been little or no standardisation in data collection and reporting.

As the underlying distribution environment has become more complex, the supply of content into most US TV households has increased dramatically. There are around 1758 commercial television stations in the United States, a mix of national services, local stations and cable channels, plus hundreds of apps on smart TVs and other connected devices, many offering access to thousands of film and TV titles: Tubi, an ad-supported streaming service recently acquired by Fox Entertainment, offers a library of over 40,000 movies and TV shows, 100+ local and live news and sports channels, and a growing library of Tubi Originals; Peacock, owned and operated by NBCUniversal, offers over 20,000 hours of content.

As access to these services has grown, viewing has become far more widely distributed. In December 2022, broadcast channels accounted for less than 25% of TV viewing, cable for just over 30%, and streaming for almost 40%, with only two streaming services (YouTube and Netflix capturing more than a 5% share of total viewing[3]. TV has rapidly become a long tail market.

To make the picture even more complex, the rights to sell against TV and video inventory on many channels and services are often widely distributed and sold via different sales channels, making it more challenging to plan, execute and measure campaigns across linear channels, MVPD addressable and streaming inventory, especially if multiple media owners are involved.

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[2] On a separate but related note, the ARF is advocating for a gradual migration away from TV households (meaning households with at least one TV set) to TV-accessible households as the basis for TV measurement. Broadband access and mobile devices mean consumers no longer need a television set to watch TV, with about 4% of US households consuming TV without owning a single TV set. A measurement scheme that leaves out this growing segment risks underrepresenting viewership.

[3] Source: Nielsen, December 2022.

TV measurement in transition – the 2010s

For many years, the US national and local TV measurement marketplaces have been dominated by Nielsen's panel-based solutions for national and local television. Nielsen was deeply embedded with buyers and sellers, providing the C3/C7 measurement currency that has supported the vast majority of national TV transactions. Although widely used, the solution came under pressure as linear ratings declined, stimulating investment in addressable solutions across MVPD and smart TV footprints. Nielsen's solution did not measure ads, but rather averaged all the minutes in programmes with a preponderance of ads. When ads are replaced to support addressable campaigns, Nielsen could not separate the addressable from the non-addressable spots in their national ratings system, since they do not measure spots. This is creating the need for second-by-second spot measurement.

Pressure for change built steadily during the 2010s, driven by multiple factors: concerns about the ability of panel-based measurement solutions to deal adequately with increasing fragmentation and the growth of streaming services; commercial concerns about the high prices commanded by the dominant measurement provider; and a growing awareness that the proliferation of data sets from numerous sources could support new approaches to measurement.

However, the ability of the US marketplace to coordinate efforts and manage a transition to a new measurement system has historically been limited by the lack of a Joint Industry Group or Committee for the TV market. For most of the 2010s, the development of new measurement solutions was driven primarily by individual vendors, with direction from their clients, along with various multi-party initiatives, standards, and recommendations from the Coalition for Innovative Media Measurement (CIMM) set up to support new approaches, working closely and collaboratively with industry groups such as the 4As, the ANA, the VAB, the IAB, the Advertising Research Foundation, and the Media Rating Council.

With limited coordination, a range of new approaches emerged, brought to market by very different vendors, with different business models, differing levels of coverage, and access to very different datasets. By the end of the 2010s, there was very little sign of the industry coalescing around a single new approach, leading to a continued reliance on Nielsen for linear and time-shifted ratings, increasingly augmented with data from other platforms.

Each major TV network group had created its own proprietary approach to providing cross-media measurement for both content and ads (such as NBCU's CFlight), and each had developed its own method of combining Nielsen data for linear and time-shifted viewing with VOD and addressable data from MVPD partners and proprietary data from streaming services and aggregators. These approaches were not created to be comparable and there was limited transparency about methodologies.

However, there has been a growing desire to collaborate. OpenAP, founded in 2017 by the major TV networks, is the best illustration of this aspiration, focused on developing cross-screen targeting and measurement capabilities that operate across multiple publishers.

The 2020s – accelerating the transition to a new multi-currency marketplace

The pandemic and the shelter-in-place policies implemented across the USA during 2020, indirectly accelerated the ongoing transition to the new multi-currency marketplace. Like many other markets, TV viewing in the US spiked, as consumers spent more time at home. However, the pandemic created measurement challenges for panel providers. At the onset of the pandemic, Nielsen suspended in-person maintenance of its television panel and modified other procedures, which impacted the way that panellist households were recruited, installed, and maintained. As a result, between February 2020 and February 2021, Nielsen lost a reported 20% of its panel sample, with successive decreases each month, resulting in reports of declining total TV viewing and reach, impacting both linear and streaming services.

In late December 2021, Nielsen acknowledged that these problems had caused them to undercount TV audiences for a period of around 16 months, due to an internal error that had led to out-of-home (OOH) viewing for broadband-only homes being excluded from national TV audience estimates. OOH viewing is a portion of viewing for nearly all TV programmes, but the error had a disproportionate impact on live sports, news, and tent-pole events. As a result, billions of impressions were taken out of the 2021/2022 Upfronts, and all four quarters of 2021, reducing the supply of TV ad inventory and distorting the perception of TV's overall health in 2021, with the VAB claiming that reprocessing led to further undercounting across some consumer groups, especially 18–34 year olds in BBO households[4]. In September 2021, the MRC suspended its accreditation of Nielsen's local and national TV ratings services.

In some respects, the MRC suspension changed very little. Billions of dollars of TV ad spend is still being transacted, predominantly using Nielsen ratings, and the major networks are still investing in measurement solutions provided by the so-called alt-measurement providers. However, the MRC's decision was widely seen as a symbolic moment, opening the door for faster adoption of new currencies and a more rapid transition to a multi-currency marketplace.

Today, senior executives at the major US networks generally emphasise three key benefits of this transition, arguing that competition between different measurement providers should result in lower prices, better products and faster innovation in the measurement space, and more choice or optionality, with buyers and sellers able to select a currency (or currencies) that best meets their needs, rather than "being dictated to by an incumbent measurement provider".

Put simply, there is a widespread belief that: "*Competition will help innovation. Competition not only drives costs down but helps ultimately drive better measurement.*[5]"

In late 2021, the industry announced a flurry of new measurement initiatives in 2021/22, intended to support and accelerate the transition, notably including the VAB's Measurement Innovation Task Force (in September 2021) and the new NBCU Measurement Innovation Forum (in October 2021). Other networks announced measurement and currency partnerships with different vendors, designed to support more holistic measurement of linear and streaming inventory.

It is worth noting at this point that the methodologies and offerings of the various measurement vendors competing for these partnerships vary significantly. Nielsen remains the only provider with a large-scale measurement panel and is now working to combine the panel with TV data provided from various sources

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[4] Source: VAB, Five Fast Facts: Behind Billions of Lost TV Impressions (October 2021).

[5] David Campanelli, EVP, Chief Investment Officer, Horizon Media, speaking at NBCUniversal's ONE23.

as part of its Nielsen ONE solution, set to launch in time for the 2024 upfronts. Nielsen's existing panel-based solution for national TV had its MRC accreditation restored in April 2023, in time for the 2023 upfronts, but is set to be replaced in 2024.

Other providers have built their solutions predominantly around licensed TV datasets, using various modelling approaches and calibration panels to develop viewing estimates for the entire market. However, no provider has deterministic, census-level data for the entire market, resulting in wide variations between different providers.

2023 – a transitional year

Despite this encouraging progress, it became clear throughout 2022 that more work would be required to support the multi-currency transition, to plug measurement gaps and to stabilise and standardise measurement offerings and to support more comprehensive measurement, by establishing common assets and inputs. Put simply, the industry has concluded that competition will deliver important benefits, but standardisation of critical inputs and clarity about requirements will help to support a successful transition.

The new US JIC, announced in January 2023, is perhaps the most important initiative, supported by the major networks and agency groups. Run out of OpenAP, the JIC's first announced priority is to consolidate, standardise and provide certified measurement vendors with access to streaming data from the participating networks, to support better measurement of viewing to their services and to address significant variations and claimed undercounting of these impressions by measurement vendors.

However, the JIC has an ambitious agenda that goes beyond streaming, looking to establish detailed baseline requirements for cross-platform video currencies:

"*The sustainability of the premium video advertising model depends on an ecosystem for measurement that is transparent, independent, inclusive, and accurately reflects the way all people consume premium video content today – across multiple screens, connections, and devices. By coming together to establish this JIC, we can collaborate and accelerate the efforts to implement a new multi-currency future that fosters more competition, inclusivity and innovation and will ultimately better serve advertisers, agencies, and consumers.[6]*"

The JIC's baseline guiding principles for currencies cover a wide range of requirements, including:

- The use of big data to support deduplicated cross-platform nationally representative viewership projections, inclusive of diverse segments and leveraging the streaming and ad exposure data provided by the JIC.

- Full transparency into all data sets and support for data clean rooms and collaboration technologies, along with compliance with US privacy regulations, disclosing consumer consent across all data sets.

- Identity spines built on scaled third-party identity sources, accessible to both buyers and sellers, and allow providers to source and deliver measurement data at the ID level.

- Content quality metrics attached to reach metrics for reach/frequency measurement and the ability to separately report out by inventory type (premium video versus UGC or social).

- Technology stacks that can support inbound and outbound data transfers, to facilitate planning, billing and transaction reporting, trafficking and pacing, and measurement system integrations across media buyers, agencies, and publishers.

Importantly, the JIC is relatively new and has embarked on an ambitious program that will take time to execute. However, it is already clear that the published

requirements will have significant implications for currency-grade measurement offerings that will take time to bed down.

In addition to the JIC, other important industry initiatives include: the VAB and ANA plans for a new common industry calibration panel: the growing take-up of the ARF's DASH study as a de facto industry standard for universe assumptions; and the ongoing development of the ANA's Cross Media Measurement initiative.

CIMM is also leading a range of important projects designed to support the industry, including:

- The Smart(er) TV Data Initiative, focused on enhancing the value of data from smart TVs as a measurement input.

- The development of an action plan for improving local TV measurement, which remains hugely challenging.

- Support for an industry roadmap and action plan for clean rooms and data collaboration.

Next steps

Taken together, these initiatives represent the most significant programme of collaborative work ever undertaken in the US measurement marketplace and look set to support significant improvements in the years ahead. However, they will take time to deliver and consolidate.

In the meantime, new challenges and opportunities are emerging. Privacy laws and regulations are widely expected to have a significant impact on a measurement industry relying more and more on big data. New metrics like attention and quality are gaining traction. Smaller streamers, largely locked out of the JIC at present, are taking steps to support better measurement of their impressions.

Perhaps most importantly, there is a growing debate between TV companies, digital businesses, agencies, and advertisers about how best to define quality, why it matters, and how to incorporate it into measurement solutions and agency planning and buying systems.

Taken together, these developments look set to transform the industry during the next few years, delivering significant improvements and innovations into the marketplace, although short term uncertainties are likely to be significant.

About CIMM

CIMM's is a non-partisan, pan-industry coalition of companies from across the media and advertising ecosystem, focused on cultivating and supporting innovations, improvements and best practices in measurement, currency development, new metrics and data collaboration. CIMM delivers an extensive programme of research and facilitates various forums to support industry dialogue and collaboration.

Membership of CIMM is open to companies and trade bodies in the US and internationally. To find out more about joining CIMM, please contact Jon Watts: jon.watts@cimm-us.org.

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[6] Joint statement from: Jeff Shell, CEO of NBCUniversal; Bob Bakish, CEO of Paramount; Wade Davis, CEO of TelevisaUnivision; and David Zaslav, President and CEO, Warner Bros. Discovery (March 2023).

AUDIENCE MEASUREMENT VENDORS

An overview of the total TV measurement services offered by some of the world's leading market research and measurement companies. The reason for including these in this publication, apart from their advanced services, expertise and innovations in measuring media audiences, is that they often work as trusted partners with joint industry committees (JICs) where they provide important services to national TAM systems.

In the following pages, leading vendors describe their current services and approaches to TV/video measurement.

How GfK unlocks value from audience measurement and provides valuable insights to the players in the media ecosystem who need to understand TV and media consumption patterns? GfK firmly believes that one size does not fit all, which is why multiple solutions have been developed.

Approach to hybrid video measurement

The aim of our measurement is to follow the user on all devices for a 360-degree understanding of viewing consumption. To deliver it, we have developed a modular approach that measures viewing behaviour across all devices reported in our panels. All these measurements are combined in our central One Media Platform and enriched with census data and/or third-party data (see Fig. 10).

TV viewing data collected via audio tracking is melded with digital data from an in-home router meter and/ or on-device measurement and with online video census data. In an ideal scenario, this happens in a single-source panel, but we have also developed fusion approaches to deliver integrated total video ratings based on a hybrid panel approach.

To include the growing longtail, we have developed methods to generate viewing insights based on qualified census data and/or return path data to enrich our panels.

With a hybrid solution we can guarantee a high-quality currency measurement for total video ratings for each market adjusted to the local conditions and needs.

Tailored approaches

We use different approaches ranging from the traditional - where one research agency wins the tender and collects, processes and reports all the data - to the scenario where an agency provides some of the data; and finally, to where we only connect the data. GfK has extensive experience across the entire spectrum (see Fig. 11).

Key to all our contracts are common principles: transparency of methodology, flexibility in approach and thinking, and adaptability to create a solution

FIGURE 10: HYBRID PANEL APPROACH

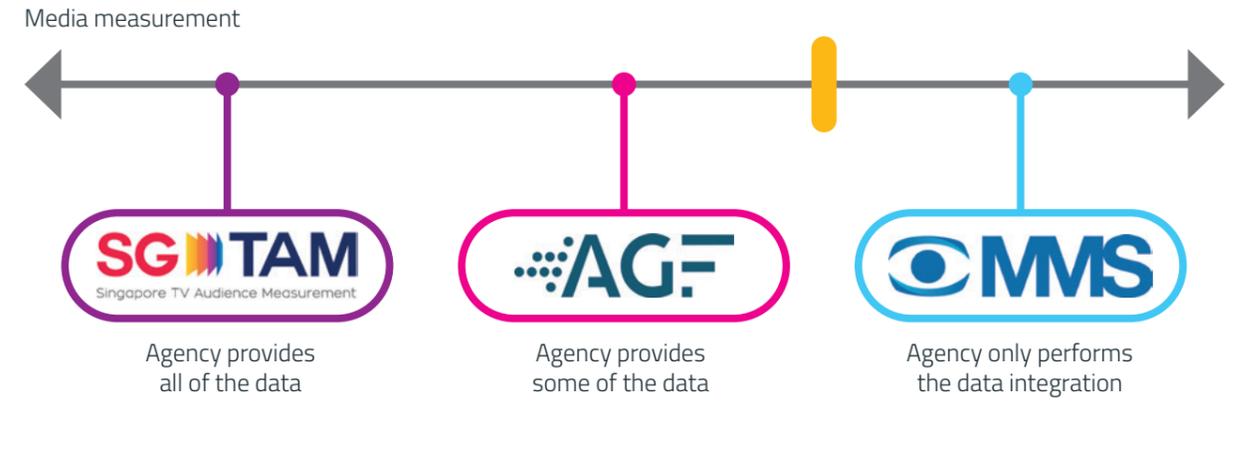Panel(s)+ census = total video measurement

Linear TV
Audio meter

Online video
Router/on device

Online video census/RPD
First-/third-party data
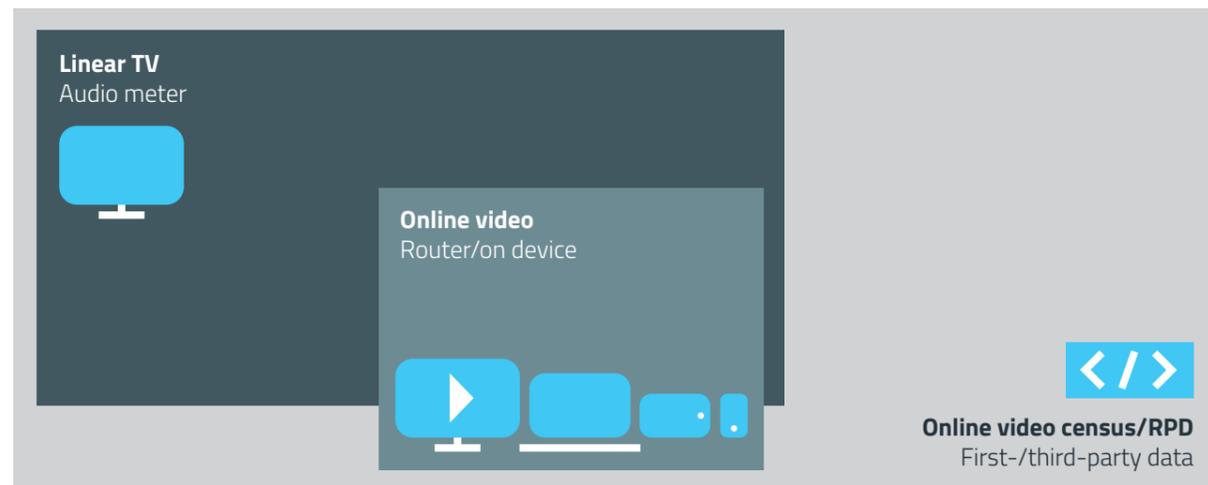
FIGURE 11: ONE SIZE DOESN'T FIT ALL

Media measurement

Agency provides all of the data

Agency provides some of the data

Agency only performs the data integration

that works for each unique market. This increasingly means collaboration with other research agencies, data providers or other third parties, an approach that continues to work well for us.

Data integration

In instances where we do not own any of the data, there are a number of agencies collaborating in a data integration approach. We start with a TV measurement panel that covers content and ads, then we add census measurement that covers all devices and big screens. The next ingredient is an online panel with cross-device measurement that helps us to profile the census data. And finally, we integrate all these data assets with the help of advanced data science techniques.

We use this approach, for example, in our data integration project in Sweden, where one research agency provides the data assets and GfK performs the data integration work to deliver an integrated streaming and linear audience reporting. During the first step, we expand the online panel with virtual panellists from census data applying data science solutions, and in the second stage, we fuse the linear and the virtual panel data. The outcome is the integrated total video ratings dataset that includes both linear and streaming usage.

In instances where we provide part of the data, for example in Germany, we work with third parties who provide the online panel to complement our cross-

media panel, as well as the German JIC AGF and online platforms. In this scenario, one of our key skills comes into play - data integration - to capture the digital viewing of TV and video.

Bringing a fully integrated audience measurement solution to Singapore

GfK has run a full audience measurement solution in Singapore - SG-TAM - for Singapore's Infocomm Media Development Authority (IMDA) since 2016. Acting as a total video currency, it combines live TV viewing, catch-up TV and streaming TV content to deliver fully integrated, deduplicated video ratings. Read the full description of our work in Singapore on page 78.

Beyond video…Total media measurement

We aim for a comprehensive total media measurement where we track analogue and digital consumption of viewing, listening and reading – online and offline. Then we add consumers' interests, product use, advertising attention and more for all domains measured through our consumer panels and surveys. To this we add the holy grail of actual sales data, directly linking media consumption with purchase behaviour. This approach supports the growth of media businesses by providing a stable transition of the existing media currencies into a smart, relevant and trusted cross-media solution.

We combine panel and census measurement using our Audience Ascription Modelling (AAM). AAM provides a dataset for analysis and reporting large enough to cover any digital use by integrating census and panel data – but importantly, it also retains the special value of each dataset in the final output. That is, keeping both the in-depth information about the profiles from the panel as well as having reliable information on the longtail by closing any panel measurement gaps through using the huge numbers of the census measurement. This data can then flow back into programmatic systems to optimise targeting processes.

In other words, we put digital first and combine our state-of-the-art media audience measurement with an open platform ready for integration with external data sources and systems.

Conclusion

We want to embrace differences in approaches while recognising commonality and have a collaborative mindset to give the users of the data what they want - a single, integrated system for planning and buying - and one that can handle programmatic data. At GfK, this is our key focus for audience measurement, and we have built technology platforms to deliver not only integrated video and digital data, but which are also prepared for all media data - TV, radio, online, print media – to come together.

Overview

Ipsos is the world's third largest market research company. We are present in 90 countries, employing more than 18,000 professionals with turnover of over €2 billion in 2022.

We start from the principle that, in a world of rapid change, the need for reliable people-based information has never been greater. In the media measurement area, as in our many specialisations, we endeavour to use the best of science, technology and know-how to help our clients meet their goals while applying the principles of security, simplicity, speed and substance to everything we do.

We currently offer TV audience measurement insights and services in over 50 countries, mainly using non-metered approaches, as well as providing establishment surveys in several countries including the UK and Italy.

Approach to hybrid audience measurement

The key technology we offer to broadcasters is MediaCell (see Fig. 12). MediaCell is a mobile application uploaded onto devices possessed by individuals to understand their media consumption habits.

Our application enables passive detection of exposure to any audio signal. The system can work in one (or any) of three ways:

- Via **audio matching**, which takes an ambient characteristic or 'digital fingerprint' and matches it to an audio library of some kind (e.g. the broadcast output of radio or television stations being measured). The resulting markings are picked up via the MediaCell application to determine the precise time and date that the person carrying the device is exposed to the broadcast.

- Via **encoding.** This involves the introduction of an audio watermark into the content transmission chain (either by hardware or software) of a broadcaster. This places an echo-based, inaudible code or watermark directly into the broadcast stream. These resulting markings are picked up via the MediaCell app to determine the precise time and date that the person carrying the device is exposed to the broadcast. Encoding also enables platform detection, for example whether someone is watching television on a TV set or online and can report on time-shifting for up to two years.

- Via **software metering**: The open design approach of MediaCell allows for the integration of third-party applications and data. For example, in all the markets and panels that we operate (both for video & audio), we have incorporated RealityMine's on-device meter into the MediaCell app, enabling tracking of online behaviour of applications and URLs as well as video and audio consumption on the device (both smartphone and additional tablets, PCs and Laptops).
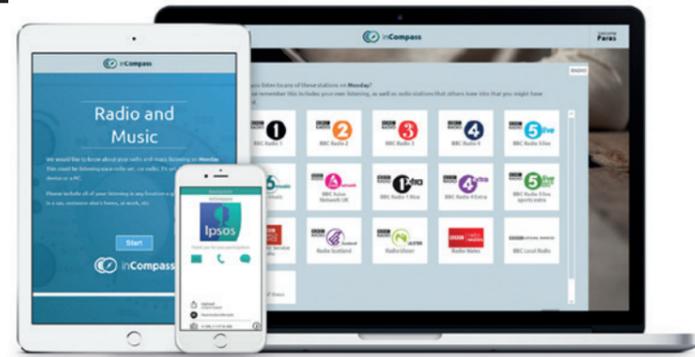
Panels at the heart

Panellists sit at the heart of our measurement approach. We generally find panel participation to be consistently long-term, regardless of project and country. On top of our participation guidelines and rules, exit surveys confirm that panel members tend to forget MediaCell is on their phone; in other words, participation is genuinely passive. This guarantees a richness of longitudinal data where a population's listening habits can be tracked over time, through technological, political and market change. It enables us to make sense and calibrate other data sources to ensure the insights are realistic and representative of society. It is also economically efficient as participation tends to be long term.

OOH viewing

In 2021, Ipsos was appointed by the NMO in the Netherlands to provide MediaCell for the TV, radio and digital currency measurements (see full description on page 68). Ipsos have developed a passive location flag that allows the viewing sessions to be reported as in-home and OOH. This is currently being rolled out across all our MediaCell enabled panels. The NMO is planning to evaluate this approach to understand how location-based consumption can be used as an extension of a traditional household TAM panel to measure out of home TV consumption and boost viewing.

Extending to cross-media measurement

The MediaCell technology is also at the core of our digital measurement deployments. In 2019, Ipsos were appointed by UKOM to deliver online audience measurement in the UK. This digital device focused project, branded Ipsos Iris, is future proofing the measurement of online content in the UK.

The service was enhanced in 2023, to include video data across the internet offering a deeper understanding of online video consumption, including the types of videos being watched, the devices they are being watched on, and the demographics of the viewers. In 2023, Ipsos Iris was also launched in Australia and endorsed by the IAB. The service will incorporate OzTam data to deliver CTV audiences integrated with digital currency data for Smartphones, tablets, and computers.

Additionally, Ipsos has been running for close to a decade a cross-media measurement system for the BBC to report on audiences to a total of 250 broadcast (television & radio) and the nearly a thousand streaming and digital properties, all media where the BBC enjoy significant audience share (see Fig. 13).

At present, the panel – known as Compass – continues to provide a passive, single-source, cross-platform, and multi-media audience reporting system for the BBC. The panel size is 3000 individuals. Panel members are asked to upload an app combining both MediaCell audio metering (TV and radio) and Reality Mine's passive on-device meter onto all the devices used to access content.

During the COVID-19 crisis, we see additional value from the approach: not only are people recruited using virus-resistant methods (CATI and online), but the panel

FIGURE 12: MEDIACELL: TOTAL MEASUREMENT BY DESIGN

FIGURE 13: BBC COMPASS: A PIONEERING APPROACH TO CROSS-PLATFORM MEASUREMENT

- **A single source, multi device passive panel** (3 000; UK nat-rep)

- **MediaCell+** a single app that integrates mediaCell audio metering and RM passive on-device tracking

- **250** TV and radio stations measured

- Reality Mine on **other devices**

- Supplemented by a **mobile-first media diary**

is also managed remotely, and data capture is entirely passive ensuring there are no gaps in measurement.

Data output includes minute-by-minute audiences, covering viewing and listening both in the home and outside, as well as all viewing to catch-up and streaming services.

Understanding out-of-home viewing consumption

With the rise of CTV and streaming services, TV is no longer consumed solely at home. MediaCell's audio encoding, watermarking technology and software metering enable clients to understand how audiences consume video content anytime, anywhere and on any device.

Unlocking audiences by providing the complete picture

In a segmented and highly competitive market going beyond linear broadcast, being one step ahead is crucial. To make informed decisions, industry stakeholders need to look at the complete picture to fully monetise on the opportunities that the expanded ecosystem offers.

An integrated approach to measurement (see Fig. 14)

To unlock audiences, content providers need to have an integrated approach, going beyond linear broadcast as we pointed out in our Future Viewing Experience report.

The market for streaming services is extremely competitive, and the growth of AVOD, SVOD and Broadcaster VOD (BVOD) means significant overlap in usage. Data from Norway (see Fig. 15), one of the most advanced audience measurement markets, shows this high degree of overlap in weekly usage. The battle for revenue, be it subscription, advertising or both, is fierce and competitive intelligence will be vital for successful strategies to grow and retain users. Cross-platform audience measurement enables improved content monetisation for content owners, content distributors

FIGURE 14: AUDIENCES UNLOCKED

FIGURE 15: THE FUTURE VIEWING EXPERIENCE

The market for streaming services is extremely competitive

Norway – Weekly reach 20 – 39 years, all screens
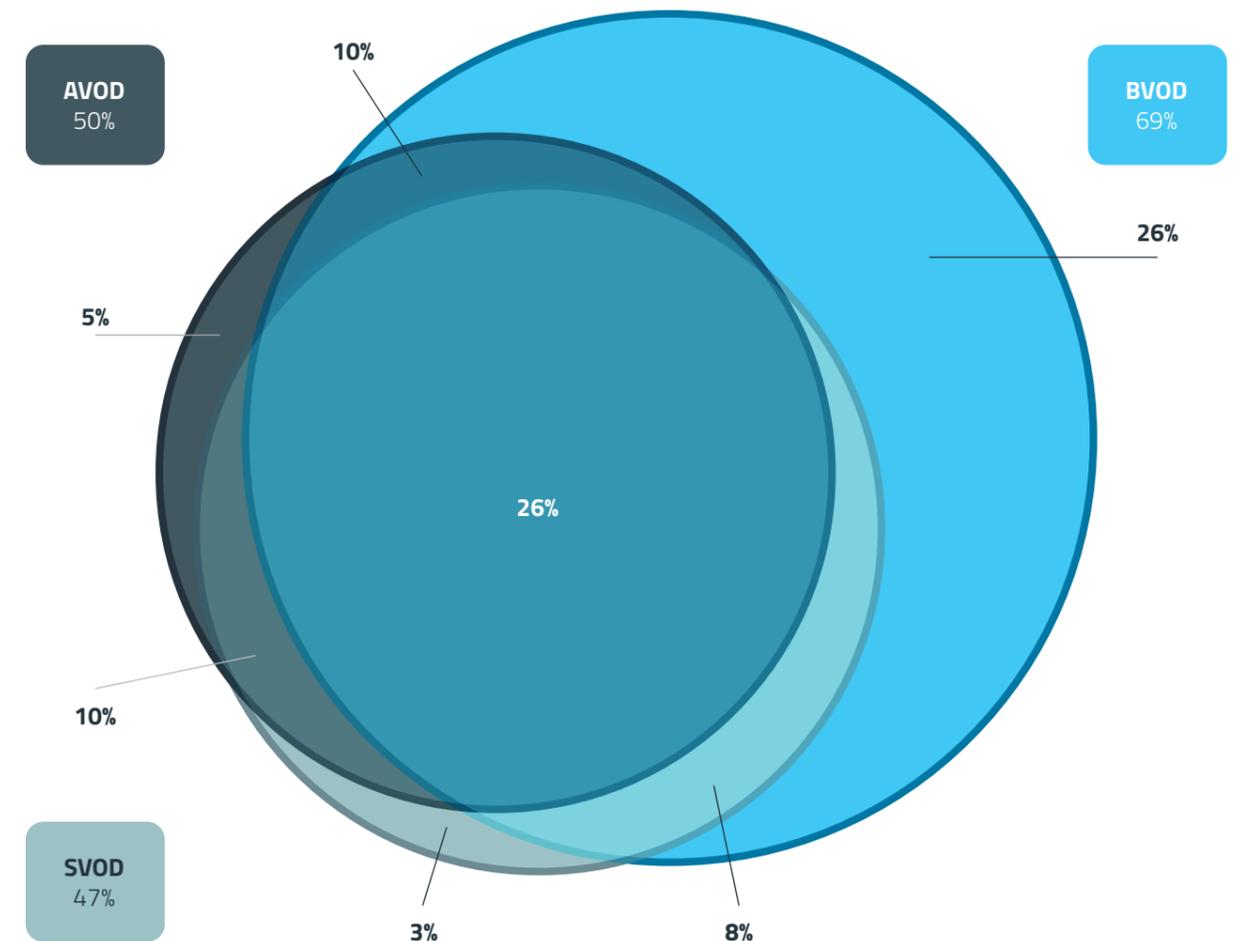
and the advertising supply side with data to fuel the growth and retention of audiences and subscribers, optimise customer experience, reduce churn, and identify new prospects. It gives media agencies and advertisers the data they need to engage with their audience and optimise their investments. Access to these insights delivers a real competitive advantage. Through our cross-media audience measurement solutions, Kantar Media already gives those valuable insights to clients in 15 markets.

Our new Cross-Platform View™ solution meets content owners' and distributors' needs for context and comparability across viewing forms. It provides a full picture of the viewing landscape through a single dashboard, updated daily and reports relative numbers across all viewing, including linear and on-demand broadcast, native VOD and video-sharing platforms viewing across all devices.

To us, measurement is not about devices but people. Panels are the ground truth, as their data is the cornerstone of audience measurement. Panels are the

starting point for integration, and they contextualise first-party data. They enable the required data exchange and data ingestion to capture advertising exposures in detail across audience segments, providing vital information to navigate these new advertising opportunities.

Our technology captures viewing across all screens

To fully unlock audiences, Kantar Media uses various technologies and tools.

Our Kantar Media People Meter 7 measures all TV set activity. Easy to install, this device has a personalised user interface offering an intuitive experience to panellists. The meter employs the latest content detection technologies to generate accurate, real-time reporting to the second. Integrated with the modern home setup, Kantar Media People Meter 7, delivers a complete picture of TV set viewing, whether linear or on-demand broadcast services. The solution follows Kantar Media's integrated approach, going beyond the traditional TV and detecting all household equipment, including gaming consoles. The solution has been deployed in eight markets.

Whilst people meters remain vital to measure who is watching what, with more content and advertising delivered directly via IP, the role of the router meter becomes even more important. Our Kantar Media Focal Meter and its bespoke processing backend is increasingly the global standard for measuring all relevant IP traffic within the home: all screens (smartphones, tablets, laptops) and all IP-sourced content and advertising served to the TV set.

Kantar Media Focal Meter determines in conjunction with People Meter 7 the source of delivery to the TV set and identifies content in tagged data. It then determines what the content is (via i33's audio matching and watermarking) and, critically, who – and what type – of people are watching. The meter automatically detects new devices being used in the home and can identify out-of-home usage in census data. Kantar Media deploys or uses 23,000 Focal Meters, our streaming meter, in Brazil, Canada, Chile, Finland, Israel, Italy,

Netherlands, Norway, Spain, Switzerland, Turkey, and the UK.

Ingesting data at scale

Providing the complete picture can be enhanced by ingesting data with panel-grounded measurement systems. These enable enhanced precision as well as an efficient measurement of long-tail viewing, niche audiences and addressable advertising. To deliver a comprehensive measurement of audiences, data at scale combines data ingestion through meter solutions with another key element: world-class data science.

Through this process, data is not only extracted, but it has also transformed and becomes meaningful. Kantar Media works closely with a range of partners to turn this meaningful data into impactful data. This is what we have achieved with Barb in the UK, and in many other markets, like Norway for which we combined panel data with census data, enabling us to deliver a robust solution to cover online video streaming with greater precision. Panel-based measurement provides insights required by the markets, delivering a real view of how audiences use different types of content and devices and therefore enabling a daily report on the consolidated viewing across all screens.

Another example of data turned into impact would be our work for the NMO in the Netherlands, with different online data providers to cover both online video as web and app usage.

In Canada, Kantar Media has worked with Numeris to ingest operator data to enhance panel measurement and enrich Numeris' measurement system.

Kantar Media partners with industry players in 62 markets around the world to deliver a highly accurate measurement of audiences to generate a tradable currency and drive strategic decision-making.

Unlocking audiences requires the bigger picture. Solutions are needed to measure and report all viewing across platforms on all devices, delivering a single, people-based measure. By combining scale and versatility with the resources present in our keyring, we are crafting open future-ready solutions equipping the media ecosystem with the right information to make data-based decisions.

Solutions to optimise campaign investments

Kantar Media is leading the way in the deployment of deduplicated, user-centric reach and frequency across platforms and services. Leveraging on our experience in data harmonisation, validation and cross-media reach, our Campaign Audience Validation™ solution enabling in-flight optimisation and campaign evaluation across all viewing forms is already available in Brazil and Colombia.

Cross-media measurement

Consumers have endless options for watching their favourite video content on multiple devices. This has fundamentally changed how media owners sell their advertising. Advertisers and marketers require independent, cross-platform, deduplicated measurement to build plans that drive outcomes and optimise for ROI. As a leader in measurement for decades, and the currency provider in many markets worldwide today, Nielsen understands this acutely.

That is why Nielsen is delivering a new era of clarity by transforming audience measurement to drive more comparable and comprehensive metrics across all platforms, services and video types. Nielsen's transformative cross-media solutions, Nielsen ONE, will evolve the current metrics that underpin the video advertising ecosystem.

We deliver unprecedented visibility into total video consumption regardless of platform or device. Media buyers and sellers benefit from a better understanding of unique audiences, true reach and frequency, and better management of advertising waste.

In our view, an effective measurement system must be built on these principles:

- **Quality:** Measurement must be resilient against ecosystem changes. Utilising people-powered panels and big data, along with our proprietary identity system, we provide cross-media measurement solutions based on common metrics and a privacy-centric methodology. It is crucial that big data be corrected for bias and calibrated against a human-based truth set by independent measurement providers.

- **Coverage:** The industry needs comprehensive coverage across platforms, services and devices. Nielsen's coverage of TV and streaming, in combination with our strategic relationships with the biggest platforms and providers, give us a competitive edge. Our direct integrations with walled gardens, access to first-party client data and partnerships with strategic data providers enable measurement of reach and frequency of exclusive audiences and deduplicate them across platforms.

- **Cross-Platform:** As the linear television and digital worlds collide, the need for harmonised, comparable metrics is growing. Common and equivalent metrics are needed for audiences, advertising outcomes, and content. Enhancing the granularity of TV measurement, automatically capturing all digital impressions, and building an

Identity graph for measurement are all critical components of cross-media measurement and delivering the holy grail of true deduplication of audiences across platforms.

Nielsen continually strives to deliver unbiased and comprehensive measurement across the globe, and our combination of individual-level panel insights and big data is critical to meet the needs of the industry. Below is a detailed view of the individual products that make cross-media measurement a reality.

TV ratings

Nielsen's TV Ratings provide insights into the programs, episodes and ads being viewed on linear TV. Our proprietary metering technology can identify what is being watched— whether it is live, a recorded programme via DVR, or video on demand - as well as who is watching, delivering accurate person-level measurement. Media buyers use Nielsen TV measurement to determine where and when to best place advertising, sponsorships and marketing dollars, while media sellers use these audience insights to determine who's watching their programmes to properly price ad inventory and make critical programming decisions.

Content measurement

Streaming Platform Ratings

The Nielsen Streaming Meter placed in TV Ratings panelists' homes captures the streaming happening within the home on television glass through smart TVs, connected devices and video gaming consoles, as well as via their personal digital devices, like smartphones, tablets, and computers. Nielsen's Streaming Platform Ratings provides syndicated total usage of streaming, broken down by app or app category, along with demos to highlight macro trends and share shifts by streaming service.

Streaming Content Ratings

Nielsen Streaming Content Ratings provide insights on the programmes and episodes streamed through the TV glass and on personal digital devices. This includes time spent and audience demographic profiles by

program and episode, as well as how series released on streaming services impact overall TV viewing behaviour. These learnings help content creators and studios to make informed content development and distribution decisions; streaming platforms can drive acquisition and marketing strategies; and media buyers and sellers can effectively monetise ad inventory.

Digital Content Ratings

Viewing of non-linear content on PC, mobile and CTV devices can be provided through Nielsen's Digital Content Ratings (DCR) service. DCR is also a census-based SDK approach leveraging the Identity System; however, digital panel data is also used to measure digital content for sites and apps that do not yet have an SDK implemented. DCR has been endorsed by online JICs, and is operating in Italy, Australia, New Zealand, Japan and Thailand.

Nielsen ONE Content: Deduplicated cross-media metrics for programmes

The industry will gain unprecedented access to cross-media deduplicated metrics for programmes across linear TV, connected TV, desktop, and mobile at the sub-minute level. With Nielsen ONE Content, clients will gain a clearer picture of who saw their programme/ episode and how long they watched. Clients can understand their cross-media reach, incremental reach by platform, and gain insight into how their content performed for age/gender and advanced audience targets.

Ad measurement

Digital ad measurement

Nielsen provides measurement of dynamic ads across PC, mobile and connected TV platforms via its Digital Ad Ratings (DAR) service. DAR is a census-based measurement of ad campaigns and leverages Nielsen's proprietary Identity System for big data demographics. DAR is available in many European markets, incl. UK, Germany, France, Italy, Spain, Belgium, Netherlands, Greece, Poland, Czech Republic, Hungary and Norway and more than 30 markets worldwide.
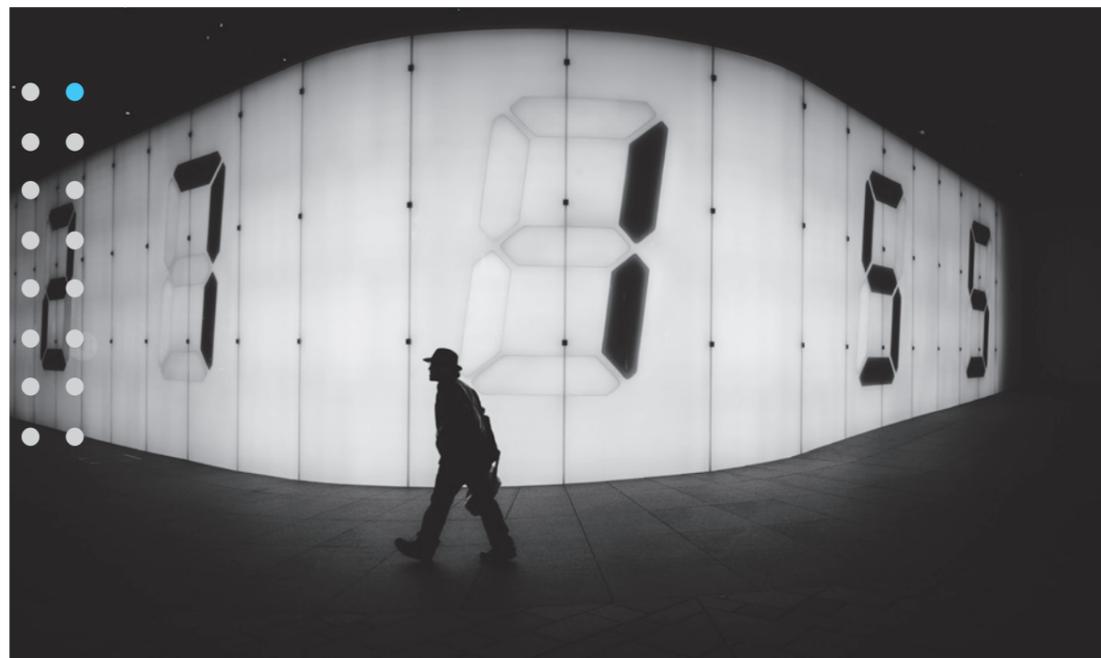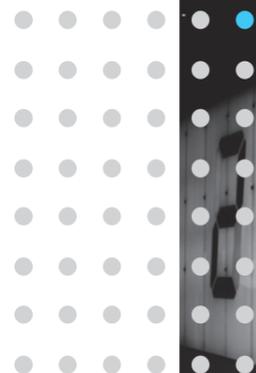
Total Ad Ratings

Total Ad Ratings provides independent and actionable audience measurement for advertising campaigns across TV and digital platforms (PC and mobile). It couples Digital Ad Ratings data with trusted Nielsen TV Ratings data to deliver accurate reporting of deduplicated audiences across TV and digital, with resilient measurement of Facebook, Google and the Open Web.

Nielsen ONE Ads: Deduplicated cross-media metrics for campaigns

For the first time in measurement, advertisers, brands and publishers will be able to understand cross-media deduplicated metrics for ad campaigns across linear TV, connected TV, desktop, and mobile. With Nielsen ONE Ads, clients can understand their cross-media reach, incremental reach by platform, as well as gain insight into how their campaign performed for age/gender and advanced audience targets.

How Nielsen delivers cross-media measurement

Nielsen ONE combines big data with the ability to validate that data using our person-level panel. Nielsen has established people-based panels throughout the globe where we offer linear TV and streaming measurement. By leveraging direct publisher integrations, digital walled gardens, measurement of networks and streaming services, and advanced data science, we enable true comparability across all platforms and the ability to deduplicate audiences. As a result, we offer the industry the clearest picture of exactly who is watching what.

To do so, Nielsen ONE is built on the foundation of panels, big data, and identity to help make its audience measurement products more interoperable, flexible and scalable.

Panels

Through direct metering of panellists, we capture real-world viewing to deliver depth of data and ensure representation of all audiences across ethnicity, income and geography. Our panels also serve as a foundational truth set for big data calibration and identity validation.

Identity and big data integrations

Nielsen Identity System maps devices to people for open web reporting across computer and mobile. The Nielsen Identity graph, composed of Nielsen panel data and first-party and third-party identity data, is used to correct for biases, calibrate against our panel and deduplicate audiences across computer and mobile platforms for person-level measurement.

The Nielsen ONE solution is also intended to be rolled out in other markets, but implementation and timeline will vary as Nielsen navigates regional market conditions and aligns with strategic stakeholders. Nielsen ONE Ads released in the US market in January 2023, with Nielsen ONE Content Alpha set to release in the US in Q2 of 2023.

INTERNATIONAL INITIATIVES

Examples of transnational industry collaborations and initiatives which aim to raise the bar in cross-media/total video audience measurement.

CFLIGHT – MEASURING TV ADVERTISING ACROSS LINEAR AND DIGITAL

CFlight is an approach developed by the TV industry to deliver unified campaign measurement within the premium video ecosystem across screens and platforms. CFlight was first designed and introduced as a concept by NBCUniversal in the US in 2018, on the occasion of the Winter Olympics, and adopted by Sky Media in the UK the year after. Both TV companies are owned by Comcast and thus share certain data and technologies. While CFlight's offering is localised by market, the principles and core elements of the methodology remain consistent and ensures that a global framework exists.

Today, CFlight has particularly gained traction in Europe. In the UK, Sky Media adapted the CFlight model to the UK marketplace and invited ITV and Channel 4 to join forces in a UK broadcaster collaboration, which launched in 2021. In Germany, Seven.One Media and Sky Germany have both adopted CFlight, but they do not collaborate around a common solution. It is attracting interest as a concept in additional markets, and may already be used by individual sales houses in additional markets.

CFlight is based around a set of principles that allow comparison between linear and online contacts/impressions at the most comprehensive level possible (e.g. only counting digital impressions with 100% view-through rate, 100% audio-on, 100% viewability and using TV currency data for linear impressions). Implementation will differ depending on the availability of data in markets as well as the data assets available to individual broadcasters. The CFlight principles prescribe that it should leverage existing industry measurement for linear (to not destabilise the trading currency) while utilising the best available measurement for digital/VOD. Independent audits of methodology and data outputs are also a key element to ensure trust and transparency.

In the following pages, there are description of how CFlight is implemented and used in Germany and the UK.

CFlight UK: the country's first unified TV advertising metric

While first adopted by Sky Media, CFlight launched as a joint initiative between Sky Media, ITV Media and 4 Sales in mid-2021, and rolled out to market throughout 2022.

In the UK, CFlight is a post-campaign online evaluation tool, which produces campaign reports that provide deduplicated total reach and frequency across linear TV and BVOD. It is founded upon Barb's linear TV audience figures and BVOD impressions from broadcaster ad servers.

At launch, CFlight only reported on adult audiences (aged 16-99), but the possibility to run reports for the main TV buying audiences is expected in Q3 2023. Many other functionality enhancements are expected over the next years. For more information, consult the CFlight website: www.cflight.co.uk.

CFlight Germany

In Germany, CFlight is used by Sat 1/Seven.One Media and Sky Germany.

Whereas the focus in the UK version of CFlight is to offer an industry solution for total TV campaign reporting, Sat 1/Seven.One Media uses CFlight as a 'brand' or 'quality seal' for the media quality of digital impressions. Advertisers can buy and are only invoiced for campaign exposures that are completed, in target, and that meet the CFlight criteria. It, therefore, offers a 'based-on-CFlight' ad product that bundles its linear and digital inventory, guaranteeing CFlight criteria (100% view-through rate for digital impressions, 100% audio-on, 100% viewability and TV currency data for linear impressions).

INTERVIEW WITH ANDREW MCINTOSH, PROJECT MANAGER, CFLIGHT UK

April 2023

egta: *Why does CFlight sit outside Barb?*

Andrew McIntosh (AM): CFlight is currently managed by Thinkbox. This was a pragmatic decision taken in late 2019, when the need to develop CFlight was urgent but Barb, which have non-commercial stakeholders (BBC) was fully committed on other projects and didn't have the capacity to take it on and push it as a top priority.

egta: *Is integration or further collaboration with Barb on the cards (to make CFlight part of the gold standard currency), or will CFlight remain a separate system?*

AM: Neither has been decided, but the topic is being reviewed by the CFlight team, shareholder broadcasters and Barb over the next six months. It can certainly be said that CFlight's berth at Thinkbox was only ever intended to be a temporary solution.

egta: *How have advertisers and agencies responded to CFlight's introduction? To what extent has it been a success?*

AM: The response has been a warm welcome. Everyone appreciates that CFlight is up and running and that the broadcasters prioritised it. However, it is only a limited success so far, because it doesn't yet report on any audiences other than adults (aged 16-99). We worked closely with agencies (through the IPA[7]) during CFlight's development and trial periods, so it contains aspects that were requested, and improvements that were made, as a result of asking future users for their views and feedback.

egta: *As advertisers can now plan campaigns across linear and BVOD, is there any evidence that CFlight has helped move ad budgets to TV? Has CFlight sparked an acceleration in BVOD ad investment vs linear TV?*

AM: Proving shifts in budgets is almost impossible as I am sure you know; it is a perennial teaser. In my opinion (and distant agency memory), even the planners and buyers themselves don't know what reasons have contributed to them moving money up or down on certain budget lines, and by how much. Unless we were to hear a planner/buyer declare what they're thinking as they amend a budget, we won't know. That said, I am of the view that the promise alone of CFlight, before it was even launched, helped boost BVOD budgets. Then the reality of it has also helped. No medium has ever shrunk as a result of better measurement. The opposite is always true in the long term: better measurement gives advertisers and agencies confidence in their advertising investment decisions. In my view linear and BVOD budgets will both benefit from CFlight, but

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7 The Institute of Practitioners in Advertising.

because other factors are also at play, I don't believe we'll be able to isolate CFlight's role unfortunately. We'll keep a close watch in 2024 and beyond though, when traded audiences are being measured, to see if the approaching launch in 2023, and traded audiences coming into play from 2024, seem to be making a tangible difference.

egta: *When CFlight launched in 2022, users were only able to plan on one broad target - adults. What were the main hurdles to offer greater flexibility and functionality from its launch, and how will the system be enhanced in the near future?*

AM: The main hurdles to CFlight's initial development were the scale of the project, the different systems in use at the broadcasters, and the complexity of some of the architecture and processing. The reason linear and BVOD deduplicated campaign reach has not been done at this scale before is that it is so incredibly complex.

The reporting of traded audiences on CFlight is due to be launched in Q4 2023. It is like the initial development, all over again!

**egta:** *Which additional developments are in scope for 2023/24?*

AM: We expect to begin to report frequency distribution bands in Q3 2023. Beyond that, it's a bit too early to say, but we have a series of functionality upgrades in mind over the next three years.

> *CFlight is the answer to what has been the perennial AV industry question: what exactly does BVOD add to a linear TV campaign? Whereas previously we had to use predictive planning tools modelled on claimed behaviour, we now have a statistically robust, post-campaign data source that has the backing of the broadcasters, as well as BARB, to shore up its validity. Although in its early stages, it heralds a new dawn in cross-media measurement and bodes well for the future.*

––– **Jon Manning**
AV Strategy Director, **Starcom Worldwide**

> *To be able to see the total delivered reach of AV campaigns gives us further proof points about the efficacy of holistic TV and BVOD planning, and will help to demonstrate the importance of considering the total TV landscape when we plan and buy campaigns..*

––– **Emily Smith**
Media Director, AV, **Wavemaker**
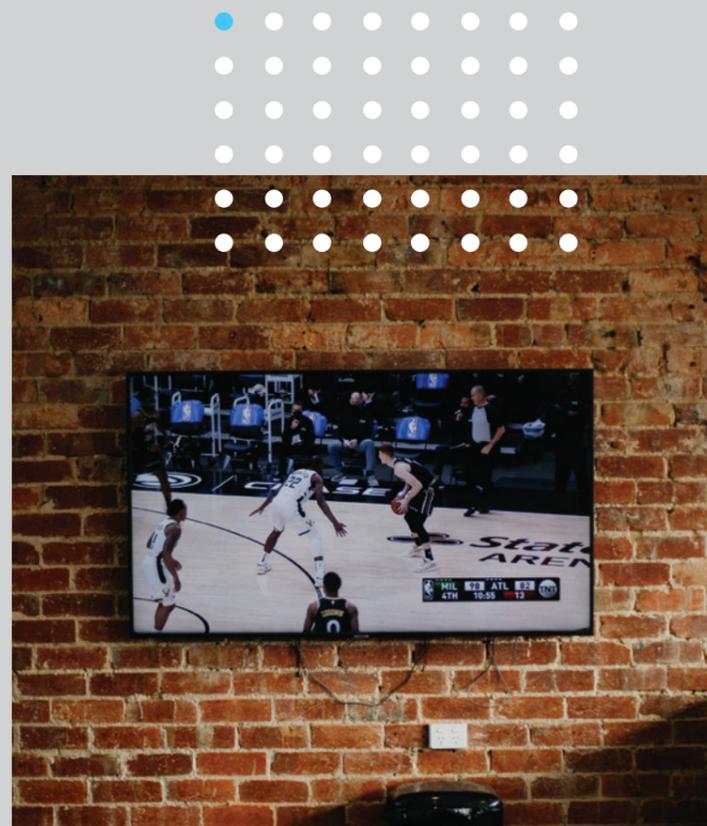
INTERVIEW WITH
RICARDO RUBIO GONZÁLEZ, HEAD OF MARKET INTELLIGENCE, SEVEN.ONE ENTERTAINMENT GROUP GMBH

April 2023

egta: *In Germany, CFlight has not been adopted as a multi-broadcaster measurement solution as in the UK. Instead, Seven.One Media uses elements of CFlight for its total video ad product. Can you explain how you use CFlight and on which principles and data sources it is based?*

RG: CFlight in Germany is not a measurement solution. Instead, we use the CFlight principles to qualify linear and digital video inventory and to bundle them into one total video offering based on CFlight. This means the client will get the same media quality on our digital channels as on linear TV.

Those principles guarantee that we preserve the established JIC definition for linear impressions. In spite of the lack of industry standards for digital impressions, we aim for the highest possible definitions to make them comparable to linear impressions.

We use different data sources and validation approaches: for linear, we rely on our JIC solution from AGF, for digital we use Nielsen DAR for audience validation, Moat for media quality, and our ad server data for delivered impressions. The total reach of cross-media campaigns based on CFlight is then calculated taking into account overlaps between the employed channels. We make the entire calculation transparent for our clients to comply with the principle of transparency.

egta: *Broadly speaking, what are the main differences and similarities with CFlight UK?*

RG: What the UK approach and our local approach have in common is that they are guided by the CFlight principles which, in turn, guarantee the comparability of the different media channels and preserve the high standards clients are familiar with from TV and expect from cross-media solutions. CFlight is an open approach - any market participant can build advertising products based on the CFlight principles.

Unlike in the UK, where CFlight is an industry measurement approach, we have made the decision to position CFlight as a quality label for video inventory and are developing total video advertising products based on the CFlight quality promise.

egta: *Why did Seven.One Media develop/adopt CFlight? What are the key advantages?*

RG: An increasingly fragmented media landscape without uniform conventions regarding media quality makes it challenging for advertisers and agencies to compare different media offers, and re-aggregate fragmented reach.

By bringing back together TV & digital contacts in one convergent media offer (we call it "Total Video based on CFlight"), we prepare our future path to remain one of the top reach suppliers for our clients, even if linear TV usage will partly transform into digital viewership.

By using the CFlight metric to ensure comparable TV and digital contacts, we aim to highlight the key unique selling points with regard to the media quality of our linear and digital broadcaster inventory, and thus differentiate ourselves from digital giants and long-tail video publishers, for example.

Ultimately, our goal is to defend classic TV budgets and to reduce accelerated ad spend on other digital players.

egta: *How has the buy-side responded to Total Video based on CFlight?*

RG: The market has welcomed our initiative to proactively shape the future of our media landscape with innovative product approaches, like Total Video based on CFlight.

The list of bookings show that Total Video based on CFlight is not built for a specific group of customers, but

is widely applied. Since 2021, both international/direct clients and agencies have been using it.

As Total Video based on CFlight is a well-established additional booking option next to classic TV for many clients, we intend to bring Total Video based on CFlight to the large agency networks even more strongly.

egta: *Could CFlight potentially become a multi-broadcaster measurement system in Germany?*

RG: Absolutely, we assume that the future cross-media measurement solution that AGF is developing will be able to map the CFlight criteria.

egta: *Does Seven.One Media plan to further develop its use of CFlight in 2023/24?*

RG: Alongside programmatic TV and addressable TV, Total Video based on CFlight is an essential part of our long-term advanced TV strategy. We will continuously develop our convergent CFlight product in the next years based on market needs and strategic beliefs.

World Federation of Advertisers

THE WFA CROSS-MEDIA MEASUREMENT INITIATIVE: ADVERTISERS IN THE DRIVER'S SEAT

Advertisers have long been asking for the ability to measure viewers of their advertising across screens, platforms and channels with a single measurement – something that existing measurement solutions have not yet been able to fulfil entirely. In 2019, a group of global advertisers, through the World Federation of Advertisers (WFA), embarked on a process to make true cross-media measurement a reality, and to create a global framework and trigger the development of systems that measure audiences across all screen types and content suppliers. The process was initiated with a series of cross-industry assessment calls and working group sessions around four key topics: standards and currencies, technical infrastructure, and privacy and governance.

In 2020, the WFA published an Industry Framework for Cross-Media Measurement[8] that formulates global principles, which are split between advertisers' requirements (also known as the 'North Star') and industry requirements to enable cross-media measurement (see Fig. 16).

While this framework formulates global principles, advertisers acknowledge that the implementation will require local adaptation to various degrees depending on market differences and preference. To that end, two pilot markets were announced as testing grounds: in

the UK, a cross-media measurement solution is being built under the management of the local advertising body, ISBA, and has been named "Project Origin". In the US, a project is led by the Association of National Advertisers (ANA). Both associations are making progress and expect to launch full cross-media minimal viable products (MVPs) covering all forms of video and display advertising in 2024.

The Halo Framework

The solutions under construction in the UK and US are based on a technical proposal, which was subject to an industry peer review during the summer of 2020. Designed by data engineers from the global platforms, a blueprint was developed which proposed a solution based on Virtual IDs (VID) to deduplicate ad impression data in a privacy-safe way. Since 2021, this concept has become part of the WFA's Halo Framework, under which a multi-stakeholder consortium has designed a set of technologies and software components to enable local markets to use various data assets and made available to the industry through open-source software codes/Halo APIs[9].

The **Halo Framework** is based on a hybrid measurement approach using a single-source panel as the 'source of truth' to calibrate the much larger samples of ad impression data. At the heart of the framework sits a Virtual ID (VID) model, which maps existing user identifiers, profiles, and other impression data to new, common virtual person IDs. The VID model is being 'trained' by the panel through a probabilistic modelling process. The Halo Framework is not a centralised measurement service, but intended to be employed by relevant local market services. The initial objective of Halo is to provide reach and frequency measurement reports, but to later incorporate outcomes measurement components.

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8 WFA: Establishing principles for a new approach to Cross-Media Measurement - An Industry Framework, 2020

9 https://wfanet.org/leadership/cross-media-measurement & WFA: The Halo Cross-Media Measurement Framework, 2023

FIGURE 16: THE WFA INDUSTRY FRAMEWORK FOR CROSS-MEDIA MEASUREMENT

Global principles

Advertiser needs ('North Star')

Full lifecycle measurement
Planning/Reporting/Optimisation

Continuous
Tagless, always-on data capture

Comprehensive
TV & digital (but not limited to video)

Full-funnel
Ouputs & outcomes measurement

Industry requirements (Advertiser supported)

Privacy-safe
Respect for consumer & no risk of re-identification

Fair & objective metrics
Neutral service with metrics for comparability

Trust & transparency
Enshrined through regular audits

Advertising & content
Measuring ads and editorial context/content

Local adaptation

Project Origin: UK's advertiser-led cross-media measurement solution

INTERVIEW WITH **JOE LEWIS, RESEARCH DIRECTOR FOR PROJECT ORIGIN, ISBA**

egta: *How did Project Origin start, and where is it on its roadmap? And when do you expect that it will be in use with real data?*

Joe Lewis (JL): Origin is in year three of its build and development.

Advertiser and market demand identified the need for a cross-media measurement platform in 2018. The UK trade association for brand owners, the Incorporated Society of British Advertisers (ISBA) was elected to drive the solution on behalf of its members and for advertisers at large. Origin is the UK manifestation of the World Federation of Advertisers' (WFA) framework for global cross-media measurement which satisfies both advertiser and industry requirements.

In 2021, the Origin concept was tested using an independent single source Ipsos panel with RSMB building and evaluating real models. RSMB gave the Origin methodology the green light at the back end of 2021 in terms of the proof of concept (POC).

2022 saw the work commence on the building of the Origin infrastructure by Accenture and the building of the household panel and VID model by Kantar.

In 2023, the programme enters its trial launch phase, with alpha and beta trials commencing. The alpha trial will use real campaign data from five major advertisers: BT, L'Oréal, PepsiCo, Procter & Gamble and Unilever across linear TV, digital video and digital display. More advertisers and media owners will be incorporated for the beta trial phase commencing in 2024. Following

the beta trial phase, pilot trials will be conducted with the launch of the Origin Minimum Viable Product (MVP) at the back end of 2024.

It is, therefore, expected that real data will be surfaced from the system beginning in the second half of 2023 and continuing into 2024.

egta: *In very broad terms, what does the solution that you are designing look like? What are the main measurement components and how will different media sources be joined and processed?*

JL: Origin is built along the main technical design as specified as part of the WFA Halo programme. It utilises a high-quality single-source panel that measures campaign exposures across TV, online video and digital display. The panel is a calibration panel in principle, identifying correlations between people and devices as well as correlations between media channel, contexts and types of media device. These correlations take the form of a virtual person model, that transcribes relationships against a database of the population of the UK by each media channel. This model is then transposed to first-party data and impressions collected by each media publisher or platform, who then allocate individual impressions to a virtual person in the UK populace. Virtual people, related to campaigns are then combined from each media channel, via a privacy safe exchange, to count reach and frequency for a campaign delivery. These reach and frequency reports can then be analysed across a multitude of definitions and quality criteria to understand true performance delivery.

egta: *How is the data intended to be used. For example, will it be used for planning, reporting, trading, and who will be able to access the data?*

JL: Origin data will be used for the reporting of deduplicated cross-media reach and frequency data in the first instance.

Following the launch of the Origin MVP: first, more granular reporting data will follow with core reporting and premium reporting modules, and second, counterfactual, tactical and campaign planning modules will follow.

Origin is not being built to deliver trading data but will have the ability to incorporate JIC currency or other industry-approved third-party data within its framework.

Origin data will be accessible to advertisers, agencies and publishers.

egta: *Does the solution being built include third-party verification/audit of input and output data quality? If so, how is this verified and by whom?*

JL: It is imperative that the Origin solution has strict checks and balances throughout the process. This will include the use of third-party audit services of both the input and output data. PWC are working with Origin in defining an audit framework, not only of the input data, but additionally the technical infrastructure employed by Origin. Independent third parties will be commissioned by both publishers and Origin to ensure all data adheres to expected efficacy and quality requirements.

egta: *Is it going to measure cross-media reach and frequency data only, or will there also be elements of outcomes measurement?*

JL: At launch, the MVP will measure deduplicated cross-media reach and frequency data.

As part of the programme vision and roadmap, Origin will also provide as soon as is feasible, the capability to support the measurement of business outcomes. This is one of the WFA 'North Star' principles in their global cross-media measurement framework.

egta: *Is the cross-media solution designed to account for difference between media metrics? For example, how will issues such as duration, context, brand safety, etc. be dealt with?*

JL: Origin is designed to allow for the comparability of different media metrics, and MRC minimum standards will also be included.

The platform will enable the surfacing and interrogation of data as requested by the market and so will allow comparability of metrics such as all impressions, duration, sound on/off, completed views, for example.

The system is designed to allow publishers to send context signals allowing for the assessment of environment and, therefore, provide the capability to assess brand-safety incorporated with standard industry tools.

egta: *What does the funding structure look like?*

JL: In the build and development phase, funding is provided by all stakeholders – the digital platforms, other media owners, advertisers and the agency holding groups.

When launched, it is envisaged that the programme will be majority funded by the buy side driven by a voluntary opt-out fractional advertiser contribution (FAC) at 0.1% of gross media billings across all media, excluding search and direct mail.

egta: *Currently, the UK broadcasting community is still not fully on board. What are the main pressure points and how close are you to finding common ground?*

JL: Origin engages with the broadcaster community on a regular basis. We believe that active broadcaster engagement with Origin would benefit them, their advertiser customers and the industry at large.

egta: *If you don't manage to use Barb currency data in Project Origin, what alternatives are you looking at for TV data?*

JL: The intention will be to report Barb data subject to access.

egta's position

egta has been following the WFA initiative since it was announced with the clear objective to make sure that the broadcasters' voice is heard, and to insist that TV impressions are fairly compared to other media in any cross-media measurement solution developed in local markets. For video comparison, this would for example mean that duration weighting and content/context are considered, and that input data is independently audited.

egta encourages broadcasters to be positive and open-minded as the industry moves towards cross-media/total-video measurement solutions. In relation to the WFA initiative, it is understandable that there are obstacles to overcome, many of which related to trust, financing and control in a cross-industry setting, but this is new territory for everyone involved and perhaps inevitable. egta is determined to protect the interests of broadcasters and to uphold the value and standards of the solutions developed by national JICs, but it also believes that the TV industry stands more to gain by getting involved to secure a fair representation of TV data in the developed solution rather than watching from the side-line.

Apart from the UK and US, where pioneering solutions based on the Halo Framework are in development, there are industry discussions happening in several other countries on how to design and introduce cross-media and cross-platform measurement, including in Canada, Germany, the Netherlands and Sweden. These will each have their own national 'flavour' and egta hopes that the proposed solutions will be based upon the same high quality, transparency and accountability that has guided TV measurement for decades.

THE AUDIENCE MEASUREMENT ACTIVITIES OF EGTA

It is a key priority for egta to follow all new audience measurement initiatives, to update our membership on important developments, and to 'build bridges' with the industry.

In addition to publications such as this one, audience measurement is an important topic on the agendas of egta's annual Market Intelligence Meetings (MIM), and we have organised several stand-alone conferences and events dedicated solely to the topic, both in-person and online. One aim is to provide a stage where broadcasters, JICs and research agencies can update each other on their plans, learn from each other, and work to develop hybrid solutions. Another aim is to foster discussion and dialogue between the still-siloed measurement approaches and practices of different industry groups; e.g. between TV and digital, between markets, between metrics and business outcomes, and between industry partners from both buy and sell side.

egta views international partnerships as critical to stay informed and to create an important dialogue across the industry. We are in close contact with fellow TV and premium video trade bodies through the Global TV Group, and we have been in communication with the World Federation of Advertisers (WFA) on the advertisers' side and the European Association of Communications Agencies (eaca) for advertising agencies, and many other industry experts, including CIMM, ARF, ASI, MRC to name a few. egta will continue to follow and take part in audience measurement initiatives, to build bridges and to promote robust and future-looking audience measurement solutions for the TV industry and beyond.

The Media Freedom Act: Audience measurement and public policy meets

The European Commission published a proposal for a European Media Freedom Act in September 2022, to regulate, amongst many other topics, audience measurement for the first time. This is a departure from the traditional industry-led, self-regulatory approach. The legislative proposal aims to enhance the transparency and objectivity of audience measurement systems as they have an impact on media advertising revenues, in particular online media. There is a strong political will to adopt the proposal before the European elections in May 2024.

The rules, as drafted in 2023, focus on principles and methodologies. These principles include transparency, impartiality, inclusion, proportionality, non-discrimination and verifiability while accurate, detailed, comprehensive, intelligible and up-to-date information on the methodology used must be shared with publishers and advertisers.

egta and its members support a future regulation which would ensure that online platforms, such as video-sharing platforms (VSPs) or social media adhere to the highest standards of audience measurement. We have agreed on a common position with members with supporting amendments to the legal text. We are liaising with our media and advertising partners to ensure that policy makers are aware of the business implications any future legislation would have. We are doing this through regular outreach to members of the European Parliament, meetings with representatives of the member states and the European Commission.

We strongly believe that trust will not be facilitated by a rigid piece of legislation that is bound to be outdated by ever-evolving industry developments. The EMFA and its provisions on audience measurement should not go beyond what has been foreseen in the proposal, i.e. principles and information on measurement methodologies when these are not transparent to start with.
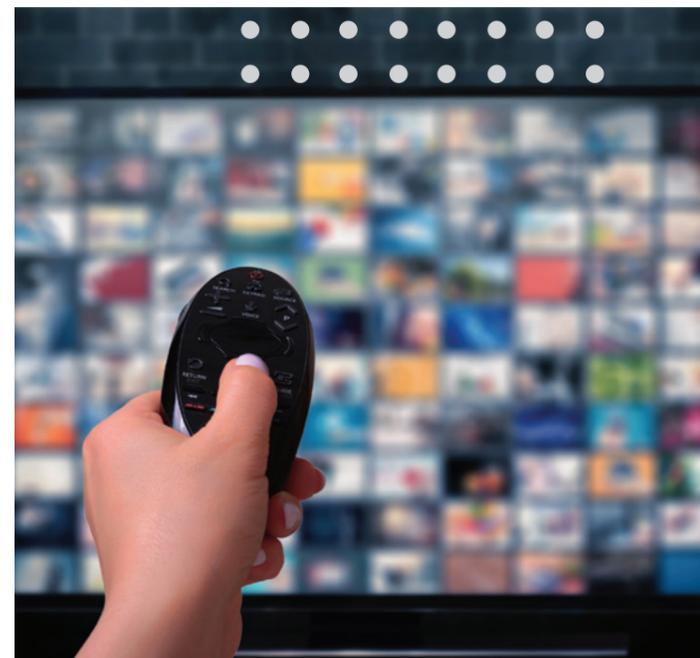
The egta TV Charter: Responsible and transparent ad measurement in the total video ecosystem

In October 2019, egta launched its TV Charter, which outlines broadcasters' commitments to raising the bar for the whole industry. It defines a set of simple principles that aims to raise the bar with regards to measurability, data transparency and accountability and defines measurement standards for the entire TV industry. It serves as a reminder that TV's premium environment – both on-air and online – already meets advertisers' legitimate demands for brand safety, transparency and access to verified data.

The TV Charter was adopted by a vast majority of egta's member sales houses across almost 50 countries, as well as by notable industry trade bodies such as Screenforce (DE, AT, CH, FI, NL), Thinkbox (UK), ThinkTV (AU/CA) and the VAB (US), which comprise the Global TV Group. The ultimate goal set forward by egta and The Global TV Group is to build a solid foundation for the TV industry to move forward in unison – evolving audience measurement, setting the highest standards allowing for comparability on a global level and building bridges with industry stakeholders in an increasingly digital, multi-screen and cross-platform advertising landscape.

egta.

THE EGTA TV CHARTER

on TV companies' commitment towards the responsible and transparent measurement of advertising in the Total Video ecosystem.

WHAT IS A **VIEW** TO **ADVERTISING**?

A view - whether on linear TV and on TV companies' online properties - is a view. TV companies, in their dealings (negotiations, planning, reporting and billing) with advertisers and their agency, will only apply the notion of a view to:

Premium content seen in a brand-safe environment over which TV companies have **full control** and for which they take **full responsibility** as publishers

Content that is seen at **normal speed**

With the **sound on**

Full screen or **fully viewable**

To a **minimum completion rate of 75%** - with the objective of quickly reaching 100% (*once the practical and technological challenges of such a precise measurement are solved*)

CONSISTENT APPROACH TO **MEASUREMENT**

TV companies commit to a **continued** and **consistent approach to measurement**:

They will apply the **quality and transparency** of TV measurement to their online properties

They are and will always be **clear and transparent about the origin of the data used** (panel, census, set-top box at household level, etc.)

They are willing to be **independently measured**

They are willing to be **audited**

They will strive for solutions that allow for **cross-platform measurement and comparisons**

ACKNOWLEDGMENTS

ABOUT EGTA

egta is the global trade body for marketers of advertising solutions across multiple screens and audio platforms. The association aims to help its members transform, grow and diversify their business, i.e. the monetisation of TV and radio content across their linear and online portfolios.

Currently, egta network counts 170+ members in 40+ markets in Europe and beyond.

Together, egta's TV members represent 75%+ of the European television advertising market, whilst egta radio members collect 50% of radio advertising revenues in countries where they are active.

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