CASBAA Television Research

TV Audience Measurement:
Is Japan Falling Behind, And Why?

A Research Study for CASBAA by
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EXECUTIVE SUMMARY

"Is Japan Falling Behind, and Why?" looks at current practice across 27 Television Audience Measurement (TAM) systems in 23 countries. Commissioned by CASBAA, the purpose of the report has been to compare what is happening in Japan with a wide range of other national markets in the Asia Pacific Rim and other parts of the world.

Television Audience Measurement (TAM) research has played a vital role since the earliest years of commercial TV in providing advertisers with estimates of how many viewers see their commercials. TV airtime sales departments finance investment and development of TV programming by selling advertising to advertisers/media buyers, and the monies they receive depend on the audiences for their spots. Today, television advertising is a major income stream, with global estimated spend of around $220 billion in 2012, and Japan being the third largest player at $24 billion, or c.11% share of the total.

Because of the importance of audiences, TAM research has an absolutely vital role to play in realizing the potential of advertising income and financing growth for national television markets round the world. Today, almost all TAM research is based on the peoplemeter, which has emerged over the last 25 years as the de facto international standard for measuring TV audiences. The power of the peoplemeter lies in its ability to provide minute-by-minute measurement of TV viewing in the home 24 hours a day for 365 days of the year by means of meters attached to each TV set and remote controls to record viewer presence. Vital too for advertisers is the speed of delivery, usually the day after for the overnight results, although some systems have even played with live ratings.

For airtime trading purposes, an important issue concerns the fair and equal treatment of different television services. This is essential so that all those engaged in the commercial television industry – the **television stations** selling the **advertising**, the advertisers purchasing the advertising and the **media buyers** normally acting on behalf of the advertisers to negotiate airtime deals with airtime sales units of the television stations – are able to share a common, objective and highly accurate and therefore dependable trading "currency".

That was and remains the potential of peoplemeter measurement. However, the realization of the potential depends entirely on how the TAM operations have been established and especially on whether the same rules apply to all. The way markets have evolved this is not always the case, and this can be a particular concern to multichannel pay-TV platforms, which are a relatively recent development in most countries during the last 15-20 years.

"Is Japan Falling Behind, and Why?" looks at current practice across 27 Television Audience Measurement (TAM) systems in 23 countries. Commissioned by CASBAA, the purpose of the report has been to compare what is happening in Japan with about 20 other national markets in the Asia Pacific Rim and other parts of the world.

Concerns over unequal treatment are now a special focus for CASBAA, which has asked for a comparison of current TAM practice in Japan, where the incumbent terrestrial broadcasters are measured by one system which supplies detailed minute-by-minute measurement for every day of the year, while the multichannel sector is measured by another system that delivers two-week batches of data down to the 5–minute level six times a year.

The simple conclusion of this review is that the **TAM system in Japan has fallen behind those used in most of the rest of the world**. This review engages in a detailed comparison of key features of a modern audience measurement system, and finds that the present Japanese system **has not been adapted for the evolution of the global television industry; it possesses major shortcomings and is highly biased in its treatment of different players in the market**. In doing so, it runs contrary to explicit international guidelines devised by the leading global advisory body.

Japanese companies, which spend almost $24 billion on television advertising annually, suffer from the lack of comparable information. They – and their advertising agencies – need neutral, comprehensive, timely information in order to efficiently allocate their ad budgets, and the current system does not provide it. The shortcomings in the Japanese audience measurement system also disadvantage the companies which generate mainstream, innovative and "niche" content offerings broadcast through Japan's pay-TV networks. Many of these companies are also Japanese – two thirds of Japan's pay-TV channels are created by Japanese broadcasters and content suppliers. Foreign content suppliers which make up the remaining one-third suffer, too – they find Japan to be a much more difficult market to introduce new content, as advertising revenue does not flow efficiently in the absence of high-quality audience data.

In reaching its conclusions about the current Japanese audience measurement practices, the present review of international TAM practice has focused on issues that may relate to biases in the way data are measured or barriers in the way they can be accessed. Inspection of the information at hand suggests that the current issue in Japan has less to do with measurement accuracy than the failure to create a comprehensive measurement system that embraces and integrates terrestrial and multichannel TV audience measurement, as is the case in almost every other country in the world.

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This review has identified six key items that set Japan apart from every other country covered in the review.

ITEM 1

The TAM service operator, Video Research, is owned and represented on its board by domestic TV and advertising agency groups. This raises significant governance concerns over its handling of the interests of external parties, i.e. pay-TV channel providers that are unaffiliated with the major terrestrial broadcasters.

ITEM 2

The Terrestrial TV TAM service operated by Video Research appears remarkably backward for the world's third largest TV advertising market. All other national TAM services employing peoplemeters use them on their own, whereas the Terrestrial TV service employs peoplemeters for covering just about 58% of the national population and fills in the remainder with setmeters or diaries. This makes national measures and comparisons problematic.

ITEM 3

Although Video Research collects Establishment Survey data for terrestrial TV, pay-TV and broadcast satellite TV, it does not project its pay-TV panel data to the relevant pay-TV universe estimates. Unlike any other system in the world, users of the pay-TV TAM data can only see sample counts and percentages, and have to rely on universe estimates provided separately by pay-TV industry body CAB-J. Furthermore, the pay-TV measurement is restricted to two urban areas that account for at most 50% of the Japanese population. The remainder of the population is not covered.

ITEM 4

Video Research is unique among TAM data suppliers in measuring terrestrial and pay-TV channel audiences on entirely separate panels. Nowhere else have they been isolated in such a way.

ITEM 5

Not only are terrestrial TV and pay-TV channel viewing measured and reported by entirely different surveys, but also they are reported on their own in either survey at a channel level (i.e. in the pay-TV TAM service, individual channel-level viewing data only is available for pay-TV channels, while terrestrial channel viewing is reported only for combined channels). This merely reinforces the isolation of pay-TV channel measurement from the rest.

ITEM 6

The Video Research pay TV panel only measures viewing across 12 weeks of the year. Even if the data are only reported as aggregated totals periodically, the accountability would be improved by continuous measurement throughout the year.

Thus, the comprehensive data and benchmarks reviewed for this study indicate that current TAM practice in Japan appears to fall well short of international guidelines set out in the 1999 Global Auidelines for Television Audience Measurement – GGTAM, especially as concerns core GGTAM principles that cover (1) The meeting of total marketplace needs; (2) Effective industry consultation; (4) Best research practices and (9) Equal access in the interest of fair trading.

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1. INTRODUCTION
Television audience measurement and the aims of the review

Television audience measurement (TAM) research has played a vital role since the earliest years of commercial TV in providing advertisers with estimates of how many viewers saw their commercials.

Television audience measurement (TAM) research has played a vital role since the earliest years of commercial TV in providing advertisers with estimates of how many viewers saw their commercials. Although the TV stations ostensibly sold advertising spots, the actual product that determined the prices they paid was the audience for those advertising spots.

In the early days of commercial television, audience estimates were based on face-to-face interview and/or diary data across representative samples of the population being measured. The degree of detail was heavily influenced by the volume and distribution of advertising spots and associated trading practices. It was, for example very common in Europe up to the mid-eighties for countries either not to allow sales of television airtime or to set such tight restrictions on the volumes sold, that negotiations needed to be made in the autumn of each year for the whole of the following year. Reflecting this, television audience measurement was often simple in the extreme.

Today, that is no longer the case. There now exist many, many more channels than in the past, with most of them taking large volumes of advertising, while global estimated spend on television advertising has grown by more than tenfold in the last 30 years and is now estimated at around $220 billion in 2012.

Parallel with the growth of commercial television markets, the tools for measuring television audiences have evolved a long way. Certain fundamental core principles have stayed the same. In particular, almost all TAM systems employ representative samples, where the data collected from members of the samples are grossed up in order to supply viewing estimates for the total population. Provided the samples are adequately representative and sufficiently large to yield low sampling error, the idea is that they supply acceptably reliable estimates of total audiences, whether for time periods, programmes, commercial breaks, or advertising spots within commercial breaks.

Another constant unchanging feature is that almost, if not quite all, TAM systems are national or cover selected regions within a country.

Other aspects of TAM research have, however, changed massively since the early days. Following the use of face-to-face interviews and diaries, came the setmeter, which monitored tuning to the TV set, and with it the setmeter and diary, by which the TAM system operators could use the setmeters to identify precisely what was being played on each metered TV set and use the diary data to fill in who was watching.

Then came the peoplemeter, which has emerged over the last 25 years as the de facto international standard for measuring TV audiences throughout the world. Its defining features are the ability to provide:

- Simultaneous registration of TV set use and viewer presence in the home by means of meters attached to each measured set, thereby enabling the measurement of viewing to all TV sets in the home
- Continuous 24-hour measurement throughout the year from a long-term panel sample
- Fine detail, usually down to the minute for purposes of processed viewing records (actual meter data may be as short as second by second depending on the technology being employed)
- Objective measurement that does not rely on individual panelist recall of what he/she was watching at what times
- Programme and commercial data through mapping the processed viewing statements of channel tuning and person presence with separately obtained transmission logs
- Rapid data delivery, usually the day after for the overnight results, though some systems have played with live ratings

Quite simply, the introduction of peoplemeter measurement suddenly created the opportunity for all those engaged in the commercial television industry – the **television stations** selling the advertising, the **advertisers** purchasing the advertising and the **media buyers** normally acting on behalf of the advertisers to negotiate airtime deals with airtime sales units of the television stations – to share a common, objective and highly accurate and therefore dependable trading currency.

That was and remains the potential of peoplemeter measurement. But whether the potential is realized depends entirely on how the TAM operations have been established and especially on whether the same rules apply to all.

Historically, the broadcast market was dominated by a small number of players, because of spectrum restraints on analogue terrestrial broadcasts. Therefore, many national TAM operations were initially set up by a limited group of leading players and designed to meet their needs. Modern broadcast markets – including in Japan – have many more players and are much more competitive. As new technologies have developed, with new options for consumers, more participants have entered the market, and the measurement requirements have changed.

The key question is whether the TAM systems are sufficiently adapted to the new market conditions or whether the influence of entrenched forces dictates a conservative and controlling approach that maintains their interests, but does not address the needs of the very large number of companies who use new platforms and new technologies to reach consumers. The TAM system is a vital tool, not only for the television industry, but for companies in many other sectors (e.g. finance, automobile, electronics, other consumer goods) who spend billions on television advertising and have a requirement for strong, comprehensive data to ensure their expenditures are efficient.

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This issue applies especially to multichannel pay-TV platforms, which have been relatively recent developments in most countries during the last 15-20 years. To ensure that the vast number of companies and sectors engaged in TV advertising have access to full information, the TAM systems are required to make serious efforts to ensure full coverage of the newer multichannel systems.

That is the subject of the present report, which focuses on Japan. CASBAA requested a review of the key characteristics of the main TAM service in Japan for measuring terrestrial and multichannel pay-TV audiences, in comparison to a selection of about 20 other national markets in the Asia Pacific Rim and other parts of the world. The review is designed to ascertain how the TAM systems globally have been adapted to meet changing conditions in the TV market, especially as concerns treatment of channels delivered by pay-TV operators and the extent to which the local TAM systems (a) treat these channels and distribution platforms on a fair basis compared with the more established terrestrial broadcasters, and b) cater adequately for the needs of the advertising industry for comprehensive and comparable information about all platforms.

Following on the detailed comparisons and analysis, the conclusion of this review is that the **TAM system in Japan possesses major shortcomings and is highly biased in its treatment of different players in the market**. It does not well serve the many stakeholders on all sides of the advertising market, nor the pay-TV broadcasters themselves – both Japanese and foreign.

In presenting its conclusions, this report has been conceived in the following sequence:
*   Section 2 provides a descriptive framework of TAM peoplemeter systems
*   Section 3 identifies specific aspects of TAM peoplemeter systems that relate to the assessment of how pay-TV platform operators and the channels they carry are measured and reported compared with the incumbent/establishment FTA stations
*   Section 4 supplies a comparative international review of TAM practice in Japan versus other countries
*   Section 5 supplies the conclusions

2. DESCRIPTIVE FRAMEWORK OF TAM PEOPLEMETER SYSTEMS

The peoplemeter possesses unique advantages over other methods in terms of comprehensiveness of measurement within the home, objectivity and speed and frequency of data delivery – advantages that have made it become the de facto methodology, wherever it can be afforded, for measuring television audiences around the world.

The aim of any TAM system is to supply audience data that are representative of the population being measured and can be classified by selected socio-demographic categories. Due to the relatively high costs of collecting the information and the demands in most countries for a common advertising trading currency, there is typically one accepted industry source.

Although two-way communications networks, such as the internet, theoretically permit exact counts of the number of "unique visitors" to different websites, this has not up to now been possible for broadcast television services. At the same time, a significant limitation of such information is the inherent lack of comprehensive information about the identities of the visitors or the ability to group them in designated socio-demographic target groups.

Accordingly, the approach taken by TAM services throughout the world is to collect audience data from a representative sample that can be grossed up to supply viewing estimates for the total defined population on the basis of statistical sampling theory, which can specify the error margin for samples of different size. Assuming the sample to be representative, that is to say, without bias, the basic mathematical principle is that the larger the sample the lower the percentage margin of error within specified probability ranges. Of course, it is impossible to rule out sample bias in any TAM system. Rather, the aim is to keep bias within acceptable limits, in which respect many of the GGTAM guidelines are about limiting wherever possible the potential for bias to enter into the data collection.

As discussed in the introduction, there exists a variety of survey methodologies with which to collect TV viewing data. However, the peoplemeter possesses unique advantages over other methods in terms of comprehensiveness of measurement within the home, objectivity and speed and frequency of data delivery – advantages that have made it become the de facto methodology, wherever it can be afforded, for measuring television audiences around the world.

Whatever the national or other market under consideration, peoplemeter TAM systems possess a common set of design components, which may be sequentially listed as:
• Survey organization
• Survey universe
• Collection of establishment data for deriving universe and population estimates
• Recruitment and maintenance of the panel sample
• Data collection
• Data processing and production
• Data reporting

2.1 SURVEY ORGANIZATION

The fundamental goals of TAM research are to provide the TV industry with both a trading currency for the sale of commercial airtime and a source of programme ratings that can assist schedule construction. The goals are inter-related for commercial broadcast channels in so far as the larger the audience for a specified target demographic group the greater the potential for delivering commercial advertising and sponsorship revenues.

In order to deliver the goal of a common trading currency it is important that all parties accept the source supplying the audience data. This has led to two broad types of survey organization.

One is the Joint Industry Committee or JIC, where all sides of the TV industry – the TV stations (including airtime sales), advertisers and media buyers - get together to participate in an organization that sets down the TAM survey specifications and appoints a contractor to supply the TAM data required by the industry for a given period. Typically the JIC will set down the terms and conditions for selling the survey data to subscribers to the service and own the data copyright.

The alternative is an Own Service or OS, where a market research company with specialist expertise in TAM research sets up a TAM system, owns the data copyright and holds multiple individual contracts with subscribers to the TAM service.

Between these two extremes there lie many variants and we may identify two distinct kinds, which exist in some countries. Invariably, the main purchasers of the survey data (usually upwards of 75%) are the TV stations. In some countries this has led to MOC (Media Owner Committee) structures, where TV stations collectively determine the survey specifications. And from the OS perspective a distinction needs to be made between independent market research companies and those where ownership is in the hands of the leading domestic media groups, which may include the TV stations, one or more leading advertisers and advertising agency/media buyers. In such cases, we may speak of TRCC (Tripartite Research Company Contract) structures.

Yet, whatever the ownership structure of the TAM service provider, there exist many variations in terms of how decisions are taken and the extent to which wider subscriber interests and concerns are properly or adequately taken care of by supporting technical committee, user and other advisory groups, and working parties.

In summary, the four broad categories we have identified are:

- *JIC (Joint Industry Committee)*: The research companies conducting the fieldwork and processing the TAM viewing data hold a contract with a formal joint industry committee of representatives from the TV stations (including airtime sales houses), media buyers and advertisers, where the advertisers may be signatories to the contract and/or have their interests taken care of by the media buyers who

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represent them. The JIC typically specifies the terms of the contract, which it puts out to tender; supervises the running of the panel; owns the copyright to the data (although there are exceptions); decides the data licensing conditions and terms of access. The concept of JIC also embraces the idea that its members represent the interests of all users, with advertisers and media buyers often being represented by their trade associations. The situation is less clear-cut with respect to media interests, as TV stations rarely possess equivalent trade associations.

- *MOC (Media Owner Committee)*: The research companies conducting the fieldwork and processing the TAM viewing data hold a contract with a single media owner or a group/committee of media owners comprising TV stations, including airtime sales houses. The basic controlling functions of the MOC controlling bodies are similar to those of JIC organizations, although the balance of interests may well differ. A key difference is that within MOC structures media owners (including airtime sales houses) guarantee 100% of the basic funding of the contracted TAM systems, whereas with JIC organizations it is spread across both sides of the advertising industry (i.e. sellers and buyers).

- *TRCC (Tripartite Research Company Contract)*: The research company responsible for supplying TAM data to the market has a tripartite shareholding structure of media companies, advertisers and media buyers, and has a dual set of contracts with (a) clients purchasing the data and (b) sub-contracted research suppliers, who may supply some or much/most of the fieldwork. Depending on how the TRCC is set up, it may operate to a greater extent like a JIC or OS TAM system

- *OS (Own system)*: The research company runs the TAM service as a private commercial venture and signs multiple individual contracts with purchasers of the data, who may also exercise considerable influence on the survey design through their own independent industry committees and other bodies, including working groups

2.2 SURVEY UNIVERSE

The survey universe denotes the total population that is being measured, which may be defined in terms of households and the individuals living in them. The universe is defined at four main levels:
- Geographic scope
- Type of household
- Nationality, citizenship, language and ethnic origin
- Age threshold

Geographic scope: Owing to the national character of nearly all TV markets, almost all TAM surveys are national and cover the entire country within practical limits. The most common exceptions are the exclusion of offshore islands for some countries, or the restriction of survey coverage

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to urban and possibly surrounding areas in the case of very large countries.

Type of household: Nearly all TAM surveys incorporate private households that own one or more TV sets, and exclude non-residential establishments such as hotels, clubs, university halls of residence, military barracks and so on.

Nationality, citizenship, language and ethnic origin: This is a more variable component depending on the linguistic and ethnic diversity of a given territory. As a general rule, TAM surveys will attempt as broad a definition as possible within practicable limits. One other factor that will determine the choice of definition is the existence of official foundation statistics – in particular, census data that determine the size of the universe. In the absence of official population data for a given group, TAM surveys may well exclude it from their samples.

Age threshold: Peoplemeter measurement relies on active viewer registration. In the case of very young children, this may be handled by others who are present as viewers. At the same time, very young children and babies have less awareness/understanding of what they are watching. As a result, many systems set a lower age threshold – 4+ years being the most commonly used – for measured or reported viewing.

2.3 COLLECTION OF ESTABLISHMENT DATA FOR DERIVING UNIVERSE AND POPULATION ESTIMATES

Because all TAM peoplemeter research is based on representative samples, it is necessary to place values on the total size of the survey population and the sub-groups for the purpose of grossing up the sample into population estimates. Some of the data may be gained from national official statistical sources – sex, age, household size and regional break-outs being among the most commonly selected variables. However, the demographic break-outs from official statistical sources will usually not cover all the demographic variables, especially those relating to socio-economic classifications in which users of the TAM data are interested, nor will they provide any information about the reception and equipment variables that make up the TV environment and which are vital to know for purposes of achieving statistically representative samples for measuring TV audiences.

The solution employed by almost every TAM system in the world is to gather additional information about the survey universe beyond what may be obtained from official statistical sources by means of a separate "Establishment Survey" (ES) or from some other multimedia survey. The need for such surveys is underscored by:

- The relatively small size of long-term peoplemeter panel samples due to the high costs involved
- The significantly lower response rates for joining the peoplemeter panel compared with answering an ES interview

Almost all TAM surveys are national and cover the entire country within practical limits.

The one striking exception to this rule is the USA, where the TAM supplier Nielsen relies on a very high quality recruitment survey, where the high response rates allow close estimation of population parameters. Nielsen USA apart, almost all other national TAM systems make use of other sources of establishment data in order to supply population estimates for sampling purposes. The most common practice is for TAM systems to undertake ES's, which serve three main functions:

- Provision of universe and population estimates
- Updating universe and population estimates at regular intervals
- Establishment of population variables associated with variations in viewing
- Provision of a pool of addresses for panel recruitment

Provision of universe and population estimates: The aim of any ES is to provide population estimates for all the main population parameters that (a) may be associated with variations in viewing and (b) are wanted for commercial purposes. As indicated above, this will include all the socio-demographic variables required for airtime sales, but also key reception and equipment variables associated with variations in the number and distribution of TV channels. A distinction is made between:

- *Universe* estimates, which denote population estimates that are held constant over time by means of weighting for measurement and reporting specified variables
- *Population* estimates, which denote population estimates for variables that are not held constant over time and will vary according to changes in the daily reporting samples

Updating universe and population estimates at regular intervals: Because universe values will change over time, almost all TAM systems that employ an ES will undertake one or more waves of their ES during the course of the year. For slow-changing variables such as sex and age it may be judged sufficient to supply annual updates, but more dynamic variables such as distribution platform, digital TV and pay-TV penetration, may require more frequent updates.

Establishment of population variables associated with variations in viewing: The ES is used to a varying extent by different TAM surveys to establish the variables most associated with variations in viewing and which may be used subsequently as panel controls to ensure that the sample delivers representative viewing data. For example, some surveys will include questions about the claimed weight of viewing that may be used as panel controls in order to obtain a representative sample of heavy, medium and light viewers and avoid the potential bias arising from lighter viewers being less likely to agree to join the panel sample. Opinions are divided within the research industry over the use of more subjectively based ES viewing measures to influence what is being measured by the panel sample.

Provision of a pool of addresses for panel recruitment: Besides providing universe and population estimates at regular intervals, the ES is also used by nearly all TAM services to supply a pool of addresses for panel recruitment.

The aim of any ES is to provide population estimates for all the main population parameters that (a) may be associated with variations in viewing and (b) are wanted for commercial purposes.

In order to achieve these functions, the standard procedure is to design a survey questionnaire that may involve face-to-face or telephone interviews, typically using computer assisted methods. Key variables to be taken into consideration in designing a high quality ES include:

- *Sample size*: The bigger the better
- Frequency: Important in conjunction with sample size for deciding the frequency of updating universe estimates for selected variables
- *Sample type*: The ideal being an equal probability sample that enables the collection of a representative profile of the survey population
- *Sample stratification*: Choice of known variables, such as regional variations in population size, which can be used to improve the efficiency of the ES sample
- *Sampling frame*: Use of public information sources such as lists of addresses or postal codes, telephone directories, electoral registers and so on, to assist the achievement of equal probability samples
- *Response rate*: The percentage of the eligible contact sample that answers the ES questionnaire. Response rate definitions will vary depending on the precise fieldwork procedures employed. However defined, the general principle is the higher the response rate the better
- *Fieldwork controls*: Means employed by the ES survey contractor to ensure that the claimed sampling procedures are adhered to and the data are accurate. This may include several consistency checks, where answers to different questions may be matched in order to check the accuracy of data collection

Finally, it should be noted that the ES (or other (e.g. multimedia) survey) is a completely separate survey from the peoplemeter panel even if it is used as a sampling frame for recruiting households on to the TAM panel. As such, it is relatively common practice in JIC countries, and may sometimes be found in OS countries, to employ a different contractor to conduct the ES from the main panel survey contractor.

2.4 RECRUITMENT AND MAINTENANCE OF THE PANEL SAMPLE

Many panels recruit their panel sample from the ES respondents, which provides a sampling frame of addresses. The alternative is to employ a separate recruitment survey that also collects establishment data, while many systems may use recruitment surveys either to top up the pool of addresses for recruitment, or to enable sample expansion or other changes that may require enlargement of the recruitment database. The typical procedure is some form of automated random sample that tries to fill in an ideal target structure according to selected key variables that are associated with viewing. The controls may consist of:

- Socio-demographic individual and household variables (either single (e.g. Sex, Age, Household size, Household Socio-economic/ occupational/work status, etc.) or matrix variables (e.g. Sex x Age))
- Geo-demographic variables (e.g. Region, Type of settlement (e.g. City size; Urban/rural)
- Equipment and reception variables (e.g. Number of TV sets, Type of reception (satellite/cable/DSL/Terrestrial etc.), Pay-TV subscription, broadband internet connection)
- Viewing behavior related variables (e.g. Claimed weight of viewing)

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Within the controls, distinctions may be made between primary and secondary controls and tolerance levels may be set to assist the prioritization of households to be approached and recruited from the database.

Once recruited, equipment is installed and households are instructed on the push-button requirements. Although there have been attempts to create passive meters, the pervasive practice is to equip each working TV set in the home with meters and a push-button handset, which panelists are instructed to press when they are present as viewers in the room when the TV set is on and to press again when they leave the room. Each panelist has his/her own designated button on the peoplemeter push-button remote control handset, which allows the meter to identify at any time who is present and able to view. Nearly all meter handsets are also designed to include guest buttons, which ask for the age and sex details when the guests register. Guest viewing is treated as the equivalent of viewing outside the home in other peoples' homes and guests are simply assigned the household demographic classifications of the household in which the viewing is taking place.

Once installed, new homes are monitored closely by quality control staff at the research headquarters to check that viewing monitored by the TV set is adequately covered (i.e. someone is registered as in the room with the TV set on and watching). A selection of controls is employed, in cases including the monitoring of "nil" viewing (no recorded viewing) or to specific TV sets, "uncovered" viewing (when the TV set is on but no one is registered as present), "concurrent" viewing (when a panelist is registered as present on two or more TV sets simultaneously) and "excessive" viewing (where one channel appears to be left on for an entire session exceeding certain thresholds). In these cases, the goal is to see to it that the button-pressing instructions are being fully observed. Where problem households are identified, contact is made over the phone by the quality control staff. These contacts may be followed up by technician visits in the event of technical faults and by further instructions where behavioural button-pressing issues have been identified.

Practically all TAM systems will offer gifts at regular intervals, both as a reward and an incentive to continue participation in the panel sample. Strict and transparent rules are invariably set down in order to protect against excessive use of rewards that may distort button-pressing behaviour.

The panel sample will change over time due to a number of reasons, as homes leave the panel to be replaced by new homes. Termed panel turnover, the departure of homes from the panel sample may occur for a number of reasons. Examples include panel member resignation, persistent technical or behavioural issues, and enforced rotation to maintain panel balance or to counter ageing of the panel sample, where there is a risk of institutional bias due to differences in viewing habits between homes that stay on the panel for shorter periods and those that stay longer.

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2.5 DATA COLLECTION

In principle, the aim of all TAM peoplemeter systems is to collect viewing data from all working TV sets in the home. But, there may be exceptions, such as TV sets that may be found in the home, but normally belong in second homes, or TV sets, especially smaller portable TV sets, that are frequently moved around within the home, and TV sets that are very rarely used. The precise definition will vary from system to system, though the differences are likely to be minor. A slight issue can arise in reconciling ES estimates of number of TV sets in the home with panel sample estimates, especially if the number of TV sets is used as a panel control. Yet, whatever the precise operational definition, the basic aim is to capture almost all, if not all, viewing to TV sets in the home, plus in many cases guest viewing as a substitute measure of panel member viewing in other TV homes.

All peoplemeter TAM systems are set up in such a way that each meter will collect records of TV set status and viewer registration for the TV set to which it is attached. In panel households with two or more metered TV sets, one of the meters acts as a "master", which collects and stores data from the other "slave" meter(s), which it downloads to the research centre daily during overnight polling. In the early days of peoplemeter measurement, polling normally had to take place via a fixed line telephone connection, although now it can be done on all systems via wired or wireless telephone connection. Polling is invariably conducted daily in the early hours of the morning (typically from around 02.00-06.00) via a separate modem installed by the TAM contractor that enables it to take place without disturbing members of the household. Up to several polling attempts are made daily to download the data. In the event that polling is unsuccessful due to technical reasons (e.g. loss of electrical power, faulty modem, etc.), the meters will usually have the capacity to store up to several days data, which may allow fresh polling attempts over the next day or two in order to maximize the successful polling rate.

The data collected and polled by the meter consist of two sorts:
- TV set tuning
- Person registration

TV set tuning: A variety of metering technologies has been developed over the years and many meters will possess more than one technology for purposes of back-up or to provide additional identification of the signal source. In the days of analogue broadcasting, each television channel had its own characteristic frequency (or frequencies) in a given location, which led to two broad categories of direct frequency measurement (DFM) and tuner meters. The former operated by measuring the associated frequencies of tuner devices, while the latter took over the functions of the tuner and read the associated electrical outputs (e.g. voltage differences associated with specified frequencies). Both technologies were often quite intrusive by requiring the insertion of metering equipment into the TV set. But, with the advent of digital multiplex technologies, which allow the carriage of multiple channels on a given frequency, new picture- and audio-matching technologies have emerged whereby the meters collect regular picture or sound from

The basic aim is to capture almost all, if not all, viewing to TV sets in the home, plus in many cases guest viewing as a substitute measure of panel member viewing in other TV homes.

the TV set, which are later matched against reference picture or sound sources collected by the central processing unit for every channel that is being measured, in order to identify the signal source. As a result of storing central channel reference records for up to a week after the day of transmission, many systems can both identify live viewing and time-shift/catch-up viewing up to a week after the scheduled live transmission.

Although picture-matching preceded the introduction of audio-matching, audio-matching has become over time the widely preferred source for channel measurement. However, it is limited to the extent that it can only identify the content source and not how it came on to the screen. For example, audio-meters cannot on their own distinguish between time-shift viewing to a PVR device (Personal Video Recorder, also commonly known as Digital Video Recorder (DVR)), or catch-up via IPTV. Nor can they tell on their own, which distribution platform is being tuned to. For this reason, and also for back-up purposes in the event of technical faults, meters may employ additional identification technologies, of which two important ones for the purposes of multichannel measurement are water-marking and finger-printing. Water-marking requires the co-operation of measured channels, which add the channel source, programme details, plus date and timing of its transmissions into their broadcast metadata. Meanwhile finger-printing involves the TAM contractor injecting additional information into the signal being metered that in particular permits identification of the delivery path; whether, for example, time-shift via a PVR device, or catch-up via an Ethernet connection to the internet.

As a result, it is now possible for peoplemeters to identify not only the programme content, but also the delivery pathway to the TV set and too the associated distribution platform of a signal. Meters may also possess the functionality to monitor the use of the TV set for other purposes than channel viewing; examples being the viewing of pre-recorded DVD/video cassettes and video games.

Finally, meters will typically collect data on a second by second basis, with some allowance being made for time discrepancies between the meter clock which stamps the meter data and the clock of the central processing system.

Person registration: As described above, each family member has his/her own button, while additional buttons may be used for guest registration. The meter simply records whether or not each panel member is present while the TV set is on. Precise instructions on when to press may vary from system to system. For example, viewers may be instructed to press their buttons when they are in a room with the TV set on (and therefore able to watch), or when they are present and actually watching. In practice, it appears that very little difference in measured viewing exists due to the particular instructions being followed, as experience has shown that most panel members will rely on their own psychological judgment of when they are actually viewing. Instead the main issue for panel operators is to ensure maximum compliance with button-pressing instructions, so that all panel members in each household actually register and deregister their presence at each viewing session. For this purpose, meters will flash reminder registration signals from the moment the TV

As a result of storing central channel reference records for up to a week after the day of transmission, many systems can both identify live viewing and time-shift/catch-up viewing up to a week after the scheduled live transmission.

set is turned on and until some presence is registered. Once a person is registered, his/her button will light up on the meter display and remain there until either the person deregisters, or the TV set is turned off.

2.6 DATA PROCESSING AND PRODUCTION

Once meter data have been polled from the panel households and collected by the central processing unit of the survey contractor, the next stage is production. This is an automated procedure and it has four main components, which are known as:

- Validation
- Editing
- Weighting
- Addition of channel programme log data

Validation: The first task is to establish whether the meter data from a given household were (a) successfully polled and (b) of sufficient quality for the household in question to be admitted into the daily reporting sample. Assuming the meter data from a given household were polled and collected by the central processing unit, the household might still be rejected from the daily reporting sample for technical or behavioural reasons.

Rejection for technical reasons could be caused by a number of different factors, such as failure of the polled records to include all monitored TV sets, meter faults that prevented collection of the necessary meter data, unidentified signal sources that exceed specified time or percentage share thresholds and so on.

However, often more common than rejection for technical reasons, is rejection for behavioural reasons, of which the most common is "uncovered" viewing; that is to say, when one or more TV sets is on, but no viewer is registered as present, and the total volume of uncovered viewing exceeds specified thresholds of acceptability. The precise criteria may vary from system to system, but almost all will set limits on the acceptable levels of uncovered viewing, whether specified in an absolute number of minutes or as a proportion of total viewing. Other grounds for behavioural rejection may include excess "concurrent" viewing, where the same person is registered simultaneously as viewer on two or more TV sets in the home, or "lazy" viewing, when the TV set is on for an entire session without any viewer registration at any time during the session, or "excessive" viewing, where one channel is on for an entire viewing session and without any change of viewer registration that exceeds specified time thresholds.

The validation process is employed in order to arrive at a reporting sample of acceptable quality, but also to flag instances which raise concerns, albeit without resulting in rejection from the daily reporting samples. Uncovered viewing is a variable that will be monitored closely because of the compliance concerns that it raises. Even if the actual levels in a household do not exceed the rejection thresholds they may still be monitored closely, with cases flagged for the quality control staff to contact, check the causes of the uncovered viewing and where necessary

It is now possible for peoplemeters to identify not only the programme content, but also the delivery pathway to the TV set and too the associated distribution platform of a signal.

to remind the panel households of the push-button pressing instructions. Another important quality control parameter is "nil" viewing, whether for the household, or to a TV set, or to one or more members of a household. Nil viewing may be genuine, as when a family is on holiday, or it could arise due to technical faults, or in the case of individuals, because one or more members of a household is not following the task instructions of registering his/her presence during viewing sessions. As long as someone else is present in the room at the time and compliant, such behavior will not show up as uncovered viewing; hence the need for nil viewing as a separate validation parameter.

In addition to the behavioural validation controls, some TAM systems also employ additional security controls that will raise the alarm at the central processing unit in the event of a third party tampering with the meter data.

Editing: Hand in hand with data validation, editing also takes place. It performs three basic roles:
- The first task is to tidy up the viewing records, which chiefly involves filling in short gaps of uncovered viewing, as when the TV set is turned on and no viewer is registered from the start, but may be added just a minute or two later
- The second task is to convert the raw meter records into channel viewing statements. The vast majority of TAM systems perform this on a clock minute by minute basis. The justification is partly for purposes of data simplification, but also takes into account the lack of perfect synchrony between the meter clocks in the panel homes and the meter clock of the central processing system. Precise editing rules may vary from system to system. Yet, whatever the variation in rules, all will observe the fundamental rule of assigning each clock minute unambiguously to one channel/other signal source and one or more viewers (whether panel members and/or guests)
- The third task is to jettison data that are not converted into minute by minute viewing statements. That will include uncovered viewing that exceeds specified thresholds for editing into the processed household viewing statements. It may also include eradication of guest registration for systems that measure but do not report quest viewing, deletion of one or more set of records where concurrent viewing has been registered on two or more sets, such that only one accepted record is entered into the final statement. And it may include other forms of TV set use, such as video games that are not included in the final database of reported viewing

Weighting: Once the polled data have been validated and edited into individual viewing statements the next stage is to weight the data. This performs two essential functions. One is to correct for imbalances in the daily reporting samples in order to improve the representativeness of the final reporting sample. For example, if the balance of Women to Men in the survey universe is taken to be 52:48, yet the reporting sample for a given day is 50/50, then in order to restore the balance of the reported sample, women viewers will be weighted up by a factor of 52/50 (1.04), while men viewers will be down-weighted by a factor of 48/50 (0.9615). The second function is to gross the panel data up to the constant survey universe estimates across the period in question. Since reporting

"Uncovered" viewing – when the set is on but no viewer is registered as present – is monitored closely in the validation prcess.

samples will vary in size and composition from day to day, the application of weights is necessary to ensure constancy in the survey population estimates and hence comparability of panel measures over time.

Lastly, the key question for the TV industry in any country is the choice of weighting variables. Whereas the prime focus of panel controls is to build a panel of peoplemeter households that is adequately representative of the key variables that affect the volume and channel shares of TV viewing within the survey universe, arguably the prime purpose of weights is to ensure that the main advertising target audiences remain constant with respect to universe size, although weights may also be applied in order to improve the representativeness of the reporting sample with respect to key variables that affect total viewing time and channel share across the survey universe. And, additional weights may be applied to compensate for disproportional sampling, where certain groups are deliberately over- or under- sampled according to the specific demands of a particular system, such as the wish to create separate reporting samples for smaller regions, which results in over-representation of those regions within the national sample.

Addition of channel programme log data: Once converted into processed individual viewing statements with assigned weights for each individual in the daily reporting sample, the final stage is to add in the channel programme log data. This will normally cover the programme content being aired, including programming promotions, the advertising spot commercials and the sponsorship accreditations; thereby enabling estimates of audience size and composition for selected programme and commercial items.

The provision of channel programme log data, which may also include additional information such as genre designation, may be outsourced or assembled by the survey contractor. This is especially true nowadays relative to audio-matching measurement technologies, which involve collecting channel reference data for purposes of matching against the meter samples.

2.7 DATA REPORTING

The final stage of the TAM process is the delivery of data to survey subscribers. A major attraction of TAM peoplemeter research is the ability to gather and process the viewing data in such a way as to be able to deliver overnight ratings, although more time may be allowed for purposes of maximizing the daily polled samples and in the exceptional case of Russia, where there exist as many as nine different time zones. In addition, many TAM systems publish two sets of viewing data: first the overnight viewing figures that supply live scheduled transmissions and some days (often a week) later the consolidated viewing estimates that encompass the live transmissions and the time-shift/catch-up audiences in the interval between the specified broadcasting day and the present. The now widely used audio-matching technology is well suited for identifying time-shift/catch-up viewing of scheduled transmissions and subsequently adding consolidated viewing to the live viewing measures.

Universal access to the internet now makes rapid, almost instant, data delivery to users possible post production, whether in summary or detailed form.

Universal access to the internet now makes rapid, almost instant, data delivery to users possible post production, whether in summary or detailed form. However, users will require application software that enables them to analyze the data according to their needs. Usually the TAM contractor will offer its own software, while a distinction exists between TAM services where the operators only permit data analysis by means of their own proprietary software and systems where the TAM services will allow users to employ third party software. The ability for survey subscribers to use third party software will invariably include the ability to access respondent level data. However, it also raises concerns as to whether the measures are the same across the different software analysis tools on offer to survey subscribers. For this reasons, many TAM systems will define Gold Standard definitions of key metrics, to which third party software providers must conform. The key channel reporting metrics will include among the core components:

- Viewing time
- Ratings
- Share
- Reach
- Frequency
- Population size

> The great attraction of peoplemeter measurement is the combination of extreme minute-by-minute granularity with potential immense flexibility and versatility of analysis.

Within the metrics, a distinction is made between cross-sectional measures, such as ratings and audience share, where sample readings are taken at a given time or across selected intervals, and longitudinal measures of reach and frequency, where the interest lies in individual trends across designated time intervals. In designing reach analyses, users will generally be presented with options for defining reach. In the case of analyzing the reach and frequency of advertising campaigns, the standard approach will be to employ one-minute reach measures, which count the number of minutes where a commercial appears across a specified selection of TV channels that coincides with the measured presence as viewer of each individual within a selected socio-demographic group. By contrast, the use of reach measures to identify the core population of viewers to a particular channel may employ longer definitions such as five-minute reach, which restrict the measure to only those panel members that have actually spent some time viewing the channel.

TAM services may vary over the precise definition of what counts within the total measure of TV viewing (e.g. whether or not it includes the use of the TV set to play video games). In general, the core measure is viewing of video entertainment content, which will include all TV channels and often DVD/VCR use.

Overall, the great attraction of peoplemeter measurement is the combination of extreme minute-by-minute granularity with potential immense flexibility and versatility of analysis provided users are equipped with the necessary software or can commission further analyses through third party software bureaux. However, TAM services will vary in what they permit, and above all in what they will report as opposed to what they actually measure.

3. TAM ISSUES RELATING TO THE MEASUREMENT OF PAY-TV PLATFORMS AND CHANNELS

It is not a foregone certainty that the multichannel newcomers will receive fair and equal treatment from the TAM operators, with much depending on the committee and decision-taking structure of the survey operators.

This section sets out basic issues that relate to the measurement and reporting of pay-TV platforms and channels. From what has been written so far, TAM peoplemeter measurement has the potential to provide highly detailed and objective audience measures that involve fair and equal treatment of all parties. Whether or not it does so in practice depends on a number of factors.

Taking these factors section by section:

Survey organization: The first concern is whether the TAM survey organization is set up in such a way as to permit fair and equal treatment. It is not just a question of which party or parties owns the service and data copyright, but also of the structure and organization of the TAM service operator, which may determine how well it accommodates the interests of different users – or raise governance issues.

The specific issues that may be raised for pay-TV platforms and channels relate to the fact that multichannel pay-TV services have everywhere come into being some years after the introduction of terrestrial analogue broadcasting services, and the penetration of services will mostly fall some way, often a long way, short of the penetration of national free-to-air channels. As a result, it is not a foregone certainty that the multichannel newcomers will receive fair and equal treatment from the TAM operators, with much depending on the committee and decision-taking structure of the survey operators.

Survey universe: For any TAM service, a key issue is the definition and measurement of the survey universe both at a national level, as the great majority of TAM services are National in scope, and at the level of sub-universes. This includes both geographically based regional and type of settlement (e.g. urban/rural) universes and reception based universes, which may be defined with respect to type of reception (e.g. satellite, cable, terrestrial, DSL) or one or more pay-TV platforms. In the case of reception based universes, the accuracy of population estimates is critical to the estimation of viewing share. For example, if a pay-TV platform in a given country reaches 3.0 million homes, but the TAM survey declares this to be 2.7 million then this will entail 10% under-estimation of the national audience share of channels on this platform within the context of the total TV advertising market.

Collection of establishment data for deriving universe and population estimates: As a result, an important issue is how different TAM surveys measure pay-TV platform and multichannel penetration. This is not always an easy issue, as pay-TV penetration may be a dynamic (i.e. rapidly changing) variable, in which case the panel left to itself may provide the best estimate, while pay-TV operator statistics

may or may not be trusted, and are not necessarily synonymous with household penetration in the country concerned. What is being sought, though, is the optimal solution for defining universes in ways that meet the needs of fair and equal treatment of pay-TV and multichannel operators within the total survey universe. From a governance perspective, the question is whether the measurements are being handled in a way that is satisfactory to the pay-TV operator and multichannel subscribers to the survey data.

Recruitment and maintenance of the panel sample: Having defined and measured the reception universe populations, the next issue is their representativeness on the TAM panels. Of particular importance is the application of panel controls that are designed to optimize the representativeness and accuracy of the panel sample with respect to key reception and pay-TV variables within the market concerned. As a complement or alternative to setting panel controls, TAM systems may apply weights to correct deviations of the actual from the pay-TV platform and/or multichannel reporting samples, but this very strict means of correction is mostly less preferred on account of the floating nature of the main variables, especially where it concerns individual channels that may or may not be taken as part of subscription pay-TV packages.

Data collection: Meter technologies now exist that permit channel measurement by named platform, as well as both live and consolidated measurement of channel audiences. Whether TAM services use them or not will depend on decisions taken by the operators of those services as well as the demands of the domestic TV industries concerned.

Data processing and production: The main data processing and production components that are relevant to the "fair and equal" treatment of survey subscribers concern the choice of weights and identification of individual channels for purposes of reporting. In the case of individual channels, many systems will set threshold values for determining whether a channel is identified for purpose of reporting.

Data reporting: We may identify three major issues for pay-TV operators and channels:
- First, it is in the interests of fair and equal treatment that TAM services permit the comparative analysis of channels within a common framework, for which reason practically all TAM systems employ a single sample for measuring all channels
- Second, it is important that pay-TV operators and channels are either treated in exactly the same way as terrestrial channels that do not belong to particular platforms, or, if treated differently, are done so in a way that meets with their requirements, including integration within the survey whole. The critical concern is that they should not be treated differentially in a way that shows preferential bias towards domestic terrestrial stations and therefore runs against their interests
- The third issue concerns data delivery and software for analysis, and how they meet user needs. For multinational channel distributors the ability to analyze viewing data with third party software is an important asset, which allows them to set performance targets and monitor channel performance across a range of different national markets

It is in the interests of fair and equal treatment that TAM services permit the comparative analysis of channels within a common framework, for which reason practically all TAM systems employ a single sample for measuring all channels

4. COMPARATIVE REVIEW OF TAM PRACTICE IN JAPAN AND OTHER COUNTRIES

In undertaking international comparisons and assessing issues a critical reference is the GGTAM international guidelines alluded to in the Introduction. Published some 15 years ago, the guidelines are perhaps less relevant on various specific details of peoplemeter TAM measurement, but the underlying principles of best survey practice remain as valid today as at any time in the past. Among the core GGTAM principles that will be referred to in this comparative review, particular reference must be made to the ten principles that include (1) The meeting of total marketplace needs; (2) Effective industry consultation; (4) Best research practices and (9) Equal access in the interest of fair trading.

This section looks at TAM practice in Japan and how it compares with TAM practice in other national markets round the world. All told, the review covers twenty-three countries and regions including Japan. They may be placed under two broad headings, which consist of other Asian markets and a selection of other countries round the world with widely varying population sizes and economic development. One notable omission is China, which is growing rapidly, and also not included are any of the Latin American countries, which are mostly served by OS TAM systems, IBOPE being the main research supplier. Otherwise, the review includes a wide spread of smaller and larger European markets, and in addition the USA, Russia, South Africa and Australia.

This section comprises six sub-sections supported by 15 summary tables at the end of this report. The sections cover:
*   Advertising market size (Table 1)
*   Structure of TAM research (Tables 2-6)
*   Survey universe (Tables 7-9)
*   Panel sample design and inclusion of reception variables (Tables 10, 11)
*   Channel reporting (Tables 12, 13)
*   Data access (Tables 14, 15)

4.1 ADVERTISING MARKET SIZE (TABLE 1)

Although TAM surveys supply invaluable data for purposes of TV programme commissioning, production and scheduling, the prime driver of investment in TAM systems has been the need for accurate measurement of audiences by selected target demographics amongst airtime buyers and sellers.

The selected markets display a very wide range of variation. The US, followed by China, is easily the biggest TV advertising market in the world. It is almost three times the size of the Japanese market, which is easily the third biggest after China, and more than four times as big as the UK market, currently lying in fourth place. When we take population size into account, Japan enjoys the third highest TV advertising per capita and comes very close to the USA, although the much smaller Hong Kong market has by some way the highest TV advertising spend per capita in the world.

Some caution needs to be applied in making cross-country comparisons of TV advertising spend, which will be affected somewhat by the variable dollar conversion rates across different markets and methods of estimation employed across different countries. Even so, Japan stands out very clearly as the second biggest TV advertising market in the world. As such, Japan is better placed than almost any other country to invest in sophisticated TAM research design and methodology.

The underlying issue is that almost all the advertising proceeds are gathered by the domestic Japanese terrestrial stations in spite of the existence of a very substantial pay-TV market, including both domestic and foreign players, which currently earns less than 2% of total TV advertising revenues. Indeed, CAB-J, the local industry body for cable, estimates the pay-TV share of total advertising revenues as low as 1.1% in 2011. Although pay-TV markets vary considerably round the world, in Japan the pay-TV share of total TV advertising looks extremely low for a country with evidently substantial pay-TV penetration, which stood at 21.6% according in June 2012 according to CAB-J. Indeed, one of the issues with the Japanese market is the poverty of establishment and audience data for determining the comparative size of the pay-TV market in relation to the free-to-air (FTA) terrestrial market. But, to try put the <2% figure into some kind of comparative perspective, pay-TV household penetration in the UK is around 50%, while the non-terrestrial commercial groups on the pay-TV platforms account for 20+% of TV advertising spend. Even allowing for the significantly higher penetration of pay-TV in the UK, the Japanese estimate looks very low by comparison. In other countries with pay-TV markets of similar size (e.g. Australia (29%), France (20%), Italy (27%) and Spain 22%), we believe the pay-TV share of total TV advertising revenues is much higher than the 1.1% estimate for Japan.

TABLE 1: WORLDWIDE TELEVISION ADVERTISING MARKETS

Country	2012 population (millions)	Advertising spend		TV advertising spend per capita ($)	TV advertising Share of Total (%)
		Total ($m)	TV ($m)		
Australia	23	12,619	4,022	175	32
China	1,354	62,245	33,642	25	54
Czech Republic	11	885	412	37	47
Finland	5	1,565	363	73	23
France	61	13,162	4,389	72	33
Germany	82	21,701	5,109	62	24
Hong Kong	7	6,503	2,285	326	35
India	1,223	6,453	2,687	2	42
Italy	61	9,966	5,250	86	53
Japan	128	54,640	23,833	186	44
Malaysia	29	3,825	1,954	67	51
Norway	5	2,907	629	126	22
Philippines	98	2,856	2,238	23	78
Poland	38	2,527	1,153	30	46
Russia	142	9,362	4,512	32	48
Singapore	5	1,910	653	131	34
South Africa	51	3,963	1,843	36	47
South Korea	50	8,908	3,011	60	34
Spain	46	5,980	2,325	51	39
Sweden	9	3,902	896	100	23
Taiwan	23	1,924	902	39	47
Thailand	64	3,238	1,807	28	56
United Kingdom	63	21,104	5,556	88	26
USA	314	152,360	64,859	207	43

Source: GroupM Worldwide Advertising Forecasts – December 2012

4.2 STRUCTURE OF TAM RESEARCH (TABLES 2-6)

The structure of TAM research is crucial to the delivery of a trading currency in which survey users can be confident of fair and equal treatment. This is stated unequivocally in paragraphs 8 and 9 of the GGTAM guidelines (see pages 2 and 3).

> "8. The operational guidelines are based on ten over-riding Principles:
> Meeting total market place needs
> Effective industry consultation
> Full disclosure
> Optimal resource location
> Scientific method
> Best research practices
> Quality control
> Maximising response
> Equal access to data
> Methodological experimentation
>
> All users of the service need to have **confidence** in the system. This requires full consultation, to ensure that the best technical solutions are adopted for their own market. These must be in the public domain. In the interests of fair trading all user groups should have the same conditions of open access to the data.
>
> 9. How a country's audience measurement system is **designed, controlled and funded** is another critical issue. **The key principle is that there needs to be effective consultation with all sectors of the industry, to ensure that the system is customer-led in its priorities**. Each country needs to determine what precise organizational arrangement legally and best fulfills this objective – a continuum ranging from: the joint industry committee (JIC) that inherently ensures that the interests of all users of the system are represented in its management, to a media owner committee (MOC), to a particular supplier's own service (OS)."

As Tables 2-6 show, there exists a wide range of controlling structures in the countries we have examined; however, Japan is in a class of its own with respect to the lack of mechanisms for effective joint industry participation, and in a way that inevitably raises governance concerns.

The key principle is that there needs to be effective consultation with all sectors of the industry, to ensure that the system is customer-led in its priorities.

In preparing the international comparative tables, the report has adopted the practice of using NA to denote non-applicable, as when an establishment survey does not measure digital reception because digital switchover has taken place and all TV homes now receive digital transmissions. Otherwise, cells have been left blank when either there is nothing to add (e.g. right hand column in Table 2, which notes whether peoplemeter panels employ supplementary methodologies, such as setmeters or diaries), or when the entries are missing.

TABLE 2: TAM PEOPLEMETER RESEARCH SURVEYS

Country	Peoplemeter launch year		Current Peoplemeter TAM service(s)	Supplementary methodology employed by peoplemeter TAM service
	Terrestrial TAM	Cable/satellite TAM		
Australia	2001	2003	OzTAM	
Australia	1994	1994	RegTAM	
Australia	1991		Metro (no longer exists)	
Czech Republic	1997	1997	TV Meter	
Finland	1987	1987	Finnpanel	
France	1989	1989	Médiamat	
Germany	1987	1987	AGF	
Hong Kong	1991	Mid 1990s	Founding Subscribers Committee (FSC)	
India	1998	1998	TAM Media Research (TAMMR)	
Italy	1986		Auditel	
Japan	NA	2007	CS TV (Cable/Satellite TV)	
Japan	1997	NA	Terrestrial TV	Setmeters and diaries
Malaysia	1995	2001	Nielsen	
Norway	1992	1992	TNS Gallup TV-meter Panel	
Philippines	1994	1994	Nielsen	
Philippines	2007	2007	Kantar Media (KM)	
Poland	1996	1996	Nielsen	
Russia	1996	1996	TV Index	CATI survey and online questionnaire
Singapore	1994	2000	TAM Service	
South Africa	1989		TAMS (Television Audience Measurement System)	
South Korea	1992	2002	Nielsen	
South Korea	1999	1999	TnMS	
Spain	1987	1987	Peoplemeter Service (PS)	
Sweden	1991	1991	MMS	
Taiwan	1994	1994	Nielsen	
Thailand	1985	2008	Nielsen	
United Kingdom	1984	1984	BARB	Web-TV meter
USA	1987	1987	NPM	PC meters, setmeters and diaries

General notes
Launch year refers to the current TAM peoplemeter service
Supplementary methodology refers to additional research methodologies employed by the named peoplemeter services. In addition, other services may be supplied by third parties, including set-top box data supplied by some pay-TV operators, though not necessarily treated as accepted industry currency.

Country notes
Australia: At one time there were three panels. The Metro panel launched by AC Nielsen as an Own Service, ceased operations after Seven Networks and Nine Networks launched OzTAM in 2001.
Why the 2013 date? Hong Kong: TAM peoplemeters first introduced in 1991.
Italy: Plans exist to boost the peoplemeter sample with a further 15,000-25,000 setmeters. The Auditel Technical Committee is exploring the options, having recently issued an RFI to specialist market research agencies in order to obtain information and insights that can shape the project. The two main objectives are (1) Consolidate and strengthen the current measurement system in an increasingly differentiated and fragmented TV landscape and (2) extend the measurement of TV viewing to other devices, platforms and ways of enjoying TV content (e.g. on demand and OTT content), no longer being confined to the TV set. In a separate project, Auditel is also looking at the measurement of social activities around TV viewing.
Japan Terrestrial TV: Peoplemeters cover the three major markets of Tokyo, Osaka and Nagoya. Another 8 markets are covered by setmeters and a further 16 markets by diary surveys.
Russia: The CATI survey of c. 15,000 homes and follow-up online questionnaire (c. 6,000 individuals from CATI sample) employed as supplements to TV Index aggregated data across two three-month periods in year (February-April, August-October) to provide TV Index Plus service for measuring c.200+ thematic channel audiences.
United Kingdom: Web-TV meters for measuring viewing on PCs so far installed in 100 panel homes.
USA: In order to cover local markets, additional annual samples, totaling about 200,000 homes equipped with setmeters or participating in diary sweep, are combined with the national peoplemeter panel.

From Table 2, we can see that the mass migration to peoplemeter TAM systems occurred between the mid-eighties and mid-nineties. In this respect, Japan was one of the last countries to switch to peoplemeters, which were introduced as late as 1997 for the national terrestrial service, and only introduced for thematic pay-TV channel measurement in 2007. Even today (see Table 9), the Japanese peoplemeter sample for its national terrestrial service is relatively small and only covers three main urban markets, with setmeters and diaries relied upon to cover the other 24 designated urban/regional markets. The USA also employs setmeters and diaries, but as an add-on to the national peoplemeter sample of some 21,000 TV households in order to supply local market measurement. In general, peoplemeter is the only measurement methodology in national TAM panels today for measuring viewing to the TV set, although one or two services, such as TNS, which operates TV Index and TV Index Plus in Russia, may employ other methodologies in order to collect supplementary data for offering to survey subscribers.

Tables 3-6 provide a high level summary of the controlling structures in the 23 countries that are in the present survey. Although an ostensibly major difference lies between JIC and OS managed TAM services, the differences are often much smaller in reality due to the representation of parties in industry sub-groups (see Table 5). In Spain, for example, Kantar Media operates an OS TAM panel. Although Kantar Media ultimately takes all the financial decisions, two joint

industry groups – the Comite de Usuarios (CDU) and the Consejo de Control (CC) – play a major role, in particular the CC when it comes to directing the scope of the service.

Besides, Nielsen and Kantar Media/TNS, which account for most of the national OS services listed in Table 3, including two 50:50 joint venture partnerships in Finland and India, two other important OS suppliers of national TAM panels are IBOPE (Latin America) and GfK (parts of Europe and some countries from the former Soviet Union). What all four groups have in common is that they are both international (i.e. run TAM peoplemeter panels across many countries) and do not include TV media owners among their main shareholders.

This, however, is not the case with France, Sweden and Japan, where the TAM survey is contracted by a domestic market research company that features joint industry shareholders, including TV media owners. In both France and Sweden, the systems are labeled as TRCC (Tripartite Research Company Contract) and involve other joint industry non-shareholder parties in the committee structures that control the TAM research. Video Research in Japan has a similar structure in that it is owned by leading domestic TV broadcasters and the country's largest advertising agency, Dentsu. Other interested parties are likewise involved in the working groups for either survey. **The distinctive and unique feature of Video Research, which inevitably raises governance concerns, is that it is supplying two totally different services with major differences of detail for the domestic terrestrial TV industry and the pay-TV sectors**.

TABLE 3: TAM PEOPLEMETER SURVEY ORGANIZATION

Country	Service	Type	Data supplier / Main contracting party	Members
Australia National	OzTAM	MOC	OzTAM (Australian TAM)	National commercial broadcasters (Seven Network, Nine Network, Network Ten) and independent chairman
Australia Regional	RegTAM	MOC	Regional TAM	Regional commercial free-to-air broadcasters
Czech Republic	TV Meter	JIC	ATO (Association of TV Organizations)	Television broadcasters and advertising/media agencies
Finland	Finnpanel	OS	Finnpanel - Limited company jointly owned by Nielsen and TNS	OS
France	Médiamat	TRCC	Médiamétrie	Médiamétrie is a tripartite company whose shareholders include TV stations (35%), radio stations (27%), advertisers/media buyers (35%) and others (3%)
Germany	AGF	JIC	AGF (Arbeitsgemeinschaft Fernsehforschung)	Four main broadcasting groups (public service ARD and ZDF, and commercial Pro 7 and RTL broadcasters) make up the shareholders, while the board also includes advertiser and media buyer representatives
Hong Kong	FSC	JIC	FSC (Founding Subscribers Committee)	FTA broadcasters, media buyers

Country	Service	Type	Data supplier / Main contracting party	Members
India	TAMMR	OS	50/50 JV between Nielsen and Kantar Media Research	OS
Italy	Auditel	JIC	Auditel	Two main broadcasting groups (RAI and Mediaset), advertisers, media buyers and press association
Japan	CS TV	OS	Video Reseach (Private company under joint ownership of domestic TV broadcasters and advertising agency Dentsu)	OS
Japan	Terrestrial TV	OS	Video Reseach	OS
Malaysia	Nielsen	OS	Nielsen	OS
Norway	TGTP	MOC	Styringsgruppen for TV-undersøkelsen	Four main broadcasting groups (NRK, TV2, TVNorge, TV3)
Philippines	Nielsen	OS	Nielsen	OS
Philippines	KM	MOC	Kantar Media	ABS-CBN - National broadcaster
Poland	Nielsen	OS	Nielsen Audience Measurement (NAM)	OS
Russia	TV Index	OS	TNS Russia	OS
South Korea	Nielsen	OS	Nielsen	OS
South Korea	TnMS	OS	TnMS	OS
Spain	PS	OS	Kantar Media	OS
Sweden	MMS	TRCC	Mediamatning I Skandinavien	Television broadcasters (Public broadcaster SVT, and private boradcasters MTG, SBS and TV4)
Taiwan	Nielsen	OS	Nielsen	OS
Thailand	Nielsen	OS	Nielsen	OS
United Kingdom	BARB	JIC	BARB (Broadcasters' Audience Research Board)	Television broadcasters (BBC, ITV, Channel 4, Channel 5, BSkyB (also pay-TV platform operator) and advertising agencies/media buyers
USA	NPM	OS	Nielsen Media Research North America	OS

General notes

TAM peoplemeter services may be grouped under four broad headings: JIC (Joint Industry Committee); MOC (Media Owner Committee), TRCC (Tripartite Research Company Contract); OS (Own Service). Fuller details of the different types of service structure are provided in the report.

Country notes

Australia: OzTAM currently supplies two services: (1) Metropolitan Television Measurement Service (MTMS) and (2) National Subscription Television Measurement Service (NSTMS). The NSTMS combines OzTAM Metropolitan survey data with RegTAM survey data in order to provide a national subscription service. The OzTAM ownership structure is open to change and there was discussion at one point of expanding it to include the pay-TV operator Foxtel. As a condition of its existence, OzTAM agreed to certain undertakings to the ACCC (Australian Competition and Consumer Commission), which included fair and equal treatment of TV stations and access on fair terms to all parties. Though not on the board, representatives from the public broadcasters, advertiser, media buyer and pay-TV associations may attend the board meetings.

For convenience, the MTMS and NSTMS summary details relating to pay-TV in the tables that follow are covered under the heading, Australia National, although the NSTMS is a composite of the Metropolitan OZTAM and Regional TAM panels.

India: TAM Media Research was originally appointed by a Joint Industry Body (JIB) of broadcasters, advertisers and advertising agencies. The JIB subsequently lapsed but has recently been re-formed as BARC (Broadcast Audience Research Council) and will in due course award a JIC contract.

Japan: Domestic broadcaster external Executive Director representation on Video Research board includes Tokyo Broadcasting System, Nippon Television Network Corporation, Fuji Television Network, TV Asahi Corporation, TV TOKYO Corporation, Yomiuri Telecasting Corporation, Nagoya Broadcasting Network and Kyushu Broadcasting Co.

Sweden: National broadcasters constitute about 96% of the shareholdings.

TABLE 4: TAM SURVEY CONTRACTORS

Country	Service	Type	Survey Contractor(s)
Australia National	OzTAM	MOC	Nielsen
Australia Regional	RegTAM	MOC	Nielsen
Czech Republic	TV Meter	JIC	Mediaresearch; STEM/MARK (Establishment and Continual Surveys); Elvia (Metering devices)
Finland	Finnpanel	OS	Finnpanel
France	Médiamat	TRCC	Médiamétrie; GfK and Médiamétrie (Establishment survey - La REM); Kantar Media (Programme monitoring)
Germany	AGF	JIC	GfK Fernsehforschung and Arbeitsgemeinschaft Media-Analyse (Establishment data)
Hong Kong	FSC	JIC	Nielsen
India	TAMMR	OS	TAM Media Research
Italy	Auditel	JIC	Nielsen, Ipsos (Establishment Survey)
Japan	CS TV	OS	Video Research
Japan	Terrestrial TV	OS	Video Research
Malaysia	Nielsen	OS	Nielsen
Norway	TGTP	MOC	TNS Gallup
Philippines	Nielsen	OS	Nielsen
Philippines	KM	MOC	Kantar Media
Poland	Nielsen	OS	Nielsen
Russia	TV Index	OS	TNS Russia
Singapore	TAM Service	MOC	Kantar Media
South Africa	TAMS	JIC	Nielsen
South Korea	Nielsen	OS	Nielsen; separately TAMS and AMPS (Establishment Survey)
South Korea	TnMS	OS	TnMS
Spain	PS	OS	Kantar Media
Sweden	MMS	TRCC	Nielsen
Taiwan	Nielsen	OS	Nielsen
Thailand	Nielsen	OS	Nielsen
United Kingdom	BARB	JIC	Kantar Media; Ipsos (Establishment Survey); RSMB (Sample design and quality control)
USA	NPM	OS	Nielsen

General notes
Where there is more than one survey contractor, the functions carried out by the secondary contractors are listed in brackets

In general, though not always, TAM copyright ownership lies with the JICs or other controlling structures that contract out the research, or with the OS market research companies in the case of OS systems. Ownership of the copyright is an important concern, especially for international TV channel groups, as it may affect the ability of users to analyze the data with third party software and to be able to access respondent data for purposes of special reach and frequency and other analyses. With most TAM peoplemeter systems it is nowadays possible to analyze data with third party software and access respondent level data for special analyses; but Japan is again one of the very few systems that do not permit use of third party software and direct access to respondent level data. In the case of France, the restrictions reflect a commercial model that operates through selling data in a selection of different packages.

Overall, **Japan is probably the country with least representation of wider industry interests beyond those of the shareholders in Video Research. It is arguably the most self-serving of the national TAM services with regard to the owners of the company**.

TABLE 5: TAM SURVEY TECHNICAL COMMITTEES AND USER GROUPS

Country	Service	Technical Committee	Details	User Group	Details
Australia National	OzTAM	Yes	All sectors including pay-TV broadcasters	No	
Australia Regional	RegTAM	Yes	Regional FTA broadcasters	No	
Czech Republic	TV Meter	Yes	Television broadcasters/media buyers	Yes	Methodological Committee including television broadcasters and media buyers
Finland	Finnpanel	No		Yes	TVM-ohjausryhmä: Public and commercial broadcasters, advertisers, media buyers and research contractor
France	Médiamat	No		Yes	(1) Audimétrie acts as a joint industry technical and management committee, while (2) the joint industry Câble et Satellite committee, including pay-TV channel representatives, handles issues relating to subscription TV measurement
Germany	AGF	Yes	All sectors, though not pay-TV platform operators	Yes	All sectors, though not pay-TV platform operators
Hong Kong	FSC	Yes	Broadcasters/media agencies	No	
India	TAMMR	Yes	BARC TechComm	No	BARC comprises representatives from Indian Broadcasting Foundation (IBF), Indian Society of Advertisers (ISA) and Advertising Agencies Association of India (AAAI)
Italy	Auditel	Yes	All sectors, including pay-TV channels	No	
Japan	CS TV	Yes	"Peoplemeter Working Group" - pay-TV channels, ad agencies, Video Research	No	
Japan	Terrestrial TV	Yes	Broadcasters, Ad agencies, Advertisers, Video Research	No	
Malaysia	Nielsen			No	
Norway	TGTP	No		No	
Philippines	Nielsen	No		No	
Philippines	KM	No		Yes	

TABLE 5: TAM SURVEY TECHNICAL COMMITTEES AND USER GROUPS *(contd)*

Country	Service	Technical Committee	Details	User Group	Details
Poland	Nielsen	Yes	All sectors, including pay-TV channels and platform operators	Yes	Main clients advisory group of all broadcasters, including pay-TV channels and platform operators
Russia	TV Index	Yes	Expert Group is joint industry group of selected specialist technical experts, including a thematic channels representative, which feeds recommendations for action into the User Group	No	User Group acts as regular joint industry public forum for discussing present and future needs
Singapore	TAM Service	Yes	International Kantar support team covering all technical and hardware/software development	No	
South Africa	TAMS	No		No	
South Korea	Nielsen	Yes	Government and Media representatives	No	
South Korea	TnMS	No		No	
Spain	PS	Yes	All sectors including pay-TV broadcasters and operators	No	
Sweden	MMS	Yes	National television broadcasters, advertisers and media buyers	No	
Taiwan	Nielsen	No		No	
Thailand	Nielsen	No		No	
United Kingdom	BARB	Yes	All sectors, including other digital channels as well as Sky and the regulator Ofcom		
USA	NPM	No			

General notes
All parties denotes all main industry groups including pay-TV interests (whether subscription TV or pay-TV platform operator).

Country notes
Russia: Although there is no Technical Committee as such, there exists an Expert Group, which is a joint industry group of elected representatives of the industry with extensive experience (more than 3 years), knowledge and skills in their field, in other words - recognized experts. The EG has two main functions:
(1) To collect questions and suggestions from other industry members and send to TNS for further discussion; (2) To discuss all the possible changes in EG projects with TNS, where the main goal is to make recommendations for User Group in their possible decisions. In addition there exists a Niche Channel User Group, where TNS holds meetings with channel representatives to discuss all the possible changes to the current projects TV Index Plus and plans for the future.
South Africa: SAARF is a joint industry research foundation that oversees audience measurement across all the display media. Reporting to the board is the Advisory Council, which is fed into by six other councils, including the TAMS Council, which handle specific areas of research. The TAMS Council combines technical committee and user group functions.
Spain: The Comite de Usuarios combines the functions of technical committee and user group. In addition, the Consejo de Control, also representing all sectors, acts at a higher level to direct the scope of the service (i.e. Full technical specifications) and data release.
United Kingdom: Besides the technical committee (Technical Advisory Group (TAG)), which handles all technical issues, the other main committee reporting to the BARB board is the Contract Evaluation Committee (CEC), comprising board member representatives and BARB personnel, but also involving other BARB subscribers in sub-groups. The CEC, whose main functions are to oversee contractual and policy issues, works closely with TAG.
USA: Although technical comittees and user groups do not exist as such, three other industry groups have an important influence on the Nielsen service. They include the MRC (Media Rating Council), which has an especially important role in auditing and accrediting the Nielsen ratings, CONCAM technical committee (trade association for the cable operators) and NPGC (Network Policy Guidelines Committee) representing the interests of the broadcasters.

TABLE 6: COPYRIGHT OWNERSHIP AND DATA ACCESS

Country	Service	Copyright Ownership	Subscriber access Third party software	Respondent level
Australia National	OzTAM	OzTAM	Yes	Yes
Australia Regional	RegTAM	Nielsen	Yes	Yes
Czech Republic	TV Meter	ATO, Mediaresearch	Yes	Yes
Finland	Finnpanel	Finnpanel	Yes	Yes
France	Médiamat	Médiamétrie	No	No
Germany	AGF	AGF	Yes	Yes
Hong Kong	FSC	Nielsen	Yes	Yes
India	TAMMR	TAMMR	Yes	Yes
Italy	Auditel	Auditel	Yes	Yes
Japan	CS TV	Video Research	No	No
Japan	Terrestrial TV	Video Research	No	No
Malaysia	Nielsen	Nielsen	Yes	Yes
Norway	TGTP	TNS Gallup	Yes	Yes
Philippines	Nielsen	Nielsen	Yes	Yes
Philippines	KM	Kantar Media	Yes	Yes
Poland	Nielsen	Nielsen	Yes	Yes
Russia	TV Index	TNS Russia	Yes	Yes
Singapore	TAM Service	MediaCorp	Yes	Yes
South Africa	TAMS	SAARF	Yes	Yes
South Korea	Nielsen	Nielsen	Yes	Yes
South Korea	TnMS	TnMS	Yes	Yes
Spain	PS	KantarMedia	Yes	Yes
Sweden	MMS	MMS	Yes	Yes
Taiwan	Nielsen	Nielsen	Yes	Yes
Thailand	Nielsen	Nielsen	Yes	Yes
United Kingdom	BARB	BARB	Yes	Yes
USA	NPM	Nielsen	Yes	Yes

Australia: OzTAM and Nielsen jointly own copyright for the NSTMS.

4.3 SURVEY UNIVERSE (TABLES 7-9)

The full survey universe definition is important for assessing the representativeness of pay-TV measurement within the TAM survey totals.

TABLE 7: SURVEY GEOGRAPHIC SCOPE AND COVERAGE OF NATIONAL POPULATION

Country	Service	Geographic coverage Details	% Total population
Australia National	OzTAM	NTMS-Metropolitan areas of Sydney, Melbourne, Perth, Brisbane and Adelaide: NSTMS-National	70
Australia Regional	RegTAM	Non-metropolitan areas of Northern NSW, Southern NSW, Queensland, Victoria and Tasmania.	34
Czech Republic	TV Meter	National	100
Finland	Finnpanel	National except for exclusion of Åland islands (ca 25,000 inhabitants)	99.5
France	Médiamat	National	98.5
Germany	AGF	National	100
Hong Kong	FSC	Full Hong Kong region	100
India	TAMMR	National urban cities with 100,000+ inhabitants, but excluding Jammu & Kasmir, North East (except Assam), Andaman & Nicobar and Lakshadweep Islands	22
Italy	Auditel	National	100
Japan	CS TV	Tokyo and Osaka areas	<50
Japan	Terrestrial TV	Kanto, Kansai, Nagoya + 24 TAM survey areas	100
Malaysia	Nielsen	Peninsular Malaysia	100
Norway	TGTP	National	100
Philippines	Nielsen	National	100
Philippines	KM	National	100
Poland	Nielsen	National	95
Russia	TV Index	National urban areas comprising cities with 100,000+ inhabitants	49
Singapore	TAM Service	National	100
South Africa	TAMS	National	100
South Korea	Nielsen	National	100
South Korea	TnMS	National	100
Spain	PS	National	100
Sweden	MMS	National	100
Taiwan	Nielsen	Mainland only - excluding off-shore islands (Kinmen, Penghu, Matsu etc...)	<100
Thailand	Nielsen	National	100
United Kingdom	BARB	National	100
USA	NPM	National	100

Australia: Excluding overlap, the OzTAM and RegTAM services cover an estimated 95% of national TV homes.
India: National household population in urban and rural areas is 22% for all homes and 54% for TV homes.
Japan CS TV: Official definitions for Tokyo and Osaka areas are respectively Kanto (30km zone) and Kansai (three main prefectures).
Japan Terrestrial TV: Kanto, Kansai and Nagoya, which are measured by peoplemeters, make up 58% of the total population.
Russia: Population data in Tables 6 and 7 for 2012.

The great majority of TAM peoplemeter surveys, including the ones in this review, are national in scope. That is to say, the geographical areas cover very close to 100% of the eligible survey population, though with some important exceptions for the larger markets:

- In the case of Australia, the presence of two overlapping TAM peoplemeter panels reflects the extreme concentration of the mainland population in a few areas, which has affected the geographic distribution of the main "nationally distributed" commercial TV stations and the smaller regional networks. The overlap of the two TAM panels is, however, such that they cover about 95% of the national TV population and, although the various terrestrial stations may be reported on just one of the panels, the two are combined in order to supply the desired national ratings for the pay-TV services
- Russia is an exception due to its massive geographical size which embraces no less than nine time zones. Because of the wide geographic dispersion of the population, the TV panel is restricted to the roughly one half of the national population that lives in cities with 100,000+ inhabitants. Within this universe, there is no precise establishment measure of pay-TV penetration due to the difficulties of discriminating with confidence in the ES interviews between households connected to cable TV versus CATV (Community Antenna Television) systems. Hence, the TNS panel in Russia employs the alternative more reliable ES measure of presence of one or more thematic channels to measure pay-TV penetration
- India is an exception in terms of both its very large geographical size and its massive population of over a billion inhabitants. As with Russia, the TAM operator has taken the pragmatic decision to cover the great majority of the population living in larger cities with 100,000+ inhabitants, although its ES covers rural as well as urban areas

There is evidently a lot of variation in pay-TV penetration across different national survey universes, which is linked in many cases with wide variation of PVR penetration. In general, most national TAM panels covered in this review attempt to represent accurately the penetration of pay-TV services. In the case of Italy and South Africa, where there exist significant apparent differences between ES estimates and panel sample records, we note that:

- In Italy, the DTH pay-TV service, Sky Italia, is representatively sampled by Auditel, while the difference of c8% between the panel sample representation of pay-TV versus the ES estimate, is entirely due to the non-identified measurement of Mediaset terrestrial pay-TV households, which do not follow a standard long-term subscription model
- The strong over-representation of pay-TV homes within the national panel sample in South Africa is due to disproportionate sampling that is adjusted for in the weights

These exceptions noted, Japan must be seen as a unique and extreme case. Although Video Research conducts establishment surveys for terrestrial TV, pay-TV and Broadcast Satellite TV (BS TV), it differs in two fundamental respects:

- The ES data and panel samples for the different surveys are kept entirely separate
- Irrespective of any pay-TV universe estimates that Video Research has, it does not project its panel data on to them. Instead of any estimates of audience sizes, pay-TV users can only see sample counts and percentages. Unlike any other system in the world, the Video Research methodology for its pay-TV sample does not permit the direct calculation of audience costs per thousand. Furthermore, the pay-TV measurement is restricted to two urban areas that account for at most 50% of the Japanese population

In conclusion, **Japan is the weakest of the all the countries in this review with respect to representative measurement of pay-TV channels within the national TV homes universe, or even within the pay-TV homes universe**. By any standards, Japan fails the GGTAM guidelines of best research practices (Principle 4) that are fair and meet total marketplace needs (Principle 1).

TABLE 8: SURVEY UNIVERSE SIZE

Country	Service	Households (millions)	Inclusion of households with no TV	Individuals		
				Lower age limit (yrs)	(millions)	per household
Australia National	OzTAM	6.0	No	0+	15.8	2.6
Australia Regional	RegTAM	3.1	No	0+	7.5	2.4
Czech Republic	TV Meter	4.1	No	4+	9.9	2.4
Finland	Finnpanel	2.2	No	4+	5.1	2.3
France	Médiamat	27.2	No	4+	59.2	2.2
Germany	AGF	36.2	No	3+	71.8	2.0
Hong Kong	FSC	2.4	No	4+	6.4	2.7
India	TAMMR	52.0	No	4+	233.0	4.5
Italy	Auditel	25.4	Yes	4+	57.2	2.3
Japan	CS TV	11.2	No	4+		
Japan	Terrestrial TV	27.6	No	4+	65.4	2.4
Malaysia	Nielsen	4.7	No	4+	20.4	4.3
Norway	TGTP	2.2	No	3+	4.6	2.1
Philippines	Nielsen	17.0	No	2+	76.0	4.5
Philippines	KM	15.5	No	2+	74.0	4.8
Poland	Nielsen	14.0	No	4+	35.7	2.6
Russia	TV Index	27.9	Yes	4+	67.5	2.6
Singapore	TAM Service		No	4+	5.1	
South Africa	TAMS	12.1	No	4+	39.5	3.3
South Korea	Nielsen	17.3	No	4+	46.2	2.7
South Korea	TnMS	18.2		4+		
Spain	PS	17.0	No	2+	44.0	2.6
Sweden	MMS	4.1	No	3+	9.1	2.2
Taiwan	Nielsen	8.0	No	4+	22.1	2.8
Thailand	Nielsen	22.6	No	4+	66.6	2.9
United Kingdom	BARB	26.5	No	4+	57.6	2.2
USA	NPM	114.2	No	2+	295.0	2.6

Finland: Finnpanel sample also includes second homes as part of the survey universe.
Japan: Terrestrial TV universe figures are for 2007.
South Africa: Panel households must have at least one TV set and mains electricity.

TABLE 9: PEOPLEMETER PANEL SAMPLES AND PAY-TV COVERAGE

Country	Service	Peoplemeter household sample			Pay-TV penetration		PVR	Digital
		2001 Installed	2013 Installed	2013 Daily ave. reporting	National (%)	Sample (%)	penetration %	penetration %
Australia National	OzTAM	3,100	3,500	3,150	28.8	28.8	53	93
Australia Regional	RegTAM	1,925	2,135	2,055				
Czech Republic	TV Meter	640	1,850	1,670	51.6	54.5	14	100
Finland	Finnpanel	800	1,100	1,050	c.30	c.30	45	100
France	Médiamat	3,150	5,000	4,140	19.6		37.6	100
Germany	AGF	5,800	5,000	4,900	9.9	9.9	na	100
Hong Kong	FSC	600	800	760	46.0	46.0		
India	TAMMR	c4,000	9,600		92.0	92.0		24
Italy	Auditel	5,060	5,200	4,750	26.6	18.2 (Sky)	12	100
Japan	CS TV	0	600		23.0	100.0		100
Japan	Terrestrial TV	1,200	1,800					
Malaysia	Nielsen	670	1,100	1,010	54.0	45.0		
Norway	TGTP	1,070	1,060	1,000	NA	NA	49	100
Philippines	Nielsen	1,520	5,710	4,810				
Philippines	KM	N/A	2,548	2,254	23 urban	71.6		
11 rural	23.6 urban			c. 3,600				
Poland	Nielsen	1,210	1,700	1,580	70.5	71.6		
Russia	TV Index	1,650	4,030	3,730	NA	91.0	11	NA
Singapore	TAM Service	750	800	90+% main sample	c.60	c.60		
South Africa	TAMS	1,500	1,800	1,350	c.30	46.0	6	32.5

TABLE 9: PEOPLEMETER PANEL SAMPLES AND PAY-TV COVERAGE (contd)

Country	Service	Peoplemeter household sample			Pay-TV penetration		PVR	Digital
		2001 Installed	2013 Installed	2013 Daily ave. reporting	National (%)	Sample (%)	penetration %	penetration %
South Korea	Nielsen	1,550	4,320	4,075	92.0	94.0		100
South Korea	TnMS		3,000	2,500				100
Spain	PS	3,170	4,625	c4,400	22.0	22.0	3	100
Sweden	MMS	1070	1,350	1,200	83,7	NA	25	100
Taiwan	Nielsen	1,800	1,800+		64	64		
Thailand	Nielsen	865	1,800	1,630	80.9	80.9		
United Kingdom	BARB	4,560	5,800	5,250	50.1	c50	60	100
USA	NPM	5,000	20,800	19,970	90.5	90.5	48	100

Australia: The national estimates are based on the aggregated data from the OzTAM and RegTAM panels.

India: The original award by JIB was for a panel of 1,800 homes. Current plans are to expand the present panel to 10,100 homes covering 225 cities/ towns by the end of 2013. The pay-TV universe penetration figures are for the urban TV homes (national urban and rural estimated at 60%). Within the designated survey universe, pay-TV penetration is equated with cable and satellite penetration. Across the total national urban population the figure for 2013 reduces to 82.5%, and to an estimated 60% across the entire urban and rural TV homes universe.

Italy: Sky national and sample penetration - 18.2%; Mediaset national penetration estimated at 8.3%, but no details of panel sample representation.

Japan - CS TV: Penetration estimated at 22.3% of Kanto and 23.5% of Kansai areas, according to CAB-J.

Japan - Terrestrial TV: Total survey sample, including setmeter and diary homes, numbers 6,600 and covers 27 markets. Each of the 8 setmeter and 16 diary markets is represented by 200 TV households.

Norway: Plans to expand panel with 50 non-TV households. Although there are several pay-TV platforms, there are no precise ES or other estimates of the number of homes paying for extra TV channels on subscription. However, relatively high pay-TV penetration is signaled by high PVR penetration.

Philippines: There exist three panel household samples: National Urban (2,000); National Rural (1,500); Metro cities (2,210).

Poland: Plans to add 300 homes in order to increase possibilities of thematic channel analysis.

Russia: There is not measurement of pay-TV households as such. Instead TNS Russia identifies multichannel homes within the survey universe of cities with 100,000+ inhabitants (currently estimated at 80+% of TV households in the survey universe). A multichannel home is any TV household with 1+ thematic "marker" channels delivered via satellite to DTH households or transmitted over cable networks. It does not include any of the terrestrially distributed national//regional/local channels. The current penetration estimate of 91% applies to all individuals within the survey universe. The 11% penetration estimate under PVR includes STB and VCR equipment as well. There is no independent reliable estimate of pay-TV penetration. The ES also does not estimate digital TV penetration. The figure of 11% is taken from a survey by Price Waterhouse Cooper survey at the end of 2011.

Singapore: Panel sample includes 750 main sample and 50 India booster sample homes.

South Africa: Following an audit in early 2013, the decision was taken to suspend temporarily the disproportional over-sampling of DStv pay-TV homes with HD PVR set-top boxes in order to assess better the impact on effective sample sizes of the total panel. Ultimately, the need for disproportional sampling is expected to disappear as plans to expand the panel to 2,800 households homes take effect.

Taiwan: Pay-TV estimates are for any cable/satellite.

USA: In addition to the national panel, 16,000 homes from the national panel also provide measurement for 25 local markets. The other local markets are separately measured by a sample of 13,800 setmeters and 42,000 diaries per diary cycle. Nielsen is in the process of adding additional code readers (lower cost meters) which will triple the set meter sample sizes and double the diary sample.

4.4 PANEL SAMPLE DESIGN AND INCLUSION OF RECEPTION VARIABLES (TABLES 10, 11)

Where we have the information, almost all TAM services collect or draw from ES data about signal reception and many also collect ES data about named pay-TV platform reception, while some may further make use of data supplied by the platform operators, if only for checking purposes.

In addition to collecting signal and/or pay-TV platform reception ES data, many TAM panels will use some of the information as panel controls in order to improve the representativeness of the total panel sample. As shown in Table 11, the great majority of TAM systems in the review use signal reception (i.e. satellite, cable, terrestrial or DSL – whether by TV home or by TV set is not specified) and/or pay-TV reception as panel control variables. In the case of Russia and Norway, which use neither signal nor pay-TV reception as panel controls, other controls are in place that are designed indirectly to improve the overall representativeness of the panel sample with respect to multichannel measurement.

In certain respects, Japan appears like the rest. Although we lack the specific details, we understand that Video Research collects ES data for each of its Terrestrial TV, CS TV and BS TV surveys. But, as we have noted above, although the pay-TV ES data may be used for setting the cable/satellite 70/30

quotas on the CS panel, the data are not used to supply universe estimates. In practice, individual pay-TV channels use their own universe estimates, to which they apply the reported percentage rating. Video Research has its own guidelines for the projection method. By contrast, universe estimates are embedded in the terrestrial TAM panel and users can look at ratings and reach in 000s for the terrestrial channels.

In the case of the Terrestrial TV panel, which does not release viewing estimates for individual pay-TV channels, using pay-TV ES data in order to achieve the correct balance of households with/without pay-TV might assist the accuracy of the total TV viewing time measure and national viewing shares of the main domestic Japanese channels. However, that would still have to be set against the employment of three different survey methodologies (i.e. peoplemeter, setmeter and diary) that hinders the Terrestrial TV service from producing accurate national individual viewer ratings.

And because, the Terrestrial TV and CS TV services supply detailed measures and reports for completely different channels across different samples and different universes of unspecified national size in the case of multichannel cable and satellite TV, there is little added value to be gained from the signal and pay-TV reception establishment data collected by Video Research for purposes of integrating the two sets of viewing data.

TABLE 10: COLLECTION OF ESTABLISHMENT DATA ON TYPE OF RECEPTION

Country	Service	Total reception by category					Platform overlap	BB int. access	Pay-TV platforms measured
		Terrestrial	Cable	Satellite	Digital	DSL			
Australia National	OzTAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Foxtel
Australia Regional	RegTAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Czech Republic	TV Meter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Main satellite, cable and IPTV operators
Finland	Finnpanel	Yes	Yes	Yes	NA	Yes	Yes	Yes	Plus TV (terrestrial), DNA , Sonera and Elisa (IP-TV), Viasat, Canal Digital and many local cable operators
France	Médiamat	Yes	Yes	Yes	NA	Yes	Yes	Yes	Canalsat, Numéricable and DSL platforms - though none of DSL operators interested in platform break-outs
Germany	AGF	Yes	Yes	Yes	NA	No	Yes	Yes	
Hong Kong	FSC								
India	TAMMR	Yes	Yes	Yes	Yes	Yes			
Italy	Auditel	Yes	NA	Yes	NA	Yes	Yes	Yes	Sky Italia

TABLE 10: COLLECTION OF ESTABLISHMENT DATA ON TYPE OF RECEPTION *(contd)*

Country	Service	Total reception by category					Platform overlap	BB int. access	Pay-TV platforms measured
		Terrestrial	Cable	Satellite	Digital	DSL			
Japan	CS TV								
Japan	Terrestrial TV								
Malaysia	Nielsen	Yes	Yes	Yes				Yes	Astro
Norway	TGTP	Yes	Yes	Yes	Yes	No	Yes	Yes	Canal Digital, Viasat,
Philippines	Nielsen								
Philippines	KM	Yes	Yes	Yes	Yes	No	No	Yes	SkyCable, Destiny, Cignal, Others
Poland	Nielsen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	(Cyfrowy Polsat, NC+, Orange, UPC, Vectra, Multimedia, Toya, Inea)
Russia	TV Index	Yes	Yes	Yes	Yes	Yes	Yes	Yes	(Satellite: NTV+, Tricolor TV, Orion Express, Raduga TV, other. Cable/IPTV: Stream Tv Beeline, other)
Singapore	Media								
South Africa	TAMS	Yes	Yes	Yes	Yes	No	Yes	Yes	DStv, Mnet, Top TV
South Korea	Nielsen								
South Korea	TnMS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Spain	PS	Yes	Yes	Yes	NA	Yes	Yes	No	Digital Plus (Satellite), Ono (cable), Imagenio (ADSL), Euskaltel (cable), R (cable)
Sweden	MMS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Canal Digital, Viasat, ComHem and Tele2Vision
Taiwan	Nielsen								
Thailand	Nielsen								
United Kingdom	BARB	Yes	Yes	Yes	NA	Yes	Yes	Yes	Sky, Virgin Media, BT Vision, Talk Talk
USA	NPM	NA	NA	NA	NA	NA	NA	NA	

General notes

Spaces have been left blank where the information is missing at the time of compiling the report, while the NA (non-applicable) applies in particular to countries that have completed digital switchover and where the digital/analogue distinction is no longer applicable.

Country notes

Singapore: Various restrictions are in place. Key ones include: (1) While MediaCorp receives the full ratings database, pay-TV subscribers receive a different version, which has no terrestrial channel data. (2) Database supplied to media agencies contains terrestrial channel information, but none for pay-TV channels. Sharing is, however, permitted so that the media agencies can receive some information about pay-TV channel audiences on an ad hoc basis. (3) There are two pay-TV platforms, Star Hub and Mio TV; but channel-level information is only available for StarHub, with Mio reported as 'other. Finally, (4) StarHub does not permit Kantar Media to monitor its own channels. Only the international pay-TV channels on the StarHub platform are reported.

USA: NPM does not conduct a separate establishment survey, but use the panel sample for to estimate penetration by reception category.

TABLE 11: USE OF RECEPTION VARIABLES AS PANEL CONTROLS

Country	Service	Type of signal reception	Pay-TV	Broadband	Digital / analogue	Other
Australia National	OzTAM	No	Yes (4)	No	Yes (4)	
Australia Regional	RegTAM	Yes	Yes	No	Yes	
Czech Republic	TV Meter	Yes (Satellite (4); Cable/IPTV (4))	No	Yes (4)	No	
Finland	Finnpanel	Yes (Terrestrial, Other)	No	No	No	
France	Médiamat	Yes (Terrestrial, satellite, cable, DSL)	Yes	No	No	
Germany	AGF	Yes (Satellite, cable, IPTV (2))	Yes (2)	No	No	
Hong Kong	FSC	No	Yes	No	No	
India	TAMMR	Yes (Cable and satellite)	No	No	No	
Italy	Auditel	Yes (Satellite pay and free (12)	Yes - Sky Italia (12)	No	No	
Japan	CS TV	Yes (Satellite, Cable)	No	No	No	
Japan	Terrestrial TV					
Malaysia	Nielsen	No	Yes	No	No	
Norway	TGTP	No	No	No	No	Number of channels received
Philippines	Nielsen	Yes	No	No	No	
Philippines	KM	No	Yes, by Pay-TV provider	No	No	
Poland	Nielsen	Yes (Satellite, cable and terrestrial (1))	Yes - Sat. pay-TV operator (1)	No	No	Number of TV sets
Russia	TV Index	No	No	No	No	Number of TV sets, DVD/video ownership
Singapore	TAM Service	Yes	No	No	No	
South Africa	TAMS	No	Yes	No	No	PVR presence
South Korea	Nielsen	Yes	No	No	No	
South Korea	TnMS	Yes	No	No	No	
Spain	PS	Yes (Cable,satellite, ADSL 4))	Yes (Cable, sat., ADSL (4))	No	No	
Sweden	MMS	No	No	No	No	
Taiwan	Nielsen	No	Yes	No	No	
Thailand	Nielsen	Yes (Satellite, cable, terrestrial)	No	No	No	
United Kingdom	BARB	Yes (Satellite (12), cable (12), total sat./cable (12), terrestrial (12))	No	No	No	
USA	NPM	Yes (Terrestrial)	No	No	No	

France: Panel controls also include pay-TV individually by satellite, cable and DSL platforms.
Japan CS TV: Satellite and cable homes quota sampled on 7:3 ratio.
Malaysia: Pay-TV panel control set at 500 installed households.
Russia: TV Index employs a panel matrix structure of household size, number of TV sets and DVD/video ownership aimed at supplying a representative sample of households that reflects the diversity of the highly diverse and rapidly changing audiovisual landscape in Russia.
Sweden: Pay-TV employed as a weight and updated twice a year.

4.5 CHANNEL REPORTING (TABLES 12, 13)

Most TAM peoplemeter systems will identify and measure more TV channels than they actually report. Some of the contributors mention size criteria such as ES estimates of channel penetration (e.g. Finland) or daily reach thresholds (e.g. Philippines, as objective determinants of which channels get reported), while many surveys include criteria of channel subscription to the service as a sole or additional determinant of channel reporting. The Japanese CS TV TAM service belongs to the latter group, whilst it is unclear whether Terrestrial TV follows the same rule, or does report some channels that are not subscribing to its service.

TABLE 12: CRITERIA FOR CHANNEL REPORTING

Country	Service	Criteria
Australia National	OzTAM	All channels that pay for the data
Australia Regional	RegTAM	All channels that pay for the data
Czech Republic	TV Meter	ATO decision, but channels can block reporting
Finland	Finnpanel	Decision taken on basis of ES estimates of penetration
France	Médiamat	Channels must be paying subscribers, consent to water-marking meter technology employed by Médiamat and rules of data publication/press releases
Germany	AGF	All FTA and premium pay channels are reported , but not low pay thematic channels that are sold together with basic cable reception packages
Hong Kong	FSC	Reporting threshold: Reaching 50 panel individuals across 12 weeks
India	TAMMR	
Italy	Auditel	Each broadcaster chooses if/which channels to publish and pays for them. Only paying subscribers are published. All channels can be published.
Japan	CS TV	Must be paying subscriber (36 channels)
Japan	Terrestrial TV	Must be paying subscriber (54 channels)
Malaysia	Nielsen	All Permanent Channels (new channels will be evaluated for 8-12 weeks)
Norway	TGTP	125 most viewed channels
Philippines	Nielsen	Channels have to reach a 12 week threshold of at least 50 viewers per day
Philippines	KM	One-time minimum of 50 panel members viewing
Poland	Nielsen	Channel must reach threshold of 10% national coverage
Russia	TV Index	Channel must have cumulative 3-month reach of at least 1% and satisfy additional stability of measurement criteria
Singapore	TAM Service	Must be StarHub Cable channels and above pre-determined viewing threshold. Minimum viewing threshold is defined as at least 50 reach audience a week for consecutive 12 weeks period
South Africa	TAMS	New channels are monitored for their weekly samples. If they exceed 60 respondents for three consecutive weeks, the channel is eligible for being reported
South Korea	Nielsen	Must be paying subscriber
South Korea	TnMS	
Spain	PS	Data provider together with technical committee decides - usually only channels subscribing
Sweden	MMS	Measure 99.5% of all TV viewing. If channel is big enough it is measured
Taiwan	Nielsen	Must be paying subscriber
Thailand	Nielsen	Must be paying subscriber
United Kingdom	BARB	Must be paying subscriber
USA	NPM	Must be paying subscriber

When it comes to the components of TV ratings, all but Sweden and Norway, which report almost all measurable viewing, included measured but non- reported channels in their ratings. Depending on the country, the systems may also add in viewing of overspill channels and more than half the countries in this review mention the inclusion of PVR time-shift. A minority adds in DVD/VCR use and one or two surveys add in other TV set use as for video games. Most, but not all, surveys also factor in guest viewing.

All that really sets Japan apart for other countries in terms of channel reporting, is that the two lists are kept separate through belonging to two completely distinct and separate surveys, which is where the inequality of treatment lies.

TABLE 13: COMPONENTS OF CHANNEL RATINGS

Country	Service	Channels			PVR time-shift	On dem. catch-up		Other set use	Guest	Other devices measured
		Rep.	Non-rep.	Over-spill		IPTV to TV	DVD/video			
Australia National	OzTAM	Yes	Yes	No	Yes	Yes	No	No	Yes	No
Australia Regional	RegTAM	Yes	Yes	No	Yes	Yes	No	No	Yes	PC
Czech Republic	TV Meter	Yes	Yes	Yes	Yes	Yes	No	No	Yes	PC
Finland	Finnpanel	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
France	Médiamat	Yes	Yes	No	Yes	No	No	No	Yes	Not yet
Germany	AGF	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
Hong Kong	FSC	Yes	Yes	Yes	No	No	Yes	Yes	No	PC
India	TAMMR	Yes	Yes	No	No	No	No	No	No	No
Italy	Auditel	Yes	Yes	Yes	Yes	No	No	No	Yes	No
Japan	CS TV									
Japan	Terrestrial TV									
Malaysia	Nielsen	Yes	Yes	Yes	No	No	Yes	No	Yes	No
Norway	TGTP	Yes	No	Yes	Yes	No	No	No	Yes	PC
Philippines	Nielsen	Yes	Yes	No	No	No	No	No	No	No
Philippines	KM	Yes	Yes	No	No	No	No	No	No	No
Poland	Nielsen	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Russia	TV Index	Yes	Yes	Yes	Yes	No	No	No	No	No
Singapore	TAM Service	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
South Africa	TAMS	Yes	Yes	No	Yes	Yes	No	No	Yes	No
South Korea	Nielsen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
South Korea	TnMS	Yes		No	No	No	No	No	Yes	No
Spain	PS	Yes	Yes	Yes	No	Yes	No	No	No	No
Sweden	MMS	Yes	No	No	Yes	Yes	Yes	No	Yes	No
Taiwan	Nielsen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Thailand	Nielsen	Yes	Yes	No	No	No	No	No	No	No
United Kingdom	BARB	Yes	Yes	No	Yes	Yes	No	No	Yes	PC
USA	NPM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Hong Kong: Overspill and non-reported channels in single group.
Italy: Push VOD satellite on demand is measured. An RFI has recently been released that covers pull VOD, and TV viewing on tablet, smartphone and PC devices. In addition, there are ongoing tests on PC viewing.
Russia: Guest viewing data are collected by the meters, but not included in the processed viewing data. PVR timeshift (+/- 24 hours) is included within TV viewing, but not broken out separately.
Singapore: PVR use grouped together under common PVR channel.
South Korea - Nielsen: Smartphone and PC being tested.
Thailand: Non-reported channels grouped under total and under Cable/satellite.
United Kingdom: 100 homes are now equipped with Web-TV measurement for PCs and another 500 are to be added during 2013. A version for metering tablets is also in development.
USA: For DVD/VCR/other TV set use, the data are reported, but only included under total TV viewing if the content is TV programmes. Computer usage also is reported, but not included unless it consists of TV programme viewing. All told, everything measured and reported that is not included in TV usage, is reported under all usage. Only viewing of TV programme content is included under total TV usage. Half the panel base have virtual meters installed in their PCs. Nielsen is actively looking at ways of integrating measurement of other screens, including datafusion, with TV audience measurement. With respect to TAM panel measurement, plans are to add tables in 2014 to the desktop/laptop measurement already undertaken on the panel, to be followed by smartphones in 2014/1015.

4.6 DATA ACCESS (TABLES 14, 15)

Almost all the TAM peoplemeter panels use the potential of peoplemeters for rapid audience delivery to offer their subscribers daily minute by minute viewing data for 24 hours a day on 365 days a year, with many systems publishing consolidated viewing data over longer time intervals (usually one week (8 days) after the day of broadcast). Provided the channel is being measured and reported, almost all the systems set no different specific reporting criteria for individual channels.

There are in fact just three exceptions among the 23 countries in this review. They are France, Russia and Japan.

Like Japan, both France and Russia have chosen to report thematic or pay-TV channel ratings periodically, or twice a year rather than daily like the terrestrial channels. In either case, this practice has the backing of TV industry users, for whom the summary viewing estimates across selected intervals serve the needs of airtime sales and media buyers in those countries. In the case of France, Médiamat has disproportionately sampled the pay-TV universe (24% of the panel homes sample compared with 20% national pay-TV penetration) in order to improve the quality of its cable and satellite measurement.

However, Japan, which also supplies daily overnight ratings from its Terrestrial TV panel, differs from France and Russia in two important respects.

First, **the terrestrial and pay-TV viewing data are collected from entirely different TAM panels in Japan**, which is not the case in France and Russia, where they are taken from exactly the same TAM panel as the terrestrial channels. This is most important in that it allows for extensive cross-channel comparisons, which is not possible with the Japanese system.

Second, the CS TV survey service in Japan isolates the pay-TV channels further by reporting them on their own and without the opportunity to compare directly with the terrestrial channels except as part of the combined multichannel pay-TV and FTA estimates of total TV viewing. As a result, **a bias may be said to exist in the reporting of pay-TV channel data in Japan that is not to be found in any of the other peoplemeter channels in the present review**. The fundamental issue in Japan is segregation of pay-TV channels by what appears to be an entrenched terrestrial establishment.

One further difference to be noted is that the aggregated datasets offered by the TAM services in France and Russia cover substantial periods across the year. In Japan, however, pay-TV viewing data are only available across twelve weeks of the year on the basis of two weeks in each consecutive month (February, April, June, August, October and December), thereby considerably restricting the accountability of purchased airtime for advertisers.

TABLE 14: DATA RELEASE TO CLIENTS: BASIC UNITS

Country	Service	Form of release	Unit of reporting	Reporting data by platform	Specific constraints
Australia National	OzTAM	Online	Minute	Yes (Terr., subscription TV)	No
Australia Regional	RegTAM	Online	Minute	Yes (Terr., subscription TV)	No
Czech Republic	TV Meter	Online	Second	Yes (Sat., cable, IPTV and terrestrial)	No
Finland	Finnpanel	ftp-delivery, e-mail	Minute	Yes (Sat., cable, DSL and terrestrial, but not by named platform)	No
France	Médiamat	Gateway	Minute	Yes (Sat., cable, DSL and terrestrial, and by Canalsat and Numéricable homes)	Sat. and cable channel data supplied in two overlapping half-year reports of aggregated data (January-end June, September to mid-February)
Germany	AGF	Online	Minute	Yes	No
Hong Kong	FSC	Online	Minute	Yes	No
India	TAMMR	Online	Minute	Yes	No
Italy	Auditel	Online	Minute	Yes	No - Some smaller channels may at own request be reported monthly
Japan	CS TV		5 Minute	Yes (Satellite/Cable)	12 weeks data per year only (2 consecutive weeks in Feb, Apr, Jun, Aug, Oct, Dec)
Japan	Terrestrial TV				
Malaysia	Nielsen	Online	Minute		No
Norway	TGTP	Email/FTP	Minute	Yes (satellite, cable, terrestrial and named pay-TV platforms)	No
Philippines	Nielsen	Online	Minute	Yes (Terr, leading Pay-TV platforms)	No
Philippines	KM	Online	Minute	Yes (Terr, leading Pay-TV platforms)	No
Poland	Nielsen	Online	Minute	Yes (by satellite pay-TV platforms and cable operator)	No
Russia	TV Index	Online	Minute	No	Thematic channels are published in three-month aggregated datasets twice a year as part of TV Index Plus. The rating, share and reach figures are as electronically measured by TV Index.
Singapore	Media	Online	Minute	Yes	Yes - see notes
South Africa	TAMS	Online	Minute	Yes, (Terrestrial, subscription TV)	No
South Korea	Nielsen	CD-R, E-mail, FTP	Minute	Yes	No
South Korea	TnMS	Online	Minute	Yes	No
Spain	PS	FTP and web	Minute	Yes (satellite, cable)	No
Sweden	MMS	Email/FTP	Minute	Yes (satellite, cable, DSL)	No
Taiwan	Nielsen	Online	Minute	Yes	
Thailand	Nielsen	Online	Minute	Yes	
United Kingdom	BARB	Online	Minute	Yes (Sat., cable, terrestrial, DSL and named free and pay-TV platforms)	No
USA	NPM	Online	Minute	Yes (Sat., cable, terrestrial, DSL and named free and pay-TV platforms)	No

France: The Médiamat panel supplies the market with two sets of data. (1) Médiamat Prémium supplies daily viewing figures for about 18 terrestrial channels. (2) Médiamat Thématique supplies aggregated average ratings, share and reach data from the c2,000 homes in the panel sample equipped with pay or free satellite, cable and/or DSL reception. The joint industry Câble et Satellite committee is responsible for setting all the technical specifications, including the reporting criteria.

Russia: There are no platform variables reported owing to difficulty of many respondents in identifying the type of source (e.g. whether cable or community antenna television).

Singapore: Various restrictions are in place. See notes to Table 10.

Spain: Two reported platforms are Digital Plus (satellite) and ONO (cable).

United Kingdom: Platform reporting has been introduced extensively during 2010, with Freesat and BT Vision the only ones available before 2010. The current list includes Sky (satellite), Virgin Media (cable), BT Vision (hybrid terrestrial/DSL), Talk Talk (hybrid terrestrial/DSL), Freeview (terrestrial), Freesat (satellite) and PCTV (broadband connected to the TV set).

TABLE 15: TIMING AND FREQUENCY OF DATA RELEASE TO CLIENTS

Country	Service	Earliest release	Definitive release	Frequency of release
Australia National	OzTAM	Next day	8 days (consolidated)	Daily - 365 days a year
Australia Regional	RegTAM	Next day	8 days (consolidated)	Daily - 365 days a year
Czech Republic	TV Meter	Next day	8 days (consolidated)	Daily - 365 days a year
Finland	Finnpanel	Next day	8 days (consolidated)	Daily - 365 days a year
France	Médiamat	Next day - terrestrial	8 days (consolidated)	Daily - 365 days a year - terrestrial: Twice a year - satellite and cable
Germany	AGF	Next day	3 days (consolidated)	Daily - 365 days a year
Hong Kong	FSC	Next day	Next day	Daily - 365 days a year
India	TAMMR			
Italy	Auditel	Next day	8 days (consolidated)	Daily - 365 days a year
Japan	CS TV	NA	NA	Bi-monthly
Japan	Terrestrial TV	Next day		Daily - 365 days a year
Malaysia	Nielsen	Next day	Next day	Daily - 365 days a year
Norway	TGTP	Next day	8 days (consolidated)	Daily - 365 days a year
Philippines	Nielsen	Next day	Week later (official)	Daily - 365 days a year
Philippines	KM	Next day	Next day	Daily - 365 days a year
Poland	Nielsen	Next day	Wednesday for previous week	Daily - 365 days a year
Russia	TV Index	Preliminary data: Next day - Moscow and second day - national sample and other cities	Final data: Second day after for Moscow and fourth day after for national and city samples	Daily - 365 days a year for terrestrial: Twice a year for satellite and cable
Singapore	Media	Next day	Next day	Daily - 365 days a year
South Africa	TAMS	Next day	8 days (consolidated)	Daily - 365 days a year
South Korea	Nielsen	Next day	Next day	Daily - 365 days a year
South Korea	TnMs	Next day	Next day	Daily - 365 days a year
Spain	PS	Next day	Next day	Daily - 365 days a year
Sweden	MMS	Next day	8 days (consolidated)	Daily - 365 days a year
Taiwan	Nielsen	Next day	Next day	Daily - 365 days a year
Thailand	Nielsen	Next day	Next day	Daily - 365 days a year
United Kingdom	BARB	Next day	8 days (consolidated)	Daily - 365 days a year
USA	NPM	Next day	8 days (consolidated)	Daily - 365 days a year

Japan Terrestrial TV: Data released daily across the full year for peoplemeter and setmeter samples, but over 24 weeks for diary sample.
Russia: The situation is inherently complex due to the existence of nine time zones. The main difference between the Preliminary and Final datasets is the collection of additional data that were not successfully polled overnight due to technical problems. In addition, only the Final datasets include the broadcast monitoring data.
USA: All pay-TV platforms can be measured and reported separately, but there has been no demand for this from the platform operators and the consensus has been not to report channel viewing data by platform.

5. CONCLUSIONS AND RECOMMENDATION

Inspection of the information at hand suggests that the current issue in Japan has less to do with measurement accuracy than the failure to create a comprehensive measurement system.

CASBAA has been concerned by reports of more limited measurement of pay-TV channels in Japan, as compared to other countries in Asia and beyond, and believes there is the potential for this to damage the interests of Japan's advertiser and to restrict the ability of pay-TV channels – Japanese as well as foreign – to compete in Japan's TV advertising market.

To ascertain the facts about this question, this international review of TAM practice has focused on comparing practices prevailing in Japan with those in other global markets. It has revealed issues that may relate to biases in the way data are measured and barriers in the way they can be accessed. Inspection of the information at hand suggests that the current issue in Japan has less to do with measurement accuracy than the failure to create a comprehensive measurement system that embraces and integrates terrestrial and multichannel TV audience measurement, as is the case in almost every other country in the world.

This review has identified six key items that set Japan apart from every other country covered in the review and in a way that raises concerns over current practice in Japan.

ITEM 1
The TAM service operator, Video Research, is owned and represented on its board by domestic TV and advertising agency groups. This raises significant governance concerns over its handling of the interests of external parties, i.e. pay-TV channel providers that are unaffiliated with the major terrestrial broadcasters.

ITEM 2
The Terrestrial TV TAM service operated by Video Research appears remarkably backward for the world's third largest TV advertising market. All other national TAM services employing peoplemeters use them on their own, whereas the Terrestrial TV service in Japan employs peoplemeters for covering just about 58% of the national population and fills in the remainder with setmeters or diaries. This makes national measures and comparisons problematic.

ITEM 3
Although Video Research collects Establishment Survey data for terrestrial TV, pay-TV and broadcast satellite TV, it does not project its pay-TV panel data to the relevant pay-TV universe estimates. Unlike any other system in the world, users of the pay-TV TAM data can only see sample counts and percentages, and have to rely on universe estimates provided separately by pay-TV industry body CAB-J. Furthermore, the pay-TV measurement is restricted to two urban areas that account for at most 50% of the Japanese population. The remainder of the population is not covered.

ITEM 4

Video Research is unique among TAM data suppliers in measuring terrestrial and pay-TV channel audiences on entirely separate panels. Nowhere else have they been isolated in such a way.

ITEM 5

Not only are terrestrial TV and pay-TV channel viewing measured and reported by entirely different surveys, but also they are reported on their own in either survey at a channel level (i.e. in the pay-TV TAM service, individual channel-level viewing data only is available for pay-TV channels, while terrestrial channel viewing is reported only for combined channels). This merely reinforces the isolation of pay-TV channel measurement from the rest.

ITEM 6

The Video Research pay TV panel only measures viewing across 12 weeks of the year. Even if the data are only reported as aggregated totals periodically, the accountability would be improved by continuous measurement throughout the year.

As indicated earlier in this review, current TAM practice in Japan appears to fall well short of GGTAM international guidelines, especially where it concerns core GGTAM principles that cover (1) The meeting of total marketplace needs; (2) Effective industry consultation; (4) Best research practices and (9) Equal access in the interest of fair trading.

CASBAA'S RECOMMENDATION

In light of the comprehensive international survey conducted by the authors of this report, CASBAA believes that Japan is increasingly falling behind the rest of the world in television audience measurement. To cope with rapid changes in the television industry, significant and urgent change is required in how television audiences are measured in Japan.

A key requirement is to transition from the current, highly segregated measurement of different TV platforms to a single integrated TAM service covering all platforms, with sample sizes sufficient for the measurement and reporting of individual pay-TV channels. This will provide the vitally important single 'currency' to serve the needs of Japan's advertisers, media agencies and TV channel owners. It will also bring Japan up-to-date and into line with advances in TAM services around the world, and with the best practices enshrined in the Global Guidelines for TV Audience Measurement (GGTAM).

About CASBAA

Established in 1991, CASBAA is the Association for digital multichannel TV, content, platforms, advertising and video delivery across Asia. Spanning 17 geographic markets, CASBAA and its Members reach over 445 million connections through a footprint ranging from China to Australasia, Japan to Pakistan. The CASBAA mission is to promote the growth of multichannel TV and video content through industry information, networking exchanges and events while promoting global best practices.

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