

Audit 2012 of TNS Russia

FINAL REPORT

Prepared by:

Dr. T. Syfret

R. Ruud

R. Hulks

H. Harrison

2012 TAM Audit in Russia - Executive Summary

Overall Conclusion

TV Index is a well run TAM panel that conforms to the international standards. This conclusion is based upon detailed examination of the available documentation, additional information supplied by TNS Russia where necessary, in-depth meetings with TNS, visits to 110 randomly selected panel households and examination of the viewing data using the Infosys software.

Viewing analyses for the twenty top national channels show generally stable trends over time. The gradual decline in share due to multichannel growth and decreases in average viewing time among younger viewers are broadly in line with other countries. However, there is a marked increase in variability when the viewing data are analyzed at finer "city" levels, which may be attributed not only to the smallness of the samples, but also to certain design factors that are the main focus of the recommendations, of which the main objective is to improve the efficiency and reliability of the TNS panel for the purposes required by users in the market.

The following summarises the main recommendations. Recommendations 1-5 were made at the December presentations in Moscow, and recommendations 6 and 7 have been added since. In the case of Recommendation 7, this was specifically requested by the AWG after the submission of the Final Report in April 2013 and covers the ideal sampling requirements for Group 3 SRC's. In that sense, Recommendation 1 concerns the immediate need for improving the size and representativeness of the total panel sample, as well as improved topline measures of total Group 3 SRC audiences. Recommendation 7 takes the recommendation for expansion a long way further by considering the ideal requirements for Group 3 SRC reporting samples. In the view of the auditors it is a key item for the User Group and TNS Russia to address.

Recommendation 1 – Panel expansion: The most significant recommendation is for an increase in the overall panel size to circa 5,000 – 5,500 households. This would enable the market to use data that was more stable and less variable at the detailed level. The auditors recommend that within this increased panel size, the Non self-representative cities form the main focus by an expansion to circa 122 of the 162 cities with 100,000+ inhabitants in order to reduce disproportionality; however, further expansion may be required to satisfy industry demand for more robust measures at the Group 3 SRC level.

Recommendation 2 - The Establishment Survey - questionnaire and SRC sample sizes: The auditors conclude that the ES is conducted according to international standards and generates stable results that are broadly in line with official industry statistics. They consider the current CATI methodology, although not free from bias to be the correct way forward and a significant improvement over the previous face-to-face interview methodology. However, they recommend a shorter, more focused questionnaire to improve the overall ES and panel recruitment response rates.

Recommendation 3 - Panel Maintenance – panel control matrix, panel age and 'compliance': The auditors find that the panel sample control matrix is well constructed but recommend the introduction of further secondary controls for key household demographics in order to reduce the variability of the weights and improve comparability across cities

Recommendation 4 – Reduction of panel age through enforced turnover:

The auditors find a high level of panellists' compliance on the TV Index panel, as instanced by the household visits, the low levels of flagged homes in the quality control reports and the supporting evidence from the regular Coincidental Viewing Studies. Nevertheless the auditors find that the average length of service on the panel is high by international standards. While they agree that there is no evidence that this has any effect on panellists' compliance, they recommend the gradual introduction of Enforced Turnover with an eventual target of approximately 10% of the panel serving for more than eight years, compared with the current figure of circa 30%. This is necessary to avoid any other possible bias due to extraneous factors.

Recommendation 5 - TV Index Plus – 30-day reach: The auditors are satisfied with the collection and execution of the additional audience data supplied by TV Index Plus and its concurrence with the main TV Index viewing data. At the same time, they recommend the introduction of a 30-day reach criterion, which they feel would permit greater differentiation among the larger audience thematic channels.

Recommendation 6 – Enlarge ES Group 3 SRC sample sizes: Current ES samples for Group 3 SRCs fall far short of what is wanted to provide firm estimates for the panel control matrix variables. The auditors recommend enlargement of the sample sizes for each Group 3 SRC to circa 1,000. The precise sample sizes would be determined by an examination of sampling errors within the current sample.

Recommendation 7 – SRC measurement and the case for further panel expansion: Current SRC samples fall far below the international GGTAM guidelines which are for a minimum of 300 households, whether applied at a national or city level. That said, the GGTAM guidelines make certain assumptions about the range of target audiences for which stable measures are required. Accordingly, the auditors recommend that the AWG conduct a bottom-up analysis of the sampling requirements of SRCs and their implications for the total panel sample size.

Note: The auditors recognise that some of these recommendations, most notably panel expansion, would necessarily bear significant financial implications, which are beyond the scope of the audit.

Other observations in the audit

In addition to the overall findings and recommendations, the auditors also concluded that:

- *Documentation* - The existing TV Index Specification 2012 documentation and its appendices are well written and comprehensive, but suggest that they could usefully have expanded sections relating to the meters and to the fieldwork control
- *Panel balance* – the auditors acknowledge the improvements to panel balance since January 2012 and the switch from face-to-face to CATI on the ES and subsequent changes in the target data
- *Panel maintenance* – there are good consistent records; the incentives work well and are appropriate and comply to international standards as are the quality control mechanisms

- *The meters* – The meters work well and correctly identify the channel while the TNS 5000 meter is well equipped to handle the digital switchover. As the TV market develops with additional reception platforms and devices, these meters may require additional input to cater for time-shifted viewing and catch-up viewing etc.
- *Production levels* – They are stable and are high by international standards, indicating good ‘compliance’ and also good IT communications and polling rates
- *Coincidental Viewing Studies* – Conducted twice yearly the coincidental tests confirm the high levels of compliance across all age groups. There is a possible case for asking questions about viewer presence at the start of the questionnaire in order to reduce potential biases of giving respondents more time to work out the right answers expected of them, though this in no way invalidates the main findings
- *Data weights* – In addition to the high variation in panel weights due to disproportionate sampling, the auditors found significant differences between the actual versus ideal profiles used for weighting selected socio-demographic sub-groups at a national level and still greater imbalances at the level of individual self-representative cities. The indices of actual versus ideal frequently lay outside the auditors’ preferred range of 90 – 110 for ‘ideal’ and ‘actual’ but this is very largely due to small samples and the limited panel controls and is covered by the audit recommendations
- *Data processing* - the auditors find that TNS’ execution of “Central’ and ‘Local’ mapping required to service the national and local markets plus the monitoring of programme and commercials in this highly complex television market is well conducted and of a generally high standard
- *System and data security* - TNS’ security measures are very well considered and appropriate and the auditors merely make some suggestions for additional analyses that might further help TNS identify any possible interference with the data

Finally, individual channels at various meetings in Moscow raised many other questions with the auditors, who have endeavoured to respond to them all. Their answers and discussion will be found in the body of the main audit report.

1. Audit 2012 objectives, main conclusions and recommendations

1.1 Objectives

This report presents the main findings of the audit of the TNS Russia (hereafter referred to as TNS) Television Audience Measurement (TAM) service in Russia.

Audit 2012 was proposed by the User Group, a joint industry group representing television channels/airtime sales groups, media agencies/airtime buyers and advertisers. The audit was subsequently commissioned after receiving support from the respective national associations representing each sector. In the process, an Audit Working Group (hereafter referred to as the AWG) was formed from among the User Group members. The functions of the AWG were to agree the specifications and issues to be addressed, and to oversee the running of the audit.

Audit 2012 took place between September and December 2012. The TNS service obtains television audience measurement (TAM) data from a push-button peplemeter panel of about 3,830 homes. The peplemeter panel run by TNS measures viewing 24 hours a day across 365 days of the year. In addition, TNS employs a large-scale establishment survey (ES). The ES supplies population estimates for key demographic and equipment variables, to which the panel data are grossed up. The ES samples also provide a pool of addresses from which TNS recruits its panel homes. This pool may be further complemented at times by additional interviews from the Additional Recruitment Survey (ARS) when the need arises to increase the recruitment database for the purposes of maintaining a representative panel sample against the chosen target variables.

The TNS TAM service is known as the TV Index. In addition, TNS provides a separate service known as TV Index Plus, which the auditors were asked to include in Audit 2012. TV Index Plus combines television peplemeter panel data with Computer Assisted Telephone Interviews (CATI) and Online Interviews in order to supply audience measures for thematic channels. Polls measurement of TV Index Plus is conducted in two waves a year.

The fundamental objectives of Audit 2012 were to:

- Supply a systematic description and appraisal of the TNS TAM service
- Assess the accuracy of the classifications and viewing data collected by the TV Index, as well as the adherence of TNS to claimed panel recruitment and installation procedures
- Address issues and concerns raised by members of the User Group
- Examine the long-term audience trends for consistency
- Make such recommendations for changing the TAM procedures as the auditors considered necessary or desirable

In pursuing these objectives, the auditors collected details of the TAM procedures from a mixture of gathering reference documentation, interviews and responses to written questions. To assess the quality of the classifications, accuracy of measures and adherence by TNS to claimed survey procedures, a core component of Audit 2012 was a programme of 110 home visits. The full results are provided in detail in a separate report, whilst the TNS Audit Report 2012 summarizes the main findings, principal conclusions and recommendations.

In addition to the standard audit tasks, the auditors attended five meetings involving members of the User Group and channel representatives at the offices of three of the channel groups (REN, UTH and CTC). The meetings raised a variety of issues and concerns. The list may be broadly divided between issues of methodology and audience data output.

Under the heading of methodology, the auditors note the following:

- Conformity of ES and ARS universe estimates with official statistics
- Choice of questions in ES
- Soundness of ES methodology with its focus on individual rather than household samples
- Definitions of household TV set ownership
- Consistency of ES universe estimates
- Panel sample design with regard to the choice of cities and sample sizes within the “representative” and “non-representative” cities
- Panel balance, including the choice of panel controls and weights

- TNS' adherence to claimed recruitment procedures
- Impact of gift incentives on viewing data
- Data protection and security

Under audience data output, there was also a long list of questions and concerns, which covered items such as:

- Variability of ratings and share, especially during August, raising questions of data consistency
- Variations in measured audience levels between Moscow and other cities
- Over-representation of multichannel viewing
- Guest viewing, currently not measured
- Button-pressing compliance of mothers in families with small children
- Potential inaccuracies due to possible limitations of the TNS meters
- Lack of measurement of out-of-home viewing
- Accuracy and added value of TV Index Plus
- Ability of TNS Index to cope with changes in the TV landscape and new forms of viewing, with particular regard to the transition from analogue to digital broadcasts, increasing penetration of DVRs and viewing of IPTV content distributed over the internet

Perhaps the main underlying concern of channel representatives had to do with the predictability, or rather the relative unpredictability, of the ES and viewing measures, together with the decline in viewing shares of the bigger channels. In carrying out Audit 2012, the auditors have tried to address the questions raised in the meetings in addition to the items listed in the audit specifications.

Finally, the auditors were asked to give their views as to whether the procedures followed by TNS conformed to the international GGTAM¹ guidelines about best principles and practice.

1.2 Main conclusions

The findings of the Audit 2012 are that the TNS panel is well run and has some strong features. However, the design and certain aspects of the methodology raise a number of issues where the auditors have made recommendations for change.

To begin with the positive features, the TNS panel possesses the following plusses:

- Generally well managed by experienced teams of fieldwork and quality control staff as well as technicians
- Accurate panel classifications
- Good conformity of claimed with actual procedures
- High production levels and good panellist compliance
- Conformity of most aspects of fieldwork with international guidelines of best practice
- Very careful and well thought through system for monitoring national and regional (city) audiences
- Good standards of metering accuracy with state of the art audio-matching meter technology that is able to address the main challenges of the switchover from analogue to digital
- Sound security systems in place for guarding against data theft and/or loss
- Generally good supporting documentation

¹ GGTAM refers to the "Global Guidelines for Television Audience Measurement", produced by the Audience Research Methods (ARM) Group and sponsored and published by the European Broadcasting Union. ARM members include the Advertising Research Foundation (ARF – USA), Canadian Advertising Research Foundation, European Association of Advertising Agencies (EAAA, now EACA (European Association of Communications Agencies)), European Group of Television Advertising (EGTA); European Media Research Organizations (EMRO), European Society for Opinion and Marketing Research (ESOMAR), Group of Audience Researchers (GEAR), Pan-European Television Research Group, World Federation of Advertisers (WFA).

- Conformity of broad national measured viewing trends with changes taking place in the audiovisual landscape

The auditors add that the staff of TNS have at all times been prompt and co-operative in answering requests by the auditors for information and data, as well as been open to discussion and exchange of ideas about the issues and challenges of the current panel. With regard to the system documentation, the auditors are satisfied that a “Reference Manual” has been assembled by TNS, which is quite comprehensive and includes a number of detailed Technical Appendices. Areas that might benefit from fuller descriptions include sections concerning the ES fieldwork controls and the metering equipment.

But, there are indeed issues that need to be addressed. During their meetings with the channel and advertising representatives, the auditors met with many complaints and queries about the variability and reliability of the viewing figures, especially at the SRC level. They also encountered a few other issues in the course of the audit, which they now bring to the attention of the Audit Working Group.

In a nutshell, the central and unavoidable issue is that the 29 self-representative city samples are, with the sole exceptions of Greater Moscow and St. Petersburg, much too small to present reliable data for most purposes, except just possibly at the level of total Individuals 4+, but not at the level of Adults 18-54, which constitutes the core advertising audience. The issue of insufficient sample size is most conspicuous at the city level. However the effective national sample size has been dragged down by the high levels of disproportionate sampling that are required to deliver the current samples for the Group 3 self-representative city (SRC) samples.

The variability that the auditors encountered in the SRC samples with respect to the main demographic variables of sex and age also reflected the selection of panel control variables according to a 13 cell matrix of household size, number of TV sets and DVD/VCR ownership. This matrix provided only indirect control of the main demographic variables. At the same time, the auditors question the adequacy of the annual ES samples by SRC to deliver stable measures of the penetration of the different cells, while a further concern is the employment of DVD/VCR ownership as a matrix variable, being dynamic and in decline.

If sample size and panel controls were the two main issues, the auditors also had concerns with further points that are covered in the recommendations that follow:

- The length and relevance of some of the questions in the ES questionnaire
- The low panel response rates in addition to relatively low ES response rates when analysed at a household level
- The high average length of panel membership, notably highest in cities that had been longest on the panel
- The odd profile of results for the Coincidental Viewing Survey (CVS) tests
- The output from TV Index Plus

1.3 Recommendations

The auditors made five main recommendations during the December presentations of the audit results in Moscow. These recommendations still apply.

Recommendation 1 – Increase panel size: The aim is to provide more stable viewing estimates. During the presentations in Moscow, the auditors were primarily concerned with the quality of the viewing data at a national level, which they considered acceptable in terms of broad trends, but likely to be less stable and more variable for detailed comparison. To that end the auditors recommended:

- Panel sample expansion from around 3,830 to 5,000-5,500 households

- Expansion of NSRC panel coverage from 72 to circa 122 out of the total 162 cities with 100,000+ inhabitants, as per the ES which covers c. 90% of the total population within the survey universe of cities with 100,000+ inhabitants – also important for reducing the potential biases due to some media companies focusing their distribution on panel cities
- Non-SRC's to be a main focus of panel expansion to reduce sample disproportionality

Both during the December visit to Moscow and subsequently, the auditors have received many questions about the variability of the panel data at the SRC level, which they have covered at length in the discussions about the ES and panel sample sizes. To fully satisfy User Group (UG) demands for robust topline audience data for all 29 SRC's that supply stable and reliable estimates for the core advertising audiences (here defined as Adults 18-54), the auditors believe some further expansion to be necessary, which in turn will impact on the disproportionality issues at a national level. Whether the minimum acceptable sample for any SRC is 100, 120 or say 150 homes will depend on the sampling error criteria, for which purposes the auditors recommend detailed statistical analyses of required sample sizes for delivering certain audiences (e.g. 100 GRP's for Adults 18-54) within acceptable sampling error limits and after taking into account issues such as the interdependencies of audience measures due to many individuals sharing households and the variability of weights. In other words the task is to design the ideal requirements, which in turn will determine the target sample sizes at the SRC level. As a possibly useful first step, TNS might produce a table of sampling errors by SRC. Indeed, the auditors understand from TNS that TNS has a special file for error criteria calculation, which can also be calculated in InfoSys and is available for all its clients to use. This could be a useful starting-point for discussion.

Recommendation 2 – Changes to the panel sample control matrix: The auditors have not changed the view they expressed during the audit presentations in Moscow, in which they recommended:

- Addition of one or more secondary panel controls to the existing panel control matrix
- Additional controls to cover key household and/or individual demographic variables (e.g. Sex, age, occupation, presence of children)
- Such additional controls to be recommended by TNS and agreed with the industry, the aim being to:
 - Reduce the variability of weights
 - Improve comparability across cities at individual or group levels

To these three items they add the recommendation to review the panel matrix with the objective of reducing the number of cells. They also recommend that the number of TV sets be isolated as a control variable (rather than merged with DVD/VCR ownership in two cells of the current matrix) and they have reservations about the continuing employment of DVD/VCR ownership as a panel control variable. Regarding the key 18-54 age demographic, the auditors note that one of the questions to be addressed is the number of age cells: for example, whether it would better to keep the 18-54 age demographic as a single cell, or split it between younger (18-34) and older (35-54) Adults.

Recommendation 3 – A review of the Establishment Survey: The auditors drew attention during the presentations in Moscow to the need to review the ES questionnaire with the dual aim of:

- Shortening the questionnaire which is unnecessarily long and probably exerting downward pressures on both the ES and panel recruitment response rates
- As part of the "shortening process" reviewing the ES questions under the guiding principle that they must (1) be answerable and (2) contribute to fundamental survey objectives of:
 - Supplying universe/population estimates for important variables that are not covered by Rosstat
 - Improved understanding of the main equipment and other reception variables that are associated with variations in TV viewing

These recommendations remain unchanged.

Recommendation 4 – Reduce panel age through enforced turnover: In the view of the auditors the average length of panel membership is very high. Whilst they have no concerns about possible risk of panel fatigue given the high levels of panellist compliance, they are nevertheless concerned with the risk of sample bias due to the operation of extraneous variables, which influence individual length of panel membership. This concern of the auditors is further enhanced by the low panel response rate from the ES sample. Mindful that too rapid turnover is undesirable because of the instability that it involves and its negative impact on longitudinal reach measures, the auditors recommend that it is achieved over time through the introduction of a policy of enforced turnover at around 5-7% per annum over the course of several years. This would still keep overall turnover at roughly the mid-point of the GGTAM guidance range of 15-25% (current annual turnover levels being around 13%). The auditors suggest an eventual target of less than 10% of panel homes with more than 8 completed years of membership versus the current proportion of almost 30% of panel homes that have completed 8+ years on the TNS panel.

Recommendation 5 - TV Index Plus enhancements: After inspecting the results of TV Index Plus, the auditors consider that the introduction of 30-day reach in place of the current 3-month reach would allow greater differentiation among the more viewed thematic channels for planning purposes. Accordingly, they recommend that:

- TNS make the top 10-15 thematic channels available for planning on 30 day periods
- The selection of channels within the top group is to be agreed between TNS and the industry

In addition to the five recommendations that were presented to the industry in December, the auditors have identified four additional items for drawing to the attention of the Audit Working Group:

- **ES sample size in SRCs:** The auditors consider the current annual ES samples for the Group 3 SRCs (c. 440 for each SRC in 2012) to be extremely low for purposes of setting controls for a 13-cell panel control matrix, where the average cell size equals less than 8% of the sample base.
- **Panel recruitment response rate:** The auditors consider the low recruitment rate from the eligible ES samples to the panel to be partly caused by the dual filtering process that involves placing ES households on the recruitment reserve database before the homes selected by the automated system are approached for installation at the final third stage. They accept TNS's justification of the dual filtering process with respect to the ability to implement the panel control matrix, although this could change were it decided to adopt alternative non-matrix recruitment procedures. As it is, the high refusal rates after the ES interview underline the need for a significantly shorter ES questionnaire. This has to be the priority.
- **Coincidental Viewing Studies (CVS):** Whilst the CVS results suggest high levels of compliance, the figures contained in the summary tables are difficult to accept at face value due to the zero entries in the B cells denoting instances of pressed buttons but claimed non-presence in the room with the TV set on of the persons concerned. The auditors observe that the questions about viewer presence come after questions about whether the push button remote control handsets were working well and what changes, if any, had occurred recently with regard to household demographics and equipment. They would instinctively prefer the viewing questions to come first, as it would give respondents less time to consider what answers they thought they should give as opposed to what were actually the correct answers. However, TNS has argued that preceding the viewing questions with other questions helps to disguise the purpose of the CVS questionnaires. In other words, the case can be made either way and the

auditors make no recommendations, but simply note their surprise at the total absence of any B cell entries in some 65,000 cases between 2010 and H1 2012.

- **Security.** The auditors consider that the measures taken by TNS to guard against data loss and theft as well as any contamination of the panel sample are well considered and appropriate. Even so, it is impossible to completely prevent the risk of sample contamination, in which respect the auditors have suggested some additional precautionary measures involving periodic percentile distribution and cluster analyses for consideration by TNS and the Audit Working Group. These are not to be seen as firm recommendations, but merely as additional suggestions. As it is, the auditors are impressed by the measures taken by TNS to maintain data security, which involve monitoring the data daily, and by the seriousness with which TNS treats the issue.

Following the above, the auditors make one further recommendation.

Recommendation 6 – Enlarge ES Group 3 SRC sample sizes: Current ES samples for Group 3 SRCs fall far short of what is wanted to provide firm estimates for the panel control matrix variables. In addition to shortening the ES questionnaire, the auditors recommend minimum annual samples of 1,000 homes for the Group 3 SRCs as long as each is to have its own 13-cell panel matrix. The precise sample sizes are to be determined after examining the associated sampling errors and to be agreed with the EG before being proposed to the UG.

Besides reducing the sampling error, a supplementary benefit of larger ES samples in Group 3 would be larger panel reserve databases that afforded greater flexibility in bringing new homes on to the panel. This would become more significant in the event of the panel adopting other demographic controls in addition to the existing panel control matrix.

Recommendation 7 – SRC measurement and the case for further panel expansion: Current SRC samples fall far below the international GGTAM guidelines which are for a minimum of 300 households, whether applied at a national or city level. That said, the GGTAM guidelines make certain assumptions about the range of target audiences for which stable measures are required. It should be noted that the sample size requirements of a panel are distinct from the boundaries for reporting data samples, where the GGTAM guidelines recommend that data based on a sample size of less than 75 are flagged, and none be used for commercial trading purposes below a threshold of 50 individuals (see Section VII.11). Accordingly, the auditors recommend that the AWG conduct a bottom-up analysis of the sampling requirements of SRCs and their implications for the total panel sample size. The analysis will need to take into account a selection of issues that include:

- Reporting requirements in terms of selected socio-demographic groups
- Criteria of sample size effectiveness
- Disproportionality both within the Group 3 SRCs and between them and the other main groups
- Prioritisation of sampling requirements by SRC
- Timescale and stages of panel expansion

In view of Recommendation 7 being added after the submission of the final report, and going beyond the preceding audit analysis and Recommendation 1, the auditors have placed the supporting discussion in Appendix 8.

Finally, the auditors note that some of their recommendations entail significant budgetary implications, above all where they concern issues of panel sample size. These are matters to be jointly addressed by TNS and its client users.

Note to readers: Audit 2012 has involved inspection of a large volume of data trends. For purposes of reference, the key items have been summarized as far as possible in Word document tables from the large Excel spreadsheet of tables itemised in Appendix 6. In a few instances references are simply made to the Excel database where the data cannot easily be summarized in Word tables. These spreadsheet tables contain some more confidential information

and are not intended for public display, but are available for inspection in pdf format at the discretion of the Audit Working Group.