

Assumptions for measuring media consumption in Poland



Extract from the working business and functional specification
of marketing research of media in Poland
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1. Introduction, business goals and strategy

1.1. Declaration of cooperation between media organizations

As a consequence of an agreement between representatives of the media: radio (represented by the Radio Research Committee - KBR), television (represented by MOC TV) and the Internet (represented by the Polish Internet Research - PBI), whose main objective is to define the shape of a new study of overall media consumption in Poland, media representatives jointly declare their agreement on the key values and principles of the study described in the following paragraphs. Incidentally, this document is of a developmental nature, and its authors are aware that the topics covered in it do not exhaust such a vast issue as the comprehensive media research. Since the idea of a project that would implement the objectives set out in the following chapters of this document is an extremely complex undertaking, both in organisational, technological and methodological terms, we hope to consult the market, which will ultimately strengthen the creation of a new standard. We also assume that this document will be modified and developed along with the progress of technology and research methods.

1. The primary purpose of media measurement is to provide the knowledge necessary for
 - meet the needs of the media in terms of programming content distribution channels,
 - meeting the needs of the marketing industry in the context of advertising activities.
2. The new measurement should be based on the standards described in the second chapter of this document, primarily in terms of data detail, defined indicators, representativeness of the sample, its size and rotation and parameters identifying the advertiser or its message.
3. The measurement should be carried out by an entity or entities which guarantee stable and long-term functioning of the measurement, meeting the quality requirements defined by the adopted standards described in this document, subject to industry audits by an organisation with expertise in statistical research. The measurement conductor or conductors must conduct the measurement in a transparent manner and be ready to submit to an audit of the work carried out, implemented procedures and adopted standards.
4. The measurement should be the result of the agreement of all parties representing the market.
5. The measurement must be capable of development due to the dynamically changing media and advertising environment.
6. The measurement must take into account the needs of the different types of media.
7. The measurement should be financially secure in the long term, resistant to economic turbulence.
8. Stakeholders shall take into account the fact that the cost of a common measurement meeting the adopted quality criteria for different types of media varies and is not reflected in their share of the advertising market.
9. Stakeholders declare their willingness to cooperate with the National Broadcasting Council and industry organisations, including in the area of co-financing of the measurement.

10. The project should draw on experience from foreign markets by implementing best practices.
11. Representatives of radio, TV and Internet also declare their agreement on the basic principles of cooperation:
 - respect for the interests of all parties,
 - discussion and consensus-seeking,
 - transparency,
 - a specified way of voting (by acclamation of media representatives),
 - not influencing the natural behaviour of the research participants,
 - not interfering in the way data are collected and in the data used for the study itself.

An entity that fails to comply may be denied access to the measurement results / excluded from measurement.

12. The measurement itself should be based on devices and technologies that ensure the continuity of the study.
13. The adopted solutions should not, as a rule, exclude certain groups of potential respondents/media consumers (e.g. users of iOS system).
14. Representatives of radio, TV and Internet recommend a passive method of data collection as the best method at the present time, provided that it covers all entities operating on a given market in a way that allows conclusions to be drawn in accordance with statistical principles, and the method used solves problems with the lack of measurement in various conditions (sound disruption, wearing the meter in different places, or not wearing the meter around the clock) to the satisfaction of all parties.
15. The basic assumption is that a new, cross-media measurement must not be qualitatively inferior to surveys currently operating separately.

1.2. Market background / current status

The population of Poland is 38.5 million.

On the Polish market there are nearly 200 TV stations broadcasting in Polish. The largest of them are TVP1 and TVP2 (public) and Polsat and TVN (commercial), which together have a 36% share in the audience. The current TV audience measurement standard is a TAM panel covering 2,540 households (undergoing expansion to 3,500, of which 1,000 are covered by online video measurement), implemented by Nielsen. All household members aged 4+ participate in the study. ATV - the average time of watching TV is over 4 hours a day. Both programme and advertising data are available for all monitored stations.

Number of radio stations currently broadcasting in Poland reaches 300. The nationwide coverage is provided by four programmes of the public broadcaster - Polish Radio, two commercial stations - RMF and Radio ZET, and the Catholic Radio Maryja; the remaining stations have regional or local coverage. Both commercial and

public broadcasters operate on the radio advertising market. Public radio also broadcasts in the DAB+ system. Almost all radio broadcasters also broadcast their signal on the Internet, so the assignment of a respondent to a specific region does not always correspond to the list of stations available in the area. The current radio audience measurement standard is the CATI Day After Recall survey conducted by Kantar company on a sample of 84,000 people aged 15-75. In 2019, the weekly radio coverage was 91.9%, daily coverage was 72.2% and the average daily listening time was 4.5 hours.

According to data from the Gemius/PBI survey for October 2019, there are 28.1 million Internet users in Poland over 7 years old, of which 23.1 million are connect to the Internet via computers and 23.9 million via mobile devices. There are 112 large publishing groups active on the Internet market, whose websites and applications are used by 27.9 million users. The largest are: Google (26.4 million Internet users), Wirtualna Polska Group (21.3 million), Facebook.com (21.0 million), RAS Polska Group (20.8 million) and YouTube.com (18.8 million).

According to Publicis Group's estimates, advertising expenditure in Poland amounted to PLN 9.8 billion in 2019. 44.5% of this amount was spent on TV advertising, 36% on the Internet and 7.7% on radio; the rest remaining part was spent on outdoor (5.5%), magazines (2.9%), dailies (1.8%) and cinemas (1.6%).

1.3. Business purpose and strategy

The main goal of the project is to provide a solution enabling reliable measurement of media audiences in Poland to the media market and advertising industry. The measurement methodology, its scope, indicators and results should be accepted by all market participants. Thusly, they will take on the dimension of a universally binding standard, which will serve as a basis for settlements between stakeholders - participants of the media market.

1.3.1. Project mission and vision

- The mission of the project is to support the activity and development of the media business and advertising market by providing an integrated cross-media measurement, carried out in a responsible, reliable manner and in accordance with accepted research standards.
- The measurement is to serve as an effective and reliable tool on the basis of which broadcasters will assess the quality and level of consumption of the content they broadcast and make the necessary corrections to adjust their offer to the expectations of the recipient.

1.3.2. Expected results

- Development of the advertising market, understood primarily as an increase in the volume of advertising expenditure in each of the examined media, by enabling customers to effectively use the media to achieve their marketing goals.
- The creation of a new, commonly accepted system of settlements between the participants of the advertising market.
- Providing knowledge about cumulative media coverage and consistent measurement of media consumer contact with advertising also to representatives of the marketing industry.

2. Methodological assumptions, expectations for the study and presentation of data

2.1. Reporting standards

2.1.1. Establishment Survey

The Establishment Survey aims to estimate the number of media users in Poland and to provide knowledge about their demographics and media consumption, including a description of the respondents' (and their households') equipment for receiving TV, radio, Internet and signal source. In addition, the Establishment Survey will provide knowledge about the number and profile of users due to the frequency of use of particular types of media, which should be reflected in the structure of the media survey panel.

It is assumed that the research company conducting the Establishment Survey will publish assumptions concerning the error in estimating the total number of users, as well as in the demographic breakdown, of particular types of media. It is expected that the study will be designed in such a way as to maintain the assumed errors while minimizing costs.

The results of the Establishment Survey are crucial for the results of integrated media measurement. Therefore, in order to monitor the volatility of media consumption, as well as the number of media users, it is necessary to update the Establishment Survey results at least twice a year. However, it is recommended that the frequency and size of the sample for the Establishment Survey update should correspond to the market situation so that trends can be monitored reliably.

2.1.2. Integrated media research

- The research should cover as wide a range of media as possible in order to avoid significant disruption of measurement results due to omitting areas where media are consumed but not measured. There is a need to clearly define the omitted areas and assess their importance in the context of the different types of media.
- The measurement will be carried out on a personal sample. However, it is possible to supplement the results using data from the household sample.
- The measurement shall be based on a sample representative of the surveyed population in relation to the reported demographic indicators and selected behavioural indicators relevant for media consumption.
- The sample shall be selected at random within the adopted sampling units. The sampling algorithm should be transparent and open and described in a precise manner.
- The research company conducting the measurement will be obliged to establish and disclose quality standards (level of standard error) for specific indicators and to observe them. It is also expected to disclose the identified bias of the research sample.
- The process of data adjustment and weighting should be disclosed to data users.
- Data for the study must be subject to quality control in accordance with generally accepted standards in order to identify abnormal behaviour, both individual and long-term, that could significantly affect the reported indicators;

- The rules for data validation should be open and unambiguously defined and the validation itself should take place on a daily basis;
- The rotation of the sample must also be controlled so that its level does not have a significant impact on the reported media consumption results.

Due to the radio's requirements for regional reporting detail, the recommendation maker indicates the possibility of creating an additional strongly rotating panel. It will give the possibility to report data which, when accumulated to a longer period of time, would meet the accepted standards also for regional radio stations.

2.2. Expectations for the measurement

2.2.1. Scope of research and reported parameters

The demographic universe, common for all types of media, is defined as people from the age of four who use media in Poland using any device with any software. Since it seems impossible to collect data by personal meters in the youngest age group, it may be necessary to adopt a way of conducting the research different than the personal sample and a mobile meter (if such methodological possibility exists, and cost is not prohibitive).

In addition, the necessity of reporting data in a geographical division defined by voivodeships is assumed. Nevertheless, it is expected that smaller territorial units are reported as the sum of the indicated counties at the price of a higher estimation error. The selection of the expected territorial granulation will be made after analysis of the costs of available variants, sample size and estimation of measurement error.

It is also assumed that the basic unit of time for which the results will be reported is a single minute, with the prospect of shortening this time in the future. It should be emphasized that the quality of the study plays an overriding role in the whole project.

It is also desirable that the definition of the indicators currently used should be made more consistent so that the media can be compared with each other in a reliable manner. In particular, there are indicators for the reach of different types of media, the level of duplicated reach between different types of media and their co-consumption. It is also expected that there will be a consistent measure of the quality of contact with advertising across media types. These are indicators such as completion rate, viewability rate, zapping, multiscreening, which would be available for all media. Their specification will be determined at a later stage, after analysis of available data and examination of advertising effectiveness in different types of media. Moreover there is also a need to report indicators specific to only one type of media.

The study to be designed must be adapted to users' current media consumption, which means that it should take into account the channels in which broadcasters' content is distributed and consumed, with particular attention being paid to:

1. linear content - distributed in both analogue (radio waves) and digital (MUX, DVB, DAB, SAT, Internet);
2. non-linear content - audio and video podcasts, music internet channels, VOD, PVR, internet services and applications, DAI (Dynamic Ad Insertion);

3. content distributed by local radio broadcasters and smaller television broadcasters.

The examination must include measurement on any device used to receive multimedia content, with particular attention being paid to:

1. analogue and digital TVs and including smart TV,
2. FM, DAB, WWW radio receivers,
3. smartphones and tablets with internet access,
4. PCs.

The use of media must be monitored in as many situations as possible in which the recipient of the content is located, i.e:

1. at home - both in "collective" situations (e.g. dorm rooms) as well as individual ones;
2. outdoors - in situations related to commuting, sports, recreation, in the car;
3. at work, in educational institutions - both in "collective" and individual situations.

The adopted technology should be adapted to precise data collection, eliminating barriers in content measurement, such as: the use of headphones, the use of a microphone for calls and applications, the way the phone/measuring device is stored, the consumption of web content inside the application not sharing a cookie with the main browser, the consumption of web content through solutions to speed up the loading of content on mobile devices (GAP, FIA), etc. It is expected that data shortages resulting from technological limitations, causing significant losses in measurement, should be eliminated. Solutions are also expected to be able to estimate deficiencies on the basis of experiments (carried out, for example, as part of the Establishment Survey and its updates) and on the basis of these, to correct reported figures. The reason for introducing a given correction into the survey results should be to ensure the highest possible quality of the survey, understood as the best possible representation of media consumption. Anonymisation of the data source is required - the survey contractor should present his or her concept of data anonymisation in order to secure the possibility of influencing panelists and manipulating raw data acquisition. It is expected that the resulting data will be distributed with the use of API allowing for planning, conducting and accounting for advertising campaigns in an automated manner. The detailed needs of particular types of media result from the expectation that the current quality of the measurement will not be compromised:

2.2.2.TV

The measurement of TV and video content should cover all panellists' activities on their TVs, computers and mobile devices. The viewing of linear TV, VOD services and other video content should be measured via applications and/or external devices connected to the TV. Unless the entity performing the measurement presents another method giving a more reliable result, the authors of the document expect that the measuring device should measure the viewership by comparing two data sources. One of them is a watermark placed by the broadcasters. The second source can come from a decoder/antenna of the panelist, and through the measuring device together with the watermark can be sent to an application or a program to view the results. Computers and mobile devices of panelists should be equipped with applications enabling tracking of visited websites and used applications that contain video content (e.g. Netflix) and have the possibility to transfer data. The application is to give the possibility to compare different subgroups due to socio-demographic characteristics.

In addition:

- The method adopted will guarantee representativeness at the level of basic demographic and social variables (gender, age, income, household size, geographical distribution and size of the dwelling) and indicated media consumption (e.g. time of use of a medium given);
- The measurement will make it possible to determine directly (without e.g. data rolling) the audience (depending on the type of medium: viewers/users/listeners) for media meeting the requirements specified in the following points;
- The measurement will be carried out using methods that minimize the load on the participant;
- The measurement will allow to estimate the audience size of each of the separate streams in case of using signal splitting in linear transmission (e.g. DAI) or other method resulting in different audience segments watching different content from the same broadcaster at the same time;
- Where different data sources for different types of media are used to measure different data sources, as much of their methodologically justified common part should be provided as possible;
- The measurement will be carried out using a methodology and taking into account the definitions and dimensions resulting from the standardisation work of international expert groups to date;
- The data acquisition process should enable at least daily distribution, at the latest on the day after the monitored event occurs; in the long term, solutions will be expected to enable the size of the auditoriums to be tracked in near real time or with a slight delay, reasonable time for data transmission and processing;
- Recording of the actual use of the medium at the level of a single viewer - linearly and TS (at least +3); regardless of the use and type of device;
- Single band analysis possible for stations with average AMR% > 0.1% for groups >5% of the universe;
- At least one minute granulation of results (finer granulation possible, as described in the general section);
- Taking into account standard broadcast typology, distinguishing between premieres and replays;
- Determination of the title of the broadcast - monitoring for all antennas covered by the measurement;
- Standard classification of a single advertising spot in accordance with at least one of the classifications in use on the market (Kantar, Nielsen) - monitoring for all antennas for which a package sale is currently carried out, settled according to the number of GRP and CPP values;
- Availability of a tool allowing to receive information for an event freely defined by the antenna(s) and (time of broadcast OR name(s) of the broadcast); the broadcast should also be understood as an advertising/sponsorship block and individual advertising films/sponsorship indications included in it.

2.2.3. Internet

The key element of reporting should be the audit of websites (measuring the activity of every Internet user visiting a given site thanks to measurement scripts embedded in the HTML code) supplemented with estimated data from the sample, as it is currently done. The audit results are an accurate reflection of reality, where statistical error does not occur for most indicators. In addition, the survey standard should enable the audit of advertising campaigns, so that they can be compared with activities carried out using other media.

For data obtained in this way, a significant difficulty is to obtain measurements at the user level and to identify the user. The research company may use algorithms and procedures for adjusting data using information about cookies, as well as other possible identification methods to calculate unique browsers and devices. However, the algorithms used should be empirically validated and information about the error resulting from their use should be publicly available.

The reported data should include accessibility for the following dimensions and indicators for both content and advertising:

Demography: The survey results are required to reflect, according to accepted standards, the reported values by gender, age (defined ranges), education, income (defined ranges), town size, occupational status (list), voivodship, characteristics describing the Internet user's household (household size, net income of the household, number of children in defined ranges according to age, number of persons over 65).

Categorisation, i.e. the possibility of grouping websites measured during the research into segments reported in the research results according to established patterns. It is expected that it will be possible to create personalized categorizations in the research, apart from global categorization - common for all users.

Reported time units: reported data will be available in at least daily granularity with the possibility of aggregation to any time range.

Platforms: in the area of website content consumption measurement, the measurement should allow for the analysis of total content consumption and by PC and mobile devices.

2.2.4. Radio

The radio survey should include the measurement of all Polish radio stations currently broadcasting in the country on the basis of a concession from the National Broadcasting Council. These are both nationwide, regional and local radio stations concentrated in radio networks or broadcasting only on a limited territory. It should be noted that the limited technical coverage of smaller local radio stations directly translates into the representation of their listeners in the survey sample. Therefore, the sample size should be sufficient to guarantee statistical conclusions.

The measurement should take into account:

- listening to the radio using any sound source, also with headphones usage;
- listening to the radio from any signal source - FM, DAB, Internet, TV, TVSAT/cable;
- listening anywhere - home, work, car, public transport, outdoor
- taking into account and calibrating the possible loss of listening resulting from the nature of individual activities);

The geographical division should enable the analysis of the audience in the territorial units from the county upwards. The measurement should be conducted simultaneously on a sample representative of the Polish population (aged 4 years and more) and independently in several dozen cities indicated as the most important local radio centres (unless the size of the survey sample is large enough to make urban oversampling unnecessary).

2.2.5. The presentation

The presentation of the results should be based on the application which:

- Uses the Graphical User Interface (GUI) for intuitive operation;
- allows the user to access data wherever he/she is, only with online access;
- gives the possibility to freely cross and aggregate the available dimensions;
- gives the possibility to define and analyse the media consumption of behavioural targets (defined by the way of consumption of a type of media or specific media);
- gives the possibility to personalize the tool (rip up your groups, media choices, defined analyses, work desks, etc.);
- gives the possibility of scripting the tool (automation of performing periodical reports);
- allows to export data/results outside the application environment.

2.3. Technology, expectations and budget recommendations

2.3.1. Identifying users on the Internet

Currently, it is common to use a type of user ID (cookie) to track traffic on websites. Some of them are assigned demographic characteristics from the survey (especially in the case of mobile, where the user ID is less often deleted). However, it should be remembered that the technological environment is constantly changing. New versions of browsers offer the possibility to delete cookies, enable tracking modes or delete cookies automatically after some time. Therefore, tracking all internet user interactions is difficult and depends on external factors, independent of the research company. Recruitment of an offline panel gives additional possibilities - such as installing software on a router or replacing a router and installing tracking software on all devices. . They remain a separate issue:

- 1) Measurement of mobile applications – user activity inside application is not visible to reporting application
- 2) Measurement of the stream - player also does not communicate with reporting applications and should be integrated with the measurement.

To sum up - basing the measurement exclusively or to a large extent on a cookie carries the risk of unstable results, as well as omitting an important part of traffic or an important group of users whose behaviour differs from that of the population. When constructing the panel, it is therefore necessary to take care of the method of obtaining data about the user's Internet activity, taking into account all devices and applications installed on them. Only such a complete picture will allow to properly calibrate data obtained from site-centric measurements.

2.3.2. Preferred data sources and means of identifying audio and video content

For the authors of the document, there is no doubt that the measurement "core" should be data obtained from a panel of individuals maintained on a continuous basis. The panel should provide a sufficient level of representation for selected demographic, social and geographical characteristics. The data for the measurement should be obtained in a minimally invasive way (not burdening the panelists and not

influencing their media consumption). Media consumption should be recorded regardless of the type of message (linear and non-linear), the place of consumption (within and outside the panelist's household) and the device used for this consumption.

The size of the panel should be presented in the recommendation of the research operator, which should take into account both the detailed objectives to be achieved by the measurement and the amount of financial contribution provided by organizations financing the measurement.

Return Path Data (RPD) can be considered as one of the acceptable sources, which, due to the high volume of information natural for this type of data, may be useful, especially to reduce the number of observations of zero auditorium size, which is a natural phenomenon for sample data. RPD data must be modelled in multiple dimensions.

Due to the expected precision of content identification in different types of media and platforms, as well as the expected introduction of non-linear forms in radio and TV, linear transmission (e.g. DAI), watermarking is the preferred method of media consumption recording.

3. Summary and recommendations

Currently, the optimal compromise in the cost/effect ratio is considered to be the implementation of integrated (hybrid) cross-media measurement, where the primary role will be played by data obtained from a representative panel of individuals (not households), in which the consumption of all types of media under consideration will be measured taking into account their specificity. This panel could, if necessary, serve as a calibrator against other data sources, provided that it is clearly proven that supplementing such data with additional data will improve the quality of the result obtained, and that the use of such data is justified in order to optimise the cost of the entire research project. It seems that at present the best method of data collection is passive measurement and this is the way of collecting data from the sample (referred to in this paragraph) is recommended. Any other large packets of supplementary data should be collected by a method that provides information of at least the same level of quality.

Regardless of the form of measurement, its added value compared to current methods should be able to estimate the unique reach achieved by each media. A consequence of this is the introduction of a tool that enables planning commercial communication while controlling the level of duplication. For editorial and advertising content, it should be possible to compare different types of media with each other, by means of standardised indicators common to all types of media, taking into account their specificity both in the way they are consumed and in the way advertising activities are conducted.

In the longer term, the market should endeavour to agree on a common advertising currency based on the intrinsic value of the various forms of advertising, as well as on the specific characteristics of media consumption, legal restrictions on the possibility to place advertising forms and on the targeting and control of emissions / impressions / insertions. Such arrangements may be conducted in parallel to the process of designing and implementing the joint study. However, an unambiguous declaration of the market's acceptance of the new research as an accounting standard is necessary, and thus cooperation in the research on placing identification codes in advertising forms (this applies primarily to online advertising, but also to audio and video advertising in the case of a solution based on watermarking).