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CIM Television

Methodology

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1 Mission and general framework of the study

1.1 Mission

The general purpose of the CIM TV-study is to measure television viewing of all residents in Belgium in a continuous and uniform way.

The national CIM TV-study already exists since 1997.

1.2 Reference universe

The reference universe is the population for which the study is aimed to be representative. The definition of the reference-universe mentioned below remains unchanged. Only its numerical interpretation is updated each calendar year, depending on the evolution of the population figures.

The TOTAL reference universe is defined as follows:

The Dutch and French speaking population, aged 4 years and older including foreigners, living in Belgium and belonging to a household that has at least 1 functioning television set at its disposal.

In practice, there are two sub universes defined because of the regional division of Belgium.

- **UNIVERSE NORTH**: all individuals corresponding to the definition above and living in the region of Flanders or in Brussels (defined as region Nielsen III) and Dutch speaking.
- **UNIVERSE SOUTH**: all individuals corresponding to the definition above and living in the region of Wallonia or in Brussels (defined as region Nielsen III) and French speaking.

The description of a **household** is as follows:

A household is formed by, either one person usually living on his own, or two or more persons (whether or not related by family ties) sharing the same home and leading a common life. The recruitment in service flats has been allowed since 2015.

Individuals who are not part of an individual household but are residents of institutions like orphanages, prisons, monasteries, etc., are not included in the TV panel.

In order to ensure continuity, the reference universes is revised annually on January 1st. They remain valid for at least 1 year and can only be updated after approval by the CIM TV Technical Committee.
In 2015,2016 and 2017, the CIM Radio Study reweighted to the CIM Press Study was used for this purpose[1]. In 2018 both the CIM Radio study and CIM Establishment Survey were used.

As the reference universe in other CIM studies consists of individuals aged 12 years and older, the reference for the individuals aged 4-11 years is taken from the Belgian government data (http://statbel.fgov.be/en/statistics/figures/) and adjusted according to the percentage of TV-owners and the ratio of Dutch and French speaking individuals in the region Nielsen III.

[1] For more information about these studies, please refer to the methodology of the CIM Press study and the CIM Radio study describing extensively the principles of (random) sampling and the principles of weighting to correct a number of demographic variables on http://www.cim.be/nl/pers/methodologie and http://www.cim.be/nl/radio/methodologie

1.3 Sample

The study is based on a panel that is a sample of households. The ultimate goal, however, is to be representative in terms of the individual and therefore to represent the viewing behaviour of the overall reference universe.

The panel must be representative for the following **personal** socio-demographic variables:

- age;
- gender;
- educational level;
- professional activity;
- PRP (Principle Responsible for Purchases)

The panel also has to be representative for the following household related socio-demographic variables:

- household size;
- presence of children.

There are also a number of **secondary control variables** that have to be compared with the reference study, but they are only corrected in case of major deviations. A deviation of more than 20% is defined by the CIM TV Technical Committee as too large. On the one hand, there are the following socio-demographic variables:

- PRI (Principle Responsible for Income);
- province;
- urbanization level;
- social group;

and on the other hand the following equipment variables:

- number of television sets in the household;
- type of TV reception (e.g. cable distribution, satellite dish);
- the possession of peripherals (e.g. video, video console, DVD reader and writer, set top box).

The benchmarks for all of these criteria are derived from the CIM Press study and the CIM Radio study. Secondary equipment variables with fast evolving adoption rates (e.g. DVD players, digital decoder) may lag in the CIM Press study. In that case, other available sources are used, e.g. the CIM Radio Study, in order to maximize the representativeness of the panel.

1.4 Scope and regional composition of the sample

The operational sample for the calculation of the results consists of at least 1,500 households: i.e. at least 750 for the North and at least 750 for the South of the country. The individual sample consists therefore of all individuals aged 4 years and older who belong to these panel households.

Occasional visitors to the household of 4 years and older (the so-called guests) are included in the individual sample.

2 Structure and composition of the panel

2.1 Recruitment of the households in the panel

2.1.1 General principle

The general principle of the recruitment of panel households during the establishment of the panel in 1996 was based on the so-called "two-steps" model. This means that first a completely separate survey

was organized to recruit potential households (step one). This survey was only set up to invite the candidate households to participate in the viewing panel and not to collect socio-demographic profiles and other criteria. This was done in the reference study CIM PMP. This 'step one' survey was therefore not to be interpreted as an "establishment" survey (according to the British model). Subsequently, the appropriate households were selected from the accumulated reserve (step two).

Once the panel was established and operational, the focus has shifted to improving the composition and/or the replenishment of deficits which automatically led to a targeted recruitment of certain profiles. Up to now, this recruitment is used.

GfK Belgium daily monitors the composition of the panel and reports at the monthly meetings of the CIM TV Technical Committee. Shortages are complemented as good and as quickly as possible. Every two months GfK Belgium makes a selection of addresses based on data from respondents in the CIM Radio and CIM Press study who indicated their willingness to participate in other CIM studies. If the recruitment pool from the CIM Radio and CIM Press study proves to be insufficient, GfK Belgium can ask additional addresses from the CIM HUB study, purchase additional addresses internally or purchase them through CONSU-data from Bisnode or Orgassim.

2.1.2 Panel maintenance –panel quality

In order to evaluate the quality of the panel, CIM uses the Efficiency ratio, a value between 0 and 100. The closer this ratio is to 100, the better the sample reflects the objectives to be achieved.

In order to be able to compute the Efficiency, first the effective sample size must be determined.

The **Effective Sample Size** expresses the degree to which the weighting factors correct a particular sample. In each sample some individuals are overweighted because they are underrepresented, others are underweighted because there are too many individuals like them. By a simple formula that makes use of the standard deviation, it is possible to calculate to what extent the sample deviates from an ideal sample.

$$\text{Effective sample size} = \frac{\text{Unweighted sample size}}{1.0 + \left[\frac{\text{Standard deviation}}{\text{Average weight}}\right]^2}$$

$$\text{Efficiency} = \frac{\text{Effective sample size}}{\text{Unweighted sample size}} \times 100$$

The value of the efficiency score allows to compare samples. It shows - in one number - what the quality of the sample is compared to the total universe. It should be noted that this ideal is only expressed in terms of the used weighting variables. In other words, the number of weighting variables used, and which ones they are, have a direct impact on the resulting factors and therefore on the standard deviation.

Table 1 Evolution of efficiency-scores (15+) in 2017

2017	North	South
jan/17	86,8	89,5
feb/17	87,2	89,7
mrt/17	87,1	88,6
apr/17	87,5	88,9
mei/17	86,9	89,5
jun/17	87,2	90,2
jul/17	86,6	89,9
aug/17	87,1	91,1
sep/17	86,7	90,8
okt/17	86,9	90,6
nov/17	87,5	90,3
dec/17	86,8	89,6

2.1.3 Panel maintenance - Recruitment matrix

In 2010, the CIM TV Technical Committee reviewed the composition of the panel. A bias in the composition of the panel was stated, showing a shortage of 20 to 29-year-olds, low-skilled individuals and labourers on the one hand and an excess of university graduates, residents of Walloon Brabant and households with an internet connection on the other hand.

The recruitment principle applied by GfK Belgium until 2010, was that deficits in the panel were complemented as well as possible. The main limit of this recruitment method is that it is done on an ad hoc basis. Additional problems are the restriction of the total annual rotation to 25% (in 2012-2014 exceptionally raised to 30%), the fact that recruitment reserves are not unlimited, and the requirement that the household panel should in fact be representative at the individual level. The CIM TV Technical Committee asked GfK Belgium to optimize the recruitment and to work proactively rather than reactively.

The Permanent Structure of the CIM and GfK Belgium subsequently investigated the principle of a household recruitment matrix that had been successfully applied for some time in the Netherlands and Great Britain. Based on a series of analyses on the influence of socio-demographic variables on viewing time, and rotation, a recruitment matrix was produced that consists of 40 cells. This matrix has been revised in 2014 and reduced to a matrix of 30 cells. These 30 cells are a combination of the following household variables: age of the PRI, educational level of the PRI, household size and professional activity of the PRI.

Table 2 Recruitment matrix (based on data PRI) – Objectives North 2018

North Target 2018

Total	North Target 2018			Low	Mid	High		
66	12 - 29			8	30	28		
223	30-44	HH1-2	Active	6	28	34	Inactive	16
		HH3+	Active	10	58	72	Inactive	
248	45-59	HH1	Active	5	15	10	Inactive	41
		HH2	Active	7	38	22	Inactive	
		HH3+	Active	13	50	47	Inactive	
184	60-74	HH1	Inactive	19	12	12	Active	27
		HH2+	Inactive	31	50	33	Active	
64	75+			39	16	9		
785								

Table 3 Recruitment matrix (based on data PRI) – Objectives South 2018

South Target 2018

Total	South Target 2018			Low	Mid	High		
77	12 - 29			15	36	25		
229	30-44	HH1-2	Active	10	26	31	Inactive	
		HH3+	Active	19	44	55	Inactive	44
244	45-59	HH1	Active	7	8	11	Inactive	
		HH2	Active	9	23	22	Inactive	
		HH3+	Active	13	34	52	Inactive	66
182	60-74	HH1	Inactive	27	23	10	Active	
		HH2+	Inactive	30	36	29	Active	26
58	75+			27	20	11		
790								

Legend

20-29	Principle responsible for income (PRI) between 20 and 29 years old
30-44	Principle responsible for income (PRI) between 30 and 44 (included)
45-59	Principle responsible for income (PRI) between 45 and 59 (included)
60-74	Principle responsible for income (PRI) between 60 and 74 (included)
75+	Principle responsible for income (PRI) older than 74
HH1	Household size = 1
HH2+	Household size = 2 or more
Active	Having a professional activity
Inactive	Having no professional activity
Low	Lower educational level
Mid	Middle educational level
High	High educational level

This matrix is a working tool for GfK Belgium. For each cell, the comparison is made between the ideal panel composition based on the universe and the actual composition of the panel. By taking into account forced rotation (e.g. households leaving the panel after 6 years), cell rotation (e.g. a 59-year-old who shifts to the cell 60-74 years) and spontaneous rotation (prediction based on data from the past), an estimation of the expected evolution in each cell can be made. In this way, GfK Belgium gets a clear overview of the recruitment priorities. An additional advantage is that this method clearly maps the recruitment efforts of GfK Belgium. The Permanent Structure and the CIM TV Technical Committee can thereby monitor the work of GfK Belgium in an easier and more structured way.
The recruitment matrix also contains additional information about the available recruitment resources for each cell. In this way one can buy additional targeted addresses if needed.

To further optimize the recruitment process the Technical Committee Television requested GfK Belgium to collect data about the non-response. This can be integrated in the recruitment as soon as sufficient information is available.

2.2 Selection of the households in the panel

After a candidate household is selected, it is contacted and additional information will be collected.

On the one hand, an extensive HOUSEHOLD QUESTIONNAIRE is filled out. Next to the verification of the known information, a complete inventory of the audio-visual equipment in the household is made, such as the number of available devices, the available peripherals, etc.

On the other hand each family member from the age of 12 years on has to fill in a PERSONAL QUESTIONNAIRE. These individual questionnaires include questions about consumption behaviour and especially socio-demographic variables.

The questionnaires are available on http://www.cim.be/nl/televisie/methodologie.

2.3 Installation of the TV meter at the selected households

After a telephonic appointment, a technician connects a TV meter on each TV set in the panel household. The family members will get a demonstration of the system. The technician also leaves behind a detailed information brochure.

2.4 Rotation of the panel

The total of all incoming and outgoing households within a given time period in the panel is called the rotation.

There are two types of rotation:

- **Spontaneous** rotation (churn), voluntary or caused by e.g. a move ;
- **Forced** rotation, caused by factors such as:
  - Lack of discipline in the use of the push-button system (uncovered viewing);
  - Maintaining the quality of the sample in terms of representativeness;
  - Two consecutive negative controls (called coincidental controls, see below);
  - Disclosure of the identity of a household in the sample to the users of the television study;
  - Participating more than 8 years with the sample.

The results of new panel households are only incorporated in the official results after a trial period of one month. Up to 2015 panel households could remain in the panel for a maximum of 6 years. 5% of the panel households could participate up to 7 years. Since 2016 panel members are allowed to remain in the panel for a maximum of 8 years. The panel households are replaced at a rate of maximum 30% per year (spontaneous and forced).

The table below gives an overview of the installations and rotations in 2017.

Table 4 Overview number of installations and rotations in 2017

	Rotation North			Rotation South			Constant Panel		
	Spontaneous	Forced	Total	Spontaneous	Forced	Total	North	South	Total
jan/17	11	7	18	8	10	18	19	17	36
feb/17	28	9	37	16	21	37	44	30	74
mrt/17	42	20	62	21	30	51	63	50	113
apr/17	48	23	71	27	37	64	75	60	135
mei/17	56	26	82	32	47	79	88	73	161
jun/17	60	30	90	37	52	89	97	82	179
jul/17	68	42	110	41	57	98	109	99	208
aug/17	74	46	120	45	64	109	119	110	229
sep/17	84	54	138	55	68	123	139	122	261
okt/17	92	61	153	58	79	137	150	140	290
nov/17	100	73	173	63	88	151	163	161	324
dec/17	103	81	184	67	92	159	170	173	343

Reasons for leaving the panel

Reasons Rotation 2017	Rotation North	Rotation South
Request panel household	103	67
Bad participation (undisciplined)	14	14
Unfindable household	7	4
Technical problem	1	11
Others	5	6
In function of max. 8 years	54	57
	184	**159**

2.5 Panel motivation and incentives

Since households generally participate for a long period of time, a continuous motivation of the panel members is very important. The panel team will try to establish sufficient communication with the families to foster and maintain a close bond of trust.

This set of contacts can be summarized as follows:

- **4 monthly panel newspaper**

This is a magazine in which general information about GfK Belgium is given, including an introduction by the management, a presentation of all staff members with their photos, some technical information, some household and gardening tips, a brief reminder on how to use the remote control, ...

There is an adapted version for children.

- **E-Panel: monthly newsletter via email**

This is a brief monthly newsletter with general information and instructions related to the study and a sweepstake (€ 100 for the main winner and 5 minor prices of € 5). There are always references to the panel member section of the GfK Belgium website.

- **Annual individual incentive**

There is a fixed incentive for all panel members age 12 years and older. Everyone who participates well for an entire year, receives a personal check accompanied by a letter in the month following to the anniversary of the initial installation. The value of the voucher amounts to € 12,5 for each individual in the household, with a minimum of € 25 for each household. Moreover, an increase of € 12,5 is provided for each additional TV in the household. Individuals removed from the panel because of forced rotation, receive a compensation in proportion to the number of months they cooperated.

- **Lottery**

Three times a year, 15 prizes are randomly raffled among panel members who cooperated correctly: € 250 (1°), €125 (2°), € 75 (3°) and gifts worth approximately € 25 (4° to 15°). The winners will be listed by their household panel number in the panel newspaper.

- **Welcome gifts & annual gift**

Each household will receive a small welcome gift worth € 10 at the moment of installation and a small gift worth € 7.5 at the end of each year.

- **Children's Gifts**

An appropriate gift worth € 10 is sent twice a year to all children (0-12 year) (during the summer holidays and at Saint-Nicholas).

- **Coincidental checks**

Twice a year there is a short telephone conversation with the panel members, during which the panel members can freely comment. These comments are treated by the panel team.

- **Free telephone number, and website** (separately for French and Dutch)

Panel members can contact the panel management team of GfK Belgium at any time to point out possible problems. An answering machine will record all telephone calls outside the office hours.

- **Free mailbox**

For correspondence with GfK Belgium.

- **Visit by technicians**

Personal contact between the panellists and GfK Belgium occurs mainly through visits by technicians within the scope of the annual survey. Moreover, practice has shown that free minor repairs of the TV equipment are strongly appreciated.

- **Uncovered viewing**

Each day the 10 households with the most uncovered viewing are contacted by telephone by the panel team. A short standardized questionnaire is used to categorize the reasons for uncovered viewing. Should the uncovered viewing be caused by a lack of discipline, the household will be urged to amend the situation. If the reason is technical, an appointment is made to send a technician to the household.

2.6 From annual to continuous questioning of the panel

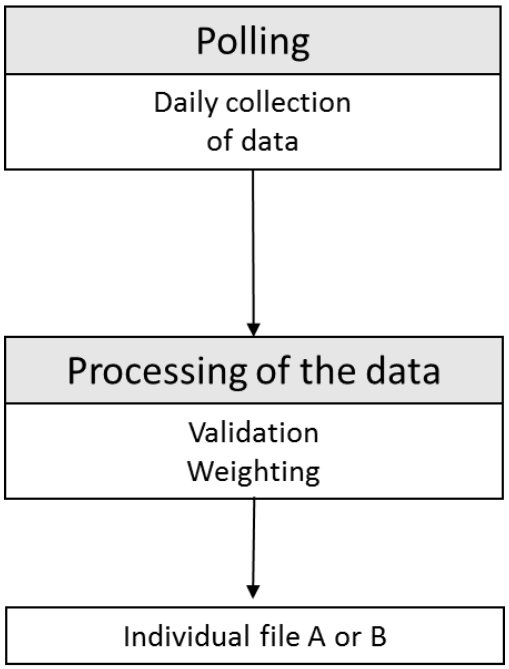
Until 2004, all panel members were annually interviewed during the months of October and November. As of January 2005, this questioning became a continuous process that is carried out by the technicians.

During these surveys, both the household and the personal questionnaires are administered in a face-to-face way. The manner of phrasing will be kept as similar to the recruitment interview to guarantee the comparability of the results.

The results of this survey are encoded and verified by a control program at GfK Belgium. The recoding of e.g. social groups or lifestyle, based on basic variables, will be registered in the panel file by GfK Belgium.

3 Collection of data

The various stages in the collection of the information are illustrated by the following scheme. It is a cycle that is repeated daily.



3.1 Registration of TV consumption

3.1.1 Technical equipment in the households

GfK Belgium uses the TARIS 5000, which was developed by the Common Technology Center (CTC), an economical partnership between GfK Belgium and Kantar Media.

Until 2001 the AGB4900 TV meter was used.

Every television set in the household is connected to a TV meter.

3.1.2 Identification of TV channels [2]

From 2003 to 2007, two recognition systems were used to determine which TV channel was being watched: the so-called Picture Matching and the CNI code. Both techniques functioned optimally in an analogue environment. In a digital context, however, channel identification based on these systems became more difficult.

In the course of 2007, it was decided to install a third channel identification module: Enhanced Audio Matching (EAM). From 2011 onwards, the system of Picture Matching was no longer used.

Enhanced Audio Matching

As of 2007, audio matching became the main method for the measurement of digital television channels. The so-called EAM (Enhanced Audio Matching) ensures the identification of the TV channel using "remarkable" audio samples. The audio samples from the TV set are matched with the audio samples of the reference site of GfK Belgium.

Contrary to Picture Matching in which a fixed pattern of samples is taken, the audio sampling does not happen at a fixed pattern. EAM uses the so-called triggered sampling technique where the system takes striking sound samples within a time interval of 7 to 10 seconds. Multiple samples are taken this way each minute. From 2016 on, the sample rate is increased to 5 seconds. This will improve the channel recognition.

During the night, all the information on the TV meters is sent to GfK Belgium, then the data is compared to the sound samples in the EAM Reference site. By using triggered sampling, less comparisons are needed to find a correct match. This makes the whole process run faster and allows for more data to be stored. Because of this, the measurement of time shifted viewing could be realized.

[2] Some descriptions are adopted from the methodology of the TV study in the Netherlands

CNI-code through the Vertical Blanking Interval

Many TV stations broadcast teletext information through the Vertical Blanking Interval (VBI), the otherwise unused part of the video signal. In addition to the known pages of text information, this information includes codes to identify the TV channel (these are for example used by some TV sets to show the name of a station for a short time after it is selected) and the CNI code (Country and Network Identification) published by the European Broadcast Union (EBU).

The TV meter is equipped with a VBI module to recognize these CNI codes (it is not necessary that the television is equipped for teletext) assuming that the TV channel itself integrates this code. This code can be requested at the EBU: every TV channel receives a unique code. A disadvantage to this system is the channel dependence: if for any reason the TV channel no longer transfers the code, there will be no measurement possible. Moreover, this CNI code system suffers from the introduction of digital platforms. Some digital operators (e.g. VOO) don't always transfer a CNI code, other digital operators have no CNI code at all. For example, the Proximus set top boxes that have been installed since autumn 2015 will not transmit any CNI code.

The CNI code is especially useful in case of simulcast. This occurs when two or more TV channels broadcast the same image or sound. Known examples are sport events such as a soccer game or the Olympic Games, which are simultaneously broadcasted in several countries. In this case, the CNI code is used as an additional identifying method.

3.1.3 Further classification of unknown viewing volume

Since 2007, an Audio Breakout Box (ABB) is used to inform the TV meter through which peripheral device audio signals are transmitted to the TV screen. The evolution and the use of certain devices can be closely monitored this way.

Until 2007, the Scart Source Selector (SSS box) was used for this. With the introduction of the EAM the SSS boxes were gradually replaced by the Audio Breakout Box (ABB).

The following devices are registered (if the content was not identified in the reference site):

- Video recorder;
- DVD and other peripherals (reader, writer, reader + VCR, hard drive,...);
- Other hardware device (camera, PC, memory stick, ...) ;
- Play-console (Sony Play Station, Microsoft Xbox, Wii, …);
- Set-top box (Telenet, Proximus TV, ...);
- Smart of Connected TV's (connected to the internet through Wifi of Ethernet, or through external peripheral as Apple TV or Chromecast)

Before 1/9/2015 DVD was mentioned alone. In practice, other recording devices were also put in this category. In the results before 1/9/2015 there is also a category "Pay TV" for Pay TV channels with their own decoder. Pay TV is currently available on the standard set top boxes.

This type of measurement only allows for the viewing volume of each of these peripheral devices to be monitored separately. The content of the images remains unknown.
Until 31/12/2015 the CIM published statistics on the usage of teletext. Due to the introduction of digitext, this measurement was no longer sufficiently reliable and was thus stopped.

3.1.4 Viewing behaviour of individuals

The registration includes all usage of the TV set for each family member, so that one can measure and report any specific form of television activity.

The panel members should identify themselves by one simple action. Each household member of 4 years and older, logs on at the start and logs off at the end of a viewing session. He disposes of his own button on the remote control. When (s)he begins to watch, (s)he just presses on his / her own button. Then the number of the person logging on appears on the display of the TV meter. At regular intervals, the following message appears: "IS THIS STILL CORRECT?". At that moment, the person can confirm the number(s) of the viewer(s) or he can just ignore the message. It will disappear after a few seconds.

3.1.5 Definition of a TV channel

A TV channel is defined as every unit that:

- is broadcasting audio-visual content according to a program schedule;
- possesses a unit of editorial responsibility.

3.1.6 Definition of a viewer

All panel members and any guests who are in a room with a TV set and who are able to watch television, are considered to be viewers.

In other words, the contact with the medium is being studied. Members and guests are therefore not only asked to register themselves as a viewer when they are actually watching. Watching actually implies an active perception and is therefore more restricted than the simple "contact" with the medium. This is explained in the manual that the panel household receives. In the case of young children (4 to 11 years), the registration can be done by an adult.

If a panel member is registered on multiple televisions, only one trajectory will be kept. The last login has priority.

3.1.7 Definition of a guest

Occasional guests meeting the definition of a viewer are considered as TV viewers. Their viewing is considered to be equivalent to the viewing of the fixed panel members in the household.

Guests have been measured for a long time in the CIM TV study. They have to register themselves, just like the fixed panel members, through the remote control of the panel household. Separate buttons were provided so that these guests can identify themselves and register their age and gender. In practice, however, these data were hardly used because no other socio demographic details were available. This changed as of January the 1st, 2013. From then on, guest viewers were fully profiled. The viewing ratings with integrated guest viewers became the new, official currency on the television market. By integrating guest viewing, the TV Audience Measurement (TAM) became a lot more representative for the total TV viewing in Belgium.

The premise of the integration is that guest viewing is representative of the viewing behaviour of panel members outdoors. The extensive algorithm allocates the viewing behaviour of a guest to that of a panellist who at that moment in time was not watching TV at home.

The algorithm looks for the best possible candidate based on four parameters. The panellist must live in the same region (North-South) as the guest viewer, he or she must have the same gender and must belong to the same age group (4-11, 12-14, 15-24, 25-34, 35-44, 45 - 54, 55-64, 65 +). In addition, the type of set top box (Telenet, Proximus, VOO, other DVB NL, other DVB FR, and no DVB) is also taken into account to prevent that a guest, viewing a particular channel, replaces a panel member who cannot receive that channel.

When all potential recipients are found, viewing behaviour is assigned randomly. This way, the same panellists don't always act as a receiver. If no corresponding candidate exists, one will be sought in an adjacent age group. If no candidate is found, the guest viewing behaviour is not assigned. A panel member receives the successive viewing trajectories of the same guest as long as (s)he does not watch TV.

The allocation was tested for 2 months and could pass the necessary quality requirements. Obviously, not every individual match is perfect. It might happen that a guest differs on several characteristics from the panel member that receives the viewing behaviour. This is not a major objection because the TV Audience Measurement is reporting on a target group level.

More information on the impact of the profiled guest viewing data on target groups, programs and campaign analysis can be found in a document available at www.cim.be (section television/methodology/Introduction Guest viewing).

3.1.8 Time between samples and persistence

Data must be collected for each device in the panel household that is able to receive television broadcasts.

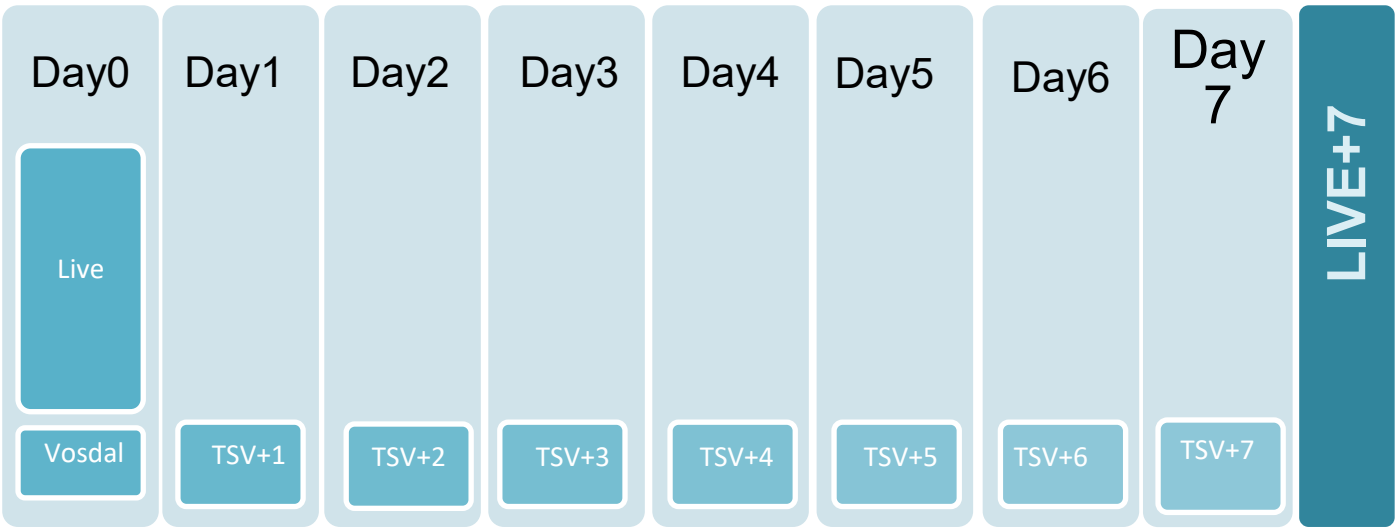
In the current system, it takes several seconds before a "match" is found and a channel is detected. Just like the channel persistence in the old measurement system (which could be set at 15 seconds exactly), this means that when another channel is selected on a TV device, the new channel will only be recognized and matched if the channel is viewed for at least 10 to 15 seconds. Extreme switching behaviour is therefore not registered. From 2016 on the duration between samples has been lowered to 5 seconds. This will facilitate channel recognition.

3.1.9 Time Shifted Viewing

On January the 1st, 2010 the TV measurement changed fundamentally with the introduction of delayed viewing or Time Shifted Viewing (TSV). Until the end of 2009 only Live Viewing, the linear viewing behaviour, was taken into account. Time shifted viewing could not yet be detected so this was classified in the category "Other" (unrecognizable viewing behaviour). The matching system became much more efficient with the introduction of the EAM system making it possible to match sound samples over a longer period.

The CIM TV Technical Committee decided in 2010 to take into account time shifted viewing until six days after the day of broadcasting. The sum of Live + Time Shifted Viewing until six days after broadcast became the new "currency" or standard for the television methodology and was called Live+6. Since the 1st of January 2016, the seventh day of TSV has also been measured. The new currency is called Live+7+Guests. With this change, the CIM TV study joins the currency of other European countries. Both Live data and VOSDAL data (‘Viewing On Same Day As Live’ or time shifted viewing on the same day as broadcasted) are reported the day after the broadcast. The official currency data, however, is only available after 8 days, when the Live+7+Guest data is known for a particular day/program, commercial or channel.

The diagram below shows how Live + 7 is composed:



The TSV-persistence is 30 seconds. This means that TV viewing is considered to be time shifted as soon as the viewing moment differs 30 seconds or more from the broadcasting moment (as recorded in the Audio Reference Site). This TSV-persistence was chosen after research that showed that there may be a small time difference in the moment of receiving the signal. The location plays a major role but especially the way the TV images are received is crucial (digital-analogue, through cable or adsl, etc.).

Until 12 September 2016 Time shifted viewing was only measured for the channels in the B-band. From 13 September 2016 on, time shifted viewing is measured for all channels in the A-band. Since 2017, time shifted viewing is also calculated for guests.

3.1.10 No television activity

In absence of a registration, in case of late registration a long time after the TV was turned on, when a family is absent because of holidays, in case of power outages, etc., checks are carried out by the panel management team (cf. infra: checks).

The complete lack of television activity may be due to:

- absence of panel members (for example during holiday);
- no viewing of the panel members;
- disturbances of the electricity or cable network or at the TV channels themselves.

Absence of the panel members

The panel members inform GfK Belgium about their absence in case of an expected absence of three days or longer. This is done through the TV meter. When all family members are absent, they can report this through the TV meter by pressing the "Holiday" button on the remote control without turning on the TV. At that time the message "HOLIDAY?" automatically appears.

All normal functions are resumed when turning on the television set after the absence. In this way, GfK Belgium knows the family is temporarily absent and that the absence of viewing behaviour is not due to telephonic or electricity problems.

When the household switches off all the electricity during their absence, the battery of the TV meter will be used for a period that is too long. In this case, the household must notify GfK Belgium personally of their absence.

If all television activity is missing for several consecutive days and this is not due to electricity or cable network problems, the panel management department must determine whether there has been effectively no television activity in the household.

Non-viewing and uncovered viewing

In principle, the complete absence of television activity is recognized as such and treated in the results. If, nevertheless, systematically too few state changes or no changes at all are listed for several days, the panel management division of GfK Belgium will contact the household.

An automatically generated daily control report ensures that the panel team is continuously informed about any problems.
The reasons for bad registration behaviour are checked, for example when during a long period or repeatedly the TV device is turned on without any registered viewer.
Families with bad registration behaviour will be reprimanded and in case of repetition removed from the panel.

3.2 Polling (data collection from the households)

Every night the information stored in the modem of each participating household is sent to the server without the panel members noticing it. This happens at night between 2:00 AM and 6:00 AM at the latest. The average connection time with a modem is about 1 minute. This solely depends on the amount of information that has to be sent (number of status changes).

Unlike the old meters, it is the TV meter itself that calls the central server of GfK Belgium.

If the polling fails (e.g. in case of a defect or maintenance activities at telecom companies or at GfK Belgium) there is a back-up window between 5 AM and 9 AM for families with GPRS. The information from the previous day can also still be collected on the following day(s).In other words, the information is not lost. The amount of data that can be recovered depends on the viewing statements present and the size of the available data storage. Maintenance activities are always planned during weekends and all CIM TV software houses are informed beforehand.

Finally, the TV meter itself is operated by the central computer. More specifically, the internal clock of the meter is synchronized with the central computer, which in turn is in sync with the atomic clock in Frankfurt.

Security procedures during the polling

The system is built in such a way that the progress of the polling is checked by a number of internal control procedures.

By using a client-server solution with excess capacity, another server can take over a job in case of failure of one of the main computers.

The system checks every 25 minutes whether the number of polled households increases sufficiently. If the minimal threshold is not reached (the standard is 90% of 1,500 panel households), the operator on duty is informed through the automatic overnight monitoring software. He can remotely log in and try to solve the problem.

If the operator of GfK Belgium fails to solve the problem, he will continue the polling but interrupt the automatic data processing (validation and weighting). 24 hours later, the data of the last 48 hours will be gathered. In this case, the management of GfK Belgium must be notified, who in turn contacts the Permanent Structure of the CIM and finally the CIM TV software houses.

Such problems are usually due to interruptions on the electricity or telephone network. To avoid this, GfK Belgium has provided a UPS system which ensures that every short power interruption is overcome and that no information is lost during longer breaks.

A summary report is made every day that summarizes the success of the polling.
After the polling session (no later than 6:00 am), the collected information is transmitted to the central computer for further processing: validation and weighting.

3.3 Validation of the data

Validation can be defined as the complete set of checks for completeness and reliability. It therefore covers all the checks regarding whether or not to accept the individual data of each of the households / persons. The possible corrections of this data are included.

Details on the various control reports that will be created can be found under the chapter on checks.

Viewing data are not included in the final file in the following circumstances:

- The socio-demographic data of a household or a household member are missing;
- The deviation of the internal meter clock of the household from the central computer is greater than 30 seconds;
- The TV was turned on for at least 1.800 seconds (half an hour) of which 99% without a viewing registration of a family member.
- Viewing statements longer than 60.000 seconds (16h) are automatically discarded.

If the time between turning on the TV set and the registration of a viewer is less than 120 seconds, the validation program assumes that the person began to watch at the time of activation of the device. If there was a channel switch in the meantime, the correction still takes place from the switch on.
If the time between the logoff of a viewer and turning the TV off is less than 120 seconds, the validation program assumes that the person watched until the time of the deactivation of the device.

The deviation of the meter clock from the central computer is also corrected during the validation process. All start and end times of the data will be corrected according to the time deviation.
If the minimum of 90% of all households in the calling list (i.e. all activated households) is not reached, the Permanent Structure of the CIM will decide whether the data are released for further processing.
After application of the validation rules, the data are prepared for weighing.

Below you can find a regional overview of the average number of families in the calling list, after data collection (= before validation) and after validation.

Table 5 Number of households in the calling list after validation per month in 2017, monthly average by region

	North	South
	After validation	After validation
jan/17	777	770
feb/17	776	771
mrt/17	778	771
apr/17	775	775
mei/17	777	783
jun/17	784	787
jul/17	777	778
aug/17	781	776
sep/17	780	775
oct/17	773	773
nov/17	789	781
dec/17	773	773

3.3.1 Simulcast

Simulcast presents itself when in audio matching the same sound is captured via two or more channels in the reference site at the same moment (e.g. Eurosong). This can occur between channels of the same broadcasters (duplex) or between channels of different broadcasters. Simulcast is determined minute by minute. Once at least 5 seconds of a minute are considered as simulcast, the whole minute is considered as simulcast. During simulcast, viewing statements will firstly be attributed to a channel based on the CNI-code. If there is no CNI-code present, the following rules will be used to choose the most probable viewing behaviour.

- Bridging: if one of the channels in simulcast was viewed before (and after) the simulcast period, the viewing statement will be assigned to this channel.
- If both of the channels in simulcast were viewed (one before, one after the simulcast), the viewing statements will be attributed to the channel that was viewed before the simulcast period.
- If before the period of simulcast, the television was not turned on and one of the channels in simulcast was viewed after the period of simulcast, the viewing statement will be attributed this channel.
- If other channels than those in simulcast were viewed after or before the period of simulcast, the viewing statements during the period of simulcast will attributed to the most likely candidate. A hierarchy was made for this decision.
    - In the North universe, Dutch-speaking Channels will be preferred over French-speaking channels, in the south French-speaking channels will be preferred.
    - Belgian channels will be chosen before foreign channels.
    - Should simulcast occurs between two or more channels of the same broadcasters, the viewing statements will be allocated to the preferred channel. The channels of each group that are preferred are indicated in blue in the overview bellow.
    - Channels that have been the longest in the CIM in the study, will be preferred over newer channels.

		NORTH
GROUPS	SUPERGROUPS	CHANNELS
1	NL-NL	NPO1
		NPO2
		NPO3
2	BE - NL	CANVAS
		EEN
		OP12
3	BE - NL	2BE
		VITAYA
		VTM
		VTM KZOOM
4	BE - NL	VIER
		VIJF

		SOUTH
GROUPS	SUPERGROUPS	CHANNELS
1	FR-FR	EUROSPORT FRANCE
		FRANCE 2
		FRANCE 3
		TV5
2	BE-FR	(BE) LA3
		LA DEUX
		LA DEUX (ENGLISH)
		LA UNE
		LA UNE (ENGLISH)
3	BE-FR	BEL RTL & TELEVISION
		CLUB RTL
		PLUG RTL
		RTL-TVI
4	BE-FR	AB3
		AB4

		OTHER
GROUPS	SUPERGROUPS	CHANNELS
1	OTHER-OTHER	DUITSLAND 1 (ARD)
		DUITSLAND 2 (ZDF)
2	OTHER-OTHER	BBC WORLD
		BBC1
		BBC2

3.4 Weighting of the data

All persons participating in the panel must be weighted according to the reference universe.

A weighting of the data is necessary if the profile of the sample doesn't perfectly reflect the reference universe as measured by the predefined relevant socio-demographic variables. Since the panel is changing daily, a weighting should be done daily and each individual will receive a different weight each day. The daily variations will, however, be as limited as possible in order to ensure the stability of the panel, especially in longitudinal analyses (i.e. over longer periods). The weights of the panel members also need to approach the value 1 as close as possible in order to limit the daily fluctuations.

The choice of the weighting variables is made by the CIM TV Technical Committee. It remains in principle valid for a whole year. Weighting is always done separately for the two regions, but according to the same criteria.

From 2012, the CIM Press study is accepted as "Golden Standard". More information about the "Golden Standard" can be found on the CIM website via the following link: http://www.cim.be/nl/golden-standard. In 2015, 2016 and 2017 the TV universe was based on the CIM Radio study. In the 2018 tjis was a combination of both the CIM Radio and Establishment Study.

The table below gives an overview of the seven weighting variables with their individual categories.

Table 7 Weighting variables

Group	Household size
1	4-11
1	12+ HH1
1	12+ HH2
1	12+ HH3
1	12+ HH4
1	12+ HH5+
Group	**Professional activity**
2	4-11
2	Agriculture + Craft/Trade 12+
2	Independent + Management 12+
2	Employee 12+
2	Skilled worker 12+
2	Unskilled worker 12+
2	Retired 12+
2	Housewife 12+
2	Student 12+
2	Others + Unemployed 12+
Group	**Education**
3	4-11
3	No degree or Primary education
3	Lower sec General
3	Lower sec Artistic, Technical, Vocational
3	Upper sec General
3	Upper sec Technical Artistic
3	Upper sec Vocational, Other
3	Bachelor
3	Master
Group	**PRP*Age**
4	4-11
4	PRP 12-34
4	PRP 35-44
4	PRP 45-54
4	PRP 55-64
4	PRP 65+
4	No PRP 12+ + PRP12-17

Group	Gender*Age
5	Male 4-11
5	Male 12-17
5	Male 18-24
5	Male 25-29
5	Male 30-34
5	Male 35-44
5	Male 45-54
5	Male 55-64
5	Male 65-74
5	Male 75+
5	Female 4-11
5	Female 12-17
5	Female 18-24
5	Female 25-29
5	Female 30-34
5	Female 35-44
5	Female 45-54
5	Female 55-64
5	Female 65-74
5	Female 75+
Group	**PRP*with/without children**
6	4-11
6	PRP 12+ with children <15 years
6	PRP 12+ without children <15 years
6	No PRP 12+ + PRP 12-17
Group	**Age Children**
7	4-5 years
7	6-8 years
7	9-11 years
7	12+

GfK Belgium uses the iterative "rim-weighting" procedure. This means that every person is evaluated with his values for the weighting variables in comparison with the other persons in the sample. Then, a weight is assigned to that individual making the overall outcome of the weighting variables corresponding to the universe. This procedure is run a sufficient number of times until the final outcome, i.e. the profiles of all the weighting variables in the sample, correspond to the universe or at least reflects it as close as possible. This way, one weight per person is obtained, which is the result of the adjustments of each individual value of the weighting variables. The distribution of these weights is centred on the value 1. Each weight is then multiplied by a factor to extrapolate the data to the total population in the region (expressed in thousands). The sum of all these weights is a constant, namely the number of individuals in the universe.

This weighting procedure is effectuated daily and as the input after polling varies daily, the weights differ (slightly) every day as well. Such weighing is done on all panel members (who were retained after validation).

Every day, several reports are made about the weighting (separately for each region) including the distribution of the weights, the average weights for each weighting variable, the highest and lowest value, the extrapolation factors and the "efficiency" score.

This information is very important to monitor the quality of the data and the stability of the panel. It is reported at each monthly meeting of the CIM TV Technical Committee.

3.5 The individual file or "viewing file"

The final product, the individual file, is created after weighing. This is one file that contains both the data of the North and the South. This file is delivered daily by 8 a.m. and contains the following elements:

- the identification of the file (day, time of production, number of records, ...);
- the channel list (channel code, name);
- descriptive variables of households (household number, size, equipment, ...);
- descriptive variables of the individuals (personal ID number, age, gender, ...);
- descriptive variables of the guests (age, gender, ...);
- individual viewing statements (with indication of the relevant channel, start and end time, device number ...).

The layout of the file is, in principle, defined for one full year. Changes can only be made after approval by the CIM TV Technical Committee. The latest changes were made at the introduction of the time shifted viewing and the introduction of profiled guest viewers. Two variables were added in the field with information about the viewing trajectories: the source code and the TSV code. Guests can be found in the software tools by means of the device number (7). The layout of the files is provided by GfK Belgium to the software houses upon request.

The CIM TV study is designed to provide information that enables the analysis and commercialization of Belgian TV channels. These channels contribute in a large extent to the financial cost of the measurement.

After a thorough debate (in 1996) the Board of Directors of the CIM decided to make two types of individual files daily:

- a file type **ATA**, which contains information about ALL the variables. This is reserved for TV channels and their media sales houses, which are part of the Belgian Association for Audio-visual Media (BVAM). It allows them to analyse and adjust their product optimally. This file contains data per second for all national TV channels that are measured within the CIM TV study;

- a file type **ATB**, which contains information about a limited number of channels (only the subscribers of the study). This file is reserved for all other members of the CIM on the list of subscribers. This file contains the data per second for the national subscribing channels.

An overview of the channels in these two files can be found on this webpage: http://www.cim.be/nl/zenderlijsten.

4 Time logging

4.1 What is Time logging?

Besides registering the viewing behaviour, the programs should also be identified to obtain correct program reach figures. Each broadcasted component is identified separately and provided with a start time and end time. This not only happens for programs but also for program sections, commercial breaks, individual advertising spots and all channel- or program-specific promotion (e.g. program trailers and announcements, channel promotion, etc.).
Within the context of the CIM TV study the French term "horodatage" is commonly used to describe this process. In English, the term "time logging" is used.

The time logging for the CIM TV study was conducted by MediaXim until 2012. After an extensive tender procedure in 2011 the time logging contract has been awarded to a new party. In early 2012, a four-year contract was signed with Nielsen. They are responsible for the time logging since January 1st, 2014. The Time logging contract was again attributed to Nielsen for the period 2018-2020.

4.2 Time logged TV-channels and available files

In the context of the television audience measurement, the timing and classification of the broadcasted programs and commercials is performed by Nielsen. Nielsen conducts the work using a semi-automatic system for defining start and end times of programs and segments of programs, commercial breaks, trailers and channel auto promotion.
The starting point of the registration are the broadcast schedules previously sent by the channels, but ultimately Nielsen relies on what was really broadcasted and shown on the screen.

An overview of the time logged channels is available on the CIM website:
http://www.cim.be/nl/zenderlijsten

Every day two registration overviews are created and reported:

- spl-files: the spot lists with all advertising insertions;
- hor-files: the program files of the time logged TV channels.

After an initial delivery (in the morning) of the program data to the channels and sales houses, a number of checks and improvements are made before the hor-files are delivered to the entire market in the afternoon.

Since January 2014 the spot lists are delivered the day after broadcast, along with the program data around 14h. Just as before there is an additional weekly redelivery of the files with corrections by the channels / sales houses (price, rate card, information about the sales houses). The final delivery of the data, one for the spots and one for programs takes place monthly (every 3rd Thursday of the month). After this, there can only be a redelivery after the exceptional agreement of the CIM and in consultation with Nielsen.

New since January 2018 is the introduction of differentiated time logging, by which a channel can be time logged in three different ways:

1. Heavy time logging : Programs, commercials and auto promo
2. Medium time logging : Programs and commercials
3. Light time logging : Commercials

4.3 The time logging operation step by step

4.3.1 Input of the TV sales houses

In order to carry out the work Nielsen relies on information from the television channels and sales houses which are responsible for the broadcast of the programs and spots that have to be registered. The broadcast schedules of the channels and sales houses are the reference point for the registration by Nielsen. These broadcast schedules must arrive at Nielsen no later than 9AM the day of broadcast.

In addition to these broadcast schedules before broadcast, Nielsen needs the "planning after" (after broadcast: customized broadcast schedules) of the commercial breaks and spots in order to correct all changes in the broadcast data for the daily redelivery of the files. This mainly includes changes in the code names of commercial breaks and schedule changes. The sales houses are requested to systematically send this "planning after" to Nielsen no later than 11AM the day after broadcast.

4.3.2 The time logging

1/ Registration of programs and spots

Nielsen determines the start and end time of all programs, program sections, commercial breaks, spots and trailers based on digital images. All elements that take one second or longer and are screen filling, will be registered. Product placement and other advertising expressions that do not fill the whole screen are not registered. In case of a split screen, only one of the two elements is assigned. Spots and auto promotions will get priority over programs.

The start of a commercial block is determined by the opening jingle / bumper of the block. The end is likewise determined based on the end of the closure jingle. If there is no closure jingle, the end of the commercial block is determined by the end of the last spot or promo.

2/ Example of time calculation

The example below illustrates the rules applied regarding the timing for programs and spots.

Table 9 Example timing

Description	Start	End
Program A	14:52:33	15:16:09
Billboard	15:16:10	15:16:18
Commercial break	15:16:19	15:18:59
Spot1	15:16:22	15:16:51
Spot2	15:16:52	15:17:22
Spot3	15:17:23	15:17:33
Spot4	15:17:34	15:18:04
Spot5	15:18:05	15:18:24
Spot6	15:18:25	15:18:56
Program B	15:19:00	15:41:32

3/ Program classification

In addition to checking the timings the time logging also includes the classification of programs.

There can be appealed on a document with coding rules for program titles for the naming convention of TV programs. This ensures a coherent spelling of the names of the programs. In addition, the programs are classified according to the format and content (each consisting of two levels). This was introduced

in January 2014. Previously the typology consisted of 3 levels in which there was a mix of format and content. The full historical data was (semi-automatically) recoded so that long-term analyses remain possible.

In this context, the CIM TV Technical Committee decided additionally in June 2014 to enable an e-mail alert procedure when a new program is being broadcasted which was not yet included in the typology. In this way, the involved channel can check whether the coded title and typology are correct.

The time logging is hierarchically structured into 3 levels. Breaks within programs are located on a separate level. This allows to calculate reach figures for programs with breaks (gross) or without breaks (net). Loops and rebroadcasts are also identified separately.

In attachment the various genre codes are presented.

4/ Spot classification

The spots are also classified in the time logging process. Each commercial spot is thereby considered as part of a commercial break, even when it is broadcasted separately.

The identification of the commercials is done in an auditory and visual way.

Nielsen continues to use the common parameters in order to maintain consistency with the past: FILMID (identification number, unique for each sales house and delivered by them, and TVTID (unique code previously created by MediaXim and now by Nielsen).

4.3.3 Control procedures

Before finally providing reliable and complete data, a number of checks takes place after the time logging.

1/ First daily check (morning)

Before the first daily delivery at 9h15 a.m., the following elements are checked and corrected if necessary by Nielsen:

- start and end times of the programs;
- completeness of the encoding of existing programs;
- coherence in titles in case of interruptions;
- checking new titles and assigning typology.

2/ Second daily check (entire day)

Along with the morning delivery Nielsen sends the .prb file that contains the deviations of the broadcast schedules to what was really broadcasted. Spots that are missing in the planning files or that were foreseen but not broadcasted, differences in spot length and changes in the order of broadcasting spots during commercial breaks are reported. This message is only sent to the involved sales house and indicates the deviations of the planning files relative to the broadcast. Conversions in spots (film A was foreseen but B film was broadcasted) are also indicated in these files. Blocks that are moved to another day are reported by Nielsen via email. The purpose of both the control files and the communication regarding it is to produce the corrected "planning after" files which will be integrated into the Nielsen spl files.

All subscribers are allowed to ask for corrections between 9h15 and 13h. The data in this time period are still under embargo. Official data from the previous day may only be communicated after 1 p.m. Moreover the following codes, checks and -if necessary- corrections will take place before the daily redelivery in the afternoon:

- harmonized program titles with existing programs

- channel facing and program announcements
- identification of existing and new spots
- check of all program titles
- check promos (channel facing, program announcements)
- check encoding programs
- check billboards
- check timing and encoding of commercial breaks
- check program sections
- encoding of sports programs
- check special programs
- comparison with planning before / after of the channel:
    - unscheduled commercial breaks
    - not broadcasted commercials
    - unscheduled spots
    - not broadcasted spots
    - spots longer or shorter than scheduled
    - disruptions in a block or spot
    - other spot broadcasted than scheduled
- check program rebroadcasts
- encoding of unscheduled spots
- encoding of manually entered spots
- encoding of split screens

3/ Weekly and monthly check

Before the weekly redelivery, checks and improvements are performed again if necessary:

- check changes in genre codes;
- additional check on specific programs;
- additional check on manually entered blocks and spots;
- additional check based on redelivered retro planning (weekly and monthly).

4.3.4 Number of time logged elements

The table below summarizes the number of time logged elements. Not only the regular programs but also the smallest elements like e.g. jingles are counted in "Total elements". The "Spot elements" include all commercial insertions: spots, billboards and sponsor insertions. The commercial insertions account for about 40% of all time logged elements.

The increase of the number of elements per year is influenced by growth of the number of time logged channels during the last years.

Table 10 Number of time logged elements

Year	Spot elements	Total elements	% Spots
2008	912 927	2 044 097	45%
2009	927 667	2 052 657	45%
2010	1 143 712	2 523 054	45%
2011	1 170 242	2 577 222	45%
2012	1 193 310	3 303 032	36%
2013	1 426 895	3 967 994	36%
2014	1.802.519	4.866.355	37%
2015	2.537.292	6.218.489	41%
2016	3.425.475	7.909.386	43%
2017	3.483.340	8.700.694	40%

5 Exploitation and analysis of results

5.1 Calculation rules

To ensure the coherence of the results among all TV software houses (as imposed by the Board of Directors), the CIM TV Technical Committee drew up some calculation rules which should be strictly applied.

The introduction of the time shifted viewing in the measurement made the calculation of the results more complex. Therefore, a document was created with calculation rules for all possible parameters (rating, market share, viewing time ...). The document is available on www.cim.be (section Television / Methodology).

5.2 Reference reports

In addition to the individual raw data files a set of reference reports are created by GfK Belgium which serve as a guide for all CIM TV software houses. On the one hand, these reports give the results by quarter for all channels in the ATB file. On the other hand, they also include the program results for the same TV channels based on the first level of the time logging (cf. infra). The calculation procedure is in accordance with the definition imposed by the CIM TV Technical Committee.

The Permanent Structure of the CIM can consult these daily reference reports online on the GfK Belgium central computer. They are made available to the CIM TV-software houses upon simple request.

Moreover, a weekly and monthly **TOP 20** of the most popular programs (highest ratings) by region is drawn up by GfK Belgium on behalf of the Permanent Structure of the CIM. The weekly list is generated every Monday afternoon, the monthly list is created on the 7th day of each month. After approval by the TV channels and / or sales houses, these lists are officially published on the website of the CIM (section Television / Public results).

In addition, a **TOP 100** of the programs with the biggest audience is published each year at the beginning of January. The same methodology is used as for the TOP 20.

In 2009, the CIM TV Technical Committee decided to also publish a monthly TOP 20 of the most watched programs and an annual TOP 10 of the most watched programs by channel according to the same principles. In addition, every year an overview of the market shares of the different channels is published both for the whole universe as for the target group for each channel participating in the CIM TV study.

The website of the CIM contains a list of software suppliers that have passed the CIM TV certification procedure (section Television / Software Suppliers).

5.3 Monthly channel reports (MZR/RME)

The channels not subscribing to the main CIM TV audimetrie can monthly receive files with the following details:

- **Average Daily Reach**

Number of television viewers (per thousand or percentage), which are part of the universe 4 years + or of any other analysed target group, having watched the analysed TV channel for:

- one consecutive minute or more on an average day (average of the reach of the days of the month);
- 10 consecutive minutes or more on an average day (average of the reach of the days of the month).

- **Average Weekly Reach**

Number of television viewers (per thousand or as a percentage) which are part of the universe 4 years+ or of any other analysed target group, having watched the analysed TV channel for:

- one consecutive minute or more on an average week (average of the reach of all the weeks during the month);
- 10 consecutive minutes or more on an average week (average of the reach of all the weeks during the month).

- **Monthly Reach**

Number of television viewers (per thousand or as a percentage) which are part of the universe 4 + or of any other analysed target group, having watched the analysed TV channel during:

- one consecutive minute and more each month;
- 10 consecutive minutes or more each month.

- **Market share**

Market share during the last month for the analysed TV channel and the TV channel subscribers of the main CIM TV audimetrie for the universe 4 years and older and one target group chosen by the subscriber.

The following metrics are reported for the analysed channel and for all subscribing channels to CIM TV in the specific region:

- A daytime block defined by the channel;
- Any other time blocks;
- The universe 4+ (North, South or National);
- A target group of choice preferably containing at least 300 panel members for each average day. If this number of 300 panellists each average day is not reached, then the TV channel / sales house have to mention that the results are based on a number of panel members which is less than 300 for an average day;
- Any other target groups, taking into account the same conditions;
- Any other TV channels, competitor or not.

A TV channel (the reported entity) can represent a group of TV channels, without having displayed a detail for each separate TV channel. Only TV channels with Belgian advertising rates can be published.

The financial conditions to participate in the MZR reporting can be consulted on the website of the CIM through the following link: http://cim.be/fr/media/t%C3%A9l%C3%A9vision/souscrire.

5.4 TV data publishing rules

The CIM TV Technical Committee has developed a set of rules relating to the external communication of the TV Audience Measurement data. It is basically a documentation of agreements and practices that were already applied by the CIM for years.

The publishing rules can be consulted on the website of the CIM (section Television / Rules).

5.5 Ad evaluation and classification of advertising campaigns

The CIM TV Technical Committee has created a basic algorithm related to the production of post evaluation sheets of past advertising campaigns (based on the spot list). It meets the requirement of the Board of Directors of the CIM regarding the coherence of the results.

This algorithm is described in the document with calculation rules available through the following link: http://www.cim.be/sites/default/files/Media/Televisie/Documents/cim_tv_calculation_and_reporting_rules_2016.pdf

Only software that follows this algorithm correctly, is allowed to carry the label "CIM bilan".

In 1998 the CIM TV Technical Committee decided to forbid evaluations that span more than one year. The software from a software house should show an error message when someone tries to produce an evaluation for a campaign that was run both on December 31st and on January 1st.

6 Checks

6.1 Basic principles of the checks

The inclusion of controls aims to determine the correctness of the process of measurement in order to ensure reliable results. The CIM TV Technical Committee impose the appropriate checks and entrust the Permanent Structure with supervising the effective implementation.
The controls are related to:

- the recruitment interview and recruitment reserve;
- the panel;
- the discipline during the fieldwork;
- the weighting of the panel;
- the technical collection and transmission of data.

The basic principle concerning these controls is that the Permanent Structure of the CIM has access to all individual data and files. They can have a copy of all individual records collected by GfK Belgium before processing (i.e. before weighting and validation).

Moreover the Permanent Structure may, at any time, rely on a third party to perform certain controls.

6.2 Checking the recruitment interview and the recruitment reserve

The Permanent Structure of the CIM can have access to all individual records of the panel households, including the household status. This indicates in which phase of the survey each household resides, including the recruitment phase and the recruitment reserve.

6.3 Checking the panel

The panel should be the most accurate reflection of the analysed universe. Therefore, the institute must take all necessary measures to guarantee this representativeness.

6.3.1 Checking the representativeness of the socio-demographic characteristics

The quality of the sample should be checked regularly to prevent any possible distortion. In this regard, the Permanent Structure of the CIM has daily access to a listing of the socio-demographic characteristics of the sample (before and after weighting), and this both for the North and the South.

6.3.2 Panel Rotation (incoming and outgoing households)

The changes in the composition of the panel are tracked on a continuous base. Every day, households can leave the panel and new households can be activated (after a test period of one month).

GfK Belgium provides the Permanent Structure of the CIM with daily access to the following elements:

- a list of the panel households that were updated indicating their number. The names and addresses of the respondents must remain confidential, both during and after their participation. The Permanent Structure of the CIM ensures not to reveal them. The staff of GfK Belgium is instructed to be very strict in this matter;
- the households that had to be equipped with a phone in order to be able to participate in the panel;
- the percentage of households with more than one television set;
- the date of effectively joining the panel, after the 4-week test period.

The reason for leaving the panel must be registered for each exiting panel.

The following categories are used:

- technical reasons;
- problems related to discipline;
- updating the panel;
- termination by the panel household;
- relocation;
- other.

6.3.3 Updating the panel survey data

The household composition and the characteristics of the panel members were initially adjusted once a year on January, 1st.

Since January 1st, 2005 it was decided to proceed the survey throughout the whole year. The adjustment of the socio-demographic variables therefore happens on a constant basis.

6.3.4 Household log file

For each household GfK Belgium tracks data on the history during its entire participation, such as:

- contacts with its reason (letter, phone, visit, ...);;
- reclassification of households;
- checks and measures taken.

The Permanent Structure of the CIM has always access to these registers.

6.4 Discipline during the field

The quality of the TAM measurement depends largely on the precision with which the panel members follow the given instructions. To ensure consistent and reliable viewing ratings, discipline in participating should be checked. Therefore, the following measures are taken.

6.4.1 Quality control of the panel performance

GfK Belgium should closely monitor whether the panel members perform their duties carefully. The push button method for measuring the television coverage is based on the meticulous registration of household members viewing and guest viewing. GfK Belgium reports on this matter daily to the Permanent Structure of the CIM.

The Permanent Structure has an online access to a website where the following indicators are shown:

- number of analysed households;
- cumulative reach in % by channel for all standard target groups;
- duration the TV was turned on (in minutes);
- viewing time of the guests;
- average number of people who registered themselves;
- number of guests;
- number of households with viewing behaviour;
- number of analysed respondents;
- average viewing time between 02h00 and 26h00;
- average viewing time between 19h00 and 22h00.

The households which turned on their television during two consecutive days without registering, will be removed from production.

6.4.2 Coincidental checks

Coincidental controls are carried out twice a year in order to evaluate the panel compliance. The purpose is to verify at specific moments the consistency between the registration system and the (telephonic) declarations of the respondents. The purpose of the CATI survey is to evaluate the quality of the measured reach.

Twice a year, the Permanent Structure of the CIM supervises this telephonic survey to assess the validity of the information given by the panel members. These checks are carried out on all panel households between 18h and 21h, by asking them on the phone who is watching TV at that time. At least 90% of the telephone contacts should be usable. The declared behaviour of the panel is compared with the data collected through the TV meter. Each incoherence for each household is registered.
The Permanent Structure of the CIM gets a detailed report on the coincidental checks 14 days after the field is ended.

An important conclusion of these checks is that there are indeed anomalies, but that these neutralize each other to some extent. Even more important is the conclusion that when all the controls performed are examined, the TV meter underestimates reality rather than overestimating it.

6.5 Weighting of the panel

The institute verifies the quality of the weighting each day in order to avoid every possible distortion of the results.

The Permanent Structure of the CIM always disposes of a list of socio-demographic characteristics before and after weighting and of an extrapolation of the sample. In addition, the following data are available daily:

- the "efficiency" value of the particular day;
- the distribution of the weights.

6.6 Collection and transmission of the data

The production of consistent and reliable viewing ratings depends also on the reliability of the electronic system. The electronic reliability refers to:

- the complete transmission of the information collected in the panel households;
- the transmission of the exact time of registration.

6.6.1 Completeness of data

GfK Belgium verifies the panel response every day. When the panel response is less than 90%, the Permanent Structure of the CIM decides whether the viewing ratings will be released or not.

GfK Belgium provides a daily file to the Permanent Structure of the CIM containing the following information:

- the number of panel families for which the data were successfully transmitted;
- the number of panel households that could not be reached;
- the number of panel households for which information is missing for another reason than an unsuccessful data transmission;
- the number of households that were rejected because they did not meet the criteria for quality control (see 3.3 Validation).

6.6.2 Transmission of the exact time of registration

Controlling the meter clocks is important. The calculation of the reach of programs and commercial spots depends on the accuracy of the clock in the TV meter.

Therefore, the coherence between the time of the TV meter and that of the central processing computer is checked daily (see 3.3 Validation).

The central processing computer is synchronized with the atomic clock in Frankfurt.

7 Attachment - List with genre codes (1997 - 2018)

a	Fiction/Fictie	
	aa	**Film/Speelfilm**
	aaa	Comedie/Komedie
	aab	Crime=(Pol. Esp...)/Misdaad (politie spionage)
	aac	Aventure/Avonturen
	aad	Science-Fiction/Science-fiction
	aae	Animation/Animatie
	aaf	Drame psy. com. dram./Drama
	aag	Guerre/Oorlog
	aah	Western/Western
	aai	Historique/Historisch
	aaj	Erotique/Erotisch
	aak	Societe/Maatschappelijk
	aal	Films musicaux/Muzikale speelfilms
	aam	Dessins animes/Tekenfilms
	aan	Documentaires/Documentaires
	aao	Horreur/Horror
	aap	Romantique/Romantisch
	aaq	Film familial/Gezinsspeelfilm
	aar	Thriller/Thriller
	aas	Action/Actie
	aat	Autres/Andere
	ab	**Telefilm/Televisiefilm**
	aba	Comedie/Komedie
	abb	Crime=(Pol. Esp...)/Misdaad (politie spionage)
	abc	Aventure/Avonturen
	abd	Science-Fiction/Science-fiction
	abe	Animation/Animatie
	abf	Drame psy. com. dram./Drama
	abg	Guerre/Oorlog
	abh	Western/Western
	abi	Historique/Historisch
	abj	Erotique/Erotisch
	abk	Societe/Maatschappelijk
	abl	Telefilms musicaux/Muzikale televisiefilms
	abm	Dessins animes/Tekenfilms
	abn	Documentaires/Documentaires
	abo	Horreur/Horror
	abp	Romantique/Romantisch
	abq	Telefilm familial/Gezinstelevisiefilm
	abr	Thriller/Thriller

	abs	Action/Actie
	abt	Autres/Andere
ac	**Series/Series**	
	aca	Policier -> Crime/Politie-misdaad
	acb	Humour; comedia/Humor Komedie
	acc	Autres/Andere
	acd	Aventure/Avonturen
	ace	Science-Fiction/Science-fiction
	acf	Animation/Animatie
	acg	Drame psy. com. dram./Drama
	ach	Guerre/Oorlog
	aci	Western/Western
	acj	Historique/Historisch
	ack	Erotique/Erotisch
	acl	Societe/Maatschappelijk
	acm	Series musicaux/Muzikale series
	acn	Dessins animes/Tekenfilms
	aco	Documentaires/Documentaires
	acp	Horreur/Horror
	acq	Romantique/Romantisch
	acr	Series familial/Gezinsseries
	acs	Thriller/Thriller
	act	Action/Actie
ad	**Feuilletons/Vervolgreeksen**	
	ada	Comedie/Komedie
	adb	Crime=(Pol. Esp...)/Misdaad (politie spionage)
	adc	Aventure/Avonturen
	add	Science-Fiction/Science-fiction
	ade	Animation/Animatie
	adf	Drame psy. com. dram./Drama
	adg	Guerre/Oorlog
	adh	Western/Western
	adi	Historique/Historisch
	adj	Erotique/Erotisch
	adk	Societe/Maatschappelijk
	adl	Feuilletons musicaux/Muzikale vervolgreeksen
	adm	Dessins animes/Tekenfilms
	adn	Documentaires/Documentaires
	ado	Horreur/Horror
	adp	Romantique/Romantisch
	adq	Feuilleton familiales/Gezinsvervolgreeksen
	adr	Thriller/Thriller
	ads	Action/Actie

		adt	Autres/Andere
	ae	**Theatre/Theater TV-play**	
		aea	En Salle/Captatie in zaal
		aeb	Adaptation en Studio/Adaptatie in studio
	af	**Court-Metrage/Kortfilms**	
	ag	**Telesuites/Mini-series**	
		aga	Comedie/komedie
		agb	Crime=(Pol. Esp...)/Misdaad (politie spionage)
		agc	Aventure/Avonturen
		agd	Science-Fiction/Science-fiction
		age	Animation/Animatie
		agf	Drame psy. com. dram./Drama
		agg	Guerre/Oorlog
		agh	Western/Western
		agi	Historique/Historisch
		agj	Erotique/Erotisch
		agk	Societe/Maatschappelijk
		agl	Telesuites musicaux/Muzikale Mini-series
		agm	Dessins animes/Tekenfilms
		agn	Documentaires/Documentaires
		ago	Horreur/Horror
		agp	Romantique/Romantisch
		agq	Telesuites familiales/Gezinsmini-series
		agr	Thriller/Thriller
		ags	Action/Actie
		agt	Autres/Andere
	ah	**Autres/Specials**	
b	**Musique Classique/Klassieke muziek**		
	ba	Operas ballets/opera ballet	
	bb	Concerts classiques/Klassieke concerten	
	bc	Autres/Andere	
c	**Divertissement/Ontspanning**		
	ca	**Clips/clip programma's**	
		caa	Succession de clips/Opeenvolging van clips
		cab	Clips avec animateurs/Clips met presentator
		cac	Clips et jeux/Clips en spelletjes
	cb	**Jeu/Spel**	
		cba	Hard games/Hard games
		cbb	Soft games/Soft games
		cbc	Autres/Andere
	cc	**-/-**	
	cd	**Talk-show/Praatprogramma**	
	ce	**Varietes/Variete**	

		cea	Show/Show
		ceb	Humour/Humor
		cec	Autres/Andere
	cf	**Concerts modernes/Concerten moderne muziek**	
	cg	**Cirque/Circus**	
	ch	**Musique/Muziek**	
	ci	**Autres/Andere**	
d	**Information/Informatie**		
	da	**Journaux nationaux/Nationaal nieuws**	
	db	**Journaux regionaux/regionaal nieuws**	
	dc	**Flashs/Nieuwsflashes**	
	dd	**Magazines Econ-Pol-Soc/Magazines**	
		dda	Plateau/Studiogesprek
		ddb	Reportage/Reportage
		ddc	Magazine (SP)/Magazines (SP)
	de	**Emissions politiques/Politieke Uitzendingen**	
	df	**EV. Exceptionnels/Uitzonderlijke gebeurtenissen**	
	dg	**Meteo/Weerbericht**	
	dh	**Bourse/Beursbericht**	
	di	**Magazines d'actua./Actualiteiten magazine**	
	dj	**Autres/Andere**	
e	**Connaissance generale/Algemene kennis**		
	ea	**Documentaires/Documentaires**	
		eaa	Siences & Technologie/Wetenschap & Technologie
		eab	Medecine/Geneeskunde
		eac	Nature animaux/Natuur & dieren
		ead	Arts Peint. Mus./Beeldende Kunst & Muziek
		eae	Literature/Literatuur
		eaf	Loisirs Tour. Geo./Vrije tijd toerisme
		eag	Histoire/Geschiedenis
		eah	Cinema/Bioskoop
		eai	Theatre/Toneel
		eaj	Societe/Maatschappij
		eak	Mode Beaute/Mode schoonheid
		eal	Vie quot. vie prat./Dagelijks leven practische tips
		eam	Archit. Urbanisme/Architectuur & Urbanisatie
		ean	Autres/Andere
		eao	Spectacles/Optredens
	eb	**Magazines/Magazines**	
		eba	Siences & Technologie/Wetenschap & Technologie
		ebb	Medecine/Geneeskunde
		ebc	Nature animaux/Natuur & dieren
		ebd	Arts Peint. Mus./Beeldende Kunst & Muziek

		ebe	Literature/Literatuur
		ebf	Loisirs Tour. Geo./Vrije tijd toerisme
		ebg	Histoire/Geschiedenis
		ebh	Cinema/Bioskoop
		ebi	Theatre/Toneel
		ebj	Societe/Maatschappij
		ebk	Mode Beaute/Mode schoonheid
		ebl	Vie quot. vie prat./Dagelijks leven practische tips
		ebm	Archit. Urbanisme/Architectuur & Urbanisatie
		ebn	Autres/Andere
		ebo	Plateau (Invites)/Studiogasten
		ebp	Spectacles/Optredens
		ebq	Consommateur/Verbruiker
		ebr	Culinaire/Culinair
		ebs	Non Specialise/Niet gespecialiseerd
	ec	**Emission Religieuse/Religieuze uitzending**	
	ed	**Emission Educative/Educatieve uitzending**	
	ee	**Autres/Andere**	
f	**Sport/Sport**		
	fa	**Retransmissions/Sportverslaggeving**	
		faa	Football/Voetbal
		fab	Rugby/Rugby
		fac	Tennis/Tennis
		fad	Neige-glace/Sneeuw ijs
		fae	Cyclisme/Wielrennen
		faf	Golf/Golf
		fag	Sports Mecaniques/Mechanische sportactiviteiten
		fah	Athletisme/Atletiek
		fai	Sports Equestres/Paardesporten
		faj	Sports de combat/Gevechtsporten
		fak	Corridas/Stiergevechten
		fal	Interviews av. ap./Voor- & nabeschouwingen
		fam	Autres sports/Andere sporten
		fan	Basket/Basketbal
		fao	Volley/Volleybal
		fap	Formule 1/Formule 1
		faq	Sport Auto (non F1)/Autosport (niet F1)
		far	Motos/Motorsport
		fas	Jeux olympiques/Olympische Spelen
	fb	**Magazines sportifs/Sport magazines**	
		fba	Football/Voetbal
		fbb	Rugby/Rugby
		fbc	Tennis/Tennis

		fbd	Neige-glace/Sneeuw ijs
		fbe	Cyclisme/Wielrennen
		fbf	Golf/Golf
		fbg	Sports Mecaniques/Mechanische sportactiviteiten
		fbh	Athletisme/Atletiek
		fbi	Sports Equestres/Paardesporten
		fbj	Sports de combat/Gevechtsporten
		fbk	Corridas/Stiergevechten
		fbl	Interviews av. ap./Voor- & nabeschouwingen
		fbm	Autres sports/Andere sporten
		fbn	Basket/Basketbal
		fbo	Volley/Volleybal
		fbp	Formule 1/Formule 1
		fbq	Sport Auto (non F1)/Autosport (niet F1)
		fbr	Motos/Motorsport
		fbs	Jeux olympiques/Olympische Spelen
	fc	**Mag. mixtes (Retrans. Ent)/Gemengd verslaggeving/magazines**	
	fd	**pronostiques/Pronostiek**	
	fe	**Autres/Andere**	
g	**Enfants/Kinderen**		
	ga	**Em. avec des anim./Uitz. met tekenfilms**	
	gb	**Em. pour jeunes/Uitz. voor jongeren**	
	gc	**Educatif/Vorming**	
	gd	**Jeux/Spelprogrammas(jeugd)**	
	ge	**Divers (studio)/Diverse(studio)**	
	gf	**Autres/Andere**	
h	**Publicite/Reclame**		
	ha	**Ecran pub; commerciale/Commercieel blok**	
	hb	**Magazine publicit./Reklame magazines**	
	hc	**Parrainage/Billboard**	
	hd	**Annonces Programme Parrainees/CAPB**	
	he	**Spot hors Ecran/OOBS**	
	hf	**Ecran diffuse par erreur/Error block**	
	hg	**Ecran vide/Empty block**	
	hh	**Ecran commercial etranger/Buitenlands blok**	
	hi	**Ecran Publicitaire en relais/Relay block**	
	hj	**Ecran (panne image et son)/Block (storing beeld en klank)**	
	hk	**Ecran boucle/Block in lus**	
i	**Divers/Diversen**		
	ia	**Auto-promotion/Eigen zender promotie**	
	ib	**Pres. Emission/Programma aankondiging**	
		iba	Bandes annonce/Trailers
		ibb	Presentatrices/Omroepsters

		ibc	Pres. em. Pancartes/Programma overzicht
	ic	**Location d'antenne/Vrije zendtijd**	
		ica	Religieux/Religieus
		icb	Politique/Politiek
		icc	Philosophique/Filosofisch
		icd	Syndical/Syndikaal
		ice	Commercial/Commercieel
		icf	Autres/Andere
	id	**Habillage Antenne/Zender aankleding**	
	ie	**Decr. Regionaux/Regionale Ontkoppeling**	
	if	**Emissions de service/Dienstuitzendingen**	
	ig	**Loteries/Loterijen**	
	ih	**Tele-achat/Tele verkoop**	
	ii	**Communique Ext./Medelingen door Derden**	
j	**Autres/Andere**		
k	**Hors Emissions/Geen uitzending**		
	ka	**Magazines Diapositives/Beeldkrant**	
	kb	**Journal en Boucle/Nieuws in lus**	
	kc	**Meteo en boucle/Weerbericht in lus**	
	kd	**Boucle/Lus**	
z	**Inconnu/Onbekend**		

8 Attachment - List with genre codes (on 01/01/2018)

FORMAT		
film	film	11
	animation film	12
	documentary film	14
	short film	14
	other film	19
serie	serie	21
	animation serie/cartoon	22
	documentary serie	23
	docusoap/reality serie	24
	other serie	29
studio/structured/show	news/flash	30
	comment of event	31
	magazine	32
	debate/talk show	33
	reality structured	34
	game/quiz	35
	short structured/sequence	36
	show	37
	reality show	38
	other studio/structured/show	39
interactive programmes		41
artistic performance	on stage	51
	clip(s)	52
	other artitic performance	59
advertising	commercial	61
	bb	62
	capb	63
	oobs	64
	foreign	65
	other advertising	69
varied	programme announcement	71
	programme overview	72
	programme trailer	73
	announcer	74
	channel promotion	75
	channel identification	76
	concession	77
	service	78
	other varied	79
oth/mix/unk		99

CONTENT		
fiction	popular drama/comedy	111
	psychologic drama/melodrama	112
	popular soap	114
	adventure	114
	fantasy/fairy tale	115
	action	116
	science fiction	117
	police, spying, détective	118
	thriller	119
	horror	120
	erotica	121
	other fiction	199
information	general news	211
	special event	212
	current affair	214
	economy/politics/society affairs	214
	traffic/transport	215
	weather	216
	finance	217
	communication/message	218
	other information	299
knowledge	science/geography	311
	technology/computing	312
	medecine/health	314
	nature/environment	314
	humanities/history	315
	human interest/society	316
	media	317
	economy/business	318
	philosophy/religion	319
	education	320
	classical arts	321
	modern music/dance	322
	books/writing/drawing	323
	photo/film/cinema	324
	culture/folklore/tradition	325
	architecture/urbanism	326
	miscellaneous	327
	other knowledge	399
lifestyle	show business/variety/stars	411
	mode/lifestyle	412
	pets	414

	cars/boat/motoring	414
	leisure/hobby	415
	travel/tourism	416
	cooking/food/drink	417
	consumer advice	418
	gardening	419
	miscellaneous	420
	home/decorating	421
	other lifestyle	499
entertainment	humour	511
	variety	512
	game	514
	betting/lottery	514
	young amusement	515
	circus/magic/paranormal	516
	talk	517
	miscellaneous	518
	music	519
	dance	520
	theater	521
	love/dating	522
	classic arts	523
	other entertainment	599
sport	football	711
	basketball	712
	volleyball	714
	handball	714
	hockey	715
	rugby	716
	other team sport	717
	cycling (road)	718
	cycling (track/piste)	719
	cycling (cross)	720
	other cycling	721
	tennis	722
	table tennis	723
	other racquet sports	724
	formula 1	725
	rally	726
	other auto sports	727
	motorbike speed	728
	motorcross	729
	other motorbike sport	730

	other motorsport	731
	skiing	732
	ice hockey	733
	figure skating	734
	other winter sports	735
	athletics (track/piste)	736
	athletics (field/cross)	737
	other athletics	738
	swimming	739
	other water sports	740
	horse racing	741
	jumping	742
	other equestrian sports	743
	boxing	744
	martial arts	745
	fencing	746
	other fighting sports	747
	golf	748
	gymnastic	749
	weight-lifting	750
	weapon sports	751
	adventure/mountain sports	752
	air sports	753
	social sports	754
	all sports	755
	other sports	799
tele-shopping		991
other		999