



APPENDIX DUTCH TAM: MANDATORY  
CALCULATION- & REPORTING RULES

**TIME SHIFTED VIEWING  
UNTIL 28 DAYS AFTER  
BROADCAST**



STICHTING KIJKONDERZOEK

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**APPENDIX: TIME SHIFTED VIEWING UNTIL 28 DAYS AFTER BROADCAST – JULY 2015**

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## **1. INTRODUCTION**

As from January 2008, time shifted viewing until 7 days after broadcast is included in the calculations of the ViewingTotal (previously known as common currency). Time shifted viewing means viewing to programmes and spots on a different moment than when this was broadcasted. The ViewingTotal comprises the time shifted viewing on the day of broadcasting and the 6 succeeding days.

In January 2015, the measurement of time shifted viewing has been extended until 28 days after broadcast. This means viewing to programmes and spots on the day of broadcasting and the 27 succeeding days. This extended time shifted viewing (between days 7 and 27) is not included in the calculations of the ViewingTotal. The aim is to provide additional insight in time shifted viewing for a longer period of time. However, the standard reporting of audience ratings until 7 days after broadcast does not change.

### **Definition**

Time shifted viewing is viewing of television content, programmes and commercials at a time other than the moment of broadcasting. This behaviour may consist of ‘near live’ viewing, after a short time span. But it can also refer, for instance, to the viewing of a film pre-recorded on the hard disk weeks earlier. This time shifted viewing behaviour includes viewing through VCR, DVD, Hard disk, Set-top box, game console or Connected TV sets.

### **Video, DVD and HDR**

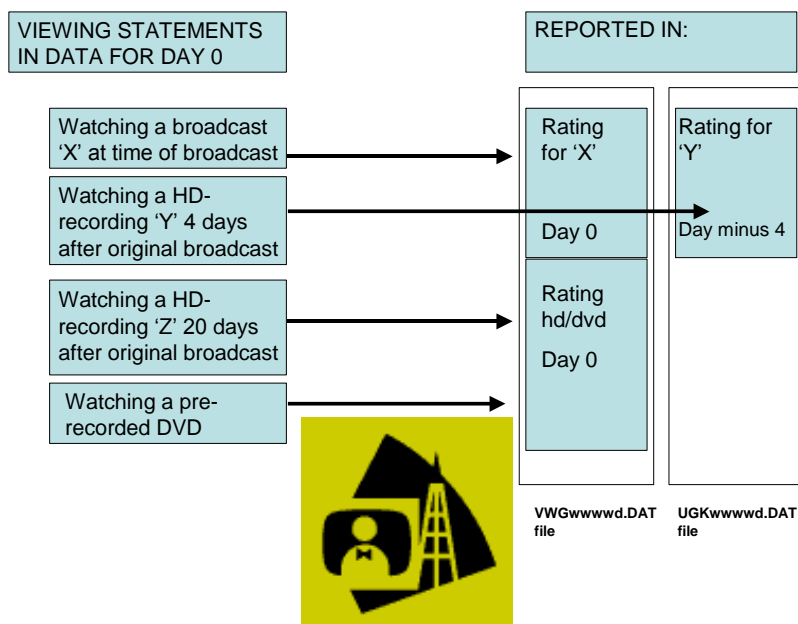
The inclusion of time shifted viewing (in the UGK-files) introduced a major change in the VWG files. Viewing records with the station codes Video, DVD or HDR in the VWG file could represent time shifted viewing behaviour. To avoid this viewing behaviour being counted twice in the total viewing, records (DVD, HDR or Video) that represent time shifted viewing are tagged in the VWG file. These tags for time shifted viewing are in the same column, using a separate code for the time shifted viewing between the broadcast day and the 6<sup>th</sup> day (code 1) and another code for the time shifted viewing between the 7<sup>th</sup> day and the 27<sup>th</sup> day (code 2) (for more information about the files, see Dutch TAM – Mandatory calculation- & reporting rules, Appendix 1: Definitions).

Currently, time shifted viewing on the day of broadcast and the following 6 days is attributed to the ratings of the original broadcast. Time shifted viewing that takes place 7 or more days after the day of broadcast is reported as ‘Video’, ‘DVD’ or ‘HDR’. Since 17-07-2015, reporting on time shifted viewing after 7 and up to 27 days is possible for

channels and programmes. As the standard reporting of the viewing ratings does not change anymore after 7 days, the volumes of 'Video', 'DVD' and 'HDR' will differ when analyses are performed based on the time shifted viewing until 28 days after broadcast.

Figure 1 illustrates how viewing records in a day file are used to report the audience ratings.

**FIGURE 1. REPORTING OF VIEWING RECORDS**



The relationship between SKO rules and report types is shown in Table 1.

**TABLE 1. OVERVIEW OF REPORT TYPES AND SKO RULES**

Report types	Total viewing	Live (TU)	Time shifted viewing until 7 days (UGK on day 0 + 6 days)	Time shifted viewing until 28 days (UGK on day 0 + 27 days)
<b>Behaviour measured</b>	Viewing at the moment of broadcast (day 0) Viewing at some time other than the moment of broadcast on the day of broadcast (day 0) or on one of the six following days	Viewing at the moment of broadcast (day 0)	Viewing at some time other than the moment of broadcast on the day of broadcast (day 0) or on one of the 6 following days	Viewing at some time other than the moment of broadcast on the day of broadcast (day 0) or on one of the 27 following days
<b>File used</b>	VWGwwwwd.DAT UGKwwwwd.DAT	VWGwwwwd.DAT	UGKwwwwd.DAT	UGK27wwwwd.DAT
<b>Calculation</b>	See Dutch TAM – Mandatory calculation & reporting rules: Chapter 1	See Dutch TAM – Mandatory calculation & reporting rules: Chapter 2	See Dutch TAM – Mandatory calculation & reporting rules: Chapter 2	See this Appendix

<b>Reportage</b>	See Dutch TAM – Mandatory calculation & reporting rules: Chapter 3	Only user reports allowed See Dutch TAM – Mandatory calculation & reporting rules: Chapter 3	See Dutch TAM – Mandatory calculation & reporting rules: Chapter 3	See this Appendix
<b>Recommended</b>	See Dutch TAM – Mandatory calculation & reporting rules: Chapter 4.1	See Dutch TAM – Mandatory calculation & reporting rules: Chapter 4.2	See Dutch TAM – Mandatory calculation & reporting rules: Chapter 4.3	See this Appendix

*The dark grey cells in the table indicate that mandatory rules apply. Additionally, SKO advises using guidelines for report types in the light grey cells. See the Dutch TAM – Mandatory calculation & reporting rules document for more information.*

Table 2 displays the mandatory rules and recommended procedures for the calculation of various result types for different report types. As in Table 1, dark grey indicates that mandatory rules apply; light grey indicates result types in the various reports for which SKO provides recommended procedures.

**TABLE 2. REPORT TYPES AND RESULT TYPES**

Report type:	Total viewing	Live (TU)	Time shifted viewing until 7 days (UGK on day 0 + 6 days)	Time shifted viewing until 28 days (UGK on day 0 + 27 days)
<b>Calculation</b>				
Audience rating	√	√	√	√
Market share	√	√	√	Not allowed
Reach	√	√	√	√
Viewing time	√	√	√	√
Results for multiple broadcasts	√	√	√	√
Samples	√	√	√	√
Additional calculation rules	√	√	√	√
<b>Reportage</b>				
User reports of all result types	√	√	√	√
Reporting of all result types for publishing	√	Not allowed	√	No total viewing time/no market share
<b>Recommendations</b>				
Profile	√	√	√	√
Top list	√	√	√	√
Block factor	X	√	X	X
Fraction	√	√	√	√
Inheritance	X	√	X	X
Persistence	X	√	X	X
Overlap/ Duplication	√	√	√	√

Reach for station combination	√	√	√	√
Selectivity index	√	√	√	√
Viewing time/ Broadcast time	√	√	√	√
Population sizes	√	√	√	√
Co-viewing	n/a	√	√	√
Reach billboards	√	√	√	√
Length of delay	n/a	n/a	√	√
Absolute time shifted viewing	n/a	n/a	√	√
Share time shifted viewing	n/a	n/a	√	√
Relative share time shifted viewing	n/a	n/a	√	√

There are no separately defined guidelines for various result types in the set of reporting rules. The reporting rules must be followed in the reportage for all results. These can be found in the Dutch TAM – Mandatory Calculation- & reporting rules.

*The dark grey cells in the table indicate that mandatory rules apply. SKO also advises using the guidelines laid out in this document for result and report types indicated in the light grey cells.*

*√ = SKO has established a rule for this result type in the report type concerned*

*X = SKO advises against using this result type in the report type concerned*

*To avoid ambiguity in the audience figures, SKO requires that what is being reported and what the basis of outcomes is be precisely indicated.*

## **2. SPECIFIC CALCULATION RULES FOR TIME SHIFTED VIEWING (UGK)**

For reporting on the time shifted viewing behaviour until 28 days after broadcast, only the viewing records in the UGK27wwwwd.DAT files are used (see for more information Section 3 Audience research files). Please note that the tagged portions of the data in the categories 'Video', 'DVD' or 'HDR' are not used.

In practice, the actual difference in the use of these files for UGK reports is that the viewing moment is determined using the actual viewing moment (the moment that the video, DVD or HD recorder is used). What is being watched is determined using the moment to which the viewing behaviour is assigned in the total viewing (the broadcast moment for the broadcast seen).

### **2.1 LENGTH OF DELAY (UTSD)**

For time shifted viewing, the result type length of delay has been introduced to provide information on the amount of time that passed between the recording of a program and the playing back of that program. It is defined as the average number of minutes between the starting minute of the broadcast moment and the viewing moment when viewers start their time shifted viewing. This viewing moment is extended up to 28 days after broadcast.

$$UTSD = UGM_i - UZT_0$$

$$1 \geq UTSD \leq 40320 \text{ minutes (being 28 days} \times 24 \text{ hours} \times 60 \text{ minutes)}$$

$UGM_i$  = Time shifted viewing moment on day  $i$  (DD:HH:MM in minutes)

$$i=0, \dots, 27$$

$UZT_0$  = Broadcast time of original broadcast on day 0 (DD:HH:MM in minutes)

### 2.3 RELATIVE SHARE IN TOTAL TIME SHIFTED VIEWING (RADL UGK0-27 / RADL UGK7-27)

The relative share time shifted viewing is defined as the time shifted viewing realised for a specific broadcast or time slot in relation to the *total time shifted viewing up to and including the 27<sup>th</sup> day* after the broadcast. The sum of all time shifted viewing that takes place in the period between the day of broadcast (day 0) and the subsequent 27 days is used as the denominator.

$$RADL\ UGK0-27 = \frac{\text{Audience Rating Time Shifted Viewing } t}{\text{Audience Rating Time Shifted Viewing (T)}} \quad (\%)$$

$t=1, \dots, t$  series of time slots

$T=1+\dots+t$  total time slot over days 0 through 27

$$0 \leq RADL\ UGK0-27 \leq 100\%$$

Additionally, the relative share of the time shifted viewing between day 7 and 27 can be calculated similarly:

$$RADL\ UGK7-27 = \frac{\text{Audience Rating Time Shifted Viewing } t}{\text{Audience Rating Time Shifted Viewing (T)}} \quad (\%)$$

$t=1, \dots, t$  series of time slots

$T=1+\dots+t$  total time slot over days 7 through 27

$$0 \leq RADL\ UGK7-27 \leq 100\%$$

### 2.4 SHARE TIME SHIFTED VIEWING IN AUDIENCE RATING (UGKA0-27)

The share of time shifted viewing up to and including the 27<sup>th</sup> day after broadcast is defined as the share of time shifted viewing versus the *total audience rating of a programme or time slot*.

$$UGKA0-27 = \frac{\text{Audience Rating Time Shifted Viewing programme / time slot}}{\text{Audience Rating programme / time slot}} \quad (\%)$$

$$0 \geq UGKA0-27 \leq 100\%$$

## 2.4 'DAILY' SHARE IN TIME SHIFTED VIEWING (AUGK7-27)

The daily share in time shifted viewing is defined as the share of the time shifted viewing behaviour per day for a program or time slot relative to the total time shifted viewing for that program or time slot. For the time shifted viewing between days 7 and 27, one share for this entire period can be calculated, but not separately for each of the days.

$$\text{AUGK7-27} = \frac{\text{Audience Rating Time Shifted Viewing Program/Time slot on day 7-day 27 (\%)}}{\text{Total Audience Rating Time Shifted Viewing Program/Time slot}}$$

$0 \geq \text{AUGK7-27} \leq 100\%$

## 3. AUDIENCE RESEARCH FILES

Two sorts of data files with viewing records are used in the audience research (VWG- and UGK-files). The table below indicates which data files must be used in the calculation of the result types.

**TABLE 3. SUMMARY OF DATA USE AND DATA FILES**

<i>Result</i>	<i>Files used</i>	
Total viewing	VWGwwwwd.dat	UGKwwwwd.dat from day 0 and the following 6 days
Broadcast day	VWGwwwwd.dat	UGKwwwwd.dat from day 0
Live (TU)	VWGwwwwd.dat	No
Time shifted viewing (UGK) until 7 days after broadcast	No	UGKwwwwd.dat from day 0 and the following 6 days
Time shifted viewing (UGK) until 28 days after broadcast	No	UGK27wwwwd.dat from day 0 and the following 27 days

For time shifted viewing, two datasets apply, depending on the time lag between the broadcast and viewing moment. The regular UGK-file is used for time shifted viewing between the broadcast day and the following 6 days. The UGK27-file is a separate data set to be used for time shifted viewing until the 27<sup>th</sup> day after broadcast. This UGK27-dataset cannot be mixed with the normal data delivered for the audience ratings.

Viewing records with the station code Video, DVD or HDR in the VWG file could represent time viewing behaviour. To avoid being counted twice in total viewing, records that represent TSV within 7 days and within 27 days will be tagged in the VWG file. The same applies when calculating TSV from 7 to 27 days.

For the calculation of total viewing, including TSV within 7 days and the use of tagged records please see Figure 5.1. in Appendix 1 of the SKO calculation and reporting rules (see [https://kijkonderzoek.nl/images/Methodologische\\_documenten\\_ENGELS/2013/1\\_SKO\\_Calculation\\_and\\_reporting\\_Definitions\\_wk\\_27.pdf](https://kijkonderzoek.nl/images/Methodologische_documenten_ENGELS/2013/1_SKO_Calculation_and_reporting_Definitions_wk_27.pdf)).

Please bear in mind that the total viewing remains fixed after consolidation on day 7. The stations Video, DVD or HDR should not be used to compute total viewing when calculating results including TSV 7 to 27 days.

As of 17-07-2015 control fields are reported for time shifted viewing until 28 days after broadcast in the STAU27wwwwd.COD files. For more information see Appendix 1 of the SKO calculation and reporting rules.