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## **BRC TAMS Audit for BRC August 2016**

This year's annual audit was done in two parts, first a review delivered in June about the use of DSTV subscription as a weighting variable, and then the main audit in South Africa in August. The June "DSTV as a panel control" review is attached to this report.

For the auditing work that took place in August, Setshwano Setshogo from BRC has accompanied Robert Ruud to the Nielsen offices in Johannesburg.

The scope of the audit was to check the following:

- KPI reporting 2016
- Quality Control
- Panel Size & Representativity
- Recruitment
- TAM Projects
- Aligning TAM & ES
  
- TV EVENTS is not part of the core TAM Service

This report follows the format above.

### **KPIs**


The BRC TAMS service in South Africa has improved significantly since this auditor first saw the system in 2013. The panel has increased by 50%. The polling rate has gone up. The households that pass the daily quality control and are reported has gone up. The coverage has gone up. The weighting efficiency has gone up, and the weighting ranges and maximum weight has come down to acceptable levels.

The Auditor can report that KPI levels seen from 2015 through to 2016 are in line with the levels seen in other markets. Over the past year, the KPI levels have remained stable, despite the ongoing panel expansion of 200 households. This is a direct result of the close monitoring by the BRC.

The new ES that is more representative of the South African population will make some changes to the ideal composition of the panel. Hopefully the changed ES will give an increase in both individual level and household level weighting efficiencies, especially with regards to lifting the household level efficiency above 70. The role of the BRC will be important in the adjustments

following the new ES from TNS, as there will be two different suppliers to the TAMS end-user product from end of March 2017.

### KPIs August 2013 – August 2016

 **KPI report, comparing 2013 to 2016**

KPI Panel Health	August 2013	August 2014	August 2015	August 2016
Installed Panel	1980	2658	2667	2899
Polling	87%	95%	94.5%	93%
Reporting (Intabs)	76%	90.9%	89.8%	89.7%
Weekly cumulative reach	80%	96.5%	96.4%	94.4%

KPI status, snapshot early August for each year reported

**KPI report, comparing 2013 to 2016**

KPI Panel Health	Aug 2013	August 2014	August 2015	August 2016
Coverage of TV sets	80%	89.3%	92.8%	91%
Ind. weighting efficiency	41.5%	64.9%	79.5%	74.5%
HH weighting efficiency	52%	54.5%	65%	64.9%
Ind. Maximum weight	99,000	40,860	22,618	23,882

## Quality Control

Many different aspects of quality control and maintenance work together to keep a panel in good shape over time. The natural variation over time is of course significant in a panel of 2900 households from all parts of the South African society. (This has also been well documented in the monitoring of LSM change in the panel over time, described later in this document).

Details of the Panel Management Quality Control system has been presented by Nielsen.

### Panel Contacts

The summary of these controls is presented in the tables below. We see the task performed, the frequency, the type of control, who is responsible and the actual action taken.

Quality Control tasks in the BRC TAMS panel.

<u>Quality Control Check</u>	<u>Frequency</u>	<u>Type</u>	<u>Done by</u>	<u>Action</u>
<i>Bookings for Technican Visits</i>	Daily	Call Centre	Call Centre Agent	Open Job Card Book Field Visit
<i>Rejected HH Report</i>	Daily	Technical Field	Technical QC Analyst	Investigate Book Field Visit
<i>Uncovered Viewing</i>	Daily	Panel Management Report	QC Analyst/CC Agent	Call HH
<i>Failed to poll HH's - 2 days Fix over the phone</i>	Daily	Panel Management Report	QC Analyst/CC Agent	Call HH
<i>Failed to poll HH's - 3 days Open field job card</i>	Daily	Panel Management Report	QC Analyst/CC Agent	Open Job Card Book Field Visit
<i>Button Pushing Compliance</i>	Daily	Panel Management Report	QC Analyst/CC Agent	Call HH

<u>Quality Control Check</u>	<u>Frequency</u>	<u>Type</u>	<u>Done by</u>	<u>Action</u>
<i>Nil Viewing Individuals</i>	Twice Per Week	Panel Management Report	QC Analyst/CC Agent	Call HH
<i>Nil Viewing TV Sets</i>	Twice Per Week	Panel Management Report	QC Analyst/CC Agent	Call HH
<i>Nil Viewing HHs</i>	Twice Per Week	Panel Management Report	QC Analyst/CC Agent	Call HH
<i>Kids night viewing</i>	Once Per Week	Panel Management Report	QC Analyst/CC Agent	Call HH
<i>DSTV Panel Mangement</i>	Once Per Week	QC Supervisor/Analys	QC Supervisor/Analys	Update Pollux HH Master
<i>Faulty Meter Battery</i>	Once Per Week	Panel Management Report	QC Supervisor/Analys	Open Job Card Book Field Visit
<i>Updates (Demographic &amp; Equipment)</i>	Monthly Quotas	Call Centre	Call Centre Agent	Update Pollux HH Master



<u>Quality Control Check</u>	<u>Frequency</u>	<u>Type</u>	<u>Done by</u>	<u>Action</u>
<i>Pre-Installation Call</i>	When Installation Scheduled	Call Centre	CC Agent	Call HH Book Installation
<i>Welcome Call</i>	When Installation Successfully Completed	Call Centre	CC Agent	Call HH Update HH Master
<i>Exit Interview</i>	When De-Installation Completed (> 20% De-Installations)	Panel Management Report/ Call Centre	CC Agent	Evaluate

The auditor finds these controls to be in line with international standards, and routines are also integrated parts of the Nielsen “Pollux” TAM production system. Each routine is designed so that the integrity and security of the production system and of the panel database is maintained at all times.

Nielsen personnel working on the system do not have the possibility to access any more data about the panel than they need to in order to do their job. Likewise, there is no possibility to export information about the panel from the system. Only one person has access to the full database of the TAM Panel.



Volume of QC calls made by QC staff. Jan – June 2016

The table below shows the number of completed calls made for different QC reasons during the first half year of 2016.

	<b><u>Call Centre QC</u></b>	<b># of completed calls</b>
1	Pre-Installation call	1118
2	Welcome call	552
3	Update questionnaire call/Updates	2555
4	Incentive query/Gift card received	283
5	Re-educate HH on button pushing/Kids night viewing	521
6	Re-educate HH for constant viewing	11
7	Re-educate HH for uncovered viewing	2644
8	Re-educate HH for disabled button	88
9	Nil viewing query	240
10	Re-educate HH for nil viewing button	62
11	Re-educate HH Other	94
12	Exit interview	302
13	Polling from battery call	0
14	General query	92
15	Not polled 2 days	790
	<b>TOTAL</b>	<b>9352</b>

We see that the main categories are “Re-educating household for uncovered viewing” which is the whole basis of the TAM system. The “Uncovered viewing” is viewing to the TV without pushing the button identifying the person viewing. Households with excessive uncovered viewing are removed from the daily sample, and the level of uncovered viewing needs to be kept to a minimum. The other large group is the ongoing checking of demography and equipment changes. The panel composition needs to be as close to the ideal composition (defined by the ES) as possible, and is checked on a daily basis. If the registered composition of the household is not correct, this whole exercise is meaningless.

In the auditor’s opinion the QC checking made from the Nielsen office works as it should. It is also fully in line with the rigorous Nielsen standard, and with other high quality international standards.



### Technical Field QC

A panel of 2900 households need a lot of maintenance in the field. The technicians make a large number of visits to the panel households per week. This can be for a number of reasons:

- Installing new households
- De-installing non-compliant households
- Technical repairs and replacement of meters
- Repairing households that are failing to poll (3 consecutive days)
- Meter battery replacements
- TAM RCU replacements/RCU Battery replacements
- Converting meter type
- Connecting new equipment to meters
- Delivery of gift cards
- Household education

Completed tasks during service visits to panel households Jan – June 2016

	<b><u>Technical QC (Technicians/Field)</u></b>	<b><u># of completed visits</u></b>
1	Meter faulty/Meter disconnected/Technical repair	1450
2	Connect TV/Connect non-broadcast device	384
3	New Installation/Check installation	605
4	RCU faulty/RCU needs new batteries	333
5	Convert meter	82
6	De-installation	355
7	Failing to poll	1532
8	TV in for repairs/Broken TV	79
9	No data from HH (Nil Viewing)	429
10	Check/Replace meter battery	262
11	Deliver gift card	99
12	Educate HH	167
	<b>TOTAL</b>	<b>5777</b>

We see that the largest category of tasks is the unspecified “Failing to poll” and “Meter faulty/ Meter disconnected / Technical repair” These categories are to a large extent overlapping, that the failing to poll check will be due to a faulty meter etc... so 5777 tasks during the period, does not necessarily mean that many different household visits.

New installations are also a large category of technical visits. We also see that the battery in the meter that will insure proper polling even when there is no power in the household, is worn out faster in the South African panel than what is common in other panels using the same meter with battery polling. This is due to the high level of power outages / load shedding incidents in South Africa.



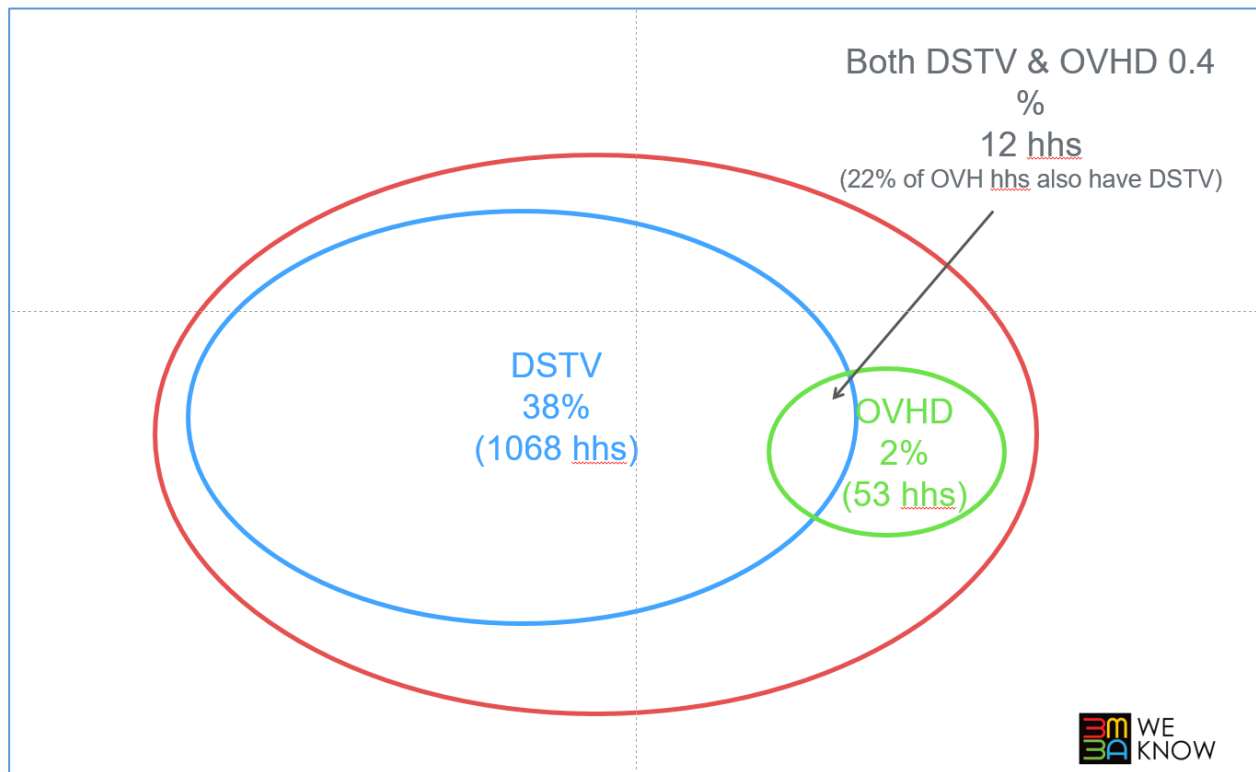
The number of technical visits to households, and the reasons for them, look like they should in a TAM panel. There is nothing to note out of the ordinary.

### The DSTV and OVHD issue

Software packages used in South Africa, all allow the re-basing of the TAM data to National, Pay TV, DSTV and OVHD.

A number of users of the Arianna software have been wondering why it is that they will get a lot of DSTV channels in the list when they make a ranking of the channel share among OVHD households.

The reason for this is that households have both DSTV and OVHD reception. In the panel the situation is as described in the figure below:



We see that within the total panel (red) we have 1068 DSTV households (blue). Among the 53 OVHD households (green) in the panel, there are 12 households that also have a DSTV subscription.

All characteristics in the TAM panel are either given on the individual or on the household level. The DSTV and OVHD availability is a household characteristic.

So selecting households that have OVHD will include some households with DSTV, and any negative selection of DSTV (“and not DSTV”) will then remove some of the OVHD households as well.

The solution that is used elsewhere is to remove the DSTV channels from the ranking if you are describing OVHD ranking only. But to describe the complete viewing in OVHD households, the DSTV households need to be there as well.

At this time the classification of panel homes are done on the household and individual level. There have been requests to include the reception platform as a target for selection. This sort of platform as a demographic solution is used in some markets to pick up whether the viewing is on TVs or on other platforms. However, this is a significant redesign of the processing and presentation of the daily data. Nielsen will investigate what it will take to deliver a platform selection as a target group.

Nielsen’s solution with DSTV and OVHD reception as “flags” on the household, is the solution used in TAM systems internationally. It is the correct way to mark households.

#### The Channel monitoring and reference verification issue

Nielsen’s Audio Matching process uses monitored audio samples from each measured channel as the reference of what channel has been watched.

The channel monitoring is done to be able to establish which channels meet the criteria to be monitored by the system. The Channel monitor will:

- Monitor weekly cumulative samples to establish whether a channel is meeting the criteria to be reported out in the TAM data channel list.
- Used as the industry Master stating whether a channel is to be released at all, or to all data users, or restricted to certain data users.
- Provide a history for reported channels in terms of launch, rebranding or termination.
- Used as the Master for the channel names.

The channel monitor is updated and distributed weekly.

A chance error led to two of the tuners capturing these references being reset and losing the correct setting to reference the correct channel.

Nielsen have implemented a system of monitoring the referencing tuners so the same issue should not occur again. The system for Reference Verification works in the following way:





- The purpose of the Reference Verification system is to provide verification that each channel is fully referenced (main and back-up), the reference is active and that the viewing is correctly assigned.
- The process of activating a reference is part of the channel release policy (2 weeks notification is recommended for activation, and 1 week for termination).
- The Reference Verification will be conducted monthly, and distributed alongside the monthly score card.

The Reference Verification uses the following data:

1. Channel name.
2. The decoder for the main reference must differ from the back-up reference.
3. Channel's unique Unitam mapping code, check to system. No duplicates.
4. Unitam unique Pollux code, check to system. No duplicates.
5. TVM 5 unique mapping code, check to system. No duplicates.
6. TVM 5 unique Pollux code, check to system. No duplicates.

1	2	3	4	5	6	
Channel Name	Main Reference Decoder	Back-Up Reference Decoder	Unitam UCI (Hexadecimal Mapping Code)	Unitam Pollux Code	TVM5 Channel Code	TVM5 - Pollux Code
SABC 1	HD PVR DECODER 2P	DSD 3U DECODER	07EE	1010/4213	261	4213
Etv	DSD 1110 (+2) DECODE	DSD 3U DECODER	04BA	1008/4237	263	4237
M-Net	DUAL VIEW I DECODER	DSD 3U DECODER	28	1003/4031	194	4031

Verification of the following:

1. Channel name.
7. System sample, by meter type. Double check reference if there are zeros.
8. Sum of all samples.
9. Programme file, mapped to TX 4. On = allows viewing through, Off = disallows viewing.
10. Arianna samples. Total Pollux samples must match.

1	7	8	9	10		
Channel Name	Unitam 3 sample	Unitam Classic sample	TVM 5 sample	Total Pollux Sample	TX 4 File On/Off	Software Sample
SABC 1	99	13	2	114	On	116
Etv	45	9	0	54	On	54
M-Net	2741	243	154	3138	On	3292

The auditor believes the method implemented is fit for purpose. The verification should help detecting errors in the channel matching.

Panel Churn



- The average installed panel size for the period 1 Jan - 31 July is 2,819 households.
- 372 households have been de-installed and 516 households have been installed, with a net increase of 144 households.
- Therefore, churn is at 13.2%.
- The main factors driving churn are:
  - Noncompliance of installed households (mostly new).
  - Panel balance
  - Removal of “old” households

#### De-installation reasons Jan – July 2016

<b>REASONS FOR DE-INSTALLATION</b>	<b>372</b>	<b>100.0%</b>
<b>Non-Compliance</b>	282	75.8%
<b>Panel Member Request</b>	90	24.2%
<b>Non-Compliance 282</b>		
Panel balance	67	18.0%
Panel tenure	61	16.4%
Continuous non-collaboration	59	15.9%
No electricity or TV Sets	44	11.8%
HH won't allow all tv sets to be monitored	19	5.1%
Hard to contact	8	2.2%
HH moving	6	1.6%
Other reason	18	4.8%
<b>Panel Member Request 90</b>		
Panel member no longer interested	35	9.4%
HH feels it has participated long enough	15	4.0%
Don't like using equipment/Equipment a prol	11	3.0%
Too much contact	9	2.4%
Incentives not appealing	7	1.9%
Other reason	13	3.5%



The breakdown of panel churn is shown in the tables below:

Installed and de-installed Jan – July 2016

	Installed		De-Installed	
Broadcast Region	#	%	#	%
DSTV Compact	20	3.9%	88	23.7%
DSTV Premium	82	15.9%	62	16.7%
FTA	414	80.2%	222	59.7%
<b>TOTAL</b>	<b>516</b>	<b>100.0%</b>	<b>372</b>	<b>100.0%</b>
<b>Net Increase</b>	<b>144</b>			

	Installed		De-Installed	
Language	#	%	#	%
Afrikaans/Both	99	19.2%	52	14.0%
English/Other	42	8.1%	38	10.2%
Nguni	251	48.6%	201	54.0%
Sotho	124	24.0%	81	21.8%
<b>TOTAL</b>	<b>516</b>	<b>100.0%</b>	<b>372</b>	<b>100.0%</b>
<b>Net Increase</b>	<b>144</b>			

Installed and de-installed Jan – July 2016

	Installed		De-Installed	
Province	#	%	#	%
Kwazulu Natal	105	20.3%	64	17.2%
Eastern Cape	27	5.2%	29	7.8%
Free State	14	2.7%	13	3.5%
Gauteng	88	17.1%	97	26.1%
Limpopo	82	15.9%	29	7.8%
Mpumalanga	72	14.0%	25	6.7%
Northern Cape	5	1.0%	6	1.6%
Northwest	51	9.9%	10	2.7%
Western Cape	72	14.0%	39	10.5%
<b>TOTAL</b>	<b>516</b>	<b>100.0%</b>	<b>312</b>	<b>83.9%</b>
<b>Net Increase</b>	<b>144</b>			



## Installed and de-installed Jan – July 2016

Community Size	Installed		De-Installed	
	#	%	#	%
City/Large Town	101	19.6%	57	15.3%
Metropolitan	213	41.3%	184	49.5%
Settlement/Rural	115	22.3%	85	22.8%
Small Town/Village	87	16.9%	46	12.4%
<b>TOTAL</b>	<b>516</b>	<b>100.0%</b>	<b>372</b>	<b>100.0%</b>
<b>Net Increase</b>	<b>144</b>			

## Installed and de-installed Jan – July 2016

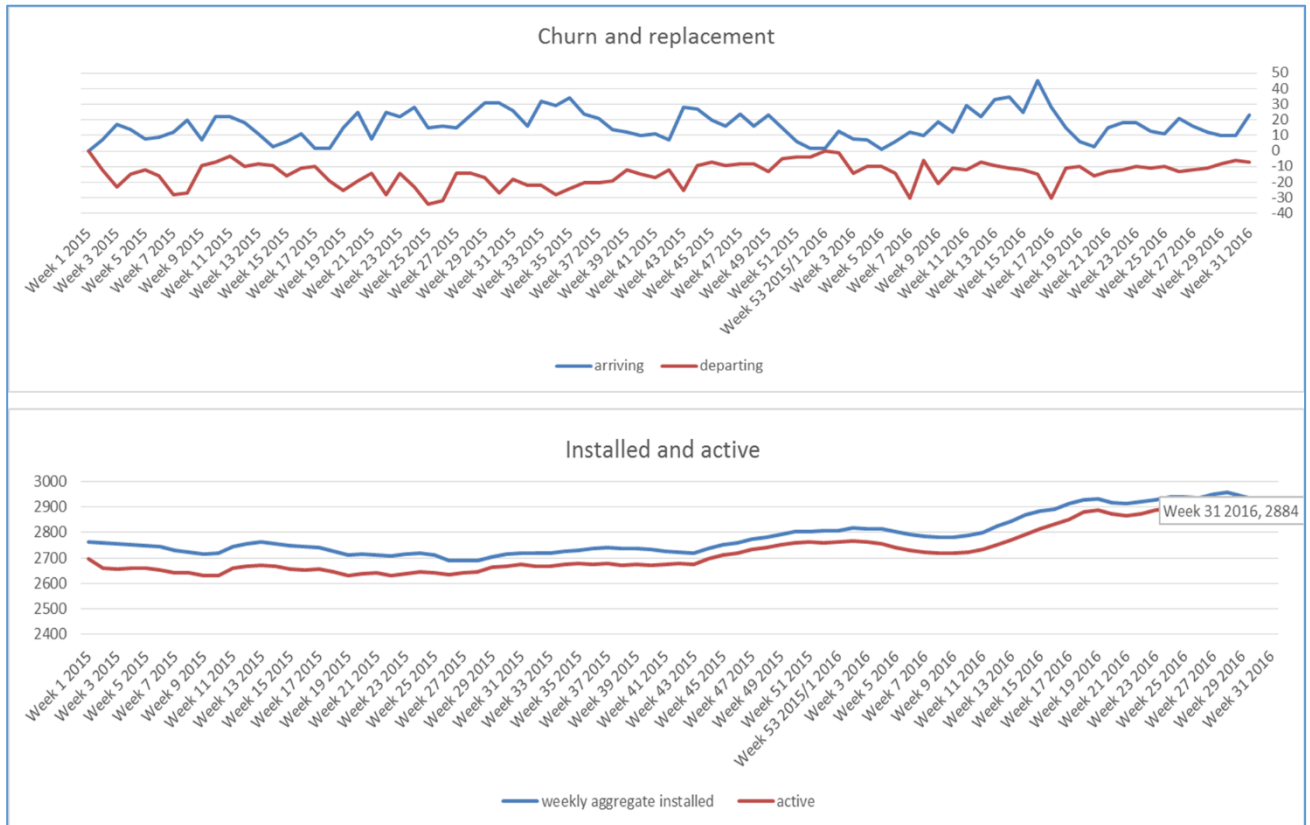
LSM	Installed		De-Installed	
	#	%	#	%
LSM 2	1	0.2%	0	0.0%
LSM 3	8	1.6%	2	0.5%
LSM 4	50	9.7%	22	5.9%
LSM 5	97	18.8%	52	14.0%
LSM 6	199	38.6%	128	34.4%
LSM 7	82	15.9%	64	17.2%
LSM 8	35	6.8%	33	8.9%
LSM 9	29	5.6%	48	12.9%
LSM 10	15	2.9%	23	6.2%
<b>TOTAL</b>	<b>516</b>	<b>100.0%</b>	<b>372</b>	<b>100.0%</b>
<b>Net Increase</b>	<b>144</b>			

## Installed and de-installed Jan – July 2016

Ethnic Group	Installed		De-Installed	
	#	%	#	%
Indian	11	2.1%	14	3.8%
Black	380	73.6%	284	76.3%
Coloured	56	10.9%	29	7.8%
White	69	13.4%	45	12.1%
<b>TOTAL</b>	<b>516</b>	<b>100.0%</b>	<b>372</b>	<b>100.0%</b>
<b>Net Increase</b>	<b>144</b>			

Installed and de-installed Jan – July 2016

Years on the Panel	De-Installed	
	#	%
Years 0 - 3	270	72.6%
Years 4 - 6	26	7.0%
Years 7 - 8	20	5.4%
Older than 8 years	56	15.1%
<b>TOTAL</b>	<b>372</b>	<b>100.0%</b>
<b>Net Increase</b>	<b>144</b>	



The churn and installations have been controlled well. At this time, we are waiting for the new ES to deliver new data for the panel composition and we foresee some adjustment to the panel when this is released.

In the auditors opinion it is now better to keep the panel stable, but not make any big adjustments to methods and proportions in the panel until we have the new ES data in place.

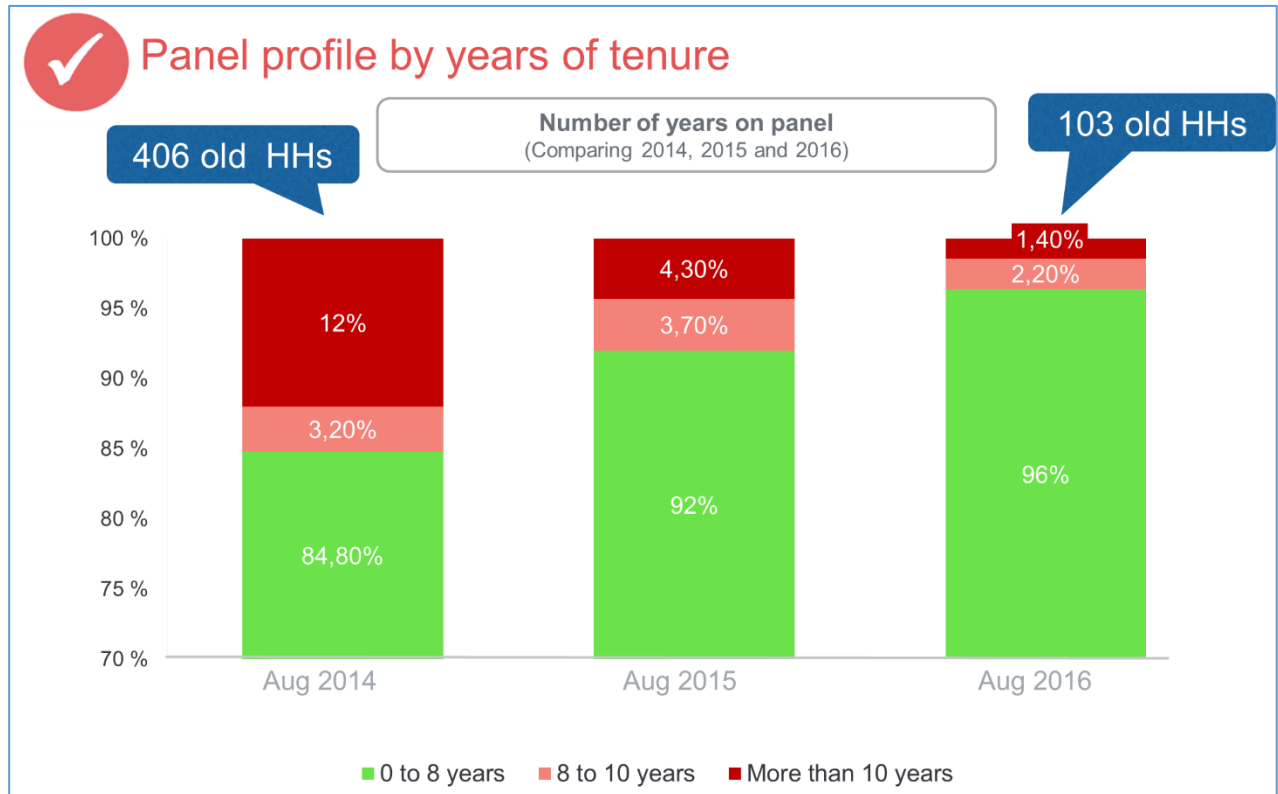


### Maximum panel tenure project

During the audit in 2014 it was decided to try to get rid of the longest serving panel households. The global best practice has a max tenure of 8 or even as little as 5 years.

The work has been going on steadily with good results, in parallel with the panel expansion and the normal churn – and the steady aging of the installed panel.

We see below how the number of panel households with more than 8 years on the panel decreased from 406 households in August 2014 to 103 in August 2016.



This has been a very good effort from the Nielsen team, and the auditor finds the level of households at a level where the resources can be used for other purposes.

### The LSM issue

The auditor has recommended not using the LSMs for weighting of the panel during the last 3 audits. The LSMs are the South African TAM systems biggest problem.

LSMs may work to classify people in a cross-sectional study, where you are collecting observations at a single point in time.

### **In a longitudinal study like a TAM panel service, LSMs are not fit for purpose.**

Nielsen have checked the changes in households LSM level in January and June for the years 2014, 2015 and 2016. The results are shown below:

Change in LSM level from January to June 2014. Households.

Jun-14									
Jan-14	LSM 3	LSM 4	LSM 5	LSM 6	LSM 7	LSM 8	LSM 9	LSM 10	MOVED OUT OF
LSM 3		1		1					2
LSM 4	1		22	9	1				33
LSM 5	1	14		80	5	3			103
LSM 6		1	47		78	15	5		146
LSM 7		1	2	48		48	12	1	112
LSM 8				6	32		28	3	69
LSM 9					7	19		14	40
LSM 10							17		17
<b>MOVED INTO</b>	<b>2</b>	<b>17</b>	<b>71</b>	<b>144</b>	<b>123</b>	<b>85</b>	<b>62</b>	<b>18</b>	<b>522</b>

Change in LSM level from January to June 2015. Households.

Jun-15									
Jan-15	LSM 3	LSM 4	LSM 5	LSM 6	LSM 7	LSM 8	LSM 9	LSM 10	MOVED OUT OF
LSM2									0
LSM 3		8	1						9
LSM 4	8		42	6					56
LSM 5		25		89	8	1			124
LSM 6		1	41		86	12	2		142
LSM 7			2	30		46	21		99
LSM 8				2	34		26	3	65
LSM 9					4	19		18	41
LSM 10							16		16
<b>MOVED INTO</b>	<b>8</b>	<b>34</b>	<b>86</b>	<b>127</b>	<b>132</b>	<b>78</b>	<b>65</b>	<b>21</b>	<b>551</b>

## Change in LSM level from January to June 2016. Households.

Jun-16										
Jan-16	LSM 2	LSM 3	LSM 4	LSM 5	LSM 6	LSM 7	LSM 8	LSM 9	LSM 10	MOVED OUT OF
LSM 2			2							2
LSM 3	2		7	4						13
LSM 4		11		28	7					46
LSM 5		3	32		66	6				107
LSM 6		1	9	68		77	15	4	1	175
LSM 7				4	73		43	13	1	134
LSM 8				1	10	38		27	4	80
LSM 9					1	10	27		22	59
LSM 10								15		15
MOVED INTO	2	15	50	104.8	156.4	130.6	84	60	28	631

What the tables show is that in the years 2014 and 2015, 22% of the households changed LSM level in 6 months. In 2016 the change in 6 months increased to 33%. This gives changes between the time a campaign is planned and when it is executed, that make the planning of TV on LSMs incorrect.

The panel also becomes increasingly costly and difficult to keep updated, and the effort spent on trying to keep ahead of the LSM changes could be used better.

The increase in LSM changes in 2016 has not been investigated thoroughly, but one reason that seems probable is: A large market campaign from DSTV that makes it easy for new groups to get DSTV (and easy to drop out again) has run in the first half of 2016. (Pay as you go Etc.) The DSTV access is an LSM indicator that move you from LSM 5 to 7 and back.

The auditor recommends removing the LSMs from the TAM. Data is not correct over time, and any planning on LSMs will not give the results advertisers think they are getting when the campaign is executed.





### Recruitment procedures

The auditor has had a comprehensive presentation of the recruitment procedures in use by Nielsen. Procedures are well documented and follow the general principles below:

1. The full 6 month AMPS database is imported into the **Pollux Recruitment module**, and a unique TAM questionnaire number assigned to each household (12 500 HHs).
2. For expansion or panel replenishment, panel balance is reviewed to identify which demographic groups are required for installation (Panel controls).
3. Within the Pollux Recruitment Module, the panel controls are used to stratify the sample, and then the system randomly selects the required households.
4. These households are then imported into the **Survey Module (Online System)** where the supervisor assigns the households to the interviewers.
5. Each interviewer receives only the addresses assigned to him or her.
6. Recruitment is conducted either telephonically or face to face.

The achieved response from addresses issued for recruitment is as follows:

Fieldwork Period Method	Jan to July 2016
	Phone
Total addresses Issued	10800
Successfully Contacted (Recruited+Not Recruited)	5122
Successfully Contacted % (of Issued)	47%
Successfully Recruited (Installed +Not Installed)	2234
Recruited % (of Contacted)	44%
Successfully Installed	518
Successfully Installed % (of Contacted)	23%
Total Not Recruited (Non Eligibles+ Refusals)	2888
Total Not Recruited %	56%
Non Eligible	895
Non Eligible %	31%
Refusals	1993
Refusals %	69%

The rate of refusal and the 44% recruitment from all contacted households is in line with what is found elsewhere. It is a good result.



### The Metering hardware

Nielsen are in the process of changing all meters to the latest generation Unitam 3 meter. They describe the situation:

- Currently there are enough meters in market to meter 2 930 households (30 permitted for quarantine and churn).
- Unitam 3 meters use the audio matching method and have the capability to measure time shifted viewing (96% of panel).
- TVM 5 meters use SI and banner and do not have capability to measure time shifted viewing (4% of panel).
- Both meters have battery back-up.
- Meter stock is tracked through the Nielsen CAM system, stating location as in home, with technician, in store.
- The inventory recon has been shared with the BRC and Auditor.

### Panel by meter type August 15 – August 16

	15-Aug-15		15-Oct-15		15-Dec-15		15-Feb-16		15-Apr-16		15-Jun-16		8-Aug-16	
<b>UNITAM</b>														
FTA	1528	57.2%	1498	55.9%	1530	55.5%	1525	56.1%	1606	56.6%	1630	56.4%	1765	60.9%
DSTV Compact	659	24.7%	633	23.6%	607	22.0%	601	22.1%	575	20.3%	576	19.9%	596	20.6%
DSTV Premium	319	11.9%	309	11.5%	369	13.4%	352	12.9%	422	14.9%	440	15.2%	417	14.4%
<b>Total</b>	<b>2506</b>	<b>93.8%</b>	<b>2440</b>	<b>91.0%</b>	<b>2506</b>	<b>90.9%</b>	<b>2478</b>	<b>91.1%</b>	<b>2603</b>	<b>91.8%</b>	<b>2646</b>	<b>91.5%</b>	<b>2778</b>	<b>95.8%</b>
<b>TVM 5</b>														
FTA	89	3.3%	127	4.7%	134	4.9%	128	4.7%	132	4.7%	144	5.0%	63	2.2%
DSTV Compact	51	1.9%	91	3.4%	89	3.2%	86	3.2%	70	2.5%	71	2.5%	33	1.1%
DSTV Premium	26	1.0%	24	0.9%	29	1.1%	27	1.0%	32	1.1%	31	1.1%	26	0.9%
<b>Total</b>	<b>166</b>	<b>6.2%</b>	<b>242</b>	<b>9.0%</b>	<b>252</b>	<b>9.1%</b>	<b>241</b>	<b>8.9%</b>	<b>234</b>	<b>8.2%</b>	<b>246</b>	<b>8.5%</b>	<b>122</b>	<b>4.2%</b>

A plan is in place to change the last remaining TVM 5 meters for Unitam 3's as well. This will give one input format to the data processing and remove the slight chance of two input formats leading to errors in the processing. (Multiple meter types are very common in many markets, but of course having only one type is the best solution)

The auditor is satisfied that Nielsen have good control over their hardware.



### Universe Update to 2015B

- The TAM Universe is updated at regular intervals to correspond with the latest Household and Population figures from the Establishment Survey.
- The next Universe update is scheduled for Monday, 5<sup>th</sup> September 2016, where the TAM Universe will be updated from the AMPS 2015A to the AMPS 2015B Universe.
- The last TAM Universe update occurred earlier this year, on the 4<sup>th</sup> April 2016.
- This will be the last universe update from AMPS, the next one will be based on the TNS ES, which will be implemented in April 2017.

Changes from 2015A to 2015B will be relatively small with an increase in households by 1.7% and for individuals by 1.65%.

### Universe Update to 2015B

	Meter Universe 2015a	Meter Universe 2015b	Difference #	Difference %
Households	13,422,570	13,651,164	228,594	1.70%
Individuals*	44,266,250	44,998,436	732,186	1.65%

### Universe Update to 2015B

		New 2015B	Current 2015A	Growth #	Growth %
<b>Total Households</b>		<b>13,651,164</b>	<b>13,422,570</b>	<b>228594</b>	<b>1.7%</b>
Metro	HH	5,987,898	5,907,150	80748	1.4%
C/LT	HH	1,843,461	1,837,493	5968	0.3%
ST/V	HH	1,583,219	1,557,658	25561	1.6%
Rural	HH	4,236,586	4,120,269	116317	2.8%
<b>Total</b>	HH	<b>13,651,164</b>	<b>13,422,570</b>	<b>228594</b>	<b>1.7%</b>
Western Cape	HH	1,564,163	1,576,934	-12771	-0.8%
Northern Cape	HH	282,488	288,223	-5735	-2.0%
Free State	HH	772,981	749,295	23686	3.2%
Eastern Cape	HH	1,378,288	1,372,315	5973	0.4%
Kwazulu - Natal	HH	2,358,763	2,261,982	96781	4.3%
Mpumalanga	HH	1,049,974	1,038,043	11931	1.1%
Limpopo	HH	1,346,887	1,352,662	-5775	-0.4%
Gauteng	HH	3,938,449	3,851,873	86576	2.2%
North - West	HH	959,171	931,243	27928	3.0%
<b>Total</b>	HH	<b>13,651,164</b>	<b>13,422,570</b>	<b>228594</b>	<b>1.7%</b>



## Universe Update to 2015B

		<b>New 2015B</b>	<b>Current 2015A</b>	<b>Growth #</b>	<b>Growth %</b>
<b>Total Households</b>		<b>13,651,164</b>	<b>13,422,570</b>	<b>228594</b>	<b>1.7%</b>
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## Universe Update to 2015B

		<b>New 2015B</b>	<b>Current 2015A</b>	<b>Growth #</b>	<b>Growth %</b>
<b>Total Households</b>		<b>13,651,164</b>	<b>13,422,570</b>	<b>228594</b>	<b>1.7%</b>
Afrikaans/Both	HH	1,901,975	1,925,544	-23569	-1.2%
English/Other	HH	1,334,929	1,364,467	-29538	-2.2%
Nguni	HH	5,916,140	5,788,746	127394	2.2%
Sotho	HH	4,498,120	4,343,813	154307	3.6%
<b>Total</b>	<b>HH</b>	<b>13,651,164</b>	<b>13,422,570</b>	<b>228594</b>	<b>1.7%</b>
LSM 1-4	HH	2,270,443	2,318,914	-48471	-2.1%
LSM 5	HH	2,372,617	2,445,353	-72736	-3.0%
LSM 6	HH	3,463,433	3,220,524	242909	7.5%
LSM 7	HH	2,001,928	1,893,497	108431	5.7%
LSM 8	HH	1,268,681	1,193,986	74695	6.3%
LSM 9	HH	1,401,948	1,434,242	-32294	-2.3%
LSM 10	HH	872,114	916,054	-43940	-4.8%
<b>Total</b>	<b>HH</b>	<b>13,651,164</b>	<b>13,422,570</b>	<b>228594</b>	<b>1.7%</b>

## Universe Update to 2015B

		New 2015B	Current 2015A	Growth #	Growth %
<b>Total Households</b>		<b>13,651,164</b>	<b>13,422,570</b>	<b>228,594</b>	<b>1.7%</b>
<b>DSTV SUBSCRIBER FIGURES</b>					
Non DSTV	HH	8,558,311	8,442,071	116,240	1.4%
DSTV		5,092,853	4,980,499	112,354	2.3%
		<b>13,651,164</b>	<b>13,422,570</b>	<b>228,594</b>	<b>1.7%</b>
PVR	HH	1,100,661	1,116,942	(16,281)	-1.5%
NON PVR	HH	12,550,503	12,305,628	244,875	2.0%
<b>Total</b>	<b>HH</b>	<b>13,651,164</b>	<b>13,422,570</b>	<b>228,594</b>	<b>1.7%</b>
OVHD	HH	89,801	45,000	44,801	99.6%
Non OVHD	HH	13,561,362	13,377,570	183,792	1.4%
<b>Total</b>	<b>HH</b>	<b>13,651,163</b>	<b>13,422,570</b>	<b>228,593</b>	<b>1.7%</b>
		<i>*0.7% of Universe</i>			
StarSat No	HH	13,560,449	13,346,184	214,265	1.6%
StarSat Yes	HH	90,715	76,386	14,329	18.8%
<b>Total</b>	<b>HH</b>	<b>13,651,164</b>	<b>13,422,570</b>	<b>228,594</b>	<b>1.7%</b>

**Aligning to the upcoming ES from 2017**

- The ES went into field on the 1st July 2016, with the first two months of data being made available in October 2016.
- Initial tests for BRC TAMS alignment will be conducted in October 2016, with further tests and implementation conducted in March 2017, when the full ES dataset is released.
- The new ES sample, is based on new area definitions, and TAM will align in preparation for the new ES Universe Update.
- All TAM Households have been geo-coded.
- The IHS area definition reference document has been sent to Nielsen.
- Nielsen has coded the TAM panel to match the new area definitions, ready for weighting.
- Next steps will be to implement the new area Universes and test the impact on viewing.



97 % of panel households have been coded to fit with the area definitions from the new ES. Results suggest that the changes will be relatively small.

The outcome of the preliminary coding of the TAM panel to the new area definition shows a close match to the ES sample, although it should be noted that, at this stage, the comparison variables are not identical. TAM panel has a disproportionate sample, Rural by a factor of 0.64.

	ESTABLISHMENT SURVEY TOTAL POP	TAM PANEL TOTAL TV HHs
Urban Metro	41%	45%
Rural Metro	2%	1%
Urban Non-Metro	27%	30%
Rural Non-Metro	31%	24%

### **Concluding remarks**

1. The current state of the BRC TAMS panel is good, the last remaining improvement takes place once the installed panel aligns with the TV household Universe from the new ES (at end March 2017), in place of the existing AMPS TV household Universe.
2. As highlighted in the report, LSM's as they currently stand should be taken out of the BRC TAMS system as soon as possible. The transition to the new ES, with an updated socio-economic model should alleviate the strain the movement in LSM's has on a live panel.
3. The BRC TAMS panel is well run by Nielsen and the good levels of quality of the service are being maintained through the constant oversight and direction from the BRC.
4. Upon observing the management of an issue that arose suddenly, which required immediate attention, the Auditor and the BRC RD believes that improvements could be made to the internal management processes at Nielsen of the BRC TAMS product. It was observed that whilst the day to day production works well, unexpected issues are not always picked up routinely and dealt with efficiently and timeously. THE BRC CEO has reported that this matter will be addressed in the upcoming RFQ that will be issued to Nielsen for the management of the service.
5. Trust in the currency system seems to be improving in the last few years, as the involvement of the AMF over the past year has proved to be a significant factor to keeping legitimacy levels of the service high.



6. The rigorous daily as well as weekly oversight and management of Nielsen by the BRC Research Director, coupled with the strategic direction given by the BRC CEO in the management of the BRC TAMS service and business component is evident. This constant management serves to ensure a stable, credible service to the industry.

7. The increase of the panel to a 4000 household sample is now essential to keep the service up to date and in-line with an evolving television broadcasting environment.

Oslo, Norway

September 12th 2016

Robert Ruud

