HOW VALID AND RELIABLE ARE AMPS, RAMS AND TAMS FINDINGS BASED ON A SMALL NUMBER OF RESPONDENTS

Originally prepared for SAARF by Dr Clive Corder and amended from time to time

1. **Some important aspects relating to sample surveys such as AMPS, RAMS and TAMS**

The universe that AMPS and RAMS represent is virtually all South African adults, throughout urban and rural areas. Adult was previously defined as age 16 years and older, and has recently been updated to include all individuals 15 years and older. In order to measure this universe a large, scientifically drawn, multi-stage, area stratified, probability sample is taken to represent the population of South Africa. Using population estimates, the sample is then grossed up to the total population so that findings can be looked at in terms of both percentage and thousands of people.

AMPS and RAMS provide the opportunity for users of the data to drill down into various sub-sections of the population, for example users of Brand X in a specific province who fall in a particular gender, age and income category. When differentiators are used the population is broken down into smaller parts, and findings may be based on a relatively small number of respondents interviewed. Thus, a question frequently asked by users of AMPS and RAMS data is "What are the implications of findings where the number of respondents is small?"

When deciding on a target market, one must take the limitations of research into account. Too often marketers will over segment, leaving the media planner with an impossible task. Despite the large sample size of AMPS, RAMS and TAMS, one still has to be careful not to define target markets too narrowly. For instance, if the target market is females, LSM 10, age 25 – 34, the sample size in AMPS Jun '10 is reduced from 25 170 to 192. It would thus be much better to lift the age restriction to say 25 – 49, or include all adults. This would provide a more robust sample.

Filter	Sample Size	'000 Population
Adults	25 170	34 020
Adult Women	12 602	17 907
Adult Women, aged 25-34	2 652	3 865
Adult Women, aged 25-34, LSM 10	192	161
Adult Women, aged 25-34, LSM 10, with children	115	86
Adult Women, aged 25-34, LSM 10, with children, divorced/widowed/separated	4	3**

One also needs to differentiate between an incidence of a finding, which is the percentage or the actual number of thousands of the population who fall into a pre-defined category, and a profile, which looks at the detailed characteristics of this category.

While the incidence in thousands or expressed as a percentage can be used to understand a population, for the purposes of comparison it is recommended that percentage is used. The reason for this is that for AMPS (and for that matter RAMS and TAMS) the universe size is updated each year in accordance with the changes in the South African population. For instance, the universe (audience or population) for AMPS 2004/ 2005 is 30 656 000; the universe for AMPS 2005/ 2006 is 30 903 000; and the universe for AMPS 2006/ 2007 is 31 109 000. This means that if the incidence in thousands is used, the baseline will vary from year to year. As such the thousands are not directly comparable. However, because the percentages are always calculated out of 100 this difficulty can be avoided.

2. Incidence of Use

When considering results based on incidence, for example of a brand or medium, then the statistical margin of error will take into account on the one hand the number of respondents who were asked the question and on the other, the size of the response. For instance one could have a low incidence of say 5%, but the base could be quite large, for example 2 000. We can use a margin of error calculation to measure the likelihood that the true proportion in the total population that the sample is drawn from falls with certain limits. In this case the margin of error is plus/minus 1% at the 95% level. This then indicates that in 95 times out of 100 the true result for this example would fall in the range of 4 - 6% (5%-1% to 5%+1%).

For a more detailed explanation of margin of error see http://www.saarf.co.za/calculatesignificant/Significant%20Difference%20User's%20Guide.pdf. To calculate margin of error for a data set see http://www.saarf.co.za/Quick%20Equation.xls.

An example is given in Chart 1 that shows Past 7 Days Listening in thousands for three radio stations with a small number of listeners. Chart 2 shows listenership for the same stations expressed as a percentage. The findings demonstrate a high degree of consistency when percentage is used and like is thus compared with like. When there is no change in the percentage from one survey to the next but the thousands have changed, this can be ascribed to a change in the universe and as such it is not a real increase in audience. Instead it is a new estimate based on a new universe.

Chart 1: Past 7 Days Listeners
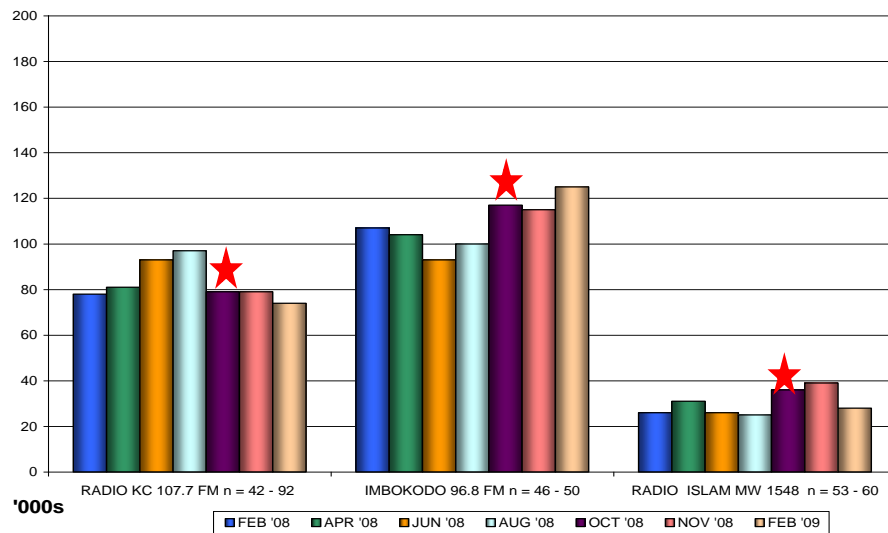
Chart 2: Past 7 Days Listeners (%)
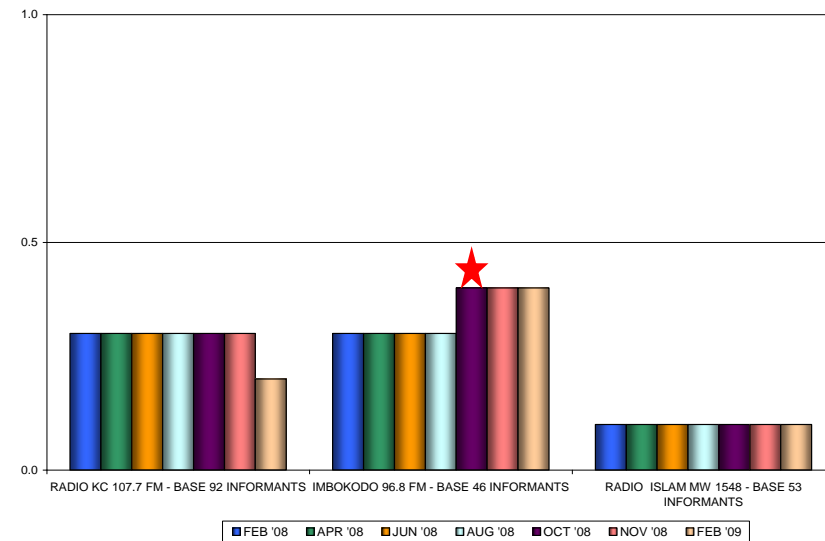
★ In October the new small urban/ rural updates included in the data, as well as a universe update. Considering the change the data appears even more consistent. This accounts for the changes at this point on some of the graphs. From 2010, the small urban/ rural update happens in both April and October and more marked changes in audience may be seen for certain stations at these points.

If one wanted to establish the audience among say female listeners then the margin of error would depend on the overall female sample size and the proportion of female past 7 days listeners.

By comparing results from one survey to another one can see how this proportion changes. Since the base for these findings will in nearly all cases be large, then the margin of error will be small.

3. Profile

With larger samples of approximately 100 or more profiles can be done. For example Chart 3 shows the Gender, Age and Community profile for Radio KC 107.7 FM over three periods. Whilst the results do differ from period to period this could be a reflection of changing audience characteristics.
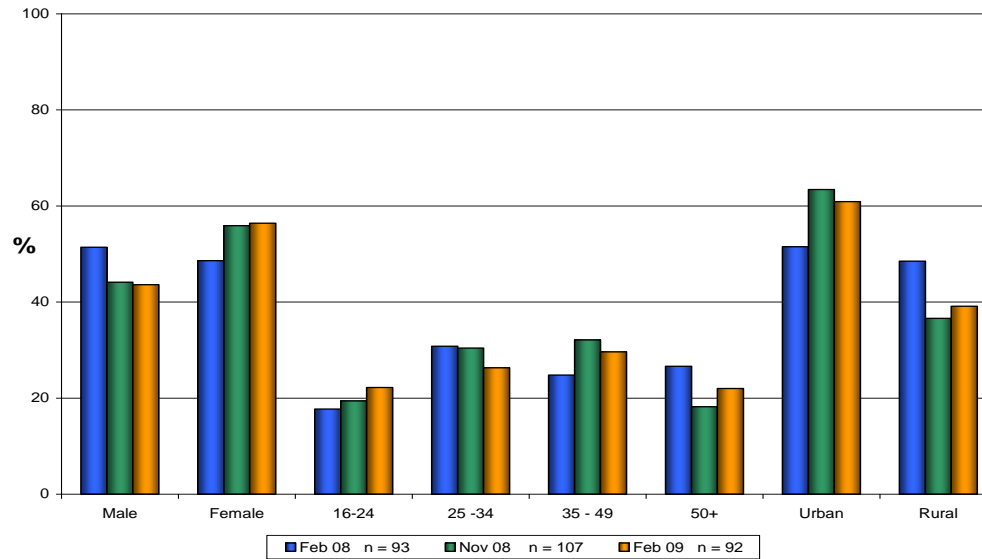
Chart 2: Profile of Radio KC 107.7 FM Past 7 Days Listening

Radio KC 107.7 FM – Listening in Past 7 Days

		Sample	Male	Female	16-24	25 -34	35 - 49	50+	Urban	Rural
Feb-08	Infs	93	41	52	22	16	28	27	70	23
	Pop		40	38	14	24	19	21	40	38
	Feb 08		0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.2
	H%		51.4	48.6	17.7	30.8	24.8	26.6	51.5	48.5
Nov-08	Infs	107	43	64	15	24	35	33	83	24
	Pop		35	44	15	24	25	14	50	29
	Nov 08		0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.2
	H%		44.1	55.9	19.4	30.4	32.1	18.2	63.4	36.6
Feb-09	Infs	92	39	53	13	15	30	34	68	24
	Pop		32	42	16	19	22	16	45	29
	Feb 09		0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.2
	H%		43.6	56.4	22.2	26.3	29.6	22	60.9	39.1

4. **TAMS**

It is important to understand that the measurement of television is done by using a continuous panel and not by separate, independent samples as in the case of AMPS and RAMS. The results of the TAMS panel show far greater variability than those for AMPS and RAMS. It is likely that this is because of greater freedom of choice and more variation in competitive options. It should also be appreciated that TAMS findings are changing continuously minute by minute and that the sample at any one time period will differ both in numbers and characteristics according to who is logged in and what they are viewing.

One can select a target group and find out what was being viewed in terms of channel, programme and time and apply the margin of error to that incidence. However, it should be appreciated that certain programmes have a more consistent audience than others, and that the size and characteristics of an audience will be influenced by alternative options that are available at any one time.

Calculating the margin of error in the TAMS universe is more complex than has been described for AMPS and RAMS. AMPS and RAMS data consists of responses given once-off. Individuals in one fieldwork period are representative of the population, and can be compared to other fieldwork periods. However they are not the same people, and there is an unavoidable degree of variation between the samples. Here the sample size and incidence over time repeated input (from the same individual) means that it is possible to become increasingly certain of their viewership patterns. Although TAMS samples may be smaller, the confidence with which the data can be accepted may be quite high. Here the degree of overlap, or duplication between samples, in addition to sample size and incidence, influence the margin of error.

Table 1 shows the audience to SABC 1 Zulu News based on all black males 16+ and guests over a number of days. Whilst there is a degree of variation, the ratings are fairly similar.

Table 1: 01/01/2009 – 31/03/2009 – All dayparts - SABC 1 - Zulu News – Black Males 16+ - Sample 900 – Universe 7 603 069

Market	Channel						Black Males 16 +		Adults 16+	
National	SABC 1									
Description (grouped)	Date	Day of week	Start time	End time	Level 1	Level 2\Variable	TVR	Sample	TVR	Sample
ZULU NEWS	02/01/2009	Friday	19:30:01	20:00:08	News	News	1 635 056	856	3 855 793	3 372
	05/01/2009	Monday	19:32:50	20:03:11	News	News	1 674 447	764	3 901 457	3 116
	07/01/2009	Wednesday	19:30:01	20:00:46	News	News	1 490 131	744	3 796 783	3 092
	09/01/2009	Friday	19:30:01	20:00:02	News	News	1 473 987	872	3 707 048	3 448
	12/01/2009	Monday	19:29:59	20:00:07	News	News	1 752 328	720	4 407 266	3 015
	14/01/2009	Wednesday	19:30:00	20:00:39	News	News	1 587 220	813	3 738 333	3 260
	16/01/2009	Friday	19:30:00	20:00:15	News	News	1 509 938	905	3 643 235	3 608
	18/01/2009	Sunday	19:30:02	20:00:07	News	News	1 454 499	793	3 164 559	3 259
	19/01/2009	Monday	19:30:01	20:00:09	News	News	1 631 474	823	3 841 107	3 371
	21/01/2009	Wednesday	19:30:02	19:59:51	News	News	1 616 148	789	3 915 603	3 220
	23/01/2009	Friday	19:30:01	20:00:13	News	News	1 682 242	896	4 152 405	3 523
	26/01/2009	Monday	19:30:26	20:00:10	News	News	1 610 766	814	3 905 586	3 289
	28/01/2009	Wednesday	19:30:00	20:00:25	News	News	1 595 152	813	3 765 245	3 253
	30/01/2009	Friday	19:30:11	20:00:01	News	News	1 414 733	917	3 468 937	3 554
	01/02/2009	Sunday	19:29:51	19:59:38	News	News	1 406 065	865	3 028 065	3 421
	02/02/2009	Monday	19:30:08	20:00:08	News	News	1 346 729	759	3 534 533	3 115
	04/02/2009	Wednesday	19:29:58	20:00:10	News	News	1 475 757	823	3 990 093	3 289
	06/02/2009	Friday	19:30:01	19:59:59	News	News	1 536 110	948	3 825 620	3 680
	09/02/2009	Monday	19:30:01	19:59:57	News	News	1 704 049	813	4 151 125	3 285
	11/02/2009	Wednesday	19:25:02	19:54:58	News	News	1 637 754	828	4 195 262	3 344
	13/02/2009	Friday	19:30:01	19:58:00	News	News	1 676 254	942	3 908 316	3 698
	15/02/2009	Sunday	19:30:27	20:00:26	News	News	1 750 822	805	3 664 621	3 323
	16/02/2009	Monday	19:30:01	19:59:57	News	News	1 666 125	850	3 804 092	3 390
	18/02/2009	Wednesday	19:31:09	20:02:01	News	News	1 820 725	814	4 216 737	3 302
	20/02/2009	Friday	19:30:01	20:00:07	News	News	1 413 576	966	3 502 772	3 735
	23/02/2009	Monday	19:30:00	20:00:37	News	News	1 940 347	907	4 407 599	3 555
	25/02/2009	Wednesday	19:30:02	20:00:11	News	News	1 696 991	891	4 163 234	3 549
	27/02/2009	Friday	19:30:01	19:59:48	News	News	1 898 057	964	4 403 474	3 760
	28/02/2009	Saturday	19:30:02	20:00:34	News	News	1 516 062	944	3 401 085	3 686
	01/03/2009	Sunday	19:30:02	19:59:30	News	News	1 540 544	871	3 362 289	3 497
	02/03/2009	Monday	19:30:01	20:00:05	News	News	1 788 200	883	4 305 799	3 508
	04/03/2009	Wednesday	19:30:01	20:00:00	News	News	1 650 875	874	3 711 797	3 507
	06/03/2009	Friday	19:30:02	20:00:37	News	News	1 759 918	972	3 926 762	3 752
	09/03/2009	Monday	19:30:01	20:00:10	News	News	1 920 976	910	4 315 395	3 590
	11/03/2009	Wednesday	19:30:00	19:59:23	News	News	2 030 124	913	4 643 878	3 600
	13/03/2009	Friday	19:30:01	20:01:15	News	News	1 926 426	968	4 404 511	3 752

15/03/2009	Sunday	19:30:01	20:00:07	News	News	1 872 251	921	3 922 262	3 568
16/03/2009	Monday	19:30:01	19:59:42	News	News	1 999 986	950	4 345 425	3 671
18/03/2009	Wednesday	19:30:30	20:00:13	News	News	1 917 212	893	4 460 410	3 515
20/03/2009	Friday	19:30:43	20:00:04	News	News	1 924 985	973	4 395 929	3 768
21/03/2009	Saturday	19:30:01	19:59:25	News	News	1 696 490	959	3 744 846	3 691
23/03/2009	Monday	19:30:01	19:59:57	News	News	1 993 487	909	4 540 483	3 564
25/03/2009	Wednesday	19:30:01	20:00:18	News	News	1 761 986	923	3 963 285	3 583
27/03/2009	Friday	19:30:02	20:00:37	News	News	2 069 665	995	4 476 363	3 840
28/03/2009	Saturday	19:30:01	20:01:07	News	News	1 862 360	971	4 090 582	3 757
29/03/2009	Sunday	19:29:58	19:59:54	News	News	1 641 947	926	3 598 659	3 587
30/03/2009	Monday	19:29:41	19:59:37	News	News	1 944 848	915	4 309 580	3 542
01/04/2009	Wednesday	19:30:02	20:00:32	News	News	1 872 066	952	4 224 819	3 655
03/04/2009	Friday	19:30:01	19:59:42	News	News	1 957 206	1 015	4 253 602	3 860
06/04/2009	Monday	19:30:01	20:00:09	News	News	2 015 150	952	4 187 463	3 672
08/04/2009	Wednesday	19:30:01	19:59:22	News	News	2 094 867	977	4 681 381	3 736
10/04/2009	Friday	19:30:00	19:59:34	News	News	1 760 452	1 024	3 823 980	3 936
12/04/2009	Sunday	19:30:05	19:59:56	News	News	1 776 102	973	3 619 231	3 784
13/04/2009	Monday	19:30:01	19:59:49	News	News	1 950 973	908	4 240 986	3 576
15/04/2009	Wednesday	19:30:01	19:59:48	News	News	1 728 238	925	4 151 342	3 598
17/04/2009	Friday	19:30:06	19:59:48	News	News	1 899 630	970	4 469 453	3 752
20/04/2009	Monday	19:30:00	20:00:00	News	News	1 980 751	894	4 339 224	3 522
22/04/2009	Wednesday	19:30:01	19:59:44	News	News	1 981 351	901	4 655 572	3 550
24/04/2009	Friday	19:29:59	19:59:23	News	News	1 978 192	968	4 507 599	3 764
26/04/2009	Sunday	19:30:05	19:59:57	News	News	1 399 060	954	3 403 802	3 665
27/04/2009	Monday	19:30:02	19:59:52	News	News	1 948 899	931	4 285 189	3 618
29/04/2009	Wednesday	19:30:01	19:59:55	News	News	1 671 782	903	3 899 196	3 559
01/05/2009	Friday	19:30:05	20:00:01	News	News	1 858 713	971	4 127 094	3 755
04/05/2009	Monday	19:30:01	19:59:34	News	News	1 873 926	889	4 281 591	3 473
06/05/2009	Wednesday	19:29:59	19:59:54	News	News	1 797 155	867	3 978 817	3 433
08/05/2009	Friday	19:30:01	20:00:00	News	News	1 928 251	952	4 125 771	3 769
10/05/2009	Sunday	19:30:00	19:57:40	News	News	1 518 347	925	3 166 100	3 590
11/05/2009	Monday	19:29:59	20:00:00	News	News	1 825 006	920	4 313 820	3 615
13/05/2009	Wednesday	19:30:01	19:59:57	News	News	2 159 412	914	4 726 447	3 599
15/05/2009	Friday	19:30:13	20:00:06	News	News	1 761 961	946	4 376 152	3 707
Summary ZULU NEWS						**1 752 209**	**900**	**4 026 571**	**3 543**

Contrast this with the audience to Laduma with the same target group. Viewing of this programme is much more subject to the degree of interest, importance of the game, and support for the teams playing and therefore we can expect greater variation in the size of the audience from one day to another (see Table 2).

Table 2: 01/01/2009 – 31/03/2009 – All dayparts - SABC 1 - Laduma – Black- Males 16+ - Sample 919 – Universe 7'609'232

	Market	Channel					Black Males 16 +		Adults 16+	
	National	SABC 1								
Description (grouped)	Date	Day of week	Start time	End time	Level 1	Level 2\Variable	AMR	Sample	AMR	Sample
LADUMA ON 1	01/03/2009	Sunday	15:22:09	17:33:37	Sport	FOOTBALL(SOCCER)	1 135 153	871	2 075 862	3 497
	04/03/2009	Wednesday	22:29:54	25:59:59	Sport	Sport	477 089	874	874 517	3 507
	05/03/2009	Thursday	02:00:00	03:01:28	Sport	FOOTBALL(SOCCER)	113 205	920	190 335	3 568
	07/03/2009	Saturday	14:55:46	17:08:37	Sport	FOOTBALL(SOCCER)	893 328	954	1 702 023	3 672
			20:00:57	23:05:35	Sport	FOOTBALL(SOCCER)	1 120 824	954	2 243 645	3 672
	08/03/2009	Sunday	14:54:16	17:53:50	Sport	FOOTBALL(SOCCER)	1 245 926	895	2 463 146	3 559
	11/03/2009	Wednesday	22:29:56	24:49:43	Sport	FOOTBALL(SOCCER)	254 210	913	585 413	3 600
	14/03/2009	Saturday	15:24:38	17:53:37	Sport	FOOTBALL(SOCCER)	995 175	951	1 947 306	3 669
			20:01:00	22:24:07	Sport	FOOTBALL(SOCCER)	1 622 999	951	3 419 941	3 669
	15/03/2009	Sunday	15:25:23	17:37:55	Sport	FOOTBALL(SOCCER)	1 066 775	921	2 038 108	3 568
	18/03/2009	Wednesday	22:30:08	24:44:03	Sport	FOOTBALL(SOCCER)	350 851	893	706 878	3 515
	21/03/2009	Saturday	14:49:53	18:00:01	Sport	FOOTBALL(SOCCER)	603 534	959	1 244 326	3 691
			20:00:02	22:20:08	Sport	FOOTBALL(SOCCER)	1 618 929	959	3 413 193	3 691
	22/03/2009	Sunday	14:51:53	17:03:12	Sport	FOOTBALL(SOCCER)	857 376	898	1 609 392	3 546
	25/03/2009	Wednesday	22:30:38	24:17:06	Sport	FOOTBALL(SOCCER)	535 326	923	1 006 923	3 583
	28/03/2009	Saturday	14:50:42	17:26:12	Sport	FOOTBALL(SOCCER)	1 372 934	971	2 976 736	3 757
	29/03/2009	Sunday	15:37:49	17:43:02	Sport	FOOTBALL(SOCCER)	849 723	926	1 688 694	3 587
	31/03/2009	Tuesday	20:30:07	22:46:44	Sport	FOOTBALL(SOCCER)	1 715 727	918	4 141 404	3 573
Summary LADUMA ON 1							**958 158**	**925**	**1 954 754**	**3 607**

The ratings for Sevende Laan have a high degree of consistency.

Table 3: 02/03/2009 – 31/03/2009 – All dayparts SABC 2 - Sevende Laan – Females - 16-34 - LSMs 8-10 – Sample 180 – Universe 1 074 010

Market	Channel	Target							
National	SABC 2	Women LSM 8 - 10 Age 16-34							
Description (grouped)	Date	Day of week	Start time	End time	Level 1	Level 2\Variable	AMR	Sample	
7DE LAAN	02/03/2009	Monday	18:28:17	18:59:26	Soap opera	Soap opera	123 619	188	
	03/03/2009	Tuesday	18:28:52	18:59:00	Soap opera	Soap opera	106 868	185	
	04/03/2009	Wednesday	18:28:42	18:58:47	Soap opera	Soap opera	88 783	183	
	05/03/2009	Thursday	18:28:41	18:59:46	Soap opera	Soap opera	129 848	181	
	06/03/2009	Friday	18:27:53	18:58:42	Soap opera	Soap opera	121 308	186	
	09/03/2009	Monday	18:28:47	18:59:37	Soap opera	Soap opera	165 889	186	
	10/03/2009	Tuesday	18:28:39	18:59:17	Soap opera	Soap opera	88 498	177	
	11/03/2009	Wednesday	18:28:19	18:59:05	Soap opera	Soap opera	100 810	169	
	12/03/2009	Thursday	18:30:05	19:01:07	Soap opera	Soap opera	153 590	177	
	13/03/2009	Friday	18:28:12	18:59:16	Soap opera	Soap opera	95 405	177	
	16/03/2009	Monday	18:28:54	18:59:36	Soap opera	Soap opera	129 405	176	
	17/03/2009	Tuesday	18:30:07	18:59:45	Soap opera	Soap opera	185 263	174	
	18/03/2009	Wednesday	18:28:42	18:59:32	Soap opera	Soap opera	177 587	174	
	19/03/2009	Thursday	18:29:51	19:00:48	Soap opera	Soap opera	181 931	184	
	20/03/2009	Friday	18:30:57	19:01:01	Soap opera	Soap opera	163 653	187	
	23/03/2009	Monday	18:28:42	18:59:35	Soap opera	Soap opera	155 364	190	
	24/03/2009	Tuesday	18:29:17	19:00:25	Soap opera	Soap opera	135 486	170	
	25/03/2009	Wednesday	18:27:26	19:00:17	Soap opera	Soap opera	164 472	177	
	26/03/2009	Thursday	18:28:39	19:00:14	Soap opera	Soap opera	156 913	182	
	27/03/2009	Friday	18:30:19	19:00:56	Soap opera	Soap opera	110 680	192	
	30/03/2009	Monday	18:27:18	18:58:43	Soap opera	Soap opera	191 280	171	
	31/03/2009	Tuesday	18:28:09	18:59:22	Soap opera	Soap opera	174 472	178	
Summary 7DE LAAN							**141 112**	**180**	

When age is reduced to 25 – 34 and both LSM 8 is excluded, the sample of Sevende Laan viewers drops even further, to less than 49 and ratings range between 16.4 and 9.1.

Table 4: 02/03/2009 – 31/03/2009 – All dayparts - SABC 2 - Sevende Laan – Female - 25-34 - LSMs 9-10 – Sample 46 – Universe 349 460

Description (grouped)	Market	Channel	Target						
	National	SABC 2	Women Age 16 - 25 LSM 9 - 10						
Description (grouped)	Date	Day of week	Start time	End time	Level 1	Level 2\Variable	AMR	Sample
7DE LAAN	02/03/2009	Monday	18:28:17	18:59:26	Soap opera	Soap opera	38 627	49
	03/03/2009	Tuesday	18:28:52	18:59:00	Soap opera	Soap opera	20 589	48
	04/03/2009	Wednesday	18:28:42	18:58:47	Soap opera	Soap opera	12 627	49
	05/03/2009	Thursday	18:28:41	18:59:46	Soap opera	Soap opera	66 507	45
	06/03/2009	Friday	18:27:53	18:58:42	Soap opera	Soap opera	47 816	48
	09/03/2009	Monday	18:28:47	18:59:37	Soap opera	Soap opera	84 417	48
	10/03/2009	Tuesday	18:28:39	18:59:17	Soap opera	Soap opera	34 958	48
	11/03/2009	Wednesday	18:28:19	18:59:05	Soap opera	Soap opera	47 411	42
	12/03/2009	Thursday	18:30:05	19:01:07	Soap opera	Soap opera	40 724	47
	13/03/2009	Friday	18:28:12	18:59:16	Soap opera	Soap opera	57 817	45
	16/03/2009	Monday	18:28:54	18:59:36	Soap opera	Soap opera	64 705	44
	17/03/2009	Tuesday	18:30:07	18:59:45	Soap opera	Soap opera	79 957	45
	18/03/2009	Wednesday	18:28:42	18:59:32	Soap opera	Soap opera	65 298	43
	19/03/2009	Thursday	18:29:51	19:00:48	Soap opera	Soap opera	78 631	48
	20/03/2009	Friday	18:30:57	19:01:01	Soap opera	Soap opera	110 600	47
	23/03/2009	Monday	18:28:42	18:59:35	Soap opera	Soap opera	56 487	47
	24/03/2009	Tuesday	18:29:17	19:00:25	Soap opera	Soap opera	63 440	40
	25/03/2009	Wednesday	18:27:26	19:00:17	Soap opera	Soap opera	59 949	43
	26/03/2009	Thursday	18:28:39	19:00:14	Soap opera	Soap opera	77 170	43
	27/03/2009	Friday	18:30:19	19:00:56	Soap opera	Soap opera	42 729	48
	30/03/2009	Monday	18:27:18	18:58:43	Soap opera	Soap opera	77 036	43
	31/03/2009	Tuesday	18:28:09	18:59:22	Soap opera	Soap opera	70 650	44
Summary 7DE LAAN							**59 052**	**46**

Table 5 gives an example of a campaign for Capitec Bank which makes use of a range of channels and programmes. It is argued that the margin of error on a range of spots is lowered because of the overlapping distribution of the audiences, but as can be imagined this calculation has to be done for each schedule.

Table 5: Schedule of Spots for Capitec Bank – Adults 35+ - Sample 2 140 – Universe 11 583 670

Market	Target	Product									
National	Age 35+	CAPITEC BANK									

Spot	Date	Start Time	Channel	NET Pos. in Break	NET Tot. Spots in Break	Duration	Programme	GRP	Investment	Reach%	Cost per GRP
1	16/03/2009	19:16:27	e-TV	4	5	00:00:15	NEWS	6.6	R 25,900	6.59%	R 3,930
2	16/03/2009	20:20:00	SABC 1	2	4	00:00:15	GENERATIONS	28.9	R 49,700	28.92%	R 1,718
3	16/03/2009	20:22:20	SABC 3	5	6	00:00:15	WORK WITH ME	3.3	R 26,600	3.34%	R 7,964
4	16/03/2009	21:34:32	SABC 3	8	9	00:00:15	LAS VEGAS	4.4	R 30,800	4.43%	R 6,954
5	17/03/2009	06:50:36	SABC 2	1	3	00:00:15	MORNING LIVE	4.1	R 11,550	4.10%	R 2,818
6	17/03/2009	14:51:08	SABC 3	1	3	00:00:15	ISIDINGO -R	6.4	R 9,800	6.43%	R 1,524
7	17/03/2009	20:15:18	SABC 3	7	7	00:00:15	THE AMAZING RACE	4.5	R 28,000	4.54%	R 6,167
8	17/03/2009	20:55:48	SABC 3	6	7	00:00:15	THE LAB	2.6	R 23,800	2.58%	R 9,230
9	17/03/2009	21:19:02	SABC 2	1	6	00:00:15	MUVHANGO	14.6	R 25,200	14.62%	R 1,724
10	17/03/2009	21:49:12	e-TV	5	6	00:00:15	THIRD DEGREE	6.4	R 15,400	6.38%	R 2,415
11	18/03/2009	17:14:25	SABC 3	6	6	00:00:15	DAYS OF OUR LIVES	11.7	R 26,600	11.69%	R 2,276
12	18/03/2009	17:58:42	SABC 3	1	5	00:00:15	THE OPRAH WINFREY SHOW	7.2	R 26,600	7.22%	R 3,685
13	18/03/2009	18:50:00	SABC 3	1	7	00:00:15	ISIDINGO:THE NEED	7.6	R 21,000	7.61%	R 2,758
14	18/03/2009	19:20:19	SABC 3	5	5	00:00:15	NEWS	5.6	R 26,600	5.59%	R 4,755
15	18/03/2009	19:58:13	SABC 1	5	6	00:00:15	ZULU NEWS	21.0	R 35,000	20.95%	R 1,670
16	18/03/2009	21:26:31	SABC 1	4	4	00:00:15	KHUMBUL' EKHAYA	8.2	R 15,750	8.23%	R 1,914
17	19/03/2009	06:57:52	SABC 2	1	4	00:00:15	MORNING LIVE	4.9	R 11,550	4.87%	R 2,372
18	19/03/2009	19:21:04	SABC 1	5	5	00:00:15	ZOLA 7	15.0	R 33,600	15.04%	R 2,234
19	19/03/2009	19:49:16	e-TV	3	9	00:00:15	SCANDAL	10.3	R 22,400	10.31%	R 2,173
20	19/03/2009	21:01:19	SABC 3	1	6	00:00:15	PRISON BREAK II	6.5	R 26,600	6.51%	R 4,083
21	19/03/2009	21:02:21	SABC 1	5	6	00:00:15	HIS STORY:AFTER NINE	12.9	R 30,800	12.93%	R 2,382
22	19/03/2009	21:45:59	SABC 3	1	4	00:00:15	PIMP MY RIDE	4.8	R 19,950	4.81%	R 4,149
23	20/03/2009	06:48:03	SABC 2	1	4	00:00:15	MORNING LIVE	3.4	R 11,550	3.37%	R 3,424
24	20/03/2009	18:51:51	SABC 1	5	6	00:00:15	JAM ALLEY	10.5	R 19,950	10.54%	R 1,892
25	20/03/2009	20:16:39	e-TV	8	11	00:00:15	THE INSPECTORS	3.3	R 29,400	3.31%	R 8,888
26	20/03/2009	20:39:32	SABC 3	6	6	00:00:15	WONDROUS OBLIVION	3.9	R 19,950	3.90%	R 5,119
27	21/03/2009	18:40:30	e-TV	3	6	00:00:15	RIPLEY'S BELIEVE IT OR NOT	8.0	R 18,200	7.99%	R 2,279

28	21/03/2009	20:35:42	SABC 3	7	7	00:00:15	FAITH'S CORNER	4.6	R 13,650	4.57%	R 2,989
29	21/03/2009	20:52:17	e-TV	3	8	00:00:15	BRINGING DOWN THE HOUSE	11.4	R 38,000	11.38%	R 3,340
30	22/03/2009	18:28:49	SABC 3	4	6	00:00:15	FILLER:CELINE DION EPK	4.2	R 9,100	4.20%	R 2,167
31	22/03/2009	18:52:35	e-TV	6	6	00:00:15	THE CHEETAH DIARIES	8.0	R 16,800	8.03%	R 2,093
32	22/03/2009	19:26:24	SABC 3	2	4	00:00:15	NEWS	6.5	R 15,750	6.54%	R 2,409
33	22/03/2009	19:39:01	SABC 2	2	4	00:00:15	SES/TSW/SEP NEWS	8.1	R 9,800	8.05%	R 1,217
34	22/03/2009	21:49:55	e-TV	5	10	00:00:15	FANTASTIC FOUR	13.4	R 35,000	13.36%	R 2,620
35	23/03/2009	19:23:37	e-TV	2	6	00:00:15	NEWS	7.0	R 25,900	6.99%	R 3,706
36	23/03/2009	20:19:45	SABC 3	2	9	00:00:15	WORK WITH ME	4.1	R 26,600	4.09%	R 6,500
37	23/03/2009	21:25:41	SABC 3	3	7	00:00:15	LAS VEGAS	4.7	R 30,800	4.71%	R 6,541
38	24/03/2009	07:34:43	SABC 2	1	4	00:00:15	MORNING LIVE	6.1	R 9,800	6.12%	R 1,600
39	24/03/2009	14:53:06	SABC 3	2	3	00:00:15	ISIDINGO -R	5.2	R 9,800	5.24%	R 1,870
40	24/03/2009	18:06:53	SABC 3	7	7	00:00:15	THE OPRAH WINFREY SHOW	5.2	R 26,600	5.20%	R 5,112
41	24/03/2009	20:51:33	SABC 3	1	5	00:00:15	THE LAB	3.1	R 23,800	3.09%	R 7,697
42	24/03/2009	21:20:00	SABC 2	6	6	00:00:15	MUVHANGO	12.6	R 25,200	12.64%	R 1,994
43	24/03/2009	21:50:38	e-TV	2	6	00:00:15	THIRD DEGREE	6.4	R 15,400	6.41%	R 2,402
44	25/03/2009	11:10:33	SABC 3	4	5	00:00:15	ALL MY CHILDREN-R	3.6	R 7,000	3.55%	R 1,970
45	25/03/2009	16:33:49	SABC 3	2	8	00:00:15	SABC 3 TALK	3.2	R 21,000	3.15%	R 6,661
46	25/03/2009	17:20:12	SABC 3	2	7	00:00:15	DAYS OF OUR LIVES	12.1	R 26,600	12.09%	R 2,201
47	25/03/2009	18:52:11	SABC 3	8	8	00:00:15	ISIDINGO:THE NEED	7.0	R 21,000	6.98%	R 3,008
48	25/03/2009	19:16:15	e-TV	4	7	00:00:15	NEWS	7.4	R 25,900	7.42%	R 3,491
49	25/03/2009	19:19:21	SABC 1	2	6	00:00:15	JIKA MA JIKA	18.3	R 35,000	18.35%	R 1,907
50	25/03/2009	23:33:47	SABC 3	1	2	00:00:15	BIRD ON A WIRE	2.8	R 7,700	2.82%	R 2,733
51	26/03/2009	06:59:40	SABC 2	1	6	00:00:15	MORNING LIVE	5.4	R 11,550	5.44%	R 2,124
52	26/03/2009	19:21:33	SABC 1	2	8	00:00:15	ZOLA 7	15.1	R 33,600	15.08%	R 2,229
53	26/03/2009	19:38:45	e-TV	3	7	00:00:15	SCANDAL	9.9	R 22,400	9.87%	R 2,269
54	26/03/2009	21:20:56	SABC 3	2	7	00:00:15	PRISON BREAK II	5.1	R 26,600	5.10%	R 5,211
55	26/03/2009	22:12:09	SABC 3	1	4	00:00:15	NEWS @ 10	2.1	R 9,800	2.10%	R 4,666
56	27/03/2009	06:58:09	SABC 2	1	5	00:00:15	MORNING LIVE	5.0	R 11,550	4.97%	R 2,326
57	27/03/2009	18:37:25	SABC 1	2	7	00:00:15	JAM ALLEY	8.1	R 19,950	8.10%	R 2,464
58	27/03/2009	18:49:36	SABC 3	1	7	00:00:15	ISIDINGO:THE NEED	4.1	R 21,000	4.15%	R 5,066
59	27/03/2009	20:18:16	e-TV	8	12	00:00:15	ZOOMAN	3.5	R 29,400	3.54%	R 8,308
60	28/03/2009	18:08:37	SABC 1	2	5	00:00:15	SELIMATHUNZI	10.0	R 21,000	9.95%	R 2,110
61	28/03/2009	21:18:29	SABC 3	2	10	00:00:15	THE PELICAN BRIEF	4.6	R 13,650	4.56%	R 2,994
62	28/03/2009	22:04:52	e-TV	7	11	00:00:15	HITCH	10.5	R 4,200	10.50%	R 400
								475.1	R 1,343,150	80.14%	R 2,827

5. **Conclusion**

5.1 AMPS and RAMS

For studies such as AMPS and RAMS where every survey is based on a completely new sample, remarkable consistency is observed from one survey to the next. This is an indication of the high quality of the sample as well as the meticulous field work. However, one must remember to use percentages when comparing results from one survey to another as universe updates take place every year, which means that the audience in thousands is not comparable. Due to the large sample size of AMPS and RAMS, the incidence of products and brands as well as specific media (radio stations, magazines, newspapers etc.) can be very accurately determined even if they are small.

5.2 TAMS

It would seem from an examination of the audience for a number of channels and programmes that a degree of subjectivity is required when using TAMS data. The nature of the programme should be taken into account, especially those where the content is subject to greater change and the competitive environment is higher. Acts of God, special occasions and events will also be major factors.