



India Peoplemeter Update
January 2007



Introduction

This Peplemeter Update marks the release of data from the second step of the TAM expansion project. The original expansion plan decided in 2002 with the industry bodies envisaged a two stage expansion. The first stage was executed to broaden the coverage from 5 States to 12 States but within the existing reporting stratum (0.1Mn+ population stratum).

The second stage is to deepen the coverage to more towns within the less than 0.1Mn + stratum for all markets covered in Stage I.

This expansion marks the conclusion of the second step of the entire expansion plan. The initial step undertaken in 2002-2003 was a 35% increase in sample size from 3550 meters (3454 homes) to 4800 meters (4555 homes). This second step also registers a 44% increase to 6917 meters (6587 homes). In addition improvements have been made in the design to take into account the changing demographic and media landscape which results in higher precision of the viewership estimates.

This 'Peplemeter Update' - the fifth in the series - is organized as a FAQ that acts as a handy reference for your expansion-related questions. Of course, should you have any questions you are most welcome to ask your friendly-neighborhood TAM executive who'd be glad to answer your questions.

F.A.Q.s

Q1. How were the sample sizes across markets determined?

A range of factors influence the sample size allocation of the overall sample across markets. These include desired depth of analysis (feedback of which comes from JIB technical committee), availability of sufficient sample sizes for commonly analysed target groups and desired level of statistical precision.

While markets are analyzed by two strata (1Mn+ and 0.1-1Mn), for sampling purposes the 0.1 - 1Mn stratum is typically broken up as 0.1 - 0.5Mn and 0.5Mn - 1Mn For this expansion, the 0.1-0.5Mn was broken up even further into 0.1 - 0.2Mn and 0.2 - 0.5Mn to ensure a better design.

A comparison of the new sample sizes with the pre-expansion sizes is given below:

Table 1: Top 6-Metro Sample Sizes (figures in homes)

Market	Existing	New Expansion
Mumbai	450	495
Calcutta	265	330
Delhi	425	470
Chennai	255	280
Bangalore	255	280
Hyderabad	255	280
6Metros	1905	2135

Table 2: State level coverage and sample sizes (figures in homes)

Market	Existing	New Expansion
RoAP	305	388
Gujarat	270	487
PHCHP	260	443
RoKar	115	221
Kerala	220	287
RoMah	295	541
RoTN	230	375
UP+	330	596
RoWB	110	244
Orissa	110	143
MP+	215	393
Rajasthan	100	334
RoStates	2560	4452
Total Homes	4555	6587
Total Meters	4800	6917

The name Uttar Pradesh(UP) that is used for reporting purposes includes the newly formed state of Uttaranchal. Similarly Madhya Pradesh(MP) includes Chhatisgarh. PHCHP is Punjab + Haryana + Chandigarh +Himachal Pradesh

Q2. How did you decide the number of towns to be sampled?

As an example, consider a certain stratum in a market with a sample size of 150. To simplify the explanation, also assume that all towns have an equal number of TV owning homes. Then, two (of the many) options available are to choose 2 towns with 75 homes each or select 5 towns with 30 homes each.

Each option has its merits and demerits. In the first option, we reduce operational cost and time (since only two towns are selected). This however comes at a cost of statistical precision - lower precision as compared to the second option. Deciding the number of towns is about balancing these two forces - of operational cost and time on the one hand and statistical precision on the other.

The special feature of this expansion is a massive increase in the number of towns sampled. We are more than doubling the number of sampled towns from 70 to 148 (110%), a rate much greater than that of the increase in sample size (44%). In effect, this means an emphasis on improving precision of viewing estimates.

Q3. How did you actually select sample towns?

As always towns are selected to be representative of the stratum of the specific market. Towns are selected from a Town listing based on Census 2001 via NRS 2005. The selection is at the stratum level (E.g. Gujarat 0.1 - 0.2Mn) and not only at the overall market level (E.g. Gujarat) making for a tighter selection. Towns are selected through a controlled selection procedure. The selection parameters are **Socio-Cultural Region-[SCR*]** (therefore ensuring geographic spread), C&S penetration (average C&S penetration of sampled towns equal to the population penetration) and Terrestrial availability of DD News (average availability of sampled towns equal to the population availability).

**SCR list attached at the end of the document*

Q4. How do you select sample homes?

Just as in the case of town selection, homes across selected towns are selected to be representative of the stratum of a particular market. Initially, a statistical analysis is conducted to understand which factors explain television viewing the most. These factors are used as control factors when selecting homes. Control factors are divided into two types - Primary controls and Secondary controls. Primary Controls are those factors that most explain TV viewing and are maintained at an interlocking level basis. Secondary controls are those that are maintained at an overall stratum level basis. A list of the control factors is reproduced below:

Table 3: Control Parameters

Control Parameters	
Primary Control parameters	Secondary Control parameters
SEC	Geographic Dispersion
C&S	Remote ownership
Household Size	Type of TV set
Preferred language of viewing	Presence of children
Claimed Weight of viewing	- 4 to 9 Yrs
	- 10 to 14 Yrs

Notably, Presence of Children was included as a new control parameter for this expansion. This parameter ensures that the proportion of homes in the sample with kids (4-9 Yrs & 10-14 Yrs) matches that of the universe.

Along with this analysis, a listing exercise is undertaken to build a sampling frame. The idea is to use the control parameters described above to draw a representative sample of households. For this, in any town we would have a target number of households which a certain profile to be contacted. For example, we might need 10 homes which are SEC A, C&S homes, with a household size of less than 5 who prefer viewing Hindi programmes, have a colour TV set with a remote control, live within city limits and have at least one child at home. These 10 homes are randomly chosen from the listing database by customized software.

As you can see, it wouldn't be operationally possible to maintain all the controls on an interlocking basis due to the sheer number of controls. Hence the bifurcation between Primary and Secondary controls.

Q5. Are these controls maintained proportionate to the universe levels i.e. if a certain market has a C&S penetration of 70% would you have 70% C&S homes in the sample?

Yes. All controls are maintained proportionate to the universe sizes except for SEC. Hence we over sample the higher SECs (E.g. SEC A) so it gives you more raw viewers for additional analysis possibilities.

Previously, the sampling rule followed was that the sample would be equally split among SEC A, B, C and DE. This automatically led to an oversampling of SEC A and B since these proportions are usually less than 25%. However, this oversampling has two implications. One implication is that is the price to be paid for the oversampling in terms of statistical precision of estimates. Higher oversampling has a detrimental effect on the precision of the overall viewership estimates. The second implication is that we have been seeing an increase in the proportion of the higher SECs. In some cases, these proportions are more than 25% - Delhi for example.

Hence for this expansion, it was decided to adopt a customized sample split that takes into account the statistical precision aspect as well as the actual proportion of SEC groups in the universe. The sample split across SEC groups is given in table 4 below along with the corresponding universe proportions. Note the sample proportions for Delhi, Hyderabad, PHCHP 1Mn.+ and Rajasthan 10L+ where the universe proportions for SEC A are greater than 25%.

Q6. How does statistical weighting work?

We use a weighting procedure called cell weighting. In this method, 64 cells are created by interlocking four SEC groups (A, B, C and DE), two access to C&S channel groups (C&S, NCS), four age groups (4-14, 15-24, 25-34, 35+) and two gender groups (M,F).

As an example, assume that the SEC A, C&S, 4-14 Male cell had a population of 10000 (from NRS 2005) and we had a sample of 100 in that cell. This means that every individual in that cell has a weight of 100. It then stands to reason that all SEC A cells will have a lower multiplicative factor since these have been over-sampled. This then corrects for the over-sampling giving us unbiased estimates.

Q7. Doesn't the fact that you have more samples in SEC A bias the viewership estimates?

No. The upper SECs are oversampled just so you have adequate samples for analysis. To ensure that the viewership estimates are not biased, statistical weighting is undertaken to correct for the oversampling.

Table 4: Proportions of SEC groups in the universe and sample

	% universe proportions				% sample proportions			
	SEC A	SEC B	SEC C	SEC DE	SEC A	SEC B	SEC C	SEC DE
Mumbai	16	18	28	38	25	20	23	32
Calcutta	20	22	21	36	25	23	20	32
Delhi	33	25	19	23	33	25	19	23
Chennai	23	26	27	23	25	25	25	25
Bangalore	26	27	26	21	26	27	26	21
Hyderabad	28	27	19	25	28	27	19	25
AP 1Mn.+	16	24	23	37	24	25	24	27
AP .1-1Mn.	12	23	23	42	21	23	21	35
Guj 1Mn.+	17	24	24	35	25	25	21	29
Guj .1-1Mn.	13	23	26	38	22	25	22	31
Karn .1-1Mn.	13	24	24	39	23	25	20	33
Ker 1Mn.+	17	20	28	35	25	25	23	28
Ker .1-1Mn.	11	18	23	47	20	25	17	38
MP 1Mn.+	24	25	20	31	25	25	20	30
MP .1-1Mn.	15	24	21	39	23	25	21	30
Mah 1Mn.+	14	22	27	37	23	23	25	29
Mah .1-1Mn.	12	24	25	39	23	24	23	30
Ori .1-1Mn.	22	27	22	29	25	27	22	26
Pun 1Mn.+	26	31	21	22	26	31	21	22
Pun 1-10	18	31	23	28	25	29	21	25
Raj 1Mn.+	30	29	16	24	30	29	16	24
Raj .1-1Mn.	16	28	21	35	25	28	19	29
TN 1Mn.+	30	27	17	26	30	27	17	26
TN .1-1Mn.	11	19	27	43	22	23	22	33
UP 1Mn.+	30	28	18	24	30	28	18	24
UP .1-1Mn.	20	25	22	33	25	25	25	25
WB 1Mn.+	14	26	20	39	25	26	16	32
WB .1-1Mn.	14	25	25	37	23	25	22	31
All India	20	24	23	33	25	25	21	28
Source : NRS 2005								

Q8. What is the Universe & household we are projecting to?

Table 5: TAM reporting market Universe & Household

Market	Individuals			Household		
	C&S	Non C&S	Total	C&S	Non C&S	Total
Mumbai	14238	1098	15336	3298	249	3547
Calcutta	9357	1950	11307	2125	438	2563
Delhi	12471	2168	14639	2659	422	3081
Chennai	6417	49	6465	1577	10	1587
Bangalore	5644	264	5908	1423	66	1490
Hyderabad	5715	274	5989	1203	53	1256
AP 1Mn.+	2203	49	2251	356	9	366
AP .1-1Mn.	5913	535	6447	1393	122	1515
Guj 1Mn.+	6606	2922	9528	1476	649	2125
Guj .1-1Mn.	2561	1321	3882	553	277	830
Karn .1-1Mn.	4829	908	5737	1071	193	1265
Ker 1Mn.+	918	244	1162	225	67	292
Ker .1-1Mn.	2901	637	3538	688	143	831
MP 1Mn.+	2482	1323	3805	522	278	800
MP .1-1Mn.	3814	2794	6608	776	552	1328
Mah 1Mn.+	4304	2838	7142	1009	651	1659
Mah .1-1Mn.	4439	3295	7733	969	688	1656
Ori .1-1Mn.	1555	1080	2636	356	231	586
Pun 1Mn.+	3269	432	3701	690	87	777
Pun 1-10	5126	1715	6841	1128	374	1501
Raj 1Mn.+	1188	1221	2409	229	229	458
Raj .1-1Mn.	2267	2185	4452	449	402	851
TN 1Mn.+	2313	82	2395	611	23	634
TN .1-1Mn.	5490	218	5708	1392	57	1449
UP 1Mn.+	6035	2989	9024	1092	518	1610
UP .1-1Mn.	6093	4526	10619	1122	782	1905
WB 1Mn.+	708	483	1191	147	94	241
WB .1-1Mn.	2758	631	3389	646	143	789
All India	131614	38229	169843	29186	7805	36991
<i>Base* - NRS 2006 projected to 1Jan 2007</i>						

Q9. I have heard that you are using a different technology for your measurement. What is the difference?

TAM will use the new TVM5 Digital meters, the most advanced, state-of-the-art Peoplemeter technology in the world that has the capability of measuring analog as well as digital signals.

This means that in addition to normal cable TV viewing, this technology also measures digital signals akin to CAS (through STB), DTH, Broadband and also other platforms like videogames & DVD. In terms of the hardware, the TVM5 meters are non-intrusive, i.e. they do not require a wire to go inside the TV tuner card; the sensors on the TVM5 meter have the capability of picking up signals by being placed on top of the TV set.

The technology is compatible with both analog and digital types of STBs. The advantage that TAM has is the network of international experts belonging to its parent companies - Nielsen Media Research & AGB- where the concept of the use of an STB to watch Pay TV has been around for years now. The TVM 5 Peoplemeter has been one of the only working solutions in the digital environment across the globe. The same is in use in India now in National Panel as well as in the Elite Panel. Infact, all the 6 major metros in India measured by TAM are completely wired by the new Digital technology TVM5 meters enabling us to measure viewing via CAS set top box or DTH set top box from day one.

For more information please refer to the TAM-CAS FAQs document on www.tamindia.com

Q10. What is the impact of the expansion on my analysis?

You will recall that in the earlier expansion(2002/2003), markets were released at different points in time. Also, we shifted to a new stratum-based market definition. This meant that you had to continually update market group definitions and at times, had to break your existing market group runs into individual market runs.

This time around we have operationally managed to ensure that all markets migrate to a new definition at the same time. Moreover there is no change in market strata definitions.



Q11. When does the new expanded TAM Panel come into effect: 31st December 2006 or 1st January 2007?

Week 1, 2007 (i.e. the first week of data for the expanded TAM National Panel) is from 31st Dec 2006 to 6th Jan 2007. Thus, the new expanded TAM Panel comes into effect from 31st Dec 2006.

Q12. Have any new markets been introduced in the new TAM National Panel Data?

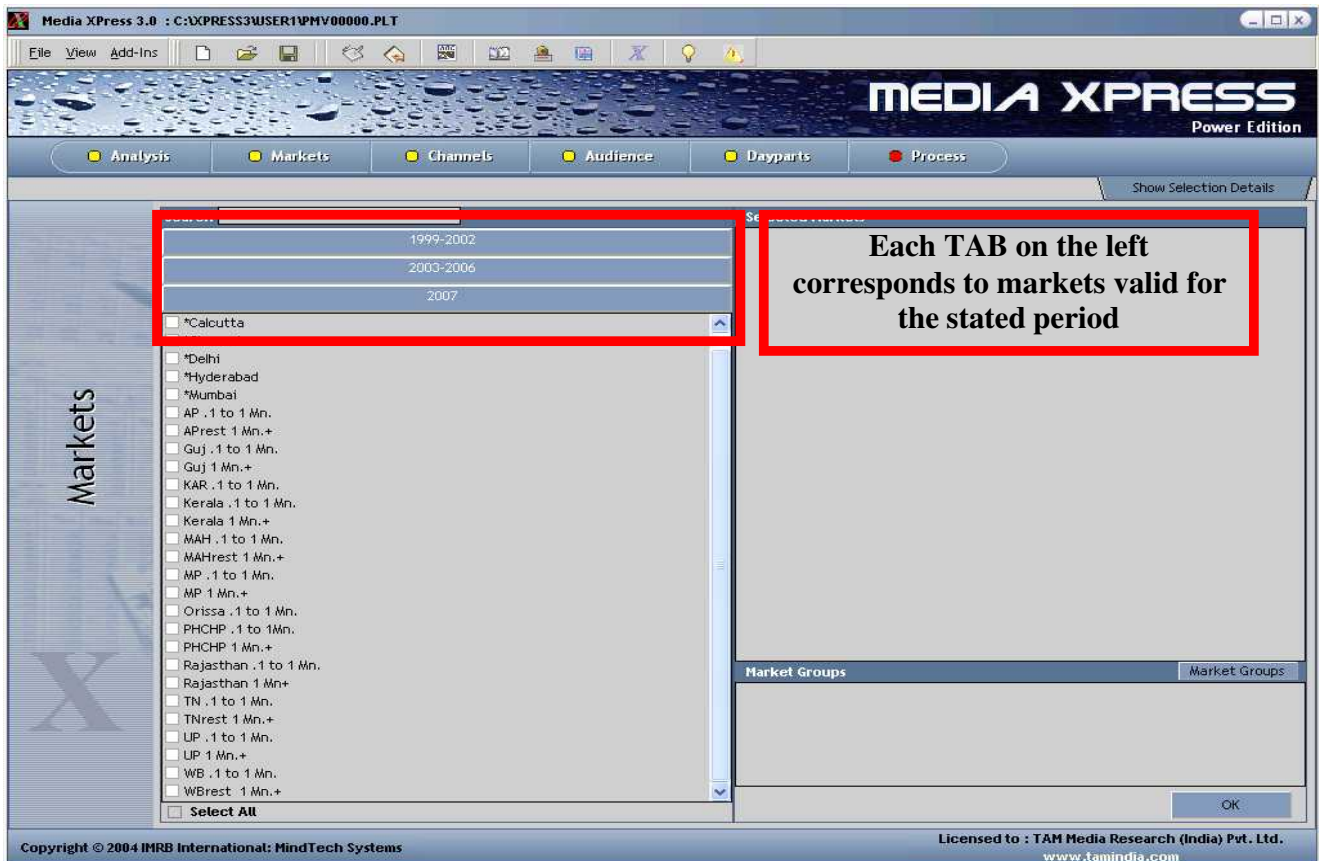
Two changes have been seen at a market level:

1. West Bengal 1Mn+ is a new market strata that has emerged due to towns moving into the 1Mn+ population bracket
2. Rajasthan which was earlier reported as Rajasthan 0.1Mn+ has now split into two market strata i.e. Rajasthan 1Mn+ & Rajasthan 0.1-1Mn

* Please note that this take the total number of market strata reported by TAM from 26 to 28 market strata

Q13. Will the Software interface change with the inclusion of the new Panel Data?

While the software interface remains the same as in Media Xpress 3.0 - Power Edition, there will be a new modified market selection window (picture attached below).



Q14. Will the previous market definitions/groups hold while analyzing the new data?

All market definitions will have to be re-made when analyzing data of the new expanded TAM National Panel. However, the existing definitions will work on the previous data set up to Week 52, 2006.

Q15. Do we have to redefine market selections in the previously created Batch Files?

Yes, all market/market groups will have to be redefined / reselected across Batch Files when the files are run on data from the new expanded TAM National Panel i.e. any analysis on data from Week 1, 2007.

Q16. What will happen to Media Plans that start when the old TAM Panel is active & are on air post TAM National Panel expansion: Can I build/analyze Plan deliveries across the old Panel & the new one (December 2006 vs. January 2007)?

There are couple of reasons mentioned below which prevents combining the Old & New Panel.

- 1) Migration of towns across population strata
- 2) Addition of new towns & homes across strata
- 3) Change in Universe proportion over the period (i.e. December 2006 based on NRS 2002 universe vs. January 2007 based on NRS 2006 projected to 2007)

The combination of the above stated reasons prevents analysis of plan deliveries & any viewing trend across the period of Week 52 2006 & Week 1 2007.

Q17. Whom should you contact in case of any further clarifications/queries?

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SCR's of TAM reported states

States	SCR's
Andhra Pradesh	Andhra (E)
	Andhra (W)
	Rayalseema
	Telengana (N)
	Telengana (S)
Chhattisgarh	Chhattisgarh & Gondwana (S)
	Baselkhand (Chhattisgarh)
	Dandakaranya (Chhattisgarh)
Delhi	Delhi
Gujarat	Saurashtra (Kathiawar)
	Kachchh
	Bhilistan - Gujarat
	Gujarat Plains
Karnataka	Old Mysore
	Kanara (S)
	Kanara (N)
	Karnataka (Deccan)
	Malnad
Kerala	Malabar (North Kerala)
	Kochi (Central Kerala)
	Central Travancore
	Travancore (South Kerala)
Madhya Pradesh	Bhundelkhand - MP
	Baselkhand (MP)
	North Malwa (E)
	North Malwa (W)
	Bhilistan - MP
	South Malwa (W)
	South Malwa (E)
	Chhattisgarh & Gondwana (N) MP
Maharashtra/Goa	Goa (Maharashtra)
	Konkan
	Desh (Western Ghat) (N)
	Desh (Western Ghat) (S)
	Khandesh
	Marathwada
	Vidharba (E)
	Vidharba (W)

States	SCR's
Orissa	Dandakaranya (Orissa)
	Gondwana - Orissa
	Orissa Hills & Plateau (W)
	Orissa Hills & Plateau (E)
	Coastal Orissa (Kalinga)
Punjab/HP/Chandigarh	North Punjab Plains
	South Punjab Plains
	Bisht Doab (Beas - Satluj) & E. P.
	Himachal Pradesh
Haryana	Eastern Haryana
	Western Haryana
Rajasthan	Maru Pradesh (Marwar) (S)
	Maru Pradesh (Marwar) (N)
	Jaipur (Aravallis)
	Mewar
	Mewar (S)
Tamil Nadu/Pondicherry	Mewar (N)
	Pondicherry
	Madras
	Coimbatore
	Tanjore
	Madurai
Uttar Pradesh	Rohelkhand (W)
	Rohelkhand (E)
	Braj (W)
	Braj (E)
	Oudh (N)
	Oudh (W)
	Oudh (E)
	Oudh (S)
	Bhundelkhand - UP
	Bhojpur - UP
Uttaranchal	Uttarkhand
West Bengal	Darjiling
	Duars
	Ganga Delta
	Rahr