Welcome to UK Television Outlook – A View Into The Future. 6 April 2006.

BJARNE THELIN, CHIEF EXECUTIVE

Our agenda this morning is fairly straightforward - a brief introduction to why we're wanting to share the work we've done with you, a guide to the scenarios that we've been creating, and then a short question and answer session.

The reason we're here today is mainly because BARB has been setting a forward thinking agenda. We're attempting to define what are likely to be the most pressing needs for the future – for the BARB service to adapt to.

Our Future Into View consultation was launched last summer. That was done to receive input from the industry about key priorities for BARB in the coming years. Our feedback to the industry was issued about a month ago. You should have received a copy – and a summary remains available on the BARB website.

Alongside that, we embarked on an Exploratory Programme which was seeking to open up thinking about alternative techniques and options for the future shape of the service.

We also outlined that we'd then start to define a series of options – come to some conclusions about feasibility and execution – and for those to lead into future planning.

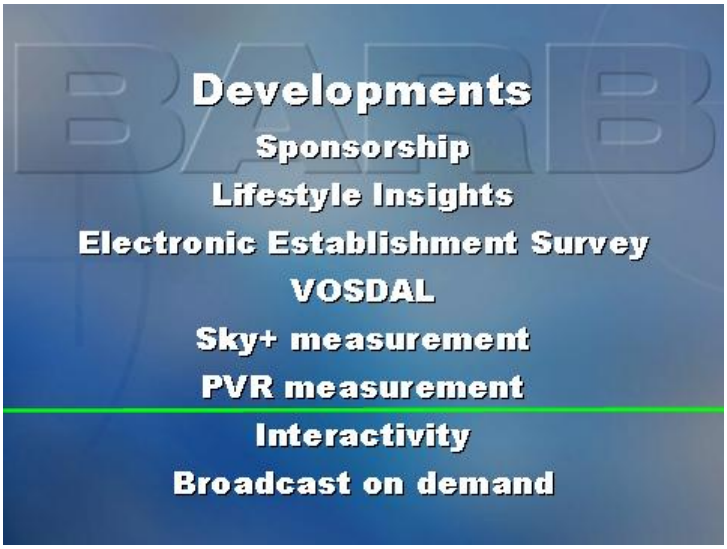
In the short to medium term we have been progressing with a number of developments – and for the Long Term planning we have now started to move into that stage of definition of the options.

In order to take us forward, our exploratory programme needs to continue, more actively with current and potential suppliers, to then lead us into the conclusions about future planning.

There's currently a mix of real delivery and continued long term thinking. That delivery is starting to reach into some of the biggest issues that have been highlighted in the consultation.

Here's where we were and what we expected to be working on in the summer of last year, and where the line has now moved to. Of particular significance are the introduction of Viewing On Same Day As Live figures (or VOSDAL) which reports same-day playback figures into the overnights, and the delivery of reporting from Sky+ homes.

And we're now in a position to monitor PVR devices in the generic sense – so going beyond Sky+ homes. This development will also give us the capability for monitoring recordable-DVD devices.



So our delivery has moved on, and we continue to progress a number of projects – for example looking at interactivity, and broadcast content on demand.

But the main reason that we're here this morning is to share the scenario projections that we've been developing. This very much works to the long-term agenda.

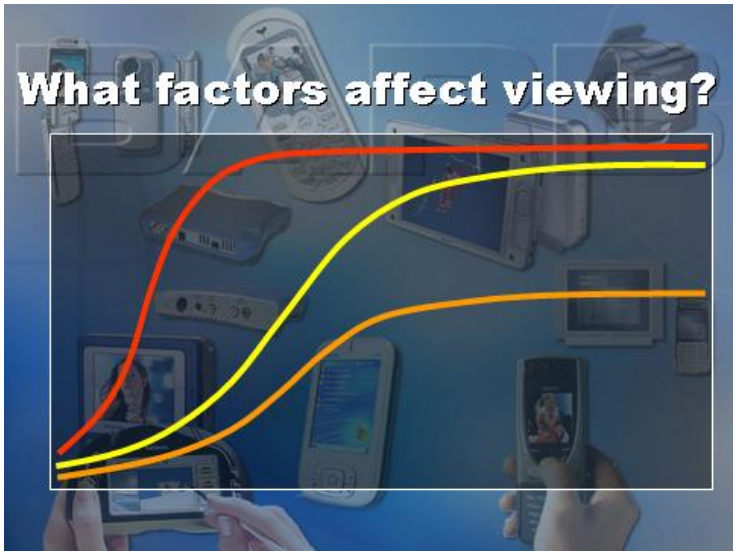
It's clear that with more options for distributing and consuming content we need to develop the views about what may be important, and when.

We need to understand what different potential shapes for the future of BARB may look like, and what they may deliver.

Each will naturally include the ability to monitor different elements of content consumption. The conclusions on where the lines should be drawn for what BARB should deliver still need to be made.

To weigh up the relative benefit of each we need a means of understanding what proportion of content we may be in a position to measure under different system structures.

What should be clear from today's presentation is the amount of activity that there could be in television - and the number of factors that need to be thought about by everyone in the industry.



It came across clearly from our Future Into View consultation that the industry would like assistance in navigating the issues of the future – and we hope that in some way today can contribute to that process.

We're deliberately avoiding using the word 'forecast' – as this work is more about understanding the range of outcomes than a specific expectation. And that has to be

our position at this stage, as the nature of developments in the medium - and potential alternative ways they could work through - mean that a definitive set of conclusions are not possible.

But we can think generically - about transportable content, about out of home viewing in its different forms, about mobile viewing, and about the nature of live broadcast vs timeshift vs on-demand. These are known challenges for the future – and we aim that this work will take thinking forward on how these factors may affect the industry.

We've unashamedly addressed these scenarios from the point of view of what are the issues involved in measurement of the medium, but we think that the output will be of interest.

I must emphasise that this work must not be taken as representing the views of any one of our underwriters, or the collective group of underwriters. It should be seen more as a framework for thinking - that BARB is using to help understand the challenges of the future and the issues that we need to address.

We believe we've been deliberately bullish on assumed take-up of some new factors, so that we're not underestimating the possible challenges.

We want to understand what our challenges might be so that we can be in a position to make more informed decisions to ensure that the BARB service remains world-leading and relevant to the industry we're serving. We are encouraging feedback of alternative scenarios, or assumptions that should be considered.

Future Scenarios

SIMON BOLUS, RESEARCH MANAGER

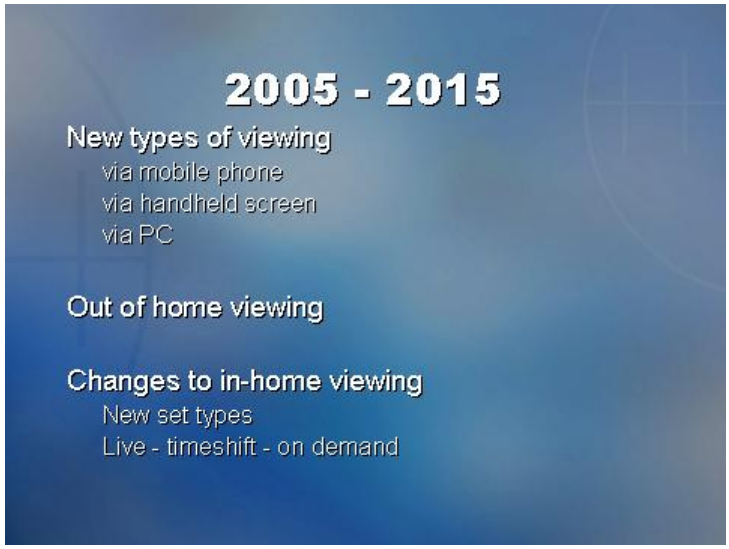
Television has evolved ever since it was introduced, and no doubt always will. Likewise, measurement of television audiences has had to adapt to reflect this evolution, and again, it always will.

Perhaps the most important feature of the current phase in the development of television is the emergence of new ways in which people can watch. Cable subscribers can watch a selection of programmes 'on demand'; the BBC have tested something similar delivered online; ITV is providing local programmes over the internet; high definition is imminent and it is now even possible to deliver TV programmes to a mobile phone. Innovations like these

arguably provide audience measurement with greater challenges than it has ever faced before.

Some of these changes are creating a debate as to what should be covered by BARB. We have looked at various scenarios that might unfold over the next few years. This has involved making assumptions about the rate at which new services are taken up and used, in order to assess their effect on television viewing as a whole, and I'm going to take you through some examples of these this morning.

I'll cover three broad areas in this presentation: new forms of viewing is the first. It is clear that new possibilities for watching television are beginning to emerge which are not yet significant, or even quantifiable, but which may become significant in the future (perhaps in the fairly near future). We've split these new possibilities into three main types, all of which already exist in some form or other: viewing via mobile phones, viewing via handheld screens, and viewing via a PC. From an audience measurement perspective none of these would be picked up by the present system.

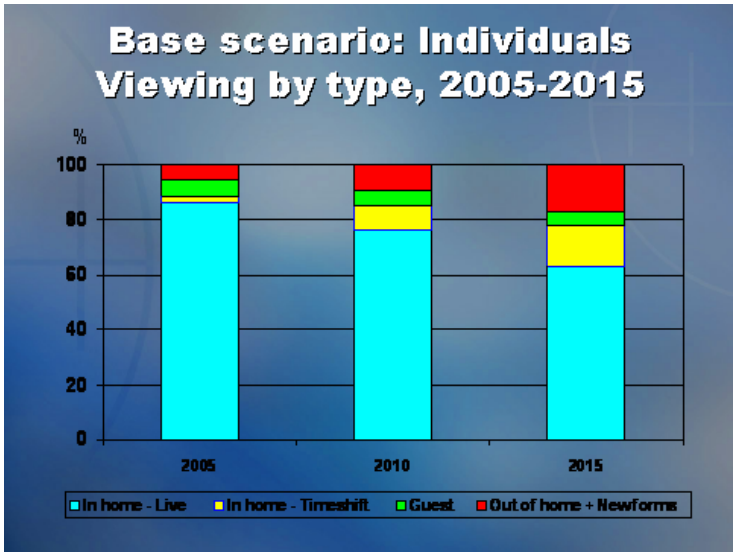


The other two areas I'll cover are out of home viewing; and changes to in-home viewing; but the main point is how far changes in these areas might affect how TV viewing time as a whole is split, and I'll return to this aspect throughout.

We have taken 2005 as a base year and looked ten years ahead. 2005 does not represent the beginning of any particular process of change, and 2015 certainly does not represent an end point, but this is a sensible window of time to look at when thinking of both the short and longer term development of the BARB system. Although it is attractive to believe that we can accurately predict how things will unfold over this period, that is of course wishful thinking. A wide range of scenarios is possible, some more likely than others.

First let's look at one scenario for how viewing might evolve over the next ten years. Starting with 2005, this is how we estimate viewing to broadcast TV was split last year. Live in-home viewing accounts for about 86% of the total; this is obviously the core part of the current BARB measure. Timeshifted viewing in-home adds another 2% to this (including playback on VCRs, PVRs and so on); this is covered by BARB, but not quite comprehensively – for example we are not currently identifying timeshift viewing via on-demand services. In principle though, these kinds of viewing can be captured by a system of the type we have now. We estimate that out of home viewing accounts for the remaining 12%. Of this 12% we think that about half is captured within the current BARB measure as guest viewing, while the other half is viewing in other locations and not covered. I'll talk about the research that provides the basis for this later on.

Essentially the red section on the chart indicates the part not covered by the current BARB service. As well as familiar forms of out of home viewing (such as pub viewing) it includes the new forms of viewing mentioned already (viewing via mobiles, handheld screens and PCs), although in 2005 the contribution of these was negligible.



Looking ahead, this chart shows how this split of viewing might develop over the next ten years. I'm sure that no-one here will be surprised to see that we expect timeshift viewing to become substantially larger as a proportion of the total – up to 9% by 2010 and 14% by 2015. Similarly that red segment also increases thanks to the growth of those new forms of viewing, so that by 2015 under this scenario a measurement system like BARB as it is now would fail to capture 17% of all viewing. Or, put the other way round, it would still succeed in capturing 83%. I'll refer to this throughout as our base scenario.

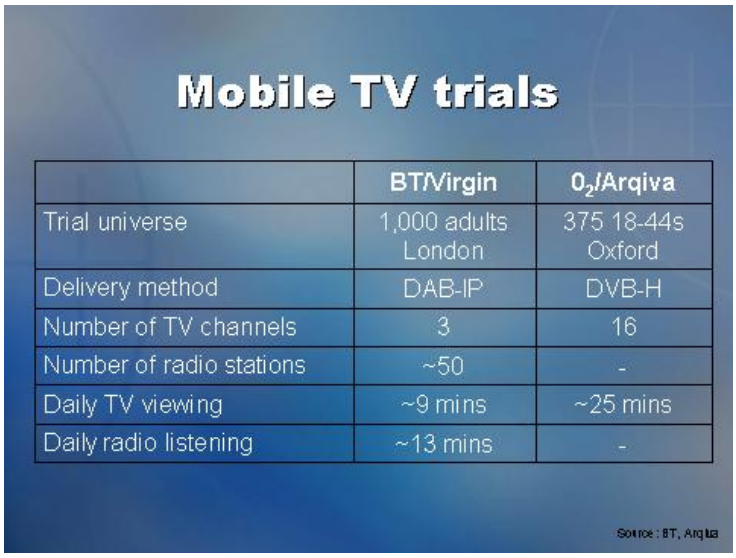
Now I'll try to make clear how this scenario was arrived at. Looking first at new forms of viewing, we have created some estimates of the future levels of these types of viewing based on a simple combination of assumed levels of uptake and assumed levels of usage.

Perhaps the biggest unknown quantity of the three is mobile TV. Mobile TV is already available via the 3G networks. For example the Sky mobile package available on Vodafone includes delivery of five live broadcast channels as well as cut-down versions of others. However the current received wisdom on delivering TV to mobiles in this way is that the technology is unlikely to support mass-market take-up. Trials have therefore been conducted to test delivery of TV to mobiles by broadcast methods.

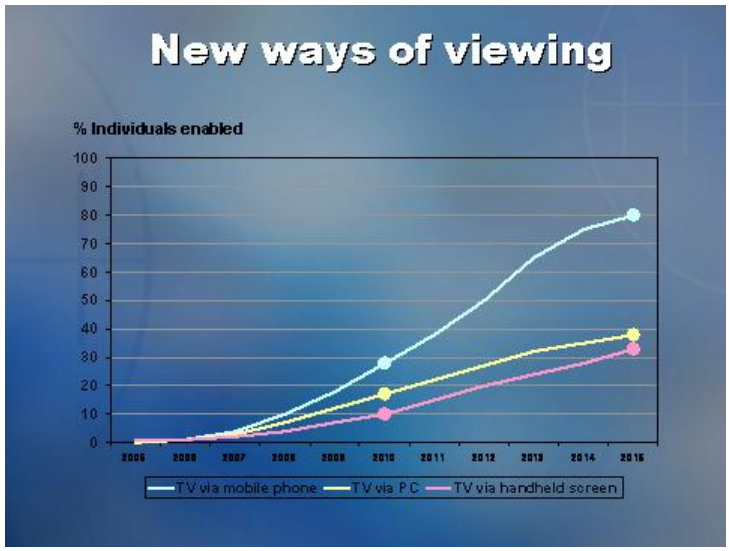
BT and Virgin mobile last year tested a service delivered using digital radio spectrum, and have announced that they will launch a commercial service some time this year. Their trial was run among 1,000 adults within the London area, and consisted of three television channels (at any one time) and about 50 digital radio

stations. Adults in the trial claimed to use their mobile to watch TV for an average of about 9 minutes per day, and to listen to radio for an average of about 13 minutes per day.

The other high-profile test was led by O2 and Arqiva and was based on a new transmission standard called DVB-H. The drawback of DVB-H is that it requires the release of additional spectrum, which may not become viable until after analogue TV is switched off, so it is not clear if or when a commercial launch will be possible. This trial ran among 18-44 year olds in Oxford, and offered 16 television channels but no radio. Triallists claimed to view about 25 minutes of television per day through their phone. It's not really surprising that the viewing figures in this trial were much higher since it offered a lot more channels, including the five terrestrial stations which were not part of the London trial. If nothing else it shows that the take-up and use of a mobile-TV service will depend heavily on what is offered, as well, of course, on how much it costs.



These are our uptake assumptions. We are assuming fairly rapid growth rates for TV to mobile, with more than a quarter of individuals enabled by 2010 and more than three-quarters by 2015. Although it is not clear how many TV-enabled handsets will become available in the next year or two, in the longer term this optimistic view is probably justifiable given the continual improvements to the spec of mobile handsets and the frequency with which people replace them. Of course people may be equipped with a TV-enabled phone but not choose to subscribe to a TV service. We've assumed that those with a TV-enabled mobile will watch, on average, 20 minutes of broadcast TV per day through their phone, slightly below the observed figure in the Oxford trial.



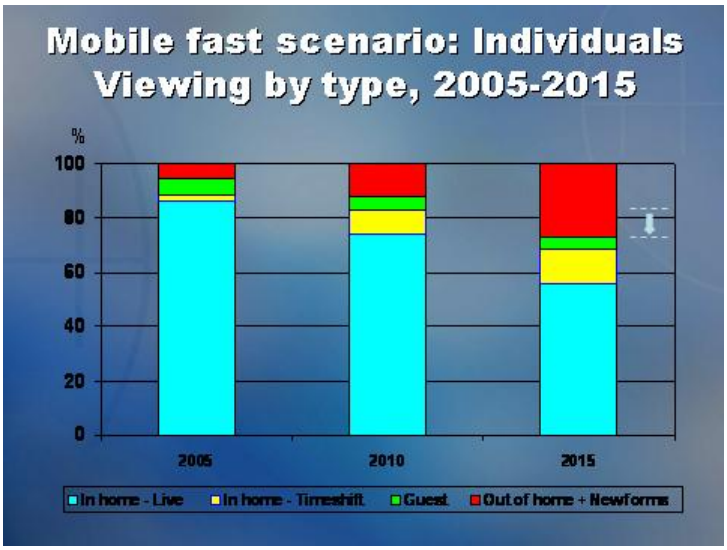
Looking at the two other types of new viewing, viewing via PC is obviously possible now, including viewing of downloaded programmes via broadband. So far (from a UK point of view) only limited numbers of programmes have been made legally available to download, very much on a trial basis. It is hard

to tell if, and how quickly, this will take off, and a lot will depend on exactly what is made available. We've assumed that 17% of individuals will be doing some sort of viewing via their PC by 2010, and almost 40% by 2015, and that by this time they'll be doing so for 20 minutes per day on average.

Handheld screens are also already available, but the process of getting TV programmes on to them is still the domain of the technically literate. The assumption here is that 10% of the population will have one by 2010, rising to about one-third by 2015, with average daily viewing through these devices rising to 15 minutes per day.

That's a summary of how at least part of our base scenario was arrived at.

At this point in time we think these assumptions are quite optimistic; but what if they turn out to be too cautious? What if viewing via mobiles takes off much more quickly?



If we assume much faster take-up of mobile viewing devices, and much more viewing taking place through them (e.g. up to 40 minutes per day via mobiles), as well as a more rapid decline in in-home viewing as a result, then instead of our base scenario, we might see this instead, with the red bar showing the part of viewing unable to be captured now as high as 12% of viewing by 2010 and 27% by 2015.

Returning to our assumptions, let's now look at out of home viewing in its more familiar sense, via ordinary TV sets in a variety of potential locations (friend's homes, pubs, at work and so on). This is only captured to a limited extent within the BARB system currently, and was one of the issues discussed during the Future Into View consultation last autumn.

To get an initial indication of how much viewing actually takes place outside the home BARB ran a piece of research via Ipsos. People were asked where their out of home viewing had taken place, and for each location were asked to estimate how much time they had spent viewing there in the past week. We ran the survey across two 4-week periods last year, and the findings seem to be broadly consistent with other surveys that have covered this, such as the BBC's Daily Life Survey and the Government's Time Use study.

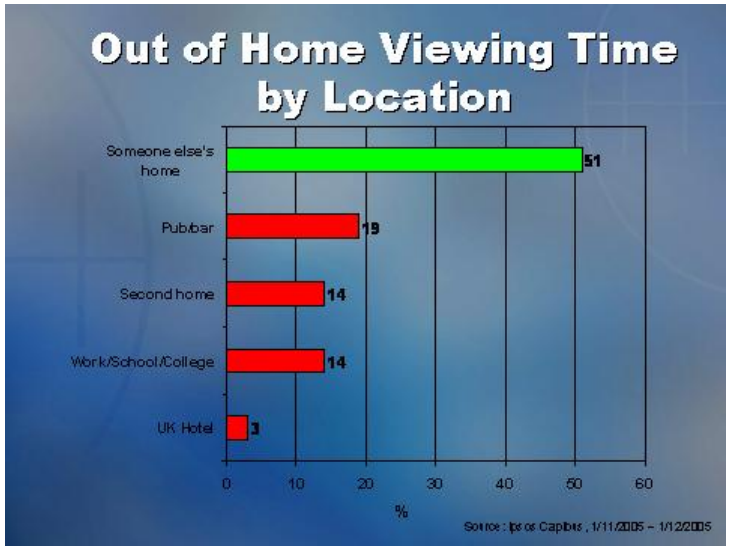
Almost half of adults claimed to have watched television outside their own home within the past month, with 32% doing so in the past week. By far the most common location for out of home viewing was someone else's home where 21% of all adults said they had watched in the past week, followed by a pub at 7%, with relatively small proportions watching in other locations. This data relates to November last year, a month which had a fair number of major sports broadcasts including rugby internationals and an England-Argentina football friendly, but obviously during a landmark event like the World Cup we might expect the number of people viewing out of home to increase.

Out of home viewing

% adults watching...	Past Month	Past Week
	%	%
Any location	47	32
In someone else's home	33	21
In Pub/bar	13	7
At Work	5	4
In own second home	2	2
At school/college	2	1
UK Hotel/Guest House	3	1

Source : Ipsos Capibus , 1/11/2005 – 1/12/2005

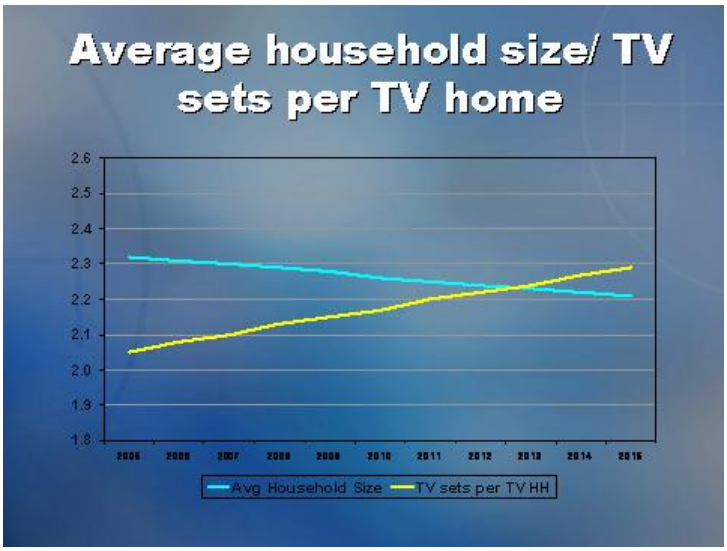
This chart shows the overall split of out of home viewing time by location. The survey results suggest that around half of total out of home viewing hours take place within someone else's home; pubs account for 19%, while second homes are surprisingly high at 14% - relatively few people have a second home, but those that do watch quite a lot of TV there. Taken together, places of work, schools and colleges also account for about 14%.



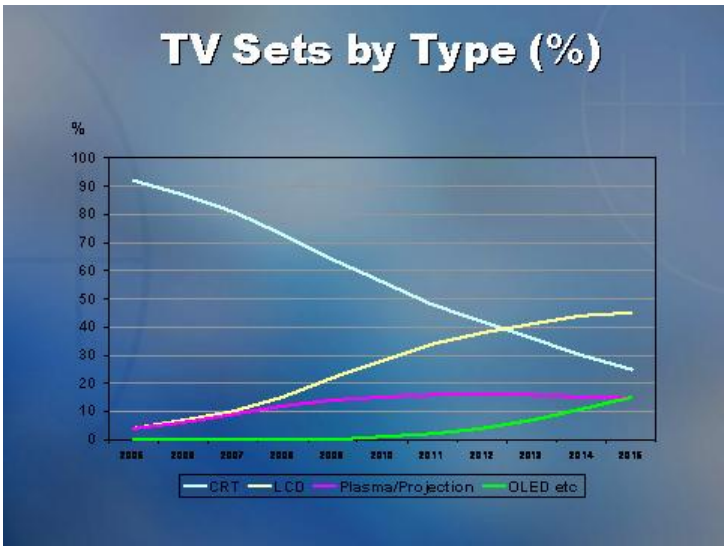
Viewing in someone else's home is currently picked up within BARB reporting as guest viewing, and accounts for approximately 6% of total reported viewing. The implication of the survey is that the overall amount of other forms of out of home viewing (in pubs, second homes etc) is of a similar magnitude, and this provides a basis for some of our projections. We've also assumed that the amount of all these types of out of home viewing will not really change over the next ten years.

Now let's shift attention to in-home viewing which is the basis of what BARB currently measures. Here we are seeing growth in the number of TV sets, new types of set, rapid growth in digital reception, and changes in viewing habits as digital recorders (like Sky+) replace VCRs.

The number of TV sets has increased steadily over the past decade and looks very likely to continue to rise. At the same time the average size of each household is falling, and is expected to continue to fall. So at some point in the next few years it is likely that the average number of televisions within private homes will exceed the number of people – effectively we will have more than one each (even before sets outside the home and things like handheld devices are counted).

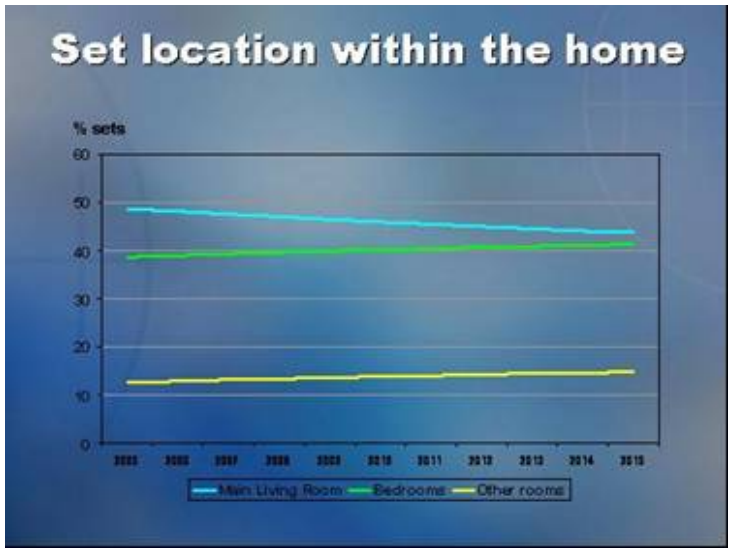


There will also be a change in the types of set present in homes. The familiar cathode ray tube is still widespread at the moment, but it is quickly being displaced by the various flat screen sets that now predominate in the shops. The launch of High Definition may act as a further stimulus to this process. LCD screens look likely to become the largest single type in the medium term, but plasma and projection screens are also being taken up, particularly in homes wanting a larger display. In the next few years further new screen types are likely to emerge. In particular displays based on new LED technology are being developed, which offer the possibility of screens becoming ever lighter and thinner and perhaps even flexible.



The growth of new screen types may present additional challenges for audience measurement relative to both technological development of metering equipment, and to willingness among the public to have their TV equipment monitored in the current way.

A higher number of TV sets means that an increasing proportion of sets will be found outside of the main living room of the home. New set types are also a factor in this – the availability of small, relatively light, flat screens allows sets to slot neatly in to spaces where a CRT may not have fitted. This change is likely to be gradual however. In 2005 just under half of all sets were found in the main living room; by 2015 we estimate that this proportion will still stand at well over 40%. It's also worth bearing in mind that main sets are still likely to account for the majority of viewing time (currently they account for about three-quarters of measured viewing).



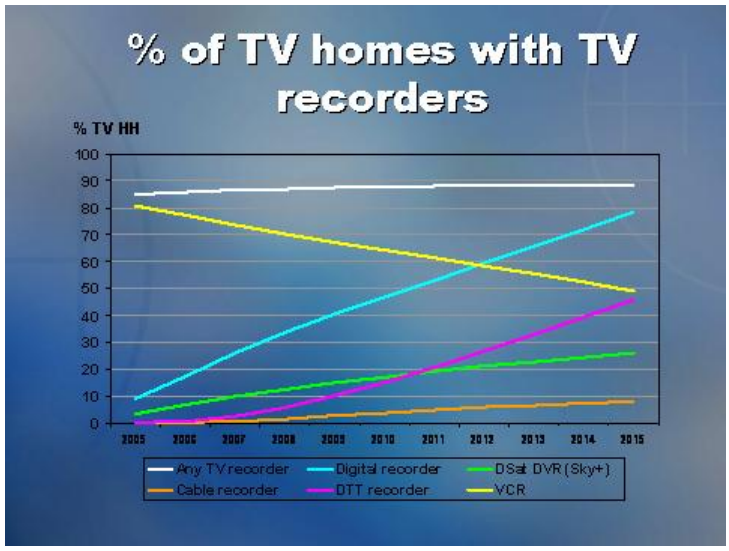
Moving now to digital switchover, the switch-off of the analogue TV signal should not present any direct problems to the current measurement system. BARB has been measuring all of the digital platforms since 1999. However it is probably contributing to the pace of change by stimulating the growth of new equipment and new ways of watching television. It's likely that three-quarters of homes will have digital TV by the middle of next year, and we are assuming that the proposed switchover timetable is met, so that all broadcast TV will be digital from 2013 on.

One of the key effects of the switch to digital broadcasting has been the development of digital recording devices (such as Sky+). These have made recording and playback of programmes easier than ever before, and the limited evidence available so far suggests that the proportion of viewing that is time-shifted in homes with these recorders is substantially higher than in homes still using a VCR.

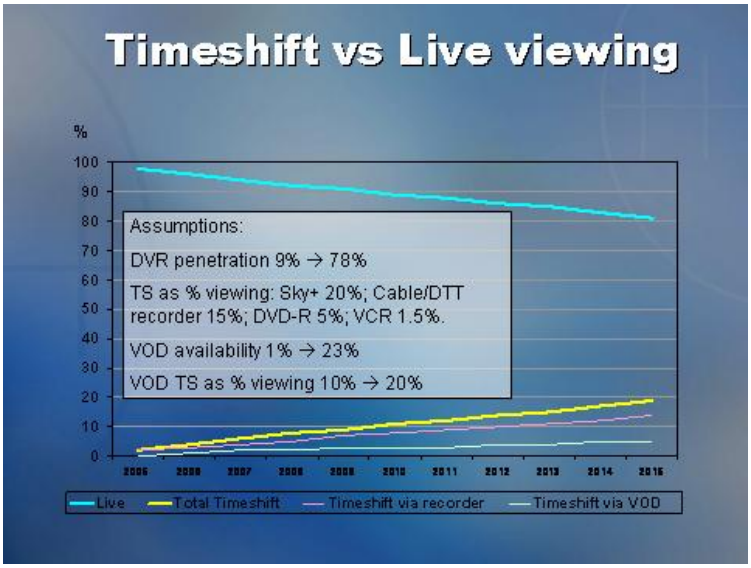
In addition to this cable (and broadband) providers are introducing on-demand services where a selection of programmes from the past week is made available to subscribers. Future services may be developed where broadcasters make programmes available via the internet for viewing either on a TV, PC, or perhaps

some other device (e.g. a handheld screen). The BBC has already tested a service along these lines.

This chart shows our estimates of how penetration of recording devices might change in the next ten years. The blue line shows rapid take-up of digital recorders to hit 78% of homes by 2015. A major assumption here is that take-up of DTT-enabled recording devices will rise rapidly, (shown by the pink line). They have not yet achieved wide penetration, but take-up is likely to be stimulated by the near-obsolescence of VCRs and DVD-Rs with analogue tuners. Although these can be used to record from a digital set top box, the process is rather clumsy and does not usually allow the viewer to watch one channel while recording another. We've also assumed fairly rapid uptake of Sky+; rollout of a cable PVR starting from this year, and increased availability of on-demand services via cable (and broadband).



To use these penetration estimates to assess the effect that the growth in digital recorders and on demand services will have on TV viewing as a whole, we have also made some estimates of the extent to which they will be used for time-shifting. For Individuals in homes equipped with a recorder we've assumed that the following proportions of viewing are timeshifted: 1.5% in homes with only a VCR; 5% in homes with only a DVD-R; 15% in DTT or Cable DVR homes; and 20% in Sky+ homes. In this base scenario these proportions remain constant through to 2015, so growth in the proportion of timeshift viewing is generated via increased penetration rather than increased usage.



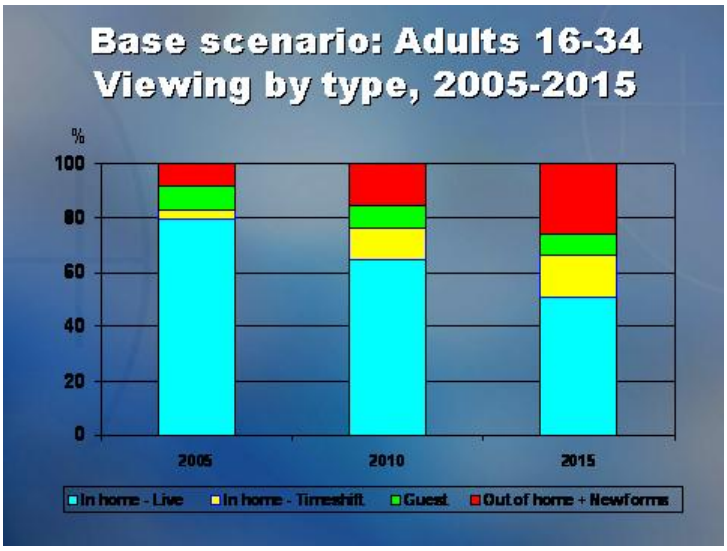
We've assumed that the proportion of homes receiving on-demand services will rise from about 1% in the middle of last year to 23% by 2015; within these homes timeshift viewing via the on-demand service is assumed to account for 10% of viewing time now, rising to 20% by 2015.

The upshot of all this is that, under all these assumptions, timeshift as a proportion of <u>in-home</u> viewing would increase from 2% in 2005, to 11% in 2010 and 19% in 2015.

That then is a summary of the assumptions we've made about in-home viewing to arrive at our base scenario. This base scenario has purposely taken a fairly bullish view of the prospects for a lot of the new things we are being faced with. We're assuming that the overall level of viewing will not change much over the next 5-10 years. The main effect is a shift in the distribution of viewing into these newly available types.

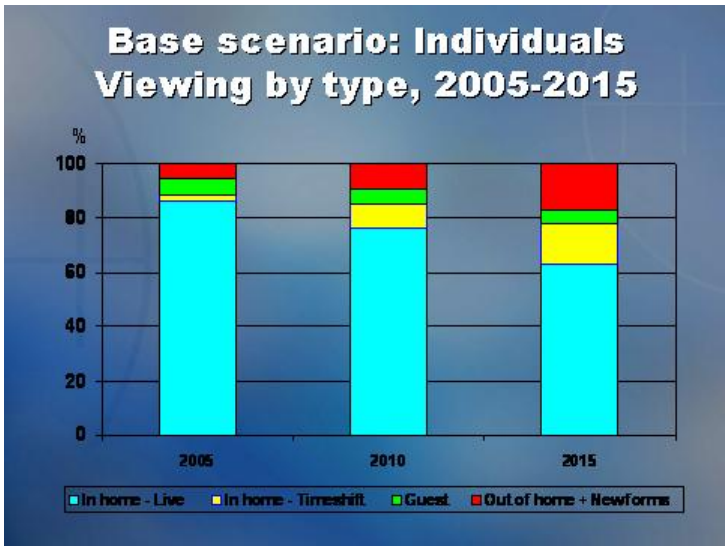
BARB needs to measure viewing across the whole population, so that has been the basis for all that I've shown you so far. Of course uptake of new devices and new services will vary considerably across different population groups. It seems fairly clear that a lot of the new things I've been talking about will initially be taken up more rapidly by younger adults, so here's an example of how the viewing split in the base scenario might look for 16-34 year olds.

16-34 year olds are of course lighter than average viewers of television; and proportionally more of their viewing is out of home; they are also more likely to adopt new technology, so it's not surprising that live in-home viewing accounts for a lower proportion of their viewing time and even in our base scenario accounts for only just over half their viewing time 10 years from now. Timeshift viewing in-home rises to 15% by 2015; and new forms of viewing together with out-of-home reach 26% by this time



Another thing to bear in mind is that even looking at this specific audience we are looking at population averages here; within this there will be some big differences in behaviour between different individuals.

Now I'm just going to recap and summarise our base scenario for Individuals. It envisages live in-home viewing falling from 86% of total Individuals viewing in 2005, to 76% in 2010 and just 63% by 2015. In-home time-shifted viewing increases from 2% of the total last year, to 9% in 2010 and 14% five years later. Guest viewing changes very little. From an audience measurement perspective all these three forms of viewing are familiar, and all are capable of being captured by a system like the one we currently have. Of the two main types of viewing not able to be captured, current forms of out of home viewing remain stable, but significant growth in new forms of viewing (such as via PCs or via mobile or handheld screens) is expected. As a whole this area may increase from an estimated 6% of total viewing last year, to 9% in 2010 and 17% in 2015.



It's clear that new measurement solutions are needed if any of this 17% is to be captured. However we will need to assess different potential system designs relative to their ability to measure all types of viewing, not just the 17%. There are ways to measure everything that I've mentioned today, but at the moment there does not appear to be one universal technique out there that will do everything that we might want it to do. Rather than providing a measure based on a single panel as we do currently, it may be necessary for viewing to be measured using more than one method if the data is to be comprehensive.

The focus here has specifically been on the potential uptake and use of new types of TV. But these are not the only potential causes of change in our audience measurement. Other factors that might also require a change in the nature of the system, or the way in which we report data, include the increasing need to cope with ever smaller pieces of viewing and, perhaps most importantly, the willingness of the public to take part in research at all.

All these elements are feeding in to our consideration of what the BARB service should cover, and will influence our conversations with current and potential research suppliers in the coming year, as we look for the right ways to deliver the measurement service the industry wants for the future.

Finally we'd like to invite your comments and views on the assumptions and scenarios we've outlined here this morning. There is time for questions and discussion now, or please send us any feedback you have via the future@barb.co.uk e-mail address.