

## **Numbers that count: Measuring the BBC World Service global audience**

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### **Abstract**

Every year since 1992 the BBC World Service audience research team has collated available data on audiences to produce a Global Audience Estimate. This is arguably the most visible output of the team: it is one of the key performance indicators used to justify the Grant-in-Aid that pays for the BBC World Service, and it features heavily in the BBC's own performance review process. In this paper I set out the principles and methods that govern the calculation of the Global Audience Estimate, its function as an instrument of accountability and the implications for its application to other purposes. I describe the way it has expanded and evolved to meet the changing needs of BBC World Service and of BBC Global News as a whole and discuss its value as a measure of performance.

**Keywords:** Global Audience Estimate (GAE); BBC World Service; the Foreign and Commonwealth Office; Performance and Impact Measurement; Target Groups; Reputation and Brand Management.

### **A bit of history**

The following comes from an internal memo dated 15th March 1974, from the then head of X.B.A.R., the audience research unit of BBC External Services:

From time to time statements on the size of the world-wide audience for BBC external broadcasts appear in print, which have not been supplied by X.B.A.R. We are not very happy about world estimates being quoted at all, but if it is essential to do so, we felt it would be best if they were based on audience research data.

The Global Audience Estimate that was produced at that time was for a regular audience (people listening at least once a week) of 59 million. A figure for the total audience (in the last

12 months) was also given. This estimate was based on survey data for countries where they were available, but extrapolated to countries where there were no audience data using estimates of the number of radio sets in the country. It is also clear from the documentation available that even for countries with data a significant element of educated guesswork was involved. Estimates were produced in 1978 (75m regular audience), 1981 (100m) and 1985 (120m). A description of the process for 'estimating world audiences' was produced in November 1981.

In 1990 I produced my first estimate. This was again 120 million but was now for the *weekly audience* (see below) and was calculated entirely from scratch. The total included a relatively small allowance (less than 10% of the total) for areas not covered by surveys, estimated roughly at a regional level. From 1992 onwards the estimate was produced annually. Between 1990 and 1994 two key changes in were introduced: the allowance for unsurveyed countries was phased out and the global total was rounded to the nearest million rather than five million as before. By 1994 the estimate was being calculated according to a set of basic principles that are still in force today. Since then we have produced an estimate every year, typically (but not always) around April, in line with the timing of budgeting and internal performance review processes.

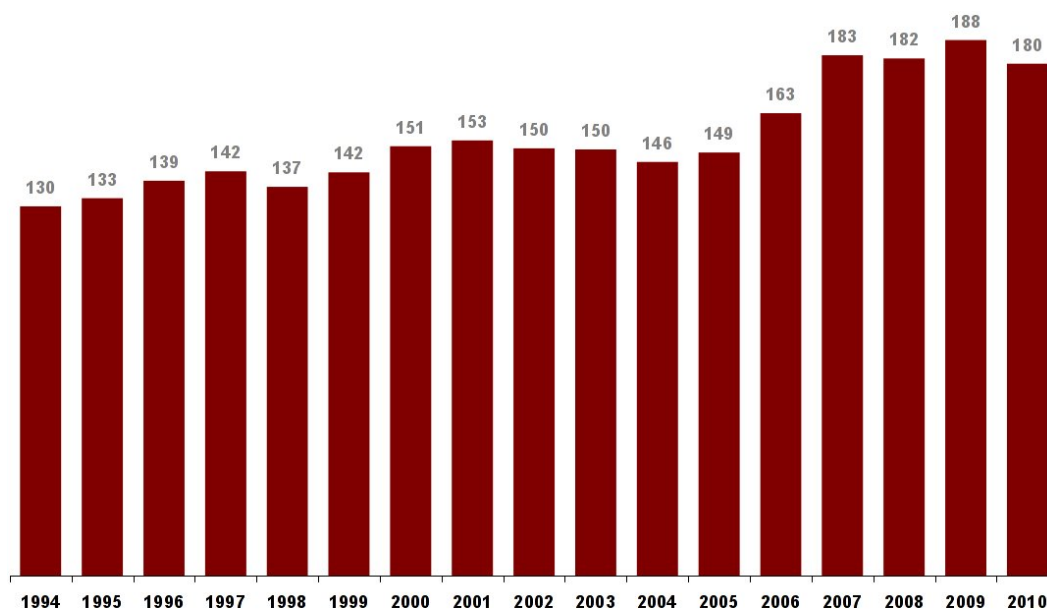


Figure 1: BBC World Service Global Estimate 1994-2010

### **Constructing the estimate**

The 2010 estimate of the BBC World Service (WS) weekly audience is 180 million. For BBC Global News as a whole (i.e. including BBC World News television and international users of the news & sport sections of BBC.com) the figure is 241 million.

Written out in full, we would say of WS 'We estimate that in an average week 180 million adults listen to BBC World Service radio, watch BBC World Service television<sup>i</sup> or access BBC World Service material via the internet'. For clarity we would add that this covers all languages and includes material broadcast or hosted by partner stations/sites as well as that broadcast by WS or available on its own websites.

There is no 'joint industry committee' for international broadcasting audience research. The major broadcasters collaborate to harmonize methods and set standards, and also share data to some extent. But for the data that make up most of the GAE we have to rely on research that we commission and analyse ourselves; and we put it all together to produce a global figure.

We have established a set of principles that we use when calculating and using the GAE:

#### **Country as building block**

We carry out, or acquire data from, surveys in around 20-30 countries each year. In addition we have data for BBC World News TV from industry standard media studies and Unique User data for internet services. Each year we use all the latest information we have to put together an estimate for each country; the GAE is then the sum of all the country estimates.

This means that the GAE is not a snapshot, but a collage – or perhaps a jigsaw puzzle: when we say that our April 2010 estimate is 180 million, we do not mean that we measured the audience in that one month, but that the estimate represents the state of our knowledge at that time. In fact many of the country estimates are based on surveys carried out some years before.

In the simplest cases the radio/TV estimate for a country is based on a single national survey. Often, though, this is not the case. We may carry out a national survey one year and in the following year survey only the capital city; in such a case our 'latest information' for that country comes from both studies. In these instances we combine the results to produce our 'best estimate for the country based on all the latest data'; in the most complex cases the estimate for one country may be based on five or more studies.

- Weekly audience is standard measure** Typically in our own surveys we measure listening/viewing by recall: we ask people if they have ever listened to/watched the BBC (amongst other stations) and, if so, when they last did so; the people who have listened/watched in the last 7 days go into the *weekly audience*. Sometimes we use data collected using different question forms, but they are all designed to result in broadly the same measure. There are many more people who use us now and again, or only in times of crisis: these people, important as they may be, are not included.
- No estimation without information** We only include in the GAE countries for which we have some audience data. We cannot cover the whole world with our research: in some countries reliable research is not possible; other countries could be covered but are not because our budget is finite. Many countries are excluded, even if we have reason to believe that we have a substantial audience. You could say that we have a jigsaw puzzle with pieces missing. In the past, in certain limited cases where we had data with less than national coverage we did extrapolate from the areas covered by a survey to other parts of the same country – but not beyond national boundaries. As survey coverage increased we were able to drop these extrapolations.
- Estimates change only through new information** If we have not surveyed a country for three years then the estimate for that country remains what it was three years ago: we do not include updates for population increase alone. This means that each time we issue a new estimate we can trace the all the changes back to the data that produced it.
- Ten year shelf life for data** Having established that we have to use estimates based on surveys that are over a year old, we then put a limit on this. Beyond a certain point survey data must be so out of date as to be useless. We set a limit of ten years: if we have no more recent data for a country then that country drops out of the GAE. This is not to say that we now think there is no audience there, only that we cannot make a reasonable estimate. So we take a piece out of the puzzle and leave a blank space. It might be argued that ten years is a generous time-span, and indeed a case could be made for reducing the limit to, say, five years. In practice we survey the countries that are of most interest to us every three years or more often, so the bulk of the global estimate is based on recent data. Further, the fact that we do not update old estimates to allow for population increase means that estimates ‘depreciate’ with

age.

**Annual update**

Another limitation we place on the use of the estimate is that we only update it once a year. We are analyzing and reporting research results all year round – some showing increased audiences, others showing falling audiences; and because results reach us faster from some places than others a newly-reported audience may be a month or six months old. If we updated the Global Estimate with every new dataset, it would give an unwarranted impression of precision: it would appear that we were tracking changes in the whole audience from month to month, when in fact only individual pieces of jigsaw puzzle were changing.

**Conservative by inclination**

In some cases there are choices to be made as regards the assumptions we make when combining results from more than one survey. Where there is a choice we try to take the conservative options – to go for lower rather than higher estimates. This general principle also underlies the other principles.

**No more than the sum of its parts**

This principle relates to the way the Global Audience Estimate is used. We produce the estimate in order to meet specific needs. It is done with care and in good faith, but has its limitations. We try to stress to users that the estimates for each country contain no information that is not in the original surveys; analysis of trends, for example, is best done using specific surveys where properly comparable data can be used. Similarly, it can be misleading to compare regional global totals over time: sometimes the audience may appear to increase simply because we have included a country for which we did not have data before.

It is important to note that these principles are not self-evident; each one represents a choice and other organisations may take different approaches.

For WS this approach has proved durable and useful. We have used the same principles consistently over the course of some 17 years. In that time the demands on the GAE have grown enormously:

In 1993 we produced an estimate for the audience in any language and in English; for each of these we calculated the direct audience (people listening to WS via its own transmissions); the indirect audience (people listening to BBC programmes on partner stations) and the combined audience, which is the unduplicated total of people listening to either direct or indirect broadcasts. This meant that there were six measures for each of 116 countries in the database, a total of around 700 measures.

In 1994, when the GAE came into full use, the six figures were additionally calculated for each language, increasing the total number of measures to around 1,700. Over the subsequent years additional breaks were added: the direct radio audience was split into AM and FM and the AM audience into shortwave and mediumwave.

In 2006 we incorporated the advertising-funded BBC World News television service (then called BBC World) and began to issue two global totals: the WS total, for broadcasts funded by Grant-in-Aid; and the Global News total, combining audiences for WS and BBC World News.

Since then the GAE has continued to grow to take account of new delivery platforms, including the internet. In 2010 the database contains nearly 7,000 measures, around ten times the 1993 total. Many of these figures are zero, because not all platforms are available everywhere; but the zeroes have to be in the database. There are over 3,700 non-zero measures in all. [See Appendix for detailed chronology.]

Wherever we combine audiences on different platforms we produce an unduplicated figure; so, for example, a person who listens to WS radio and watches WS television in the same week is counted only once in the combined radio/TV estimate. Calculating unduplicated totals is straightforward where data for the different platforms come from a single source; but often – and increasingly, with the advent of new platforms – we collate data from separate sources for different platforms, and in these cases we may have limited information on overlaps. Where we have two separate estimates with no information on overlap we follow the principle of ‘conservative by inclination’ and use the higher of the two figures for combined total, thus effectively assuming total overlap. Estimating and allowing for overlaps in the audiences is probably the most vexing part of the process.

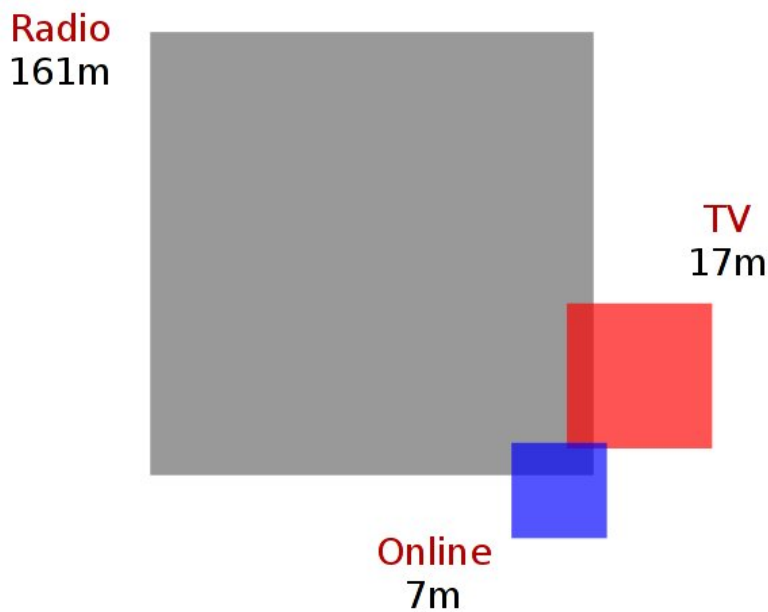


Figure 2: BBC World Service Global Estimate 2010 by platform

### Implications for performance measurement

Global audience estimates serve three different purposes:

- Accountability** As part of its agreement with the FCO, WS reports annually on its performance against targets. Audience targets are part of this, and the GAE is one of the Key Performance Indicators. The BBC's internal Annual Performance Review process can also be put under the heading of accountability.
- Advocacy** WS needs to promote itself – constantly to remind its stakeholders and wider publics of its value and of its continuing success.
- Strategy** To inform our decision-making process we need to know how well we are performing, overall and on different platforms.

For very good reasons we choose to use the one estimate for all purposes, but the three are to some extent in tension. For accountability we need to provide robust transparent data that conform to an agreed definition and that reflect areas of weak as well as strong performance. Advocacy will focus on areas of good performance: for promotional purposes we naturally want to have a good story to tell. For strategic planning and internal decision-making we need to know as much as possible about our audience and about our position in the broadcasting 'market'; less robust data which would not necessarily qualify for accountability will still be valuable in building up our overall picture.

The principles which underpin the GAE as it is, and has been since 1994, are designed to produce an estimate that meets the needs of accountability. All the components of the global total are traceable to specific survey data and the calculations can be examined. The change in the estimate from year to year can be explained solely by reference to the new data we have received that year. The principle of 'conservative by inclination' reflects our awareness that this is an instrument of accountability. But what are the implications for the other purposes?

Perhaps the most important is that the scope of the GAE is limited to what we can say with some confidence. This means some increases in the global figure come about because our knowledge has increased, not because of an increase in the actual audience. For example, between 2006 and 2007 the estimate increased by 20 million. But 14 million of that came from surveys in areas for which we had not previously had projectable data; so these were not new listeners, but newly-found listeners. In our public reporting of the figures, in press releases, the Annual Review and so on, we try to make it clear that the increase is in the estimate rather than 'new audiences', and to explain the contribution of new survey coverage; but it is difficult to stop people taking away the message that the audience has increased by 20 million.

On occasions we acquire new information about the overlap between two services which permits us to move away from our conservative assumptions; as a result the unduplicated total can increase even if the components do not.

In our internal strategic analysis it is important that people keep in mind this limitation. The global estimate and its regional components are not in themselves a good indicator of trend, and can serve only as gateways to the detailed data from which they are derived.

There is also the matter of the activities that are not adequately represented in the GAE. For example, for many years we have not been able to carry out projectable surveys in Somalia, so the importance of the Somali Service is not properly reflected in the global total. The same used to apply to Burmese. More subtly, there are languages for which we have audience data, but which have target populations too small for the audience ever to make a significant impact on the global total. In recent years we have extended our services to a range of digital platforms. For many of these it is difficult to measure the impact in numbers of users and even more difficult to establish the overlap between these audiences and the audiences on other platforms.

Because of the high profile of the GAE it would be understandable if there were a temptation to direct efforts and resources towards activities that deliver audiences that can be measured in a GAE-compliant way. But this temptation has always to be resisted; and to do this it is



important to maintain an awareness of the limitations of the GAE and to give due prominence to indicators of success that do not fall within its scope.

Within the research team we have always been aware that we are entrusted with the responsibility of providing the data by which our success is judged externally. There has always been the need for a level of independence which would ensure that decisions about where and when to carry out research are not influenced by the desire to have a good story to tell. In this respect the needs of accountability and strategy coincide, because if there are areas where audiences are falling (possible because of external developments beyond our control) then it is strategically vital to know about them as soon as possible. For example, evidence from surveys of the decline in listening to shortwave radio in South Asia and elsewhere has driven efforts to make WS output available on other platforms.

Another consequence of the responsibility of providing data for accountability is a commitment within the team to high quality research. Perfect samples are never possible, and some areas that WS covers pose particular challenges for research. But the research team has constantly been aware that a reliable estimate of the audience in a given area requires a sample that fully represents the population; a sample that under-represents illiterates, for example, is likely to produce an inflated audience estimate. We have striven to improve research standards in our own studies and through collaboration with other international broadcasters.

Further, using figures that conform to the restrictive requirements of accountability actually proves to be beneficial when employing the results for advocacy. It may be frustrating if the GAE does not take full account of all the activities that seem to be performing well; but the conservative approach to the calculations means that if the results are impressive then others are free to trumpet them abroad knowing that they can be supported by solid data and have not been puffed up.

### **Other measures of performance**

The basic building block of the GAE is the audience in one country. The measure we use is the number of people who use WS in a week; in the GAE this is expressed in millions of adults; when reporting the results of a single survey it is also expressed as the proportion of all adults covered by the survey, referred to as weekly reach. Again the use of this standard measure is not self-evident but is a matter of choice. The data that go into the GAE represent only a small part of the audience information that we gather in surveys to assess how people use the BBC and how they regard it. There are alternative approaches to be considered both for the base for reach percentages and for the definition of an audience member.

## Target Groups

In some countries WS has a mass audience comparable to that of a domestic broadcaster. More often, though, the international news which forms the core of WS content is of interest to only a minority of the population. And in some places WS is not available to everyone. Is it appropriate to use the same base everywhere for calculating reach?

Over the years we have reported our reach within specific target groups defined in various ways. Around 1995 we were using people with tertiary education; later 'opinion formers', defined differently from one country to the next and surveyed separately from the general population. From 2000 to 2008 we focused on four groups identified within World Service's strategy as the key targets for WS broadcasts:

<b>Cosmopolitans</b>	Highly educated decision makers and opinion formers requiring access to reliable, accurate and relevant information about global affairs.
<b>Aspirants</b>	Those who aspire to improve their lives and for whom WS offers a vital link to the wider world.
<b>Information poor</b>	Audiences who are deprived of free, global information for either political or economic reasons.
<b>Lifeline</b>	Audiences in acute crisis for whom information is a survival tool.

These were top-down definitions: they were declared as part of the strategy rather than being derived from analysis of audience data. It was the task of the research team to turn these broad definitions into measurable criteria. Inevitably, given the definitions we started with, what we came up with was a mélange of different axes: Cosmopolitans were defined by demographics; Aspirants by attitudes; Information Poor by location; and Lifeline by a combination of place and time. In practice the Lifeline audiences are precisely the ones we are least likely to be able to survey. Most reporting of performance was limited to Cosmopolitans and Aspirants.

More recently we have been developing a more bottom-up approach, aiming to identify the people most likely to use and value the content that we offer, and identified in surveys by means of a few simple questions. We are concentrating on a target group we label *Active Internationals* and define as people who:

- Access news and current affairs more than daily;
- Are very interested news about other countries;
- Discuss news about other countries at least occasionally.

## **Engagement**

As a definition of audience membership, weekly usage sits somewhere in the middle of a wide spectrum of audience behaviour. Here are some (fictitious) members of our weekly audience:

*Ashok* lives in a village in India. He tunes in every day to BBC broadcasts on shortwave and consequently is regarded by others in his village as an authoritative source of international news.

*Basimah* occasionally watches BBC Arabic TV for a few minutes while she is channel surfing. *Craig*, in the USA, has the radio on in the background over breakfast and sometimes tunes in to a public radio station which rebroadcasts BBC programmes.

*Dmitri* came to the BBC Russian service website during the South Ossetia crisis and comments on the forums. He dislikes the BBC's coverage but nevertheless likes to hear an alternative view which challenges his assumptions.

*Efua* listens very occasionally to the WS English material broadcast on Joy FM in Ghana. She also accesses sports results on her phone.

In the GAE someone who uses the BBC every day and regards it as a lifeline has the same status as a person who looks briefly at the occasional web page. A regular contributor to BBC discussion forums sits alongside a person who happened to have the radio on at a time when a BBC programme was being broadcast.

There are also audiences which remain outside the GAE. Many people do not use our services as a matter of habit but do turn to us for reliable information when something important happens that affects them. We have ample evidence that in times of crisis the number of people accessing our services rises dramatically. The times when people need us most are often the very times when we are not able to carry out measurement. Even where we do have measures we aim to exclude the 'crisis audience' from the GAE so that as far as possible it serves as a measure of normal behaviour. The idea of 'being there' when people need us is an important part of the rationale for WS, but it does not feature in this measure.

Are all users equal? Certainly we have something to offer to a wide range of people with very different needs, and the most dedicated users are not the only ones that matter. Increasingly, though, WS is looking at measures beyond basic reach. We need to know whether significant numbers of people engage with our output, value it, use it, respond to it; whether people come to us by choice or by chance; whether they trust us, care about us, stick with us,

recommend us. Within the wider BBC there is a move towards greater emphasis on the quality of the relationship with the audience.

For WS, we are developing a Quality Score which combines the following aspects:

- Reputation**      The extent to which users name the BBC as  
                           ‘a source that I trust’  
                           ‘unbiased and objective’  
                           ‘relevant to me’  
                           ‘high quality’
- Impact**            How often users discuss international news that they have heard on the  
                           BBC with others  
                           Whether users feel that the BBC helps them to form their opinions on  
                           important issues  
                           Whether users would recommend the BBC to others

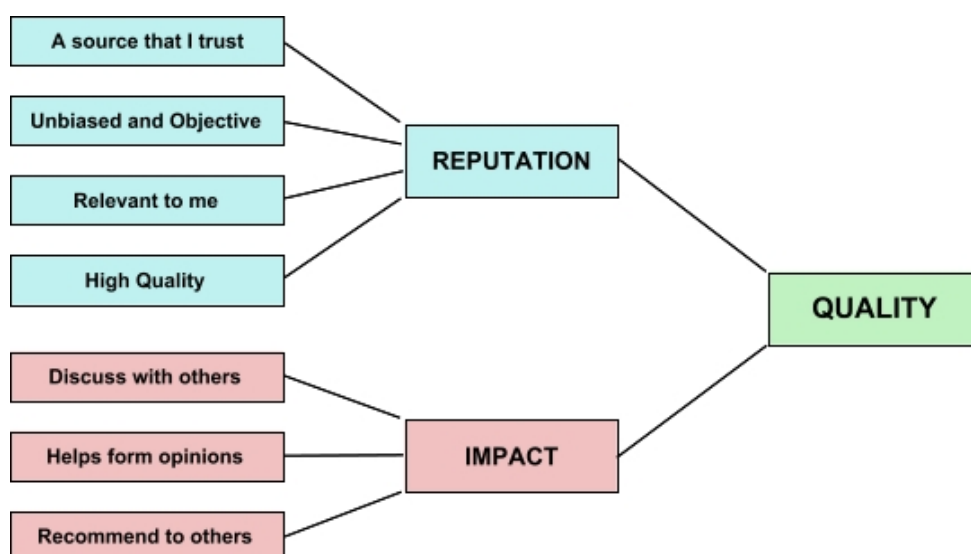


Figure 3: Construction of Quality Score

Where we can collect this information we will be able to report the Quality Score alongside the reach measure. This is a work in progress, and we will need to keep under review the choice of measures and the interpretation of the data. The relationship with reach is complex. To take a hypothetical example, suppose that service A has 10 million users and has an average score of 50 (out of a maximum of 100) amongst them, while service B has 1 million users and a score of 90. Which is the more successful? Clearly B has the higher score; but A may have 5 million users who rate it highly while B has fewer than a million, so in that sense A is doing much better.

Progress on both these counts – refining target group definitions and assessing the quality of the relationship with the audience as well as the numbers of users – will enable us to have a much more nuanced understanding of how well WS is performing.

### **Conclusions**

The question ‘how many people do you reach?’ is a reasonable one. But there is no single, simple answer. The methodology we use for calculating the GAE is designed with accountability in mind. When it is used for other purposes it is important to bear in mind its limitations. It is a very blunt instrument.

The global figure should not be given more weight than it deserves: it is not merely an end in itself but is largely a by-product of a much more extensive programme of performance assessment.

There is more to good performance than large audiences. Do we reach the right people and serve them well? Do they find the content compelling? Do they care about us, value us, trust us, recommend us to others? In future, questions such as these will play an increasing part in our assessment of the performance of BBC World Service.

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Not everything that can be counted counts, and not everything that counts can be counted.<sup>ii</sup>

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### **Postscript**

This article was originally written for a conference in September 2010. Since then a great deal has changed at the BBC:

In October 2010 it was announced that from 2014 WS will no longer be funded by Grant-in-Aid and instead will be covered by the licence fee that currently pays for the BBC’s services in the UK. This is possibly the biggest change in its relationship with the government since it was founded.

In January 2011 WS announced that was to carry out a fundamental restructuring in response to a 16% cut in its Grant-in-Aid funding. Five language services would close, radio broadcasts would cease in a further seven languages and there would be cuts in output elsewhere. The announcement has prompted much public debate – still continuing – and there are frequent references to the GAE and to specific audience estimates. The restructuring is also having a

significant effect on the audience research team: its budget is to be reduced and a number of posts are to close.

This means that the article represents a snapshot of the situation as it stood at the end of 2010. At the time of writing a great deal remains undecided regarding the cuts to WS output and the future for the audience research team, and the implications of the move to licence fee funding are still being worked out. There are many questions on which, at this stage, one can only speculate:

the FCO will still be involved in the setting of objectives, priorities and targets for World Service: what rôle, if any, will the GAE play in this?

how will internal accountability and performance review change as WS becomes more closely integrated with domestic BBC services?

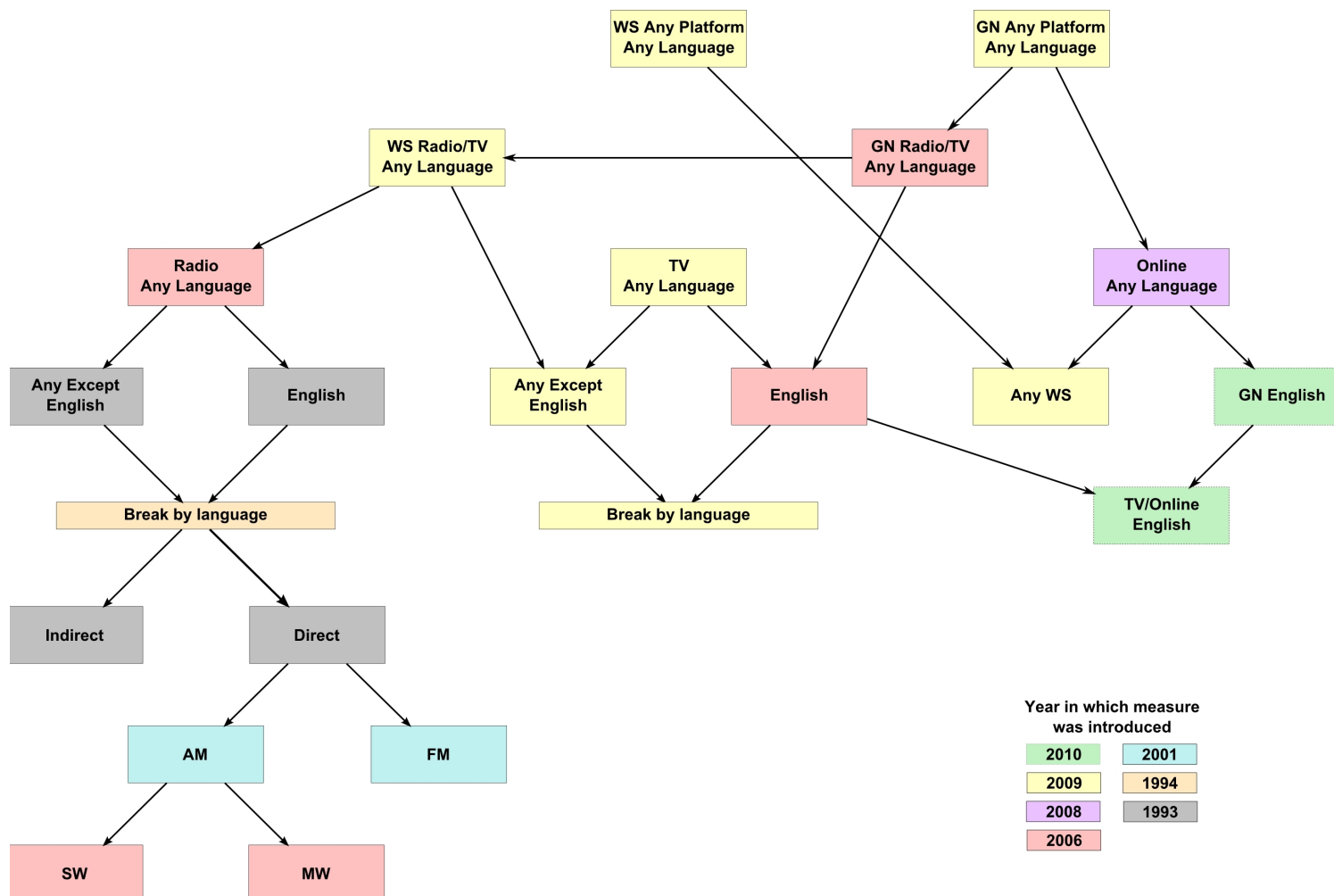
will the WS audience research team, with significantly reduced budget and staffing, be able to meet the need for audience data for accountability, advocacy and strategy, and maintain the commitment to high quality research? In an atmosphere of cutbacks, will it continue to enhance the organisation's understanding of its audiences with new measures of performance and further analysis of target groups?

Only time will tell. What is clear, though, is that the changes to WS, and the implications for performance measurement, will be profound.

### **Biographical Note**

Colin Wilding worked in the BBC's international audience research team from 1979 to 2011. When the original version of this article was written (see 'Postscript' above) he was Senior Analyst, Performance & Assessment Data in the Marketing, Communications & Audiences department of BBC Global News. He is now a freelance consultant in international media research.

**Appendix: Chronology of GAE measures**



<sup>1</sup> International television services from the BBC come under two headings: BBC World News is the English-language service and is funded by advertising; services in other languages such as Arabic and Persian are funded from the World Service Grant-in-Aid and are grouped here as ‘World Service television’.

<sup>2</sup> William Bruce Cameron: *Informal sociology: a casual introduction to sociological thinking* (1963).