

AUDIENCE MEASUREMENT IN THE EC

Internal Report

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1. INTRODUCTION

This report has two objectives.

The first and primary objective is to describe the main domestic and international surveys that are used to measure audiences; to assess their evenness of treatment of domestic and international media titles; and to assess the international comparability of different national practices.

Part I of this report contains the description of the main surveys, and Part II supplies our assessments. The CEC has asked us to examine the surveys for television, press and radio. The particular points we have been asked to cover are to be found in Steps (1), (2) and (4) of DG XV 's brief. They include:

- Research organization and control;
- Survey design (to incorporate: universe selection, sampling procedures, techniques of measurement);
- Other purposes of commission and other user groups besides the advertising industry. Of special interest to the CEC are the uses made by governments and by the industry in general for purposes of copyright.
- The second objective is to see whether the audience measures generated by different surveys permit users of the data to draw a useful and usable map of media concentrations where it concerns the plurality of choice.

Part III of this report covers the second objective, which is laid out in Step (3) of DG XV's brief. The media maps to which the brief refers are to be considered at three levels:

- Country;
- Linguistic region;
- EC as a whole.

Again, the media we have been asked to examine are television, press and radio.

Part I - Description of Media Surveys of Audience Measurement

The broad questions we have sought to answer are:

- How are the surveys organized and administered?
- Who carries them out?
- What is their scope?
- What measures do they provide?
- Who obtains the results and under what conditions?
- For what purposes are the results used apart from (a) selling and buying advertising space, and (b) decision-taking by the media owners over programme or editorial policy?

The approach we have adopted is to supply the answers in tables with an accompanying narrative. We have grouped the tables into four sections: one each for television, press and radio, and a fourth for the main international surveys.

Before delving into the tables, we have prefaced Part I with a section on the "General Principles and Issues of Audience Measurement". This is in order to introduce basic concepts of measurement and to anticipate Part II (Assessment) by establishing an important distinction between the "inevitable" and the "deliberate" causes of uneven treatment in surveys of audience measurement.

It goes without saying that in the best of all possible worlds measurement surveys would mete out equal and even treatment across all media. Only, we do not live in Pangloss's world, and there are many areas where we can expect to find uneven treatment. The immediate and critical question is whether the unevenness is inherent to the organization and conduct of the surveys, and is in that sense inevitable, or whether it reflects particular decisions, and is in that sense deliberate. If it is inevitable, there is little to add. If deliberate, we must ask if the unevenness is fair, and whether or not it matters.

Although we shall attempt to identify where deliberate unevenness may creep into survey practice, it is beyond the scope of this report to point an accusing finger at this or that practice in each member state, or to determine whether the unevenness actually matters to those whom it is likely to affect.

Lastly, we have chosen the word, "uneven", throughout in place of other candidates such as bias, skew, unfair, distorted, unless of course we mean to make a specific value judgement. That is because we intend "uneven" to read neutrally, whereas the other terms we have considered are mostly loaded with other, and often pejorative associations.

Part II - Assessment of Media Surveys of Audience Measurement

Having supplied the descriptions and established the framework for assessment in Part I, Part II assesses the unevenness of existing surveys at two levels.

The first is national. What unevenness exists and to what extent is it deliberate? The original brief stressed the importance of examining the handling of transfrontier media; however, indigenous national media also fall within the sphere of policy-making by the Commission. Accordingly, the amended brief has asked us to examine existing or potential sources of uneven treatment across all media.

As mentioned already, there are many potential causes of uneven treatment. Consider the example of a readership survey which covers 100 print titles out of 300 in country X. The survey practice could result in uneven treatment for a host of reasons, such as:

- Inclusion of a title within the survey gives it an advantage over excluded titles in selling advertising space;
- The selection of questions may engender overestimation of readership for monthly versus weekly titles;
- Media owners who have most titles in the selected 100 have greatest influence over the specific contents of the survey;
- The main survey sponsors restrict access to purchasers of the data, or erect price barriers to limit external use and participation.

And so on. In each case the question is, inevitable or deliberate?

The second level of assessment is international. It entails less a judgement of unevenness than comparability. Converging political, economic and social trends, which have been fostered by the creation of the single market, have created mounting pressure for harmonized audience data. The general question of harmonization may be divided into three separate questions, each of which we address in Part II.

If we take the analogy of the temperature scale, the first question is whether a degree Centigrade in country A refers to the identical unit quantity as a degree Centigrade in country B. This is the specific issue of *comparability*.

Following on from this, the fundamental scales may be identical, but one country speaks of Centigrade where another speaks of Fahrenheit: that is to say, they divide the scale differently. This is the specific issue of *compatibility*.

Without pushing the analogy too far, the issue of comparability is present with audience measures when we examine what the scales include. In practice, almost everyone speaks the language of ratings in television research, and means the same. Yet, even if theoretical definitions are the same, the operational definitions may differ. For example, where country A includes guest viewing in the published ratings, country B excludes them. As a result, the basic units are not the same and are therefore not directly comparable.

As for compatibility, two surveys may operate with the same definitions and practices and yield identical measures; yet frustrate comparisons because they report the data by different socio-demographic breaks, or by different time units, and so on.

And lastly, there is the question of free flow. Partly, this is an issue of comparability and compatibility, but it goes beyond these by raising additional issues of practicability, access and copyright that constrain the ease of cross-border transfer of audience data.

Part III - Audience Maps by Media Controller

We understand the main interest of DG XV to be plurality as opposed to market concentration of ownership. We note that the Green Paper on media concentrations and pluralism offers a legal definition of this term, and that in many countries the degree of plurality is the by-product of national laws regulating competition.

We have treated pluralism in this report from an audience rather than a legal perspective since our object is to examine the feasibility of constructing audience maps of plurality. The approach we have adopted is to explore two sets of questions.

First, there are questions of definition. What do we mean by pluralism, and what media measures correspond with the various meanings we might choose? We have not attempted exhaustive analyses, but concentrated on identifying the main issues for taking further.

Second, there are questions about the adequacy of the measures. Focusing on each medium in turn, how satisfactory are the main measures, such as readership, reach or audience share, which we wish to use?

The discussion mostly assumes we are concerned with national audience maps. The final section comments briefly on the international audience maps, for which DG XV has asked an opinion.

Matters Arising

As noted earlier, the goal of this report is to expose rather than examine in depth real or potential issues of uneven treatment in audience research, and to open up the question of using audience data to quantify plurality. We think there are a number of topics DG XV may wish to look into in greater depth after this initial mapping of the terrain, and submit our recommendations in a short final section (Part IV).

We have also added a glossary of media terms at the end as a quick and convenient reference, as well as defining each term when it first appears in the main text.

2 PART I - AUDIENCE MEASUREMENT SURVEYS: DESCRIPTION

2.1. General Principles And Features Of Research Practice

Part I describes the main surveys of audience measurement within EC member states for television, press and radio.

By far the main use of audience measurement data is for the express purpose of selling and buying advertising space. Almost all funding proceeds from this quarter, the only significant exceptions being some public non-commercial broadcasters in television and radio. They constitute a special case. Otherwise, virtually all funding is geared to the needs of the private sector.

The universal shared emphasis on the needs of the advertising industry has helped to engender certain common features of audience measurement across all EC member states. The two most obvious of these are that, (a) nearly all surveys are national, and (b) nearly all audience data issue from a single source; that is to say, there tends to be only one, occasionally two, and never three or more general national surveys, to handle audience measurement for television, press, or radio.

The two qualities - being national and offering a single source - are connected.

Most surveys are national because of the national focus of media and advertising markets, and within the national boundaries considerations of cost and affordability make it plain sense for regional, and even some local media, to join with other media in national surveys. Besides, there is the additional consideration of advertising sales houses. Although a medium like commercial radio operates purely locally in some markets (e.g. Denmark and, till very recently, the United Kingdom), the stations have recognized the need to offer national sales houses and national audience research in order to attract national advertising support. Even if their direct clients are mainly regional, at least some will be accountable to national client centres.

Issues of resource and affordability also press for one national survey in place of two, three or four. It is not just a question of the media being able to pay for research that costs large sums of money for doing well, but also a matter of competition between rival research companies. In the case of television, France had two national surveys until last Autumn, when one, Sofres-Nielsen, pulled out on account of the losses it was sustaining through competition with its rival, Mediamat. Similarly, Ecotel and Media Control were forced to merge in Spain. The surveys changed ownership and the resulting merged survey is now known as Sofres A.M.. Portugal is now the only EC member state, and one of the very few countries in the world that is endowed with two television surveys. Both AGB Portugal and Ecotel Portugal are said to be losing money, and it is quite possible that there will eventually be only one national survey.

There is indeed a sense in which the practice of audience research tends towards natural monopolies. It may be particularly pronounced in television where the costs of research are several or more times higher than for press or radio due to the methodologies being employed, and where the main funding is supplied by very few media owners. Yet, even in the more fragmented medium of press the concentration of media owner control is often strong, and there is besides a general market need for a "single currency". By that is meant a single rule, or yardstick, for measuring audiences. Although advertisers buy time and space, rate cards and negotiating practices will invariably possess built-in flexibility to ensure that actual prices paid are regulated according to the volume of audience delivery. Accordingly, the last thing any national advertising industry wants are disputes arising from conflicting sources of data. More than this, there is strong demand, particularly among the media owners, for data that are accurate and reliable over time; or, what they really want are data that are stable over time, as this makes it easier to predict and sustain profit forecasts on each year's business plan. We shall return to this point later, as it possesses implications for the structure of research.

Apart from the commercial considerations, which have encouraged the convergent evolution of national media surveys in the EC, other common features are dictated by the basic principles and requirements of survey practice. We list the main items below with introductory comments and definitions. This is to help clarify the descriptive sections that follow.

2.1.1. Choice of Universe

All surveys take sample measures from a population. The universe is simply the envelope that defines the total population, which a survey measures. The envelope will define the geographic boundaries and location of the population, and contain other qualifications of importance.

As noted above, nearly all media surveys take their measurements from within national boundaries. Most television surveys will further define the survey universe as all television homes within the universe of all national homes. Then there may be additional qualifications, which would include demographic qualifications, such as the specification of businessmen for a national survey of readership specializing in the measurement of audiences for financial and business publications.

The total population is the population of all individuals meeting the criteria of the survey universe. The populations for which audience data are reported for purposes of trading advertising space will mostly be sub-populations of the total (universe) population.

2.1.2. Sampling Methods

Audience measurement for national populations relies on the drawing of representative samples: that is to say, samples, which preserve the same proportions of individual characteristics as would be found if measurements were taken across the entire survey universe. The characteristics are readings from selected variables that are judged to affect the survey output (i.e. audience data).

Two basic issues arise.

The first concerns the technique of drawing a representative sample.

The starting-point is the selection of the appropriate sampling frame. This is a source of information about the total survey (i.e. universe) population, which enables the sample to be drawn. Most important is the geographic dispersion of the total population, and in some cases the sampling frame will also provide a list of names, addresses or telephone numbers, from which contacts are initiated. Typical examples are census data, postal lists, telephone directories, and electoral registers. Such sources are also important for estimating the overall size of the universe, or total population.

The best choice of sampling frame depends on the quality of the sources that are available, and can vary over time. For example, the British electoral register used to offer a good sampling frame for the British population; however, its value was impaired with the introduction of the local poll tax a few years ago. This engendered two kinds of distortion in the representativeness of the samples that could be drawn from it. Avoidance of poll tax payments caused individuals to be dropped from the electoral register. At the same time, some councils are alleged to have become less conscientious in updating their records as a way of keeping numbers (and hence grants) up.

Once the sampling frame has been chosen the next task is to draw a random sample, using it as a base. This entails very complex rules since there are numerous practical obstacles to drawing samples that are truly random. For example, pure random selection from a list of telephone numbers will not on its own achieve a random sample as certain sections of the population are much more likely than others to be in, or to answer promptly, when the research company(s) conducting the survey makes its calls.

The outcome is that each interview method has very complicated rules for obtaining random samples.

Two departures are often made from the "pure random" method.

One is to use source information from the sampling frame in order to reduce sampling error. For example, if the census data indicate that two thirds of the survey universe are to be found in region A, then the chances of drawing a representative sample will be improved by drawing two thirds of the sample from region A. This will diminish the geographic sampling error, and thereby enrich the eventual sample. Had the supposed representative sample been drawn by another means without taking the underlying distribution of the population into account (say, half the interviews were conducted in region A because it represented half the geographic area of the country), this would have allowed the geographic sampling error to exist.

In practice, surveys may use up to half a dozen levels of stratification in order to improve the representativeness of the eventual sample. The majority, which conduct face-to-face interviews, will use stratification techniques to fix the location of sampling points from which contacts are made. In many cases, this will be "random", though there will again be strict procedures to ensure randomness. Typically this is achieved by pre-selection, whereby interviewers are assigned a randomly selected list of contact names and/or addresses at each sampling point, which they must attempt first before following the strict procedures for calling up substitutes in the cases of non response or acceptance. The acceptance rate of the survey is thereby defined as the percentage of the contacted names/addresses who participate in the eventual sample. The higher the acceptance rate the more likely the sample is to be truly representative of the survey population. It is especially important for surveys like the British National Readership Survey or the German Media Analyse, which provide demographic data for other surveys to follow.

The other departure from "pure random" methods is to select quotas. Their main purpose is to ensure that sufficiently large samples are drawn from specific subgroups of the population in order to enable satisfactory analysis. Whereas stratification is used to select the sampling points from which contacts are made, quotas are used to select or reject respondents

directly. The interviewer will follow set procedures of going from place to place until he finds someone who (a) accepts and (b) fills one of his quotas.

It is perfectly possible for the survey both to employ stratification in order to fix the number of sampling points, followed by quotas for selecting respondents. But, whereas stratification is used to enrich samples by reducing sampling error, quotas do not. On the contrary, the more quotas are used the larger the total sample size that is needed in order to achieve representative findings. It should be added that, because quota sampling methods do not employ pre-selection of names/addresses, they carry with them significant risks of variability and distortion on variables for which quotas have not been set. It is also very hard to assess the quality of quota samples as acceptance rate is a relatively meaningless statistic when applied to them. Having said that, pre-selected probability samples also carry risks of bias due to differential response rates among different target groups. As much as anything, it is a question of how well either method is carried out.

2.1.3. Sample Size

The theoretical determinant of sample size is the number needed to give reliable measurements; that is to say, measurements within an acceptable (however decided) band of sampling error.

For the very large universe and population numbers that are common in media research, the sample sizes needed to ensure reliable representative measures to a given degree of detail will not vary much. The critical determinants are not so much market size as:

- The resources available for the survey;
- The depth of analysis that is wanted;
- The methodology that is chosen for taking measurements.

The actual samples that eventuate may be seen as a trade-off between these competing considerations. The mathematical laws, on which the sample sizes depend, contain several important practical implications.

- The more specialized and varied the number of media titles in terms of distribution and coverage, the bigger the sample that is wanted.
- The more detailed the demographic and other breaks used for analysis, the bigger the sample that is wanted.

- The lower the market penetration of a title or station, the harder it is for a national survey to treat it adequately. Although a specially tailored local survey might serve its needs better, the national solution is likely to be the only realistic option due to resource limitations and the overall market need and preference for a single currency.
- The difficulties of low market penetration will be further compounded, as in the case of DTH reception, by patchy geographic distribution. It will be much less costly to research the audience, say, of a local cable station or regional title with 5% national penetration that is concentrated in a particular locality, than a minor satellite station or consumer magazine, also with 5% national penetration, but with dispersed reception/distribution across the entire country. It will both cost more in order to build a sample for the dispersed media with low national penetration, and place greater strain on the quality of the sampling procedures as a function of the clustering that may exist.

2.1.4. Choice of Methodology

The choice of methodology is chiefly governed by the choice of measure. In sampling terms, there are two basic options:

- Panel measurement
- Interview measurement

Panel measurement is often referred to as continuous since it employs the selection of a sample that yields a stream of measurements over time without interruption. By contrast, interviews are one-off and therefore discontinuous. The pairing of continuous versus discontinuous is also used in a second sense: a continuous survey being one that is carried out through all twelve months of the year without break, and discontinuous where there are breaks. In general, panel surveys are continuous in both senses, whereas interview surveys can be continuous or discontinuous over time.

The great advantages of panels over interviews are that, (a) they enable the collection of by many orders of magnitude more data from each individual, and (b) common derivative combination measures, such as cover and frequency, can be based on real calculations. With one-off interview measures this cannot be the case: instead, the data have to be modelled, using mathematical formulae.

There is, however, a price to be paid for continuous panel measurement. Because of the high costs associated with panel measurement, the

samples for panel measures tend to be appreciably smaller than samples for interview measures. In comparing television (all panel) with press (all interview), national survey samples for television are typically a quarter or less of the size of the press samples and cost five times as much or more.

Because of their size, the panels used in media research require conducting a separate establishment survey (as noted under section 2.1.2), of which the main functions are to determine the demographic composition of the survey universe, and in most cases to provide separately a list of addresses from which to draw a representative sample for the panel. Another important feature of panel research is the necessity of panel controls and complicated editing rules and weighting procedures in order to maintain the stability of the panel measures over time.

Although the panel may report continuously, individual panel homes/respondents will come and go, and the total number of valid reports will vary from day to day. The panel controls are in essence a set of quota requirements to ensure that the demographic composition of the panel stays close to the demographic composition of the universe on selected variables. It will never do that precisely; hence the employment of corrective weights afterwards to adjust the aggregated measures in line with the proportions to be found in the survey population.

For example, if we define half the population as "older", and half "younger", and the older half watches television twice as much on average, a panel comprising two thirds of individuals within the older group will systematically overestimate viewing without the application of panel controls (viz. ejection of some older panellists for replacement by younger panellists) or corrective weights.

By contrast, interview measurement, although less complex, entails a wholly separate set of methodological issues. As a general rule, interview measures rely more on human memory (it would be extremely difficult to make panels work unless the task demands were fairly undemanding), be it via recognition, reconstruction or recall. This brings with it a series of additional concerns about such factors as: choice of stimulus material; wording and sequence of questions; rotation of questions; classification of responses; and interviewer effects.

2.1.5. Choice of Measure

By far the main uses of audience measurement are for advertising sales and programming/editorial. The demands of the former predominate and require a higher level of precision.

For purposes of advertising sales, the ideal measure is exposure to an advertisement, or opportunity to see/hear. How far this can be achieved in practice depends on the physical and commercial constraints on each medium. These are hugely different, with television and press occupying the two extremes, and radio a halfway house between them.

In the case of television, something very close to the ideal measure is possible thanks to metering technology. Several physical factors favour its application. They include the following attributes.

- The medium is electronic.
- Television sets are usually static.
- The great majority of television viewing is in the home.
- Advertising spots (a) occur in real time, and (b) are unavoidable if the station is tuned to them. (Video timeshift presents a slight difficulty, but one that can be quite easily surmounted for practical purposes.)

Metering television sets is expensive, and requires panel methodology. Here television obliges commercially, by exhibiting the least fragmentation of the media under consideration. In most European countries the top six or seven channels (or fewer) will command over 90% audience share on the back of wide national distribution. As a result, the demands of the dominant media owners can be met by relatively small panels.

The same attributes also make television amenable to diary measures. Although diaries can provide reliable estimates of viewing, they possess several limitations in terms of volume and fineness of detail, speed of processing, and reliance on memory.

Setmeter and diary panels are an interim stage between an all diary and an all meter approach. By this method, a meter (the "setmeter") registers set status (i.e. to which channel the set is tuned at any moment), and panellists simply record their presence as viewers in their diaries. Cross-referencing the two sets of records enables the estimation of viewing by individual demographic groups.

Though lessened, the burden of memory is still present in the setmeter and diary approach, and the individual diary entries remain limited in the precision of measurement that they can offer. Throughout Western Europe, television viewing is now measured by dual meters: one for the set, and, one for the individual, who simply presses his designated button (nowadays via remote control keypad) at the beginning and end of each viewing session. This type of meter is called the peplemeter. For

the time being it is the most sophisticated and reliable tool available for measuring television audiences, and is best able to fulfil the demands of national audience surveys.

The main attributes of print media are the antithesis of the qualities which make television so amenable to meter measures of the opportunities to see. In particular:

- The print media covered by national readership surveys are entirely non-electronic.
- Newspapers and magazines are portable, not static.
- Press advertisements occupy space rather than real time, and, as a result, are not necessarily encountered when a publication is read.
- A lot of reading takes place outside the home.

In addition, the much greater fragmentation of the print media necessitates the employment of larger samples.

Because of these contrasting features, print media are not susceptible to meter measurement (or, so far, no one has found a way to conduct them), nor even do diaries provide a satisfactory solution. Although it has been tried in experimental studies, the diary approach has proved problematic in terms of accuracy and sample size, and no national readership survey, as far as we are aware, uses it.

Instead, readership research relies on less direct measures of exposure that are taken from interview surveys employing large samples. Such an approach places a significantly greater burden on memory, and too, the level of detail is constrained by interview length. Interview length is a point of major importance in readership research, and involves trade-offs between the numbers of titles covered, the depth of the controls, the precision of the measures, and the gathering of other important commercial data such as source of copy and place of reading.

Today, two kinds of readership measure are to be found in European national surveys.

- The "Recent Reading" technique asks the basic question, "When did you last read or look through such-and-such a newspaper or magazine?" It does not matter which issue, or where a copy of that publication was read, or to whom it belonged. The reader is anyone who last looked at a copy of the said publication within its "issue period": defined as the period stretching back from the day preceding the interview to a point corresponding with the publication interval of

that title (i.e. one month for monthly titles, one week for weekly titles, and so on). The end measure is termed "average issue readership" (AIR).

- The "First Read Yesterday (FRY)" attempts to reduce the memory burden associated with "Recent Reading" by asking only about titles looked at yesterday and the number of different issues looked at. It then establishes whether yesterday was the first time this happened for each title and issue, and arrives at a total FRY score for each title, by combining the separate FRY scores for each issue. Having established a FRY score for each title, the method calculates a total score by multiplying this statistic by the publication interval in order to estimate AIR.

The differences between the two measures are not that they try to measure different things - both measure AIR - but that they do things differently, and possess different strengths and weaknesses in the process. We will describe some of the differences in the next section. The points to note here are that:

- Two types of readership measure are current in national readership surveys in EC member states, both purporting to measure the same abstract quantity, AIR, but with techniques that employ different operational definitions of it.
- Either method is associated with a different interview methodology: Recent Reading with face-to-face interviews, and FRY with telephone interviews. The nature of telephone interviewing and the restriction of asking about yesterday entail shorter interviews and less collected information on readership. The two factors push for bigger samples.

Lastly, the halfway house of radio. Radio is like television in that it is electronic and advertising spots occupy real time, and like press in that radio sets are mostly portable, much listening takes place away from home, and the medium tends to be much more fragmented than television. But also, big differences exist in the structure of commercial radio from country to country. As a result, the techniques of measuring radio listenership are the least unified out of the three media, and share features with television and press. Although there has been talk of meter measurement, radio set- or people- meters are not yet reality.

2.2. National Surveys Of Television Audiences

2.2.1. Organization (Tables 1 - 4)

Table 1: Historical Introduction of Peoplemeter Methodology

All national television surveys in EC member states employ peoplemeter panels. Indeed, television is the only medium that can boast a unified methodology. Before their introduction, several different methodologies were employed, and the operational definitions of commercial ratings were never identical between any two cases.

Today's peoplemeters all use remote control keypads for signalling viewer presence. They were introduced in Europe from the mid-eighties onwards, albeit manual versions have been used in Germany and Ireland since the seventies.

Table 2: National Peoplemeter Surveys in EC

Apart from Portugal, only one operational peoplemeter panel per country fulfils market needs for a trading currency of ratings. France and Spain each had two peoplemeter panels a year ago, but economic conditions forced the reduction to one panel in each country, and the same could happen in Portugal. Mostly, the research is conducted by one research company, which supplies the market with audience data. The main exception is France where two research companies, Secodip and Audimedia, each carry out half the fieldwork at the behest of Mediametrie, which performs the data processing and holds the contracts with other parties.

The precise contractual arrangements vary from country to country, though three basic models are discernible.

Media Owner Control (MOC): The main contract(s) is between one or more media owners and the research supplier(s). Out of the three pure examples of MOC contracts in Table 1, two - Denmark and Germany - are single main contracts which guarantee the funding of the surveys. In the case of the Netherlands, NOS (programming and network co-ordination) and Ster (advertising sales for the public network) were the original main contracting parties. Later RTL-4 and others joined with separate and variable contracts. The existence of an MOC structure does not preclude the research supplier from selling the audience data to other parties, depending on the clauses of the agreement. It functions

mainly to guarantee the basic funding of the service, specify the research requirements and lay down any conditions of access.

Joint Industry Control (JIC): The main contract is between a body representing all three parties belonging to the advertising industry - i.e. media owners, advertisers and agencies - and the research company(s). The JIC body is also responsible for technical specifications and overseeing the running of the peplemeter service. As with MOC, JIC contracts are intended to cover the basic funding of national peplemeter surveys, though JICs like BARB and Auditel are separate bodies (there are no MOC bodies as such) and are very much involved with the commercial exploitation of the audience data. Ireland and Belgium are special cases. The main contractor in Ireland is RTE, which also owns the copyright to the data; however, the TAM service is supervised by a joint industry management committee, in which decisions are arrived at by consensus. As for Belgium, the contracts are partly with CIM, a joint industry association that oversee media and other marketing research, and partly with groupings of TV stations/advertising sales concessionaires.

Own Service (OS): There is no special contract(s) that guarantees the basic funding of the service, although the funding provided by the main media owners may account for a sizeable majority share of total funding. The panel remains the commercial enterprise of the research company.

As noted above, no two countries operate with the same basic arrangements. In most instances, there is a degree of supervision by all parties. Although, for example, there may be no formal JIC, as in France, joint industry bodies, like the CESP in France, do perform some of the functions of a JIC. Or there may be a joint industry users' committee, as in Germany or Spain, which can recommend courses of action or influence decisions, even if it possesses no formal decision-taking powers.

However the research is organized, the critical questions, to which we shall return later, are:

- What are the conditions of access for using data? Are the rules the same or different for different parties?
- How transparent is the survey methodology? This is also a question of access, but access for validating the research data.

Table 3: Ownership of Research Company(s) Supplying Data and Duration of Main Contracts

All research companies are privately owned, and have no connections with media ownership, with the exception of Mediametrie. The latter is formally constituted to have tripartite ownership by media owners (TV and radio), advertisers and agencies. Formerly, the AGB group of companies was owned Robert Maxwell, but the group has been disbanded and sold off since his death. There are still some lingering connections and ties between the members of the old AGB family, some of which have retained the brand name, but are now completely independent of one another. The ex-AGB group is follows:

- AGB Benelux: North Belgium and Netherlands - umbrella name for company owning Aspemar and Intomart, but not used for trading. The board of AGB Benelux is the same as the board for Intomart.
- Gallup: Denmark
- AGB TAM: Ireland.
- AGB Italia: Italy, Greece and Portugal - 100% owner of AGB Italia and majority owner of AGB Hellas and AGB Portugal.
- Taylor Nelson AGB: United Kingdom.

The one other grouping of companies under common ownership comprises Sofres A.M. in Spain, Ecotel in Portugal and Sobemap in South Belgium. Sofres is the leading and controlling shareholder in each.

Mostly, the contracts with television stations or joint industry parties are in the order of five years. Sometimes they include extension options. In one or two cases (e.g.. Intomart in the Netherlands) contracts have been renewed mid-term. Companies operating their own private systems tend to operate with much shorter, usually one- or two- year contracts. Ecotel's contract with RTP in Portugal is said to be for five years, though.

Table 4: Balance of Funding

Regardless of the type of contract, media owners contribute the bulk of the funding, except for AGB Portugal, where the difference is caused by the Ecotel Portugal's current exclusive contract with RTP. The figures are slightly misleading in so far as the real costs of research combine basic subscription charges with user charges, plus equipment and staffing costs. The last of these is not part of the break-down of funding, and in those cases where media owners cover almost the entire basic funding of research, and the advertising community pays almost

nothing by way of direct subscription, user charges can be quite substantial.

The advertisers contribute almost nothing either to the direct cost of funding research or towards purchasing the data, leaving such payments to their media buyers. Between 0% and 5% is funded by other sources.

2.2.2. Universe, Establishment Survey and Sample Size (Tables 5-9)

Table 5: Survey Universe

All but three panels measure national universes. Reflecting the lack of resources, the Greek universe comprises just the metropolitan areas of Athens and Thessaloniki, as well as urban concentrations of 50,000 or more inhabitants. It covers an estimated 53% of the national population. By contrast, the combined universes of North and South Belgium, which separately cover the two main linguistic regions, account for more than 100% due to the duplication in Brussels. There, both panels accept Flemish-speakers, though only the South panel includes the Francophone population. Besides these exceptions, the national panels in Italy, Portugal and Spain leave out some or all offshore islands, which, strictly speaking, belong to their national universes. Sicily (Italy) and the Balearic Islands (Spain) are included in their respective national TV universes.

All national universes are restricted to private households; most exclude homes without TV (c1%-2% of the universe of all homes); and France excludes homes without telephone (again probably a negligible percentage). France and Ireland further exclude DTH homes, though not cable, from their panels (from 0%-2% penetration), albeit, in the absence of adequate establishment survey data, DTH homes will most likely be counted as part of the national universes.

The majority of panels set a lower age limit of 4 years and only Germany sets an upper age limit (99 years). Several, including Germany, set a language restriction, and only Germany sets a restriction on nationality (viz. head of household must be German). None claims to exercise specific restrictions on ethnic origin.

Table 6: Establishment Survey - Survey Type

Two broad categories of establishment survey exist. In half the cases, the research companies responsible for running the panels will conduct their own separate establishment surveys (unless, as in the UK, one

company is awarded the contract for one set of functions, and another for another set of functions, in which case the tasks of running the panel and conducting the establishment survey may be split. The essential point, however, is that the establishment survey and panel measurement belong to the same total research operation). In the other half of cases, the research companies borrow establishment data from national multimedia surveys.

The drawbacks of using multimedia surveys for establishment data are that neither the television questions on the surveys nor the sampling procedures they employ are fully geared to the specific needs of television, and may, as a result, not get to grips properly with the (growing) complexities of estimating channel penetration and types of reception. The German panel partly compensates for this by employing a second separate survey in order to quantify three basic universes: "cable", "terrestrial" and "satellite".

Table 7: Establishment Survey - Sampling Methodology

Various sources are used as sampling frames. As noted in section 2.1., there is no one correct source. It is a question of using the most trustworthy source in each case, and recognizing that the quality of the source may vary over time. Quotas, when they are applied, seem to be mainly regional. One recognized danger of quotas based on individual characteristics is that the interviewer carrying out the research subconsciously complies by favouring average-looking households or individuals for the quota categories

In general, the larger the survey universe, the larger the annualized samples of households and/or individuals, depending on whether the survey interviews one or more persons per household. But, as mentioned previously, the key determinants are not so much size of universe as: affordability; the complexity of the viewing environment; and varying local demands over the precision of measurements. The largest sample belongs to the BARB survey in the United Kingdom. It is so partly because of national requirements for over-sampling in overlap areas between ITV and BBC regional stations. This is in order to establish effective regional universe boundaries, which is in turn related to the regional basis of airtime sales in the United Kingdom.

Table 8: Establishment Survey - Data on TV Reception

Establishment surveys vary over the level of detail with which they attempt to quantify different modes of reception and station penetration. This will affect the reliability of their estimates.

All surveys will ask respondents which channels they can receive, or show/read to them a list of stations and ask which they receive. Overall, the surveys record nearly every channel that is received, even for those countries where the table reports a "selection" of stations. However, when it comes to the minority stations, there is ample scope for individual error in knowing which ones are received, and only three surveys purport to carry out a channel check during the establishment survey interview.

Definitions of cable, SMATV and DTH vary, not least because they depend on the types of housing to be found in each country and national structures of cable and community antenna reception. Some countries like Belgium, which is all cable, or Italy, which has practically no cable or satellite reception of any kind, present no special difficulties. Others, such as Denmark, are much more problematic for establishing precise criteria.

Table 9: TV Homes Universe and Panel Size

In general, the larger the national market the larger the national panel, but lower the ratio of panel homes to size of population. The Spanish and British national panels are bigger than the French, German and Italian panels because of the extra regional requirements. The smaller markets are constrained more by the threshold sizes needed to yield adequate samples for the main demographic categories.

2.2.3. Data Reporting (Tables 10-14)

Between the drawing of representative samples and reporting of viewing figures is an important middle stage of data processing and calculation. Much attention has focused on different viewing instructions (viz. "presence in room with set on" versus "presence in room with set on and watching"), and on the different computer algorithms for calculating ratings. A channel rating, or GRP (gross rating point) is the average percentage of a specified population viewing that channel over a given interval (e.g. programme, commercial break or unit time period). Ratings can be added to give a cumulative audience across a number of intervals, and a rating of 100 means simply that on average each member of the said population has viewed that channel once. Meters are sensitive to second by second changes, so that theoretically ratings for a channel can be calculated by adding all the seconds assigned to it over the interval and dividing by the maximum possible. To do this requires massive computer storage. As a result, different meter systems employ diverse averaging techniques. For example, they may carve the time intervals into minute units and take a snapshot of viewing at each mid-point of the

minute. Whatever someone is viewing then is accepted as his viewing for the entire minute, and it is further assumed that the inevitable errors of estimation for each individual will randomize out, so that the gross viewing figure for the chosen population remains undistorted.

We have deliberately ignored the differences for the purpose of these tables, though will comment on them in assessing the comparability of different systems. We have left them out of these tables because they involve much complicated detail, and are, in our opinion, a side track from the real issues affecting the evenness of treatment of media and even comparability.

We have likewise included in these tables only a selection of items where national systems vary over what they report. We will cover issues, such as guest viewing and treatment of holidays and absences, in section 3.2. on comparability and the current extent of harmonisation.

Table 10: Universes for Reporting Ratings

We have defined the rating or GRP for a channel as the average percentage of a designated population viewing it over a given interval. The basis of the population estimate is the homes universe. If a channel is present in only 50% of homes, its ratings should, according to the strict definition, be referenced against its receiving universe. For purposes of comparison, it is often convenient to evaluate channels against at least one common universe: the national universe of homes. Supposing this to equal 100%, the ratings of our channel will be halved, though the estimate of total impacts - impacts being the number of exposures, or opportunities to see - will be the same. Thus a rating of 10 against 50% of homes is equivalent in terms of total audience to a rating of 5 against 100% of homes.

The common practice, especially in cable and satellite markets, is to report ratings for more than one universe. The employment of as many as seven different universes in total within EC member states reflects the varied viewing environments from one territory to the next.

Table 11: Stations Measured/Availability to Media Buyers in Main Reports

Transfrontier overspill of television signals has increased substantially over the last decade in half the EC member states owing mostly to the expansion of satellite broadcasting and cable/DTH reception. In most countries too, the total number of channels which can be received adequately by at least 5% of the population is well into double figures, or beyond.

Meters are sensitive to all uses of the television set, and all surveys require an extensive channel check of tuned and untuned channels at the time of meter installation. So as not to disturb viewing patterns in the recruited homes, the standard practice is for installation engineers to leave the television sets as they found them after they have completed their checks. The check is important for subsequent validation of correct channel identification by the installed meters.

Though all stations are coded there is no guarantee that the surveys will preserve the meter records of them all, or even report their audiences. As a general rule, most domestic stations are reported if they enjoy sufficient penetration (i.e. large enough to yield adequate samples). Many foreign overspill stations are not reported. They are more likely to be reported if they broadcast in the same language as the domestic channels, though, as in the case of Ireland, this is no guarantee that they will be reported. Of the foreign language stations, those that do get reported are mostly English-language.

Table 12: Demographic Breaks

Audience data can be supplied to the advertising industry in two ways. On the one hand, surveys may report viewing figures by specific target groups (e.g. All adults, Men 24-45, ABC1 44+, etc). Since the proportion of these groups within the panel will vary over time, if only because up to 10% of the panel will be excluded each day for whatever reason (e.g. meter failure, invalid viewing statements etc), and will very rarely match the proportions in the survey universe, weights are used in grossing the panel estimates in order to provide the eventual ratings for each group. Such viewing figures are termed aggregated data. They are the basis for estimating ratings and costs per thousand (i.e. unit costs of audience delivery), and provide the basic "audience currency".

The alternative is to ask for special analyses, where the choice of target group is more flexible and is made to suit the specific needs of the client (either seller or buyer). This is typically wanted when the client seeks to analyze a particular schedule of spots, and obtain measures of cover (total population reached by the schedule) and frequency (average opportunities to see out of the total cover).

There are important roles for both aggregated and special analyses, and overall, a wide range of different software products is available across Europe for handling them, though it is also probably true to say that the quality of the products and adequacy of commercial arrangements also varies considerably from country to country. One advantage of aggregated analyses is that they save on computer storage. With the continuing developments and improvements in computer processing capacity and software, there is growing emphasis on clients being able to

choose whatever analyses they want so long as the variables they chooses are coded by the system. However, aggregated analyses are likely to remain important for several purposes, including international comparisons.

What Table 12 shows is that there is little uniformity over age groups, or the number of socio-demographic groupings that are used by different national peoplemeter systems in EC member states.

Table 13: Earliest Availability of Ratings Data to Buyers

The entries in this table refer mainly to aggregated outputs.

In most cases, data for basic time periods, commercials, and programmes are made available the following day. The practice is for meters to store the day's data, and for the central computer at the company collecting and processing the viewing data to poll it over the telephone line daily, in the early morning (e.g. at 03.00). The down-loaded raw data are then cleaned (i.e. checked and edited where necessary), weighted, and released to users. Time periods are easiest to produce, as the provision of ratings for commercials and programmes requires the additional cross-referencing of meter records against transmission logs of the television stations.

Where it takes longer for the data to be released than the next day, the reasons may be attributed to several causes: TV stations wanting the results ahead of the buyers (Belgium); extra processing requirements (e.g. Italy and the United Kingdom: the latter being the one country to include video timeshift - up to one week after recording - in the final records for commercials and programmes); limited resource/infrastructure (East Germany and Portugal (AGB)).

Table 14: Time Periods of Reporting

Another important area for comparability and the determination of computer software for cover and frequency or other analyses concerns the time units for reporting in the aggregated or special analyses. Of particular interest to note in Table 14 is the division between those countries that supply ratings for individual commercial spots or the next closest thing, minute by minute ratings (usually, the commercial spot rating is the rating of the minute in which the spot appears), and those which only supply data for the commercial breaks as the minimum unit.

Table 15: Access and Formats of Reporting

A few years ago, the emphasis in most systems was on producing printed reports. The general trend is towards electronic access via diskettes, PC-based applications and mainframe analyses offered by the data supplier or research bureaux. Here the distinction between aggregated data and other data is again important: this time focusing on the distinction between data that are stored in aggregated cells, that involve the collapsing (and hence loss) of information about individual records, and data that are retained at the individual level. Often this second category is referred to as raw data, or data held at the level of the individual respondent. There are varying degrees of rawness. Usually, some editing and cleaning will have taken place, and the individual records will contain all the coded socio-demographic and other information that are needed for analyses by selected target group. Such information provides the basis of cover and frequency analyses, but raises a critical issue of access. Namely, can users examine the raw records individually by household and apply their own software for analysis, or can they see the data only through someone else's software? Only the French and British systems claim to cater for the latter. Aside from any value such access may have for commercial practice, full access to raw data is considered by some to be an important condition of transparency in research methodology.

One other point about Table 15: access to data held at the level of individual respondents can be obtained via diskettes and PC-based applications, but, as in the case of the Dutch on-line access, it will require specific software for addressing.

2.2.4. Ownership of Copyright and Access (Tables 16 and 17)

Table 16: Ownership of Data Copyright

Ownership of copyright and special conditions governing its application reflect the national structures for controlling research. Countries may be grouped into three categories:

JIC Ownership: In Belgium, Italy, and the United Kingdom, audience data are the property of the JIC which specified the research contract. Subscribers to the CIM, Auditel or BARB, have automatic access to the data. beyond that, the JICs may establish their own rules for selling data to other parties. It appears that the exploitation of data copyright in Belgium is restricted to the sphere of CIM membership, whereas there are no such special conditions for Italy, or the United Kingdom.

Own Service: This applies in Greece, Portugal (both AGB Portugal and Ecotel), and Spain, where the research company operates with total freedom, apart from the basic constraint of having to meet market needs.

Media Owner Contract: Four EC member states - Denmark, Germany, Ireland and the Netherlands - fall under this heading, but there exists a basic division over the ownership of copyright.

The one company, which does not fit easily into any of the three categories is Mediametrie in France. In certain respects it behaves like an "Own service" operator, and in others like a JIC. The main funding is guaranteed by contracts with the television industry and media buyers, whilst Mediametrie is itself a "joint industry company", whose shareholders include its main clients. In fact, the statutory composition of the board of Mediametrie comprises 35% TV stations, 35% advertisers and agencies/media buyers, and 30% radio stations. It operates freely as a private commercial enterprise in supplying data to the market.

Among the MOC group of four, Gallup in Denmark, and Intomart in the Netherlands are similar to Own Service companies in being able to sell data freely to other parties after having met the demands of their main contractors. The only strings attached are the minor public service conditions that apply in the Netherlands. There, Intomart provides special audience analyses for the public broadcasters concerning the audiences for the broadcasting societies that programme the three public networks. This is sensitive, confidential information relevant only to the public broadcaster and overseeing powers in the government.

Lastly, RTE in Ireland, and AGF, which represents the ensemble of TV stations in Germany, retain copyright to the audience data in their countries. In the case of Ireland, RTE allows AGB TAM some freedom in selling information to other parties, but decides the overall conditions of supply. That said, Irish TAM is managed by a joint industry committee, and to our knowledge, the conditions imposed by RTE are supported by the advertisers and agencies. The German situation is rather different, though, as the TV stations have laid down a number of conditions on the supply of data to the wider market. The research supplier, GfK, obtains income through selling the data, but there are bounds on what it can do. Requests for analyses or data beyond these bounds must be referred to the television stations.

Table 17: Restrictions on Access

This follows on from Table 16. In most countries there are no specific restrictions on what data can be supplied to the market, beyond the release of raw data, which only takes place in France and the United

Kingdom. In that sense, most systems exercise some control over what they will release to the market. Granted that the data are accessible in some form, most systems are open in what they sell. The three main exceptions are Belgium, Ireland and Germany. With the first two countries, the restrictions apply to the reporting of cross-border data, and in addition, the broadcasters in Belgium and Ireland get access to more data than is released to the advertising community. With Germany, the main restriction imposed by AGF is its refusal (except on occasion through special permission) to allow analysis of advertising data at finer levels than the commercial break.

One restriction, which is not covered by this table, is the general refusal by the parties selling the data to publish figures for television stations that are not already buying the data from them. If say, Eurosport chooses to buy audience data from Intomart in order to assist airtime sales, Intomart will publish the data. Otherwise it will not, since it is not in the business of giving away valuable commercial information. As far as we are aware, the same applies with every other system.

Another restriction, which is not covered by this table, concerns the commercial payments demanded by the copyright owners for the sale of their data. We shall cover this in greater depth in section 3 since the scale of tariffs is very important to the evenness of treatment for different parties. The general practice is for the sellers of audience data to employ rate cards with different pricing levels for different categories of client. The prices charged may or may not be adjusted to the perceived benefits of the data to the customers. As a general rule, for example, media buyers will be charged fees that take into account their overall size in terms of TV billings. The rules may be less even for the TV stations.

Lastly, access by other parties. The right hand column in Table 17 is not intended to be exhaustive. As noted in the beginning, by far the main use of audience data is by broadcasters for purposes of programming and advertising sales, and by the advertising community. Some independent TV producers, usually no more than a handful, buy the audience data. Though not listed exhaustively in Table 17, probably all systems supply topline audience data to publishers for listings. Likewise, some supply audience data to computer bureaux or other consulting bodies. For others, the sale of their own software for analysis represents an important extra revenue stream, and they retain monopolistic control.

With regard to specific uses of audience data by government and copyright bodies:

- We have identified several cases where a government ministry or information agency purchases audience data. As far as we can tell, none uses the information on audience share, unless it is a question of

a government department reviewing the licence fee. In other words, the case for the licence fee, or the justification of any change in it is a political issue, where considerations of audience share are bound to feature. This apart, we know of no instance where audience share data are part of legislation regulating media concentrations. The main use of audience data seems to be to monitor the volume of advertising and other matters of content (e.g. source of programming, balance of programming, etc) that are covered by national media laws. We also point out that Table 17 will under-estimate the use of audience data by governments, since they can (and will from time to time) obtain the data they need by going directly to their public broadcasters without reference to the data supplier. That is to say, they do not necessarily need to take out a subscription in order to obtain the data they want. However, there is no evidence that any EC government currently exerts significant influence over the form and structure of survey methods.

- We have encountered two cases where audience data are/may be used for copyright purposes.

First, Agicoa buys audience data from Intomart in the Netherlands in order to fix cable rights payments for foreign channels. Were the data easily obtainable from other countries, one might expect Agicoa to purchase audience data from the other main cable markets - viz. Belgium, Denmark, Germany, Ireland, and possibly the United Kingdom - however, access is almost certainly ruled out in at least three cases (Belgium, Germany, and Ireland) on account of the restrictions already mentioned; the United Kingdom is a non-starter because the cable and satellite services with any audience share at all are domestic; and Denmark is awkward on account of the problems in defining cable for versus SMATV. Therefore, we suspect the use of audience data to be very limited in the collection of rights payments from cable networks.

Second, Mediametrie has reached agreement with other national data suppliers to offer a special international programme ratings service. We understand that it has discussed the supply of ratings data with the European Broadcasting Union, and assume that the information would be used in negotiating televised sports rights with EBU members. Again, there are a number of issues surrounding the use of audience data in this way seeing that not only is size of audience indirectly related to commercial value - even on many occasions for private broadcasters - but it also depends most heavily on when the programme is scheduled. This (and the choice of channel - also important) may be more or less predictable for televised sports among EBU members, but it would constitute a special case.

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Table 1 - Historical Introduction of Peoplometer Methodology

Country	Launch of First Peoplometer Panel	Previous Methodology
Belgium (N)	Oct 1989	Diary (BRT in-house panel)
Belgium (S)	Aug 1988	Face-to-face interview/day after recall
Denmark	Jan 1992	Telephone interview, up to 5 days after recall
France	Jan 1989	(1) Setmeter; (2) Diary; (3) Face-to-face interview/day after recall
Germany	Jan 1985	(1) Face-to-face interview/day after recall; (2) Peoplometer (1)
Greece	Nov 1987	Ad hoc face-to-face interview/day after recall
Ireland	May 1989	Manual/postal peoplometer
Italy	Dec 1986	Diary
Netherlands	Jul 1987	Setmeter and diary
Portugal (1)	Jul 1990	Face-to-face interview/day after recall
Portugal (2)	Mar 1991	Face-to-face interview/day after recall
Spain	Mid 1987	Face-to-face interview/day after recall
UK	Dec 1984	Setmeter and diary

(1) Germany: Telescan peoplometer panel ran from 1975 - 1984; however, the data were very little used by the advertising industry. The switch to peoplometer data coincided with the launch of commercial television by satellite in 1985.

Table 2 - National Peoplemeter Surveys in EC

Country	Survey	Research Company(s)	Research Company Supplying Data	Type of Contract	Main Contractor(s)
Belgium (N)	Audimetric	Aspemar	Aspemar	JIC/MOC	CIM/BRT
Belgium (S)	Audimetric	Sobemap	Sobemap	JIC	CIM
Denmark	Gallup TVR	Gallup	Gallup	MOC	TVR (DRK/TVR/TV2/TV3)
France	Mediamat	Audimedia; Secodip; Mediametrie	Mediametrie	Tripartite	TV Stations, Agencies
Germany	GfK	GfK Fernsehforschung, Nürnberg	GfK Fernsehforschung, Nürnberg	MOC	ARD/SZDF/RTL, Sat-1, Pro 7/DSF
Greece	AGB Hellas	AGB Hellas	AGB Hellas	OS	na
Ireland	TAM	AGB TAM	AGB TAM	MOC	RTE
Italy	Auditel	AGB Italia	AGB Italia	JIC	Auditel
Netherlands	Intomart	Intomart	Intomart	MOC	NOS/Ster; RTL-4
Portugal (1)	AGB Portugal	AGB Portugal/Marktest	AGB Portugal/Marktest	OS	na
Portugal (2)	Ecotel	Ecotel Portugal	Ecotel Portugal	OS	na
Spain	Sofres A.M.	Sofres A.M.	Sofres A.M.	OS	na
UK	BARB	AGB TV; RSMB	AGB TV; RSMB	JIC	BARB

JIC = Joint Industry Committee
MOC = Media Only Contract
OS = Own Service

Table 3 - Ownership of Research Company(s) Supplying Data and Duration of Main Contracts

Country	Survey	Research Company(s)	Research Company		Contract Duration	
			Ownership (1)	Ownership (2)	Start	End
Belgium (N)	Audimetrie	Aspemar	AGB Benelux (Private)		BRT: Mar 1988 CEM: Oct 1989	Feb 1996
Belgium (S)	Audimetrie	Sobemap	Sofres (Private)		Jan 1991	Dec 1995
Denmark	Gallup TVR	Gallup	Private		Jan 1992	Dec 1996
France	Mediamat	Audimedia, Secodip, Mediametrie	Private *		Jan 1992*	Dec 1995*
Germany	GfK	GfK Fernsehforschung, Nürnberg	Private		Jan 1985	Dec 1994
Greece	AGB Hellas	AGB Hellas	AGB Italia (54%)/Private		Short term	na
Ireland	TAM	AGB TAM	Private		May 1989	Apr 1994
Italy	Auditel	AGB Italia	Private		Sep 1991	Dec 1996
Netherlands	Intomart	Intomart	AGB Benelux (Private)		Jan 1991	Dec 1996
Portugal (1)	AGB Portugal	AGB Portugal/Markttest	AGB Italia (60%)/Private		Short term	na
Portugal (2)	Ecotel	Ecotel Portugal	Ecotel Spain (60%)/Norma (40%)/Private		Variable	na
Spain	Sofres A.M.	Sofres A.M.	Sofres (60%)/Telefonica (40%)		Short term	na
UK	BARB	(1) AGB TV; (2) RSMB	(1) Taylor Nelson AGB (Private); (2) Private		Aug 1991	Jul 1998

(1) All the research companies supplying audience data to the advertising industry are privately owned. Only the French Mediametrie currently includes media owners among its shareholders. The contract dates in the right hand column are for the contracts between Mediametrie and the two other research companies carrying out the fieldwork. The AGB group of companies used to be owned by Robert Maxwell.

Table 4 - Balance of Funding

Country	Survey	Media Owner (%)	Advertiser (%)	Media Buyer (%)	Special Notes
Belgium (N)	Audimetrie	80%+		20%-	Main agency payment via subscriptions to CIM
Belgium (S)	Audimetrie	80%+		20%-	Main agency payment via subscriptions to CIM
Denmark	Gallup TVR	100%			TVR 100% of basic costs; Gallup sells separately to other customers (1)
France	Mediamat	c80%		c20%	c2% other parties, agency total includes three advertisers
Germany	GfK	100%			Agency/other parties pay mainly via user charges
Greece	AGB Hellas	c55%		c40%	Other c5%
Ireland	TAM	80%		20%	Agency payments via IAPI, national agency association
Italy	Auditel	100%			Basic funding only
Netherlands	Intomart	85-90%		10-15%	Agency total includes all other. Agencies pay the major part
Portugal (1)	AGB Portugal	c25%	0-5%	c75%	
Portugal (2)	Ecotel	na	na	na	TV stations supply main funding
Spain	Sofres A.M.	c75%		c25%	
UK	BARB	c70%	c0.5%	c30%	Agency payments via IPA (c25%) national agency association and AMI (c30%), national association of media independents

(1) TVR is the advertising sales concessionary of TV2. TVR has signed the contract on behalf of all the television stations, which jointly pay for the Gallup survey.

Table 5 - Survey Universe

Country	Survey	Geographic Scope	Homes Without TV	Homes Without Phone	Lower Age Limit Indiv.	Specific Requirements of Nationality, Language & Ethnic Origin
Belgium (N)	Audimetrie	N Belgium/Brussels (1)	No	Yes	6 (2)	Flemish language (1)
Belgium (S)	Audimetrie	S Belgium/Brussels (1)	No	Yes	6	One of three national languages (1)
Denmark	Gallup TVR	National	No	Yes	4	Danish language
France	Mediamat	National	No	No	4	None
Germany	GfK	National	No	Yes	6 (2)	German language
Greece	AGB Hellas	Athens/Thessaloniki/urban	No	Yes	6	None
Ireland	TAM	National	No	Yes	4	None
Italy	Auditel	National	Yes	Yes	4	None
Netherlands	Intomart	National	Yes	Yes	6 (2)	None
Portugal (1)	AGB Portugal	National	Yes	Yes	4	None
Portugal (2)	Ecotel	Lisbon/main regions	Yes	Yes	4	None
Spain	Sofres A.M.	National	Yes	Yes	4	None
UK	BARB	National	No	Yes	4	None

(1) Belgium (N) and (S): The overlap between the North and South universes consists of Flemish speakers in Brussels. French speakers in Brussels are only included in the universe for South Belgium.

(2) Belgium (N), Germany, Netherlands: Data collected on children aged 3+, but only reported for children aged 6+.

Table 6 - Establishment Survey - Survey Type

Country	Survey	Specific Survey	National Readership/ Multimedia Survey	Frequency
Belgium (N)	Audimetrie	Yes	No	Once a year
Belgium (S)	Audimetrie	No	Yes	Once a year
Denmark	Gallup TVR	Yes	No	Cont. weekly roll. (telephone) Twice a year (face-to-face)
France	Mediamat	No	Yes	Once a year
Germany	GfK	No	Yes	Once a year
Greece	AGB Hellas	Yes	No	Once a year
Ireland	TAM	Yes	No	Once a year
Italy	Auditel	Yes	No	Twice a year
Netherlands	Intomart	Yes	No	Once a year
Portugal (1)	AGB Portugal	No	Yes	Once a year
Portugal (2)	Ecotel	No	Yes	Once a year
Spain	Sofres A.M.	No	Yes	Cont. qtrly roll.
UK	BARB	Yes	No	Cont. monthly roll.

Table 7 - Establishment Survey - Sampling Methodology

Country	Survey	Sampling Frame	Sampling Method	Annual Sample Size HH	Annual Sample Size Individual
Belgium (N)	Audimetrie	Official street directory/census	Clustered random/quota	1,490	3,912
Belgium (S)	Audimetrie	21 roundings (population units)	Pure random	4,300 (1)	10,000 (1)
Denmark	Gallup TVR	National telephone and address files	Random/quota	6,400 (15,000) (2)	14,000 (15,000) (2)
France	Mediamat	Telephone directories and random dialling	Random (HH selection)/quota (area, demog.)	75,000	75,000
Germany	GfK	Electoral districts	Clustered random	32,240	33,764
Greece	AGB Hellas	Census data	Stratified random	498	195
Ireland	TAM	Census data - (1) Electoral lists - (2)	Multi-stage stratified random	2,569	n/a
Italy	Auditel	Electoral lists, telephone directories	Random/quota	10,000	30,000
Netherlands	Intomart	Universe of addresses, directory from PTT	Pure random	6,000	7,000
Portugal (1)	AGB Portugal	Telephone directories	Random/quota	15,000	15,000
Portugal (2)	Ecotel	Census data	Stratified random	13,000	13,000
Spain	Sofres A.M.	Electoral districts	Stratified random	44,000	44,000
UK	BARB	Postal address file	Multi-stage stratified random	39,264	90,000

(1) S Belgium: National survey - CIM-Media Produits, c47% of interviews cover the south.

(2) Denmark: Figures in brackets refer to additional telephone interviews.

Table 8 - Establishment Survey - Data on TV Reception

Country	Survey	Record of Station Reception	Cable	SMATV	DTH	Channel Check
Belgium (N)	Audimetrie	All	Yes	No	Yes	No
Belgium (S)	Audimetrie	All	Yes	Yes (any)	No	No
Denmark	Gallup TVR	Selection	Yes	Yes	Yes	No
France	Mediamat	All	Yes	No	Yes	No
Germany	GfK	All	Yes	Yes	Yes	No
Greece	AGB Hellas	Selection	No (1)	No (1)	No (1)	No
Ireland	TAM	All	Yes	Yes (any)	Yes	No
Italy	Auditel	All	No	No	Yes	No
Netherlands	Intomart	All	Yes	Yes (any)	Yes	No
Portugal (1)	AGB Portugal	All	No	Yes	Yes	No
Portugal (2)	Ecotel	Selection	Yes	Yes	Yes	No
Spain	Sofres A.M.	Selection	Yes	Yes (2)	No	No
UK	BARB	All	Yes	Yes	Yes	Yes

(1) Greece: Cable community antenna (any) and DTH reception are grouped in "Other" category.

(2) Spain: SMA TV is combined with DTH (=any satellite reception via dish).

Table 9 - TV Homes Universe and Panel Size

Country	Survey	National TV Homes Universe ('000 s)	Gross Panel Size HH	Gross Panel Size Individual	Panel HH per '000 National TV homes
Belgium (N)	Audimetric	2,333 ⁽¹⁾	630	1,750	0.28
Belgium (S)	Audimetric	1,775 ⁽¹⁾	600	1,500	0.34
Denmark	Gallup TVR	2,196	530	1,200	0.24
France	Mediamat	20,394	2,300	5,600	0.11
Germany	GfK	31,780	3,960	9,750	0.12
Greece	AGB Hellas	1,660 ⁽²⁾	650	2,050	0.39
Ireland	TAM	1,024	432	1,400	0.42
Italy	Auditel	19,714	2,420	7,000	0.12
Netherlands	Intomart	5,880	1,100	2,900	0.19
Portugal (1)	AGB Portugal	3,070	600	1,200	0.20
Portugal (2)	Ecotel	2,860	550	1,870	0.19
Spain	Sofres A.M.	11,255	2,000 ⁽⁴⁾	7,000	0.18
UK	BARB	21,600	4,701 ⁽³⁾	11,700	0.21

(1) Belgium: No official figure for TV homes. Figures are for housewives.

(2) Greece: The TV homes universe has been estimated by multiplying the national TV homes universe by a factor of 0.53 (ie the proportion found in the urban universe).

(3) Spain: In process of being expanded to 2,500HH.

(4) United Kingdom: The national panel is several hundred homes smaller than the figure reported here, which is the combined total of the regional panels. Some regional "overlap" homes are duplicated (ie belong to more than one regional panel).

Source for TV homes universe figures: Carat (data collected in October 1992)

Table 10 - Universes for Reporting Ratings

Country	Survey	Ratings Universe (see below for codes)						
		A	B	C	D	E	F	G
Belgium (N)	Audimetrie	No	Yes	No	No	No	No	No
Belgium (S)	Audimetrie	No	Yes	No	No	No	No	No
Denmark	Gallup TVR	Yes	No	No	No	No	Yes	No
France	Mediamat	Yes	No	Yes ⁽¹⁾	No	No	No	No
Germany	GfK	Yes	Yes	No	Yes	Yes ⁽²⁾	No	No
Greece	AGB Hellas	No	Yes	No	No	No	No	No
Ireland	TAM	Yes	Yes	No	No	No	No	Yes
Italy	Auditel	Yes	Yes	No	No	No	No	No
Netherlands	Intomart	Yes	Yes	No	Yes	Yes	No	No
Portugal (1)	AGB Portugal	Yes	Yes	No	No	No	No	No
Portugal (2)	Ecotel	Yes	Yes	No	No	No	No	No
Spain	Sofres A.M	Yes	Yes	No	No	No	No	No
UK	BARB	Yes	Yes	Yes ⁽³⁾	No	No	Yes ⁽³⁾	No

A - All national TV homes

B - All TV homes within region

C - Station's own TV universe

D - TV homes in reception area

E - All cable homes

F - All cable/SMATV/DTH homes

G - All TV homes in foreign overspill area

(1) France: only for Canal+, Arte, and M6.

(2) Germany: The survey reports against three reception universes: (a) "Satellite" homes are TV homes with individual dishes (ie DTH); (b) "Cable" homes are TV homes receiving 5 or more channels that are often or always transmitted via cable or satellite; (c) "Terrestrial" homes covers the remainder irrespective of the method used for reception.

(3) United Kingdom: C - for regional stations; and F - for satellite channels.

Table 11 - TV Stations Measured/Availability to Media Buyers in Main Reports

Country	Survey	Domestic	Foreign
Belgium (N)	Audimetrie	VTM, BRT 1, TV 2, RTBF, Sport 21, Arte 21, RTL-TVi	Ned 1, 2, 3
Belgium (S)	Audimetrie	RTBF, TVi, Sport 21, Arte 21	TF 1, F2, F3
Denmark	Gallup TVR	DRK, TV2, TV3, Kanal 2, Kanal Denmark	Neighbouring countries *, Satellite and other *
France	Mediamat	TF1, F2, F3, Canal+, Arte, M6	None
Germany	GfK	ARD1, ARD3, ZDF, Sat-1, RTL, Pro-7, DSF, Vox, RTL 2, CAMPTV (Regional), Der	Eurosport, Arte
Greece	AGB Hellas	Wapekkanal, EI-1, 2, Ant 1, Mega, New Channel, K 29, TV 100*, Argo*, Kabelkanal, n-tv	Other satellite
Ireland	TAM	RTE 1, 2	None
Italy	Auditel	RAI 1, 2, 3, Canale 5, Italia 1, Rete 4, Italia 7, and 10 other national/regional	None
Netherlands	Intomart	Ned 1, 2, 3, RTL-4, Kindemet, FilmNet and two local	BRT 1, TV 2, ARD 1, 3, ZDF, Eurosport, The Discovery Channel, Children's Channel
Portugal (1)	AGB Portugal	RTP1, 2, SIC, TV1	None
Portugal (2)	Ecotel	RTP1, 2, SIC, TV1	None
Spain	Sofres A.M.	TVE 1, 2, Antena 3, Canal+ Espana, and 8 autonomics	Galavision, MTV*, Eurosport*, CNN*
UK	BARB	BBC 1, 2, ITV, C4, S4C, Sky One, Sky News, Sky Sports, Sky Movies Plus, Sky Gold, Movie Channel, UK Gold, The Children's Channel, and other satellite/cable*	MTV, Eurosport

* Available on request, but not part of normal service.

Table 12 - Demographic Breaks

Country	Survey	Regions	Social Class Grouping	Age Breaks
Belgium (N)	Audimetrie	5	8	6-7, 8-12, 13-14, 15-17, 18-20, 21-24, 25-29... units of 5 up to 74 years, 75+
Belgium (S)	Audimetrie	5	8	6-7, 8-12, 13-14, 15-17, 18-20, 21-24, 25-34, 35-44, 45-54, 55-64, 65+
Denmark	Gallup TVR	7	6	40 age codings
France	Mediamat	1	2	4-10, 11-14, 15-34, 35-49, 50+
Germany	GfK	16	3	6-9, 10-13, 14-19, 20-29, 30-39, 40-49, 50-64, 65+
Greece	AGB Hellas	3	3	6-11, 12-14, 15-24, 25-34, 35-44, 45-54, 55+
Ireland	TAM	4	5	4-6, 7-10, 11-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65+
Italy	Auditel	18	4	4-7, 8-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65+ and 15-19
Netherlands	Intomart	5	4	3-5, 6-8, 9-12, 13-15, 16-19, 20-24, 25-43, 35-49, 50-64, 65+
Portugal (1)	AGB Portugal	5	5	4-14, 15-34, 35-64, 65+
Portugal (2)	Ecotel	4	4	Freely chosen on-line access - fully flexible coding
Spain	Sofres A.M.	7	5	Freely chosen on-line access - fully flexible coding
UK	BARB	13	4	4-15, 16-24, 25-34, 35-44, 45-54, 55-64, 65+

Breaks permitted in aggregated analyses (see notes for qualifications).

Table 13 - Earliest Availability of Ratings Data to Buyers

Country	Survey	Time Periods	Commercials	Programmes
Belgium (N)	Audimetrie	Weds NW - online	Weds NW	Weds NW
Belgium (S)	Audimetrie	Weds NW - online	Weds NW	Weds NW
Denmark	Gallup TVR	ND	ND	ND
France	Mediamat	ND	ND	ND
Germany	GfK	ND	ND	ND
Greece	AGB Hellas	ND	ND	ND
Ireland	TAM	ND	ND	ND
Italy	Auditel	ND	Breaks - ND; Spots - 8 days; Sponsor promos - 30 days	ND
Netherlands	Intomart	ND	ND (breaks only)	ND
Portugal (1)	AGB Portugal	ND - special request c. Tues NW - disk	ND - special request c. Tues NW - disk	ND - special request c. Tues NW - disk
Portugal (2)	Ecotel	ND	ND	ND
Spain	Sofres A.M.	ND	ND	ND
UK	BARB	ND	8 days later	8 days later

ND = Next day
NW = Next week

Table 14 - Time Periods of Reporting

Country	Survey	Minute	5 minutes	Quarter Hour	Time Segment	Day	Programme	Advertising Spot	Commercial Break
Belgium (N)	Audimetrie	No	No	Yes	Yes	Yes	Yes	No	Yes
Belgium (S)	Audimetrie	No	No	Yes	Yes	Yes	Yes	No	Yes
Denmark	Gallup TVR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
France	Mediamat	Yes (1)	(Yes)	Yes	Yes	Yes	Yes	(Yes)	Yes
Germany	GfK	No (2)	(Yes)	(Yes)	(Yes)	Yes	Yes	No	Yes
Greece	AGB Hellas	(Yes)	(Yes)	Yes	Yes	Yes	Yes	No	Yes
Ireland	TAM	No	Yes	Yes	Yes	No	Yes	(Yes)	Yes
Italy	Auditel	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Netherlands	Intomart	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Portugal (1)	AGB Portugal	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	Yes	Yes	Yes
Portugal (2)	Ecotel	(Yes)	(Yes)	Yes	Yes	Yes	Yes	Yes	Yes
Spain	Sofres A.M.	(Yes)	(Yes)	Yes	Yes	Yes	Yes	Yes	Yes
UK	BARB	(Yes)	(Yes)	Yes	(Yes)	(Yes)	Yes	Yes	Yes

No = Not available to agencies

Yes = Available in basic analysis

(Yes) = Available on special request or through direct access to raw data

(1) France: For three targets only in basic analyses: all individual 4+, all adults 15+, all homes

(2) Germany: Possible through referral to the stations.

Table 15 - Access and Formats of Reporting

Country	Survey	Printed Reports	Diskettes	Aggregated Data Level		Raw Data (ie respondent level)	
				Online	DL/OT	Online	DL/OT
Belgium (N)	Audimetrie	Yes	Yes	Yes	No	No	No
Belgium (S)	Audimetrie	Yes	Yes	Yes	No	No	No
Denmark	Gallup TVR	Yes	Yes	No	Yes	No	No
France	Mediamat	Yes	Yes	No	Yes	No	No
Germany	GfK	Yes	Yes	Yes	Yes	No	No
Greece	AGB Hellas	Yes	Yes	No	No	No	No
Ireland	TAM	Yes	No	Yes	No	Yes	No
Italy	Auditel	Yes	Yes	Yes	No	No	No
Netherlands	Intomart	Yes	Yes	Yes	Yes	Yes	No
Portugal (1)	AGB Portugal	Yes	Yes	No	Yes	Yes	No ⁽¹⁾
Portugal (2)	Ecotel	No	Yes	Yes	Yes	Yes	No ⁽¹⁾
Spain	Sofres A.M.	No	Yes	Yes	Yes	Yes	No
UK	BARB	Yes	No	Yes	Yes	Yes	Yes

DL/OT = Downloading or Other Transfer to agencies or third parties (viz computer bureaux)

(1) Portugal (1) and (2): Access not impossible, but more an issue of affordability.

Table 16 - Ownership of Data Copyright

Country	Survey	Owner of Copyright	Special Conditions
Belgium (N)	Audimetrie	BRT/CIM/Aspemar (1)	Data only available to CIM members
Belgium (S)	Audimetrie	CIM	Data only available to CIM members
Denmark	Gallup TVR	Gallup	None
France	Mediamat	Mediametrie	None
Germany	GfK	TV stations belonging to AGF	GfK supplies agencies/others within constraints imposed by AGF members
Greece	AGB Hellas	AGB Hellas	None
Ireland	TAM	RTE	AGB TAM has some rights to sell data, subject to agreement with RTE
Italy	Auditel	Auditel	None
Netherlands	Intomart	Intomart	Some minor restrictions on availability of information about public broadcasters
Portugal (1)	AGB Portugal	AGB Portugal	None
Portugal (2)	Ecotel	Ecotel	None
Spain	Sofres A.M.	Sofres A.M.	None
UK	BARB	BARB	None

(1) Belgium (N): BRT owns copyright to BRT data, CIM for data on VTM, and Aspemar the remainder. Aspemar is sub-licensed to sell all data (including extra software analyses) to CIM subscribers.

Table 17 - Restrictions on Access

Country	Survey	Restrictions on Access	Access by Parties Other than TV Stations, Advertisers, Agencies
Belgium (N)	Audimetric	Yes	Almost entirely restricted to CIM members
Belgium (S)	Audimetric	Yes	Almost entirely restricted to CIM members
Denmark	Gallup TVR	Open	None, except Copenhagen School of Business Studies
France	Mediamat	Open	TV producers, magazine listings, software bureaux, CSA
Germany	GfK	AGF sets rules	TV producers, magazine listings, Bavarian Media Authority, DLM considering
Greece	AGB Hellas	Open	TV producers, magazine listings
Ireland	TAM	Yes	TV producers, magazine listings
Italy	Auditel	Open	TV producers, magazine listings, software bureaux, high authority controlling antitrust
Netherlands	Intomart	Open	TV producers, government institution for public information, publishers/TV listings magazines, Agicoa
Portugal (1)	AGB Portugal	Open	One or two advertisers
Portugal (2)	Ecotel	Open	One TV producer, one software bureau
Spain	Sofres A.M.	Open	TV producers/distributors, ministry responsible for television
UK	BARB	Open	TV producers, magazine listings, software bureaux, COI considering

2.3. National Surveys Of Press Readership

There exist two kinds of information that could be used for trading advertising space in newspapers and magazines: namely, readership data and circulation data. We have only covered the readership surveys in our tables, as readership figures are much the most important data used by the advertising industry. This is not to say that circulation data are unimportant. On the contrary, they are sometimes important in deciding whether a publication is included in a readership survey (readership estimates are usually only given for titles with audited circulations), and they matter in the absence of readership figures. We have not covered them here because they do not contribute to the audience estimates; however, they are important statistics in their own right, and we shall discuss some of the specific issues concerning circulation data in sections 3 and 4.

The points to note here are there exist in most, though not all, EC members states, official bureaux for auditing the circulation of newspapers and magazines. Where we have details (e.g. Belgium, Denmark, France, Germany and the United Kingdom) for member states, they are all answerable to tripartite groups of publishers, advertisers, and agencies. It appears however, that the national bureaux audit circulation figures according to varied criteria and with varying levels of professional qualification among their staff. Regarding the criteria they employ, a full list of checks might break out total circulation into "average paid", "average non-paid", "average non-qualified" (i.e. lying outside the defined target market served by the publication - very important for trade and technical issues), and " controlled circulation" as the four main categories. Further differentiation is possible within them. Indeed, approaching twenty distinctions are possible altogether, which may or may not all be either checked or included within the final audited circulation figures.

2.3.1. Organization (Tables 18-20)

Table 18: National Readership Surveys in the EC

Table 1 summarizes the main national and general surveys of readership in EC member states. It does not include specialist surveys such as the Leseranalyse in Germany, which covers decision-makers in industry and administration, or general surveys, such as the Target Group Index in the United Kingdom, which are not primarily used for determining advertising rates. The British TGI, for example, is mainly used for cross-referencing

readership and other media consumption data against a vast databank of ownership and consumption data.

Most countries have one national readership survey. The exceptions are Germany, Greece and Portugal.

In the case of Germany, there are approximately 5,000-6,000 consumer and trade and technical magazines in addition to some 1,500-2,000 newspapers and free sheets. It is the largest press market in Europe both in volume and value of sales. The main readership survey, the Media Analyse (MA), covers only a small part of the total market in terms of numbers, and is the source for setting rate card prices for the main publications. The Allensbacher Werbeträgeranalyse (AWA) is an important supplementary source offering readership data across a wider selection of specialist magazines (many more monthly titles) and including a wide range of market and target group data.

Greece and Portugal are characterized by weak press markets compared with the other EC countries and less developed industry structures for organizing readership research. The initiatives for measuring readership in Portugal have proceeded from private research companies, where both the Bareme and Euroteste are important for media planning. Readership surveys have appeared on a more ad hoc basis in Greece. Of the two that are current, we have been able to obtain information about the Bari Report, but not the Nielsen Media Survey. The former appears to be the current main source of readership data in Greece.

By contrast with television, almost all the main surveys of readership are organized through joint industry control (although, for 1993, it appears that joint industry control giving way to media owner contracts in France). Such joint industry bodies set up finance and control the surveys, commission the fieldwork and involve themselves to varying degrees with the methodology (all aspects), production and dissemination of the data. The research companies/institutes carrying out the fieldwork are all privately owned.

Table 19: Balance of Funding

The costs of national readership surveys are generally well below (severalfold) the costs of peplemeter measurement for television. Whereas advertisers contribute almost nothing to the direct financing of television surveys or to the purchase of audience data, they pay a significant fraction for readership data in several EC member states. Agencies appear to contribute the same proportions for press as for television overall, though the proportions may differ significantly for any one country (e.g. United Kingdom), and care needs to be exercised in reading the figures as they do not all cover user charges. Media owners

pay the most. Their share of funding is lowest in Greece and Portugal, where, as noted above, the print media are relatively weaker and there is no joint industry control.

The balance of funding is not directly related to the degree of control as defined by voting structure. In almost every case, the media owners possess 50% or more of the vote, but this does not guarantee them dominance (always assuming they can agree amongst themselves) as some use qualified majority rules for voting changes. For example, media owners possess 50% of the vote within AG.MA in Germany; however, a 75% majority is required before any changes are made to the Media Analyse. Spain is the one exception where advertisers and agencies have held the majority sway. The advertising community and media owners each occupy four seats on the board of the EGM, but the former also field the chairman who has the casting vote.

Table 20: Funding by Media Owner Sponsors

Funding or subscription payments for all national readership surveys is spread across a large number of titles. In some cases the readership survey is also the main, or an important, source of audience data for other media, which also contribute towards the total survey costs. We have not collected details of the mechanisms for fixing contributions, be these flat rates, which are the same for all, or rates based on proportional criteria, such as circulation or advertising turnover. But, with approaching one hundred or more titles sharing the total costs in each country (Ireland is the only major exception, with 17 newspaper and magazine sponsors), the sums paid by each will be fairly small.

2.3.2. Universe and Survey Methodology (Tables 21-23)

The tables in this section cover only a limited portion of the total survey methodology. Because all the techniques of readership measurement rely on memory, the ordering and rotation of questions are important features of design, as are the selection of stimulus cards (viz. black and white printed names versus life-size mastheads, (i.e. reproductions of titles as appearing in print), or half a dozen or more other variants), and the precise wording and subsequent coding of key questions about frequency of reading and recency of latest reading. We will cover some of these items in the text of Section 3 when we examine the comparability of different national surveys. In this section we are more concerned with the broad variables that fix the scope and comprehensiveness of the readership surveys.

Table 21: Survey Universe

All the readership surveys measure national universes, though the Portuguese surveys only cover mainland Portugal. All but the CIM in Belgium are restricted to private households. The Danish and Dutch surveys, which employ telephone interviews are necessarily restricted to homes with telephones, though this will have a negligible effect on universe composition due to the very high "saturation" levels of telephone penetration (c95%-99%) in those countries.

The lower age limits of the surveys range from 12-15 years. None employs an upper age limit.

Table 22: Survey Methodology

As noted in Section 2.1. two basic methodologies of readership measurement are in current use by EC member state: namely "Recent Reading" and "FRY" (First Read Yesterday). Most EC countries employ Recent Reading, using face-to-face interviews. Only Denmark and the Netherlands employ FRY, both using telephone methods of interview.

Census data are the main population statistics for choosing the sampling frame, though telephone lists, electoral registers and postal files also feature. A few surveys employ quotas. The majority adopt some stratification. For the Recent Reading surveys, the standard procedure is to select a large number of sampling points from which a set number of interviews (ranging from 5-19 among the surveys listed here) is attempted. Sometimes the stratification process is referred to as disproportionate (multi-stage) probability sampling, and can be used, as in the United Kingdom, to pre-select the sampling points entirely.

The eventual sample sizes are only weakly correlated with size of population. Comparisons are made harder by the splits within the German and Italian samples.

The German Media Analyse is divided into separate press (c20,000) and broadcast (c23,000) samples. Both cover newspapers, but only the press survey covers consumer magazines. Furthermore, the newspaper readership data are reported on a rolling basis by adding in the figures from the previous year to give a total newspaper sample of around 85,000.

The Italian Audipress also comes in two halves: ISPIPRESS (Indagine Sulla Stampa Periodica In Italia - magazines), and ISEGIPRESS (Indagine Stampa Editori Giornali Italiani - magazines). Either half is further subdivided into halves, which are given different, overlapping questionnaires. The whole lot is subsequently merged via datafusion techniques to give a

final national reporting sample of more than 50,000 individuals. In very simple terms, the fusion process involves matching individuals from two samples at a time along selected demographic variables, such as age, sex, occupation, and so on. Having decided the pairings, one half (the recipient sample) is endowed with the properties of the other half (the donor sample).

Table 23: Definition of Reading and Survey Duration

Apart from Denmark, all countries employ the same basic definition of reading as "Have you read or looked at?", though the precise wording will vary from country to country. The instructions will frequently specify that place of reading is unimportant, and it does not matter which issue was being read or looked at.

All surveys, except in Ireland, narrow the definition further with time-related filters, such as "in the last six months?" Filters refer to questions that are asked in order to reduce the number of titles, for which more detailed reading questions are asked later. Although the Irish survey does not employ a specific time-based "recency of reading" filter, it later uses the frequency question as a filter. In addition, some surveys also use hurdle questions. The German Media Analyse is perhaps the most extreme by asking first, whether the interviewee has heard of a title, then if he has only heard of it by name, and lastly, whether he has had a copy in his hand inside the last unit period (14 days for dailies; 3 months for weeklies; 6 months for fortnightlies; 12 months for monthlies). Altogether, the Media Analyse filters out non-readers in three stages before getting to the key questions of frequency and recency.

All surveys are discontinuous in two senses. First, they question each interviewee once only. Second, interviews are not conducted on all 365 days of the year, although the majority run through at least nine months, main exceptions being EGM in Spain (180 days), Audipress in Italy (170 days), and AWA in Germany (134 days).

Interview lengths vary considerably from survey to survey. The total length includes all the extra questions on product ownership, demographics, other media, and so on. The readership sections mostly last between 10 and 30 minutes (50 minutes for the AWA), and occupy approximately between one third and four fifths of total interview length.

2.3.3. Reporting of Readership Data (Tables 24-28)

Table 24: Coverage of Titles

The number of titles measured in each survey usually covers the bulk of publications that are of interest to the advertising community. As a general rule, the greater the number of titles that are asked about, the longer the interviews. The Danish and Irish surveys cover fewest titles and have the shortest readership sections. By contrast, the German AWA asks about most titles and takes much the most time over its readership questions.

The trade-off between number of titles covered and length of readership interview is made less precise by the inclusion of regional newspapers, which are only asked about in their local areas of distribution. At the same time, the relatively short readership interviews and large number of titles in the British NRS have been made possible by the employment of computer assisted methods of data collection (known as CAPI). This technology possesses several advantages, including those of speeding the collection of responses and facilitating the rotation and sequence of questions.

Table 25: Criteria for Title Inclusion

Divers criteria are employed for deciding which titles are included in the national readership surveys. This is obviously important to the assessment of evenness of treatment, in so far as readership figures are the main trading currency in each country and readership surveys can only cover a small subsection of all the titles that are published.

Two surveys, the Dansk Media Index and MA, require that the owner of the title is a survey sponsor; seven surveys set a specific lower circulation threshold; and three use minimum number of issues per annum as a criterion for inclusion. Other criteria include usefulness to advertisers (CIM and NRS); adequate coverage above a set threshold (JNRR, EGM, Bareme and NRS); and auditing by a specific body (CIM, CESP, AWA). Although the Dansk Media Index does not specify a minimum threshold for inclusion, the technical sub-committee for the survey will exclude titles if it believes their circulation figures are too low.

Overall, the commonest criteria for inclusion are those based on circulation.

Table 26: Demographic Breaks

There is wide variation over the description of socio-demographic breaks and a reasonable measure of similarity in the reporting of aggregated age breaks; more so than with television.

Table 27: Coverage of Non-Print Media

A number of national readership surveys, such as CESP in France or EGM in Spain, were originally conceived as multimedia surveys covering the audiovisual media (and even outdoor media), and some still supply the more recently arrived peplemeter panels for television with establishment data on channel reception and demographic composition of the survey universe. All but three cover television and radio to a varying degree, and all but one supply data on cinema attendance. More often than not the questions about cinema are the main audience data for advertising sales in that medium. The audience data for other media are used to a varying extent for purposes of multimedia planning.

Table 28: Frequency and Recency of Reports

All surveys publish one or more printed reports per annum, and the majority offer electronic versions of the same in addition to special analyses via on-line access, computer bureaux, or other means. Only the British NRS publishes any data on a monthly basis. Five national surveys only publish data once a year. They tend also to be the surveys with greatest delay between execution of fieldwork and publication of results. The extreme case is MA in Germany, which publishes data once a year, but with a four month delay after the completion of fieldwork. A press media planner wishing to plan for 1994 will rely on data collected during 1992/3 (up to end of April).

Electronic reports are generally made available at the same time as the print reports.

2.3.4. Ownership of Copyright and Access (Tables 29-31)**Table 29: Ownership of Copyright**

Where there are JICs, the JICs own the copyright to the data: exceptions being the own systems in Greece and Portugal, and the AWA in Germany, for which the research institute also holds the copyright. Three surveys have mentioned that they license the data to computer

bureaux, (i.e. computer software companies purchasing measurement data, which they store, process with their own in-house software and offer as a range of products to interested customers, including both media owners and media buyers), and one, Audipress, lays down conditions on what data are published (see Table 13 below).

Table 30: Conditions of Access

The most common form of access is annual subscription with the same access for everyone. Some surveys - Dansk media Index, MA and NRS - are sold on a per report basis - and only Audipress blocks access to the full survey data, laying down specific restrictions on what different subscribers are allowed to see. One Audipress rule, which applies to everyone, is that neither the publishers nor the media buyers get to see the figures for high frequency readership in full.

A few surveys restrict the availability or sale of data to non-subscribers: that is to say, parties not belonging to the industry bodies, which are responsible for carrying out the surveys. In most cases, the data are quite easy to access, at least in the printed reports.

Table 31: Other Users

We have not collected this information exhaustively. By far the main use of readership data is for trading advertising space. The data are also needed to a lesser extent by the editorial staff of newspapers and magazines. Otherwise, there appears to be very little demand for them, except by computer bureaux. We have not met with any instance where the data are used by government departments vis a vis regulatory issues, but this does not mean that they are not used, given that access to the printed reports is easy. Even where the data are restricted to survey subscribers, access by a non-subscriber to the printed summaries is not that hard. All he has to do is ask a subscriber.

Table 18 - National Readership Surveys in the EC

Country	Survey	Research Company	Type of Contract	Main Contractors	Research Company Ownership
Belgium	CIM	Sobemap Marketing/Marketing Unit	JIC	CIM	Private (Sofres)
Denmark	Dansk Media Index	AIM	JIC	Dansk Media Index	Private (Nielsen)
France	CESP(1)	ISL/Sofres	JIC	CESP	Private
Germany	MA	8 research institutes (2)	JIC	AGMA	All private and independent
Germany	AWA	Institut für Demoskopie Allensbach	OS	na	Private
Greece	BARI	FOCUS	OS	na	Private
Ireland	JNRR	Lansdowne Market Research Ltd	JIC	JNRR	Private (Irish Marketing Surveys Ltd)
Italy	Audifress	Doxa/Demoskopos/Makrotest	JIC	Audifress	Private and independent
Netherlands	Summoscanner	Inter View	JIC	SUMMO	Private
Portugal	Barene	Marktest	OS	na	Private
Spain	EGM (1)	ECO	JIC (3)	AIMC	Private (IPSOS)
UK	National Readership Survey	RSL	JIC	NRS	Private (IPSOS)

(1) France, Spain: Tables describe the survey arrangements up to and including 1992. The French newspaper publishers have gone ahead with their own survey in 1993, whilst this year's EGM has been grounded by management and funding issues. The eventual outcome is unclear in either case.

(2) Germany: Six institutes each conduct fieldwork for the print and electronic sections of the Media Analyse. Four work for both, thereby giving 8 institutes in total.

(3) Spain: Not a formal tripartite body representing the users via their associations as with most JIC arrangements.

Table 19 - Balance of Funding

Country	Survey	Balance of Funding (%)		
		Media Owners	Advertisers	Agencies
Belgium	CIM	61.5	1.5	37.5
Denmark	Dansk Media Index	100	0	0
France	CESP	67	13	20
Germany	MA	98	1	1
Germany	AWA	100	0	0
Greece	BARI	57	12	31
Ireland	JNRR	92.5	1.5	6
Italy	Audipress	100	-	-
Netherlands	Summoscanner	75	12.5	12.5
Portugal	Barene	50	0	50
Spain	EGM	75		25
UK	National Readership Survey	84 (1)	12 (1)	4 (1)

(1) United Kingdom: Represents associations only accounting for two thirds of total cost.

Table 20 - Funding by Media Owner Sponsors

Country	Survey	% of Total Survey Cost	Newspapers (1)	Magazines (1)	Other (1)
Belgium	CIM	61.5	33	147	-
Denmark	Dansk Media Index	100	53	40	0
France	CESP	67	5%	55%	7%
Germany	MA	98	51	52	Television/radio/ cinema
Germany	AWA	100	65	0	0
Greece	BARI	57	59	90	-
Ireland	JNRR	92.5	13	4	0
Italy	Audipress	100	56	122	-
Netherlands	Summoscanner	75	60	90	0
Portugal	Bareme	Not applicable - subscription only	-	-	-
Spain	EGM	75.2	45	92	Television 10/ radio 13
UK	National Readership Survey	55	29	170	0

(1) Figures denote the number of titles, except for France, where CESP have supplied the break-out of total costs by category of media owner instead.

Table 21 - Survey Universe

Country	Survey	Geographic Scope	Housing	Lower Age Limit	Specific Restrictions		
					Language	Nationality	Ethnic Origin
Belgium	CIM	National	All private homes and places of work	15	Flemish / French	None	None
Denmark	Dansk Media Index	National	All private homes with telephone	12	None	None	None
France	CESP	National	All private homes	15	None	French	None
Germany	MA	National	All private homes	14	German	None	None
Germany	AWA	National	All private homes	14	German	German	None
Greece	BARI	National	All private homes	12	Greek	Greek	None
Ireland	JNRR	National	All private homes	15	None	None	None
Italy	Audipress	National	All private homes	14	None	None	None
Netherlands	Summoscanner	National	All private homes with telephone	13	Dutch	None	None
Portugal	Bareme	Mainland Portugal	All private homes	13	Portuguese	Portuguese	None
Spain	EGM	National	All private homes	14	None	None	None
UK	National Readership Survey	National	All private homes	15	None	None	None

Table 22 - Survey Methodology

Country	Survey	Survey Methodology	Sampling Frame and Method	Sample % of Universe	Universe Size	Annualized Sample
Belgium	CIM	Personal interviews	Census data by region, age, quota sampling	0.113	8.846	10000
Denmark	Dansk Media Index	Telephone interviews	Census/random telephone numbers from telephone listings stratified by population densities	0.364	4.4	16000
France	CESP	Personal interviews	Census data & employment survey (INSEE)	0.035	42.65	15000
Germany	MA (1)	Personal interviews	Census 1981 and updated census 1990. Clustered random sample	0.22	49.53	Magazines 19,717 Newspapers 87,901
Germany	AWA	Personal interviews	1992 federal statistics based on micro census. Random sampling based on representative locations, then quota by age, social status etc	0.031	63.05	west 15776, east 4063, Σ19839
Greece	BARI	Personal interviews	1991 census NSSG population data 1992 & quota by gender and age	0.535	5.76	30800
Ireland	JNRR	Personal interviews	Census & electoral registers and stratified random 3 stage probability	0.197	2.583	5090
Italy	Audipress (2)	Personal interviews	Annual Istat Census Geographical stratification/random	0.116	48.116	ispi 24438, isegi 31385, Σ55823
Netherlands	Summoscanner	Telephone interviews	Population census & random digit dialling by telephone listings	0.182	12.1	22000
Portugal	Bareme	Personal interviews	Census: stratification into 45 strata/random	0.186	8.022	15000 (1260 pm)
Spain	EGM	Personal interviews	Electoral Register, multi-stage probability for the selection of electoral districts	0.138	32	44100
UK	National Readership Survey	Personal interviews	Census & electoral register postal address file. Stratified random	0.071	45.3	32029

(1) Germany: MA is split into two halves, the print and electronic sections. The halves duplicate coverage of newspapers, for which the results are published on a rolling basis by adding the results of the preceding year onto the new year. Hence the final large pooled sample for newspapers.

(2) Italy: Audipress is conducted in overlapping halves. ISPIPRESS focuses on magazines, whilst ISEGIPRESS focuses on newspapers.

Table 23 - Definition of Reading and Survey Duration

Country	Survey	Definition of Reading	Time Related Measures	Number of Periods	% of Year Covered	No of Days Interviewing	Average Interview Length (Min)	Length of Readership Questions (Min)
Belgium	CIM	Read, paged through or looked at	Yes	Continuous 12 months	86	310	90	30
Denmark	Dansk Media Index	Have you ever read	Yes	Continuous	100	360	13	10
France	CESP	Read or paged through	Yes	Continuous 12 months	90	320	37	30
Germany	MA	Read or paged through	Yes (4)	Continuous	100	360	50	20
Germany	AWA	Read or paged through	Yes	Discontinuous 4*2 months	37	134	118	55
Greece	BARI	Read or looked at	Yes	Discontinuous 3*3 months	75	275	15	15
Ireland	JNRR	Read or looked at	No	Continuous 12 months	100	360	35	13
Italy	Audipress	Read or browsed	Yes	Continuous 6 months Spring: Feb to Apr Autumn: mid-Sep to mid-Dec	45	170	35	20
Netherlands	Summoscanner	Read or looked at	Yes	Continuous	83	300	25	19
Portugal	Bareme	Read or paged through	Yes	Continuous 12 months	100	360	30-40	15
Spain	EGM	Read or looked at	Yes	Discontinuous Feb-Mar, May-Jun, Oct-Nov	50	180	45	15
UK	National Readership Survey	Read or looked at	Yes	Continuous	100	360	38	17

Table 24 - Coverage of Titles

Newspapers Covered	Survey Period	Newspapers Covered				Magazines		Foreign Newspapers	Foreign Magazines	TOTAL
		National	Regional/Local	Free Sheets	Colour Suppl.	Magazines	Foreign Newspapers			
Belgium	1992 (2nd half)	33	0	0	0	147	-	-	180	
Denmark	1992	21	33	0	0	40	-	-	94	
France	1992	9	0	0	0	139	-	-	148	
Germany	1991/92	6	c580	-	4	138	-	-	728	
Germany	1992	14	0	0	0	262	-	-	276	
Greece	1992		59	-	-	90	-	-	149	
Ireland	1992	13	1	0	0	7	-	-	21	
Italy	1992 (2nd half)		56	-	-	122	-	-	178	
Netherlands	1992 (2nd half)	8	55	0	0	90	-	-	153	
Portugal	1992	33	4	0	7	125	7	9	185	
Spain	1992 (Autumn)	7	90	0	14	97	1	-	209	
UK	1992	29	18	0	12	170	-	-	229	

Table 25 - Criteria for Title Inclusion

Country	Survey	Sponsor	Minimum Circulation	Minimum No. of Issues	Other
Belgium	CIM	No	No	No	Publication must be part of circulation audit survey. A CIM committee decides, based on usefulness to advertisers and expected no of data pts. (50 per title)
Denmark	Dansk Media Index	Yes	No	No	Titles for which the technical sub-committee believe the circulation is too low
France	CESP	No	Magazines: 65,000 copies	Newspapers: 6 days per week	Audited by OJD only. At least 6 months in existence
Germany	MA	Yes	Yes	No	Membership of AGMA
Germany	AWA	No	No	6 issues per year	Circulation audited by IVW; Minimum number of sampling points - 300 cases within sample
Greece	BARI	No	No	No	Any publication that circulates in Greece
Ireland	JNRR	No	Yes	No	Adequate coverage of target audience (5% of population)
Italy	Audipress	No	Newspapers: 3000 copies per province periodicals: 50000 copies	No	New titles have to pay fee of 2m Lire for newspapers, 50m Lire for periodicals
Netherlands	Summoscanner	No	30000	12 per annum	-
Portugal	Barene	No	> 0.2% average issue readership	No	All national newspapers and magazines are covered. Only regional/local covered which circulate in more than one region
Spain	EGM	No	Yes	No	A minimum audience level is usually required
UK	National Readership Survey	No	No	No	Certain degree of interest to users in terms of advertising potential; Minimum readership level set at 0.5% of population

Table 26 - Demographic Breaks

Country	Survey	Social Class	Region	Age Breaks
Belgium	CIM	10 occupation	8	15-20, 21-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+
Denmark	Dansk Media Index	11 occupation, 9 education		13-19, 20-24, 25-29, 30-39, 40-49, 50-61, 62+
France	CESP	2 occupation, 4 education	9	15-24, 25-34, 35-49, 50-64, 65+
Germany	MA	6 occupation, 4 household income	16 Lander, 9 Nielsen regions	14-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70+
Germany	AWA	6 occupation, 3 socio-economic	8	14-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70+
Greece	BARI	Open questions	8	12-17, 18-24, 25-34, 35-44, 45-54, 55-70
Ireland	JNRR	7 socio-economic groups	4	15-24, 25-34, 35-44, 45-54, 55-64, 65+
Italy	Audipress	15 occupation, 18 sagacity	18	14-17, 18-24, 25-34, 35-44, 45-54, 55-64, 65+
Netherlands	Summoscanner	4 occupation	5	13-35, 35-49, 50-64, 65+
Portugal	Bareme	4 class, 8 occupation	6	13-17, 18-24, 25-34, 35-44, 45-54, 55+
Spain	EGM	5 socio-economic	17	14-19, 19-24, 25-34, 35-44, 45-54, 55-64, 65+
UK	National Readership Survey	9 occupation, 6 socio-economic	58	15-17, 18-24, 25-34, 35-44, 45-54, 55-64, 65+

Table 27 - Coverage of Non-Print Media

Country	Survey	Television	Radio	Cinema	Other
Belgium	CIM	Yes	Yes	Yes	No
Denmark	Dansk Media Index	No	No	Yes	Outdoor
France	CESP	Yes	Yes	Yes	No
Germany	MA	Yes	Yes	Yes	No
Germany	AWA	Yes	Yes	Yes	No
Greece	BARI	Yes	Yes	Yes	No
Ireland	JNRR	No	No	Yes	No
Italy	Audipress	No	No	No	No
Netherlands	Summoscanner	Yes	Yes	Yes	No
Portugal	Barene	Yes	Yes	Yes	No
Spain	EGM	Yes	Yes	Yes	No
UK	National Readership Survey	Yes	Yes	Yes	Yellow pages/ teletext/ Thompson local

Table 28 - Frequency and Recency of Reports

Country	Survey	Periods Covered by Reports		Frequency of Reports		Publication Delay
		Printed	Electronic	Printed	Electronic	
Belgium	CIM	Annual (last 6 mths)	Same	Annual	Same	3 months
Denmark	Dansk Media Index	Last 12 months	Last quarter	Annual	Quarterly	6 weeks
France	CESP	Last 6 months	Same	Twice yearly	Same	2 months
Germany	MA	Last 12 months	Same	Annual	Same	4 months
Germany	AWA	Annual (last 12 mths)	No	Annual	No	2 months
Greece	BARJ	Last 3 months	Same	3 times a year	Same	3-4 weeks
Ireland	JNRR	Last 12 months (Jul-Jun)	No (only additional analysis)	Annual	No (only additional analysis)	10 weeks
Italy	Audipress	12 weeks	Same	Twice yearly	Same	3 months
Netherlands	Summoscanner	Last 6 months	No	Half yearly	No	8 weeks
Portugal	Bareme	Last 12 months Last 6 months	Same	Bi-monthly	Same	c.month
Spain	EGM	2 month period	Same	Every 4 months, annual	Same	3-4 weeks
UK	National Readership Survey	Last month, 3 months, 6 months, 12 months	Same	Monthly, quarterly, half-yearly, annual	Same	2-3 weeks

Table 29 - Ownership of Copyright

Country	Survey	Copyright Holder	Licensing Conditions
Belgium	CIM	CIM	None
Denmark	Dansk Media Index	Dansk Media Index	Nielsen pay licence fee for data required to produce calculations
France	CESP	CESP	None
Germany	AWA	AWA	None
Greece	BARI	FOCUS	None
Ireland	JNRR	Lansdowne	JNRR licenses 3 computer bureaux
Italy	Audipress	Audipress (not individual members)	Audipress has its own regulations for the use of the data and licensing to computer bureaux
Netherlands	Summoscanner	SUMMO	None
Portugal	Barene	Markttest	None
Spain	EGM	AIMC	None
UK	National Readership Survey	NRS Ltd	None

Table 30 - Conditions of Access

Country	Survey	Payment Conditions	Restrictions on Availability to Non-Subscribers	Access for Subscribers
Belgium	CIM	Annual subscription	Yes	Same for all
Denmark	Dansk Media Index	Per report basis	No	Same for all
France	CESP	Annual subscription	No	Same for all
Germany	MA	Annual subscription	Yes	Same for all
Germany	AWA	Per report basis	No	Same for all
Greece	BARI	Annual subscription	Yes	Same for all
Ireland	JNRR	Annual subscription	No	Same for all
Italy	Audipress	Annual subscription	No	No, subject to specific agreements
Netherlands	Summoscanner	Annual subscription	Yes	Same for all
Portugal	Bareme	Annual subscription	No	Same for all
Spain	EGM	Annual subscription	No	Same for all
UK	National Readership Survey	Per report basis	No	Same for all

Table 31 - Other Users

Country	Survey	Description
Belgium	CIM	No
Denmark	Dansk Media Index	Schools/ colleges / libraries/ television research
France	CESP	Top line results made available on a case by case basis to third parties
Germany	MA	None
Germany	AWA	Universities for Research, reports available to everyone
Greece	BARI	None
Ireland	JNRR	Universities/colleges
Italy	Audipress	No
Netherlands	Summoscanner	None
Portugal	Bareme	Yes
Spain	EGM	No
UK	National Readership Survey	Market research companies

2.4. National Surveys Of Radio Listenership

Radio is in many respects the most problematic of the three main display advertising media for measuring audiences.

First, radio usually ranks a distant third behind press and television in terms of national advertising spend. Its share lies typically in the range of 2% to 10%. Quite often a high proportion of that spend (50%+) is by local advertisers on local stations, for which purposes audience data may be relatively unimportant. All this points to limited budgets for research; or, put another way, the necessary budgets for doing research of high quality will usually represent a higher share of collective advertising turnover for commercial radio stations than for television and the print media. This entails a trade-off in most markets between sophistication and affordability.

Second, the market structure of radio has been made very complicated by the geographic layering of national, regional and local stations. and the varying extents to which the regional and local stations have grouped together into national, semi-national, and regional networks. Factor in the divisions between long wave, AM, and FM frequencies; allow too for the fact that, in a country like Denmark more than one station will occupy a given frequency through a system of daily rotation (i.e. one channel in the morning, another in the afternoon, etc); recognize also that some networks exist for programme syndication only, some for advertising sales, and others for a mixture of the two; and the net result is a very heterogeneous European marketplace with pronounced variation from country to country. The one shared feature of most EC member states is the dominance of the public sector stations, often without advertising, at a national level. The majority of national private commercial stations are networks carrying mixed national and regional/local programming and advertising.

Third, radio presents several obstacles of its own for measuring audiences. Three stand out in particular. (a) It is hard to give reliable estimates of station penetration and reception for many local frequencies. (b) The geographic fragmentation of radio into hundreds of local stations in some countries can present awkward challenges for sampling. (c) Radio falls halfway between television and press, in the sense that it is less amenable than television to panel measurement via continuous metering, or diary-based studies, but a great deal easier to measure in this way than press.

For these and other reasons, the measurement of listenership to radio stations presents a less unified methodology than either television or

press, and a wider gap between the more and the less sophisticated measures.

2.4.1. Organization (Tables 32-34)

Table 32: National Radio Surveys in the EC

Table 32 summarizes the main national radio services in EC member states. As with television and press, there is usually one, though sometimes two, national surveys, the main function of which is usually to provide audience data for the sale of commercial airtime, though the use of the data for purposes of public broadcasting can also be important.

In general, the research is under joint industry control, or underwritten by the stations. For Belgium and Denmark, the main contractor is an advertising sales house.

Table 33: Balance of Funding

Except in Greece and Portugal, where advertising agencies have also figured prominently over the years in funding television and press research, media owners are responsible for almost all the funding. In the case of Germany and Spain, the percentage contribution by the radio stations only appears low because the radio measurements are belong to multimedia surveys which provide the main data on readership.

The balance of funding is probably mainly due to the lesser importance of radio to agencies compared with press and television.

Table 34: Radio Survey Sponsors

In two EC member states where Table 34 records a large number of local sponsors (Belgium and Denmark), their mediation is through advertising sales houses. In the case of the United Kingdom, which also mentions a large number of sponsors, there are two main parties to the contract with the research suppliers, each with 50% ownership of RAJAR (Radio Association for Joint Audience Research). One is the public broadcaster, BBC, and the other the Association of Independent Radio Companies (AIRC), albeit individual stations buy data separately: that is to say, AIRC both supervises and controls the measurement of listenership, and decides the tariff structure at which its members can buy whatever data they want.

The structure of Audiradio in Italy is similar to that of RAJAR, except that the proliferation of local radio stations, which occurred during the seventies, has evolved into some half dozen leading national networks, which dominate the private sector participation. In Italy, as in most EC member states, the private stations are counterbalanced by a large public sector, which occupies the main national frequencies. Where we have given a single figure under public and private stations, the public stations have been treated as single sponsors, and the balance is supplied by the leading private networks and stations. The smaller stations are mostly represented through advertising sales houses.

2.4.2. Universe and Survey Methodology (Tables 35-38)

Table 35: Survey Universe

Apart from the Portuguese IAR survey, all others are national. Only the British RAJAR survey includes children (4+): the others have varying lower age limits between 11 and 15 years. The French, German and the two Portuguese universes employ language restrictions. In addition, both Portuguese surveys set a further restriction on nationality.

Table 36: Survey Methodology

Three distinct categories of survey methodology are in use:

- Diary;
- Telephone interview;
- Face-to-face interview.

As the following tables will show, wide variation is possible within each category. Our impression is that the majority of radio surveys adopt the same or a very similar approach to sampling (viz. in the selection of sampling frames and recruitment procedures) as the establishment surveys for television and the press readership surveys. In several instances (e.g. MA in Germany or EGM in Spain) radio and press belong to the same multimedia survey.

Table 37: Definitions of Listening

There is no consistency over the choice and definitions of measures. Ratings offer the more precise measure of average audience size across a given period, but not all surveys go this far. Several, like the Danish

Gallup survey, employ the looser measure of reach, which is the total culminated audience across a set period. Reach figures will always be higher than ratings for a given period, and the degree of inflation will increase the longer the reach period that is being used.

For those surveys which report ratings:

- The most common rating interval is the quarter hour. Some surveys will ask for any listening to a station during the quarter hour period, though the Dutch Intomart survey, for one, employs the more stringent criterion of at least 8 minutes listening (i.e. majority of the 15 minute interval) for a station to be reported. Doing things the Dutch way means a maximum one station being recorded per rating interval. The rating criterion of any listening during a unit interval is, of course, identical with the reach definition for that interval. The Dutch mid-point criterion of 8 minutes, which ignores anything less than 8 minutes and counts anything more as 15 minutes, ought to come closest to measuring average audience size at any time. By contrast, the Mediametrie criterion of any listening during an interval will inflate the true quarter hour ratings, but is called a rating measure because the measures for longer periods are averages based on the cumulation of 15 minute units. Lastly, the precise criteria for defining listening by unit time interval (including the question of whether the respondent can tick more than one station) can be quite complicated. The point to note here is simply that significant variations exist.
- Whereas the diary methods employed by Intomart and RAJAR will yield rating estimates for specific times and dates, the telephone and face-to-face interview methods will invariably report on averages by time of day and day of week. The averages (sometimes referred to as probabilities) could be monthly, or are more likely to be based on the whole survey period. Sometimes the surveys may even collapse the data into averages by time of day and weekday/weekend listening. Collapsing the data in this way effectively increases the sample size for each time interval that is reported.

All surveys employ reach measures. Sometimes this is the main or only measure they use. Reach is generally a cruder measure than the rating, and does not indicate the exact audience size. The reasons why it is sometimes used on its own, or may be given prominence include the following:

- Reach figures are simpler and less expensive to supply.
- Radio listening is highly segmented by demographic group and the reach profile of a station within a chosen area is an important descriptor of its global market.

- Much more than with television, radio airtime is sold in large packages of spots, such that reach within specified dayparts (e.g. 06.00-09.00 etc) becomes a reasonable measure of at least one opportunity to listen to.
- Because they are higher than ratings and give greater chance of positive responses than ratings, reach figures can produce a broader range of discrimination. That is particularly important in measuring listenership for minority and local stations, where sample size is also often a problem. Being easier and quicker to measure than ratings, the use of reach rather than ratings is one way of maximizing sample sizes within a given budget. Sellers and buyers will prefer to use rating measures of total audience, but for a country like Denmark, where national advertising spend is extremely low, reach measures are all that the survey sponsors can afford, and a big improvement on nothing at all.

One other measure in wide use is listenership. It is equivalent to the global market size, or reach of a station, and may be reported as the total number or percentage of individuals listening to a station during a specific time period. Listenership is a useful additional measure in the absence of precise establishment survey data on the size of a station's actual reception universe. The French Mediametrie survey, for example, defines national listenership as the number or percentage of different persons who have listened to a specific station during a set period (e.g. 05.00-24.00 daily, 24 hours, week, month), whatever the duration of their listening. In this instance, each national percentage point represents 453,200 persons. The next measure of importance is the average time spent listening by listeners to a given station; equivalent to a rating measure, but with universe defined as the average number who listen to that station during the specified time period.

Table 38: Duration and Data Collection Method

Neither of the two diary surveys (Intomart in the Netherlands and RAJAR in the United Kingdom) involves continuous panel measurement. Compared with press surveys of readership, radio surveys tend to cover a greater proportion of the year. The main exception is the Italian Audiradio survey, whilst the German and Spanish interviews are part of the multimedia surveys measuring press and radio, albeit different sections of the German Media Analyse cover magazines and the electronic media.

2.4.3. Reporting of Radio Listenership Data (Tables 39-43)

Table 39: Coverage of Stations (Table 39)

As mentioned at the beginning, there is wide variation across Europe in the size and composition of each national market for radio. In terms of sheer number of different stations, the four biggest EC markets are Italy (2,500), Spain (1,700), France (1,400), and Belgium (600). These estimates are taken from Carat, 1992. The problem in matching them against our figures in order to evaluate the completeness of the surveys is that a very great number of stations are linked in networks of one sort or another. We have estimated the 640 stations measured by Audiradio, for example, on the basis of treating each network as one station; however, the total number covered probably does not fall far short of the figure quoted by Carat. The existence of pirate stations is yet another complicating factor.

Overall, it appears that most of the surveys at least measure all, or the great majority of stations, which they meet with. The main exceptions seem to be the Bareme survey in Portugal, the EGM survey in Spain, which measures the main networks (possibly accounting for more than 1,000 stations), and the Dutch Intomart survey, which only measures the public service and private satellite stations. In the absence of terrestrial private commercial radio, some 90% of the 272 radio stations listed by Carat are non-commercial.

The studies we have quoted from are mostly 1992. Belgium and Denmark have supplied figures for their current 1993 surveys. However, the most recent Italian figures for Audiradio only cover the period from September to November, 1991. We understand that particular difficulties have arisen on account of the troubled passage of the Mammi law on audiovisual media, and the ensuing lack of resolution concerning the ownership of licences for local television and radio frequencies. Another apparent problem is the conflicting interests of RAI and the private radio stations. Until these matters are settled there is no immediate prospect of another Audiradio survey.

Few foreign stations are reported. The four largest single French stations transmit from outside France.

Table 40: Criteria for Station Inclusion

As suggested in the commentary to Table 39, national surveys cover the great majority of domestic stations. A few restrict inclusion to survey sponsors. As indicated above, this probably matters most for the Netherlands by ruling out measurement of the large number of local non-

commercial stations. The other main restrictions are probably, as suggested in the commentary to Table 39, the ones cited by Bareme and EGM surveys. The others appear relatively minor.

Table 41: Demographic Breaks

In keeping with the mosaic regional and local structure of most national markets, all surveys offer the full list of main regional break-outs. As with press, there is wide variation over the description of socio-demographic breaks, and a reasonable measure of similarity in the reporting of aggregated age breaks.

Table 42: Coverage of Other Media

About half the surveys supply additional information about television viewing and visits to the cinema. As mentioned earlier, the German Media Analyse and the Spanish EGM surveys also cover readership for newspapers and magazines.

Table 43: Frequency and Recency of Reports

This is a further area of substantial variation, though with only four surveys reporting on periods of less than three months. The difficulty of choosing shorter reporting intervals is the limitations on sample size that this imposes. Doubtless the apparent restrictions on inclusion of minor stations have assisted the Bareme and EGM surveys in being able to report every two months. The Danish Gallup and Portuguese IAR surveys, which produce monthly reports, probably achieve this by supplying rudimentary data.

In general, the frequency of reporting matches the duration of the survey periods being covered, whilst the publication delays are, on average, appreciably shorter for radio than for press.

2.4.4. Ownership of Copyright and Access (Tables 44-46)

Table 44: Ownership of Copyright

Copyright normally belongs to the joint industry or media owner committees commissioning the surveys of listenership, or to the research companies when it is a question of their running their own surveys and negotiating multiple individual contracts with owners of the data. The

main exception within the EC is the Dutch system, where Intomart retains the copyright to the data.

Table 45: Conditions of Access

Some surveys restrict access to their subscribers, but it is chiefly an issue of payment. Conditions of access are more or less the same for all users, including access to raw data.

Table 46: Other Users

We have not met with any specific uses of the national survey data on radio listenership beyond the confines of the broadcasters and the advertising industry.

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Table 32 - National Radio Surveys in the EC

Country	Survey	Research Company	Type of Contract	Main Contractors	Research Company Ownership
Belgium	Radiometrie ERS		MOC	Information et Publicité	
Denmark	Gallup	Gallup	MOC	STET	Private
France	Mediametrie	Mediametrie	Tripartite	Radio Stations, Buying Agencies	Private (Joint Industry Shareholders)
Germany	Media Analyse (MA)	Six research institutes	JIC	AGMA	Private
Greece	Hellas	MRB Hellas	MOC	Radio Stations	Private (WPP)
Ireland	JNLR	MRBI	JIC	Radio Stations	Private
Italy	Audiradio	Abacus/Doria/Unicab/SWG	JIC	Audiradio	Private
Netherlands	Intomart	Intomart	MOC	Radio Stations	Private (ACB Benelux)
Portugal	Barene	Markttest	OS	Radio Stations, Agencies, Advertisers	Private
Portugal	IAR	Markttest	OS	Radio Stations/Agencies	Private
Spain	BGM	ECO	JIC	(AIMC TV/Radio Stations, Agencies, Advertisers)	Private (IPSOS)
Spain	ICP	ICP Research/Mediametrie	OS	Radio Stations	Private
UK	RAJAR	RSL	MOC	Radio Stations	Private (IPSOS)

Table 33 - Balance of Funding

Country	Survey	Balance of Funding			
		Stations	Advertisers	Agencies	Other
Belgium	Radiometrie	100%	-	-	-
Denmark	Gallup	100%	-	-	-
France	Mediametrie				
Germany	MA	10%	-	-	Publishers & Television 90%
Greece	Hellas	50%	-	50%	-
Ireland	JNLR	94%	3%	3%	-
Italy	Audiradio	100%	-	-	-
Netherlands	Intomart	100%	-	-	(Report sales 3%)
Portugal	Bareme	-	-	50%	50% Media owners
Portugal	IAR	35%	-	65%	-
Spain	EGM	14%	-	-	86% Press Television
Spain	ICP	100%	-	-	-
UK	RAJAR	100%	-	-	-

Table 34 - Radio Survey Sponsors

Country	Survey	% of Total System	Public Service Stations	Commercial Stations	Foreign Stations	Other	
Belgium	Radiometrie	100%	10	253	5	-	
Denmark	Gallup	100%	12	60	-	-	
France	Mediametrie						
Germany	MA	10%	1	8	-	103 Publishers/ television	
Greece	Hellas	50%	4	-	-	9	
Ireland	JNLR	94%	1	3*	-	Advertisers association/ Agencies association	
Italy	Audiradio	100%					
Netherlands	Intomart	100%	10		-	-	
Portugal	Bareme		Not applicable - annual subscriptions				
Portugal	IAR	35%	15		-	28 agencies	
Spain	EGM	14%	4	9	-	Press76%/ Television 10%	
Spain	ICP	100%					
UK	RAJAR	100%	49	90	-	-	

Table 35 - Survey Universe

Country	Survey	Geographic Scope	Housing	Lower Age Limit	Specific Restrictions		
					Language	Nationality	Ethnic Origin
Belgium	Radiometrie	National	Private homes	12+	No.	No	No
Denmark	Gallup	National	Private homes	13+	No	No	No
France	Mediametrie	National	Private homes	15	French only	No	No
Germany	MA	National	Private homes	14+	German only	No	No
Greece	Hellas	National	Private homes	15	No	No	No
Ireland	JNLR	National	Private homes	15+	No	No	No
Italy	UPA	National	Private homes	11	No	No	No
Netherlands	Intomart	National	Private homes	13	No	No	No
Portugal	Bareme	National	Private homes	13	Portuguese only	Portuguese only	No
Portugal	IAR	Lisbon & Oporto only	Private homes	15	Portuguese only	Portuguese only	No
Spain	EGM	National	Private homes	14	No	No	No
Spain	ICP	National	Private homes	14	No	No	No
UK	RAJAR	National	Private homes	4	No	No	No

Table 36 - Survey Methodology

Country	Survey	Survey Methodology	Sampling Frame & Method	Sample % of Universe	Annualized Sample	Universe Size
Belgium	Radiometrie ERS	Face-to-face interviews	Quotas by sex and age	0.84	75,000	8,846
Denmark	Gallup	Telephone interviews	Census data, random sampling	1.14	50,000	4.4
France	Mediametrie	Telephone interviews	Census data, stratification by department, random telephone numbers, daily quotas	0.17	75,000	45.32
Germany	MA	Face-to-face interviews	Census data, random sampling	0.53	26,617	49.53
Greece	Hellas	Face-to-face interviews	Census data, random	0.04	2,500	6.15
Ireland	JNLR	Face-to-face interviews	Register of electors. Two-stage random for sampling points & quota for demographic breaks	0.22	5,690	2,583
Italy	Audiradio	Telephone interviews	Census data, INSTAT	0.04	20,439	51.01
Netherlands	Intomart	Diary	Postal codes, random	0.057	7,000	12.21
Portugal	Bareme	Face-to-face interviews	Census, stratification into 45 strata, 180 sampling points	0.186	15,000	8.02
Portugal	IAR	Telephone interviews	Official census data by municipality information on telephone possession rate	1.14	20,000	1.75
Spain	EGM	Face-to-face interviews	Electoral register with multi-stage probability for selection of electoral districts	0.138	44,100	32.0
Spain	ICP	Telephone interviews	Census data, random and stratified sampling based on quotas of daily audiences	0.13	45,000	35.0
UK	RAJAR	Diary	Electoral districts and postal address file. London route/quota	0.24	130,000	54.0

Table 37 - Definitions of Listening

Country	Survey	Measure(s) Used	Ratings Unit Intervals	Reach Period Used	Definitions	
					Ratings	Reach
Belgium	Radiometrie ERS	Ratings & reach	1/4 hour	Day, 3 months	Listening at least 10 minutes of any 1/4 hour	At least 10 minutes yesterday
Denmark	Gallup	Reach	-	1/4 hour, 3 hours, day/week	-	Listened at all
France	Mediametrie	Ratings & reach	15 minutes	1/4 hour, 11 time bands, day	-	No of % of different people having listened to at least one radio station within a given period
Germany	MA	Ratings & reach	Average 1/4 hour	Average clock hour	Any listening per quarter hour period	At least one 1/4 hour per average clock hour with advertising
Greece	Hellas	Reach	-	4 time zones 1/2 hour	Listening in at least 8 mins of any 1/4 hour	Listenership of stations by week
Ireland	JNLR	Ratings & reach	15 mins	Day/week, month, 6 months, year	-	Time spent listening to any station any hour during the year
Italy	Audiradio	Reach	-	1/4 hour, 1 hour, 3 hours, day	-	Listening to any radio station for at least 15 minutes in last day/7 days
Netherlands	Intomart	Ratings & Reach	15 mins	Day/week	Listening at least 8 minutes of any 1/4 hour	-
Portugal	Barene	Ratings & Reach	(1/2 hour)	1/2 hour	How many were listening within the last 4 emissors of a pre-defined time	Habit of listening to the radio at a certain period
Portugal	IAR	Ratings and Reach	5 mins	Day	Average time spent during a day, share of time spend listening to radio	Total cumulative listening across a day
Spain	EGM	Ratings & Reach	1/2 hour	-	Any listening per half-hour period	-
Spain	ICP	Rating	1/4 hour/hour section of hours	-	Any listening per quarter hour period	-
UK	RAJAR	Ratings & Reach	15 mins	Day/week	Listening to station for at least 5 mins in every 1/4 hour	-

Table 38 - Duration and Data Collection Method

Country	Survey	Level of Participation	No. of Fieldwork Periods	% of Year Covered
Belgium	Radiometrie ERS	One interview	Continuous 4x3 months	100%
Denmark	Gallup	One interview	Continuous 2x6 months	100%
France	Mediametrie	One interview	Continuous 10 months	85%
Germany	MA	One interview	Discontinuous 6 months	50%
Greece	Hellas	One interview	Continuous 12 months	100%
Ireland	JNLR	One interview	Continuous 12 months	100%
Italy	Audiradio	One interview	Discontinuous 2 months	20%
Netherlands	Intomart	One week	Continuous one in every 4 weeks	100%
Portugal	Bareme	One interview	Continuous 12 months	100%
Portugal	IAR	One interview	Continuous 12 months	100%
Spain	EGM	One interview	Discontinuous Feb-Mar, May-Jun, Oct-Nov	50%
Spain	ICP	One interview	Continuous 12 months	100%
UK	RAJAR	One week	Continuous	100%

Table 39 - Coverage of Stations

Country	Survey	Measurement Period	National		Regional/Local		No. of foreign Stations
			Public Service	Commercial	Public Service	Commercial	
Belgium	Radiometrie ERS	1993	10	1	-	252	5
Denmark	Gallup	1993	3	-	9	60	-
France	Mediametrie	1992	2	12	53	1000 approx	-
Germany	MA	1992	-	-	51	157	-
Greece	Hellas	1992	4	over 75 in total			-
Ireland	JNLR	1992	2	-	1	24	-
Italy	Audiradio	1991	5	5	Over 630 stations		-
Netherlands	Intomart	1992	5	-	13	7	-
Portugal	Bareme	1992	2	3	-	-	-
Portugal	IAR	1992	2	3	1	35	1
Spain	EGM	1992	4	9	-	-	-
Spain	ICP	1992			Over 1500 in total		
UK	RAJAR	1992	5	1	44	89	1

Table 40 - Criteria for Station Inclusion

Country	Survey	Sponsor	Min. Audience Size	Other
Belgium	Radiometrie ERS	No	No	No
Denmark	Gallup	Yes	No	No
France	Mediametrie	No	25% of reach in prompted recognition list	Station must be quoted in sample by at least one respondent
Germany	MA			
Greece	Hellas	No	% of listenership	No
Ireland	JNLR	Yes	No	No
Italy	Audiradio	No	No	On request
Netherlands	Intomart	Yes	No	No
Portugal	Bareme	No	No	Bareme only analyses stations with a national average
Portugal	IAR	No	No	All stations referred to by the interviewed people are included
Spain	EGM	No	No	A minimum audience level is usually required
Spain	ICP	No	No	It must have been monitored by the interviewed and must be an active radio station
UK	RAJAR	Yes	No	Being important in audience terms

Table 41 - Demographic Breaks

Country	Survey	Social Class	Region	Age Breaks
Belgium	Radiometrie ERS			
Denmark	Gallup			
France	Mediametrie			15-19, 20-24, 25-34, 35-49, 50-59, 60+
Germany	MA	6 occupation, 4 household income	16 Lander, 19 Nielsen regions	14-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70+
Greece	Hellas	50 Habits	8	15-24, 25-34, 35-44, 45-54, 55-64
Ireland	JNLR	7 socio-economic	4	15-24, 25-34, 35-44, 45-54, 55-65, 65+
Italy	Auditradio		19	11-14, 15-24, 25-44, 45-64, 65+
Netherlands	Intomart			13-19, 20-34, 35-49, 50-64, 65+
Portugal	Bareme	4 class, 8 occupation	6	13-17, 18-24, 25-34, 35-44, 45-54, 55+
Portugal	IAR	5 class	2	15-17, 18-24, 25-43, 35-44, 45-54, 55-64, 65+
Spain	EGM	5 socio-economic	17	14-19, 19-24, 25-34, 35-44, 45-54, 55-64, 65+
Spain	ICP			14-178-24, 25-43, 35-44, 45-54, 55-64, 65+
UK	RAJAR	2 socio-economic, 1 children	12	15-24, 25-43, 35-44, 45-54, 55+

Table 42 - Coverage of Other Media

Country	Survey	Television	Cinema	Other
Belgium	Radiometrie ERS	No	No	No
Denmark	Gallup	Yes	Yes	No
France	Mediametrie	No	No	No
Germany	MA	Yes	Yes	Yes
Greece	Hellas	Yes	Yes	No
Ireland	JNLR	No	No	No
Italy	Audiradio	No	No	No
Netherlands	Intomart	No	No	No
Portugal	Bareme	Yes	Yes	No
Portugal	IAR	No	No	No
Spain	EGM	Yes	Yes	No
Spain	ICP	No	No	No
UK	RAJAR	Yes	Yes	No

Table 43 - Frequency and Recency of Reports

Country	Survey	Periods Covered by Reports		Frequency of Reports		Publication	
		Printed	Electronic	Printed	Electronic	Delay	
Belgium	Radiometrie ERS	None	4 months	None	4 months	2 months	
Denmark	Gallup	1, 3, 6, 12 months	Same	Monthly, half quarterly, quarterly, annual	Same	7 days and 21 days	
France	Mediametrie	3 months	Same	Quarterly	Same	2 weeks	
Germany	MA	6 months	Same	Annual	Same	2.5 months	
Greece	Hellas	12 months	Same	Annual	Same	4 weeks	
Ireland	JNLR	3 months, 6 months, 12 months	Same	Quarterly, half yearly, annual	Same	6-8 weeks	
Italy	Audiradio	3 months	Same	Annual	Same	3 months	
Netherlands	Intomart	Months all year	Same	Monthly all year	Same	4 weeks	
Portugal	Bareme	2 month periods	Same	Bi-monthly	Same	4 weeks	
Portugal	IAR	1 month and 12 months	Same	Monthly and annual	Same	1 week	
Spain	EGM	2 month period	Same	Every 4 months and annual	Same	3-4 weeks	
Spain	ICP	6 months/12 months	Same	4 monthly and annual	Same	2 weeks	
UK	RAJAR	3 months and 12 months	Same	Quarterly and annual	Same	4 weeks	

Table 44 - Ownership of Copyright

Country	Survey	Copyright Holder	Licensing Conditions
Belgium	Radiometrie ERS		None
Denmark	Gallup	Gallup	None
France	Mediametrie	Mediametrie	None
Germany	MA	AGMA	None
Greece	Hellas	BRMB	None
Ireland	JNLR	JNLR	None
Italy	Audiradio	Audiradio	None
Netherlands	Intomart	Intomart	None
Portugal	Bareme	Markttest	None
Portugal	IAR	Markttest	None
Spain	EGM	AIMC	None
Spain	ICP	ICP Research	None
UK	RAJAR	RAJAR	Yes with several computer bureaux

Table 45 - Conditions of Access

Country	Survey	Payment Conditions	Access for Subscribers	Restrictions on Availability to Non-Subscribers	Access to Raw Data
Belgium	Radiometrie ERS	None - free to all agents	Same for all	No	Yes
Denmark	Gallup	Annual subscription	Same for all	No	
France	Mediametrie	Annual subscription, per report, one-off	Same for all	Yes	
Germany	MA	Annual Subscription	Same for all	Yes	
Greece	Hellas	Per report basis	No special questions added for individual sponsors	No	Yes
Ireland	JNLR	Annual subscription	Same for all	No	Yes
Italy	Audiradio	Annual subscription	Same for all	Yes	
Netherlands	Intomart	Annual subscriptions and one-off data	Different	No	
Portugal	Bareme	Annual subscription	Same for all	No	Yes
Portugal	IAR	Annual subscription	Same for all	No	Yes
Spain	EGM	Annual subscription	Same for all	No	Yes
Spain	ICP	Annual subscription	No - different categories	Yes	Yes
UK	RAJAR	Annual subscription and per report basis	Same for all. 4-year contract	Yes	Yes

Table 46 - Other Users

Country	Survey	Description
Belgium	Radiometrie ERS	No
Denmark	Gallup	Gallup has the rights to data and can give it to everyone
France	Mediametrie	No
Germany	MA	No
Greece	Hellas	Yes - results of the research are available to anyone interested
Ireland	JNLR	Yes - analyzed on secondary analysis system
Italy	Audiradio	No
Netherlands	Intomart	No
Portugal	Bareme	No
Portugal	IAR	No
Spain	EGM	No
Spain	ICP	No
UK	RAJAR	No

2.5. International Surveys Of Audience Measurement

We have summarized in Tables 47-52 topline details of the two international surveys for the print media - Pan European Readership Survey (PES), and the European Business Readership Survey (EBRS) - and the one international survey covering television - Pan European Television Audience Research (PETAR). Both the PES and the EBRS measure readership of the international press targeted at business readers. For purposes of reference, we have included in our tables two national business readership surveys: the British BMRC (named after the Business Media Research Committee), and the German Leseranalyse.

Table 47: Organization of Research

All three international surveys have been sponsored by media owners, though not necessarily the same media owners each time round, as none is backed by a formal industry structure, which guarantees its continuity over time. The latest PES (PES 5) has been sponsored by a committee of six publications (The Economist, Financial Times, International Herald Tribune, Newsweek, Scientific American, and TIME), with one sales group cited as associate sponsor (RCI - Regie Club International). The three EBRS surveys conducted so far were initiated by the Financial Times as lead sponsor, and joined in the funding for the latest publication by 40 other sponsors, including 12 advertising agencies.

The successive PETAR surveys for television have had the most variable backing, and come into being for slightly different reasons. The international print titles needed their own surveys because they were rarely included in national, general surveys of readership, and often missing from the few national business readership surveys that were conducted. By comparison, the international television stations suffered more from restricted access to national survey data, and had a greater specific need for comparable multi-country audience data. However, their needs have changed quickly and considerably over time. The fortunes of the international stations rose briefly on the tide of commercial liberalization and cable expansion, then fell with the launch of national commercial competition. The survivors have so far managed by exploiting relatively low cost niche opportunities; however, the needs of a CNN will be quite different from those of a Eurosport or an MTV. As a result, the most recent PETAR, PETAR 6, has found only one sponsor, MTV Europe, and covers just five and a half countries (North Belgium, Denmark, Germany, Netherlands, Norway and Sweden). This contrasts with PETAR 3, carried out in 1988, which attracted 14 sponsors (including one advertiser), and covered 11 countries.

Table 48: Survey Universe

The survey universes for international and national readership surveys in Table 48 may share the same common ground of business and professional readers, but none is directly comparable with any of its fellows. The PES survey universe of professionals and executives living in high status areas is also suspect on methodological grounds, though possibly as good an attempt to construct an international segmented universe as could be expected under the circumstances. We shall return to this point in section 3 concerning issues of harmonization.

The PETAR survey universe is easiest to reconcile with other national survey universes because it does not attempt any demographic segmentation, but includes all individuals living in cable homes (and DTH homes in Germany). The difficulty, and not a major one, with the PETAR is in distinguishing cable from other forms of community reception, which can be a problem in some countries (notably Denmark).

Table 49: Survey Methodology

Variations in methodology bring out further the limited comparability of the various print surveys, which have rather different aims; some being much more narrowly defined than others.

Table 50: Frequency and Recency of Surveys and Reports

For reasons explained at the beginning of this section, there is no set pattern to the frequency of the international, or even the national, surveys. The television surveys need to be conducted more frequently on account of the fast-changing nature of the television business.

All the survey data are available to users in electronic form as well as in printed summary reports. The PES and EBRS printed reports can be obtained free of charge, whereas the printed reports of the most recent PETAR carry a cover charge. In practice, the short 50-page PETAR summaries will probably get distributed freely to most parties; however the detailed tabulations of ratings information will have to be purchased. For all three international surveys, manipulation of the electronically stored information is crucial for planning and evaluating campaigns.

Table 51: Coverage of Titles and Stations

Although they are specialized, the international and national surveys listed here all cover a large number of publications, including inflight

magazines by the PES and EBRs. The PETAR surveys simply cover all television stations, which can be received within the PETAR universe.

Table 52: Criteria for Inclusion and Access

As noted above, the PETAR surveys cover all channels that can be received. The criteria employed by the international and national print surveys appear more subjective, appearing to be based on the main titles that are deemed important within the designated universes in relation to business. The PES is somewhat broader in that several of the PES sponsors are either not specifically targeting business readers with their publications (e.g. Scientific American), and/or have a significant readership base outside the PES universe (e.g. Time Magazine).

Conditions of access vary from survey to survey. The PES has up to now been the most contentious by restricting direct access to the survey sponsors and other media owners purchasing the data. RSL holds the copyright on behalf of the survey sponsors, but they define the terms of access. Agencies and advertisers are refused direct access to the electronic data. Instead, they must commission special analyses through the media owners. Although the computer runs are free, the practice restricts use by the advertising community and keeps the owners informed about prospective business. It is generally reckoned that, if and when PES 6 goes ahead, wider access will be allowed.

Access to electronic data for special analyses is restricted by the other readership surveys to sponsors/subscribers. Special analyses may also be commissioned from authorized bureaux. Meanwhile, PETAR survey data can be purchased by any party, or special analyses may be conducted and paid for via RSL, which holds the copyright on behalf of MTV Europe.

INTERNATIONAL SURVEYS OF CROSS-BORDER MEDIA

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Table 49 - Survey Methodology

Table 50 - Frequency and Recency of Survey and Reports

Table 47 - Organization of Research ⁽¹⁾

Survey	Survey countries	Sponsors	Research company(s)	Ownership of research companies
<i>Type: Pan-European Press</i>				
Pan-European Survey (PES) 5, 1992	16 European countries (12 EC)	6 international publications, one sales house	Research Services Ltd (RSL) in association with 14 European research companies	Private (IPSOS)
European Business Readership Survey (EBRS), 1991	16 European countries (12 EC)	7 international publications, 22 national publications, 12 advertising agencies ⁽²⁾	RSL	Private (IPSOS)
<i>Type: National Business Press</i>				
Business Readership Media Committee (BRMC), 1990	UK	29 publications, 25 advertising agencies ⁽³⁾	RSL	Private (IPSOS)
Leseranalyse Führungskräfte in Wirtschaft and Verwaltung (LAF), 1991	Germany	National advertising agency association (GWA) and group of publishers	Four research companies: Basisresearch, Frankfurt; GFM-Getas, Hamburg; Infratest, München; Media-Markt-Analysen, Frankfurt	Private ownership
<i>Type: Pan-European Television</i>				
Pan European Television Audience Research (PETAR) 6, 1993	5.5 European countries (3.5 EC)	MTV Europe	RSL in association with 5 European research companies	Private (IPSOS)

(1) The dates are the publication dates for the surveys listed in Tables 47-52. At the time of writing the latest BRMC survey has just been published, and the next EBRS will appear in July 1993.

(2) Financial Times Ltd is lead sponsor.

(3) Five guarantors (lead sponsors): The Daily Telegraph plc, The Economist Newspaper Ltd, Financial Times Ltd, Newspaper Publishing PLC, Times Newspapers Ltd.

Table 48 - Survey Universe

Survey	Geographic Scope/ Housing	Personal Eligibility	Other Criteria
<i>Type: Pan-European Press</i>			
PES 5	National "high status" areas	Full time professional/executive 25-64	Must satisfy at least one of (a) £22k+ annual gross income or national equivalent, (b) Director of company with 25+ employees, (c) MA/MBA or higher educational qualification. Certain categories excluded
EBRS 1991	Companies	Heads of specified job functions in medium and large size establishments.	Minimum threshold of 250 employees belonging to an establishment; companies with 250+ employees and turnover exceeding a minimum threshold; head offices of banks/insurance companies included regardless of size
<i>Type: National Business Press</i>			
BRMC 1990	Private homes	Man or woman of middle or higher management status with significant business responsibilities	Full time working; Age 24-70; lengthy detailed rules of occupation eligibility, with additional education and social grade criteria
LAF 1991	Private homes	Managers in business and administration	Four categories covering STET (a) self-employed professionals, (b) vocational professionals (c) company executives, (d) civil service/administration management
<i>Type: Pan-European Television</i>			
PETAR 6	Cable homes/DTH homes in Germany	Individuals 4+	None

Table 49 - Survey Methodology

Survey	Sampling Frame	Survey Methodology	Interview Length	Universe Size (individuals)	Survey Sample	Sample % Universe
<i>Type: Pan-European Press</i>						
PES5	National representative parent surveys	Face-to-face interview	45 mins	5.67m	7,789	0.14%
EBRS 1991	Local Kompas Directories ECC (Europe's largest companies), Dunn & Bradstreet, ICAP-Hellas, Eurotest	Letter and questionnaire	Not applicable	18,661 individuals 36,604 companies	9,855	17.83%
<i>Type: National Business Press</i>						
BRMC 1990	Postal file	Face-to-face interview		1.15m	2,331	0.20%
LAF 1991	Mikrozensus 1989 Arbeitsstättenzählung	Face-to-face interview		1.164m	6,207	0.53%
<i>Type: Pan-European Television</i>						
PETAR 6	Cable operator lists/ some channel network data	Diary	4 weeks	58 million	2,308	0.003%

Table 50 - Frequency and Recency of Surveys and Reports

Survey	Fieldwork Periods	Periods Covered by Reports		Frequency of reports		Publication Delay
		Printed	Electronic	Printed	Electronic	
<i>Type: Pan-European Press</i>						
PES 5	Discontinuous - 3 stages: Stage one - 2 months; Stages two/three - 5 months	2-6 months (1)	Same	3 years	Same	3/4 months
EBRS 1991	Discontinuous - 2.5 months	End April - Mid July 1991	Same	2-3years	Same	Five months
<i>Type: National Business Press</i>						
BRMC 1990	Discontinuous - 5 months	March-August 1990	Same	3 years	Same	
LAF 1991	Discontinuous - 2.5 months	March-June 1991	Same	3 years	Same	Two months
<i>Type: Pan-European Television</i>						
PETAR 6	Continuous - 4 weeks	November 1992	Same	Annual	Same	4 months

(1) Whole survey, including screening interviews, took place between September 1991 and July 1992. Readership sections were completed in 2-6 months by country (e.g., Norway - 2 months; Portugal - 6 months).

Table 51- Coverage of Titles

Survey	Coverage	Publications Covered (EC Only)			TOTAL
		All Countries	More than 1 Country	Individual Countries	
<i>Type: Pan-European Press</i>					
PES 5	16 European countries (12 EC)	32	36	297	365
EBRS 1991	16 European countries	19	32	162	213

Survey	Coverage	Publications Covered					TOTAL	
		Daily newspapers	Newspaper supplements	Weekly newspapers/magazines	Fortnightly magazines	Monthly magazines		Other
<i>Type: National Business Press</i>								
BRMC 1990	UK	22	13	39	6	65	7	152
Leseranalyse	Germany	5	0	9	0	10	0	24 (1)

Survey	Coverage	Publications Covered		TOTAL
		National Stations	International Stations	
<i>Type: Pan-European Television</i>				
PETAR 6	5.5 European countries (3.5 EC)	All (c 50)	All (c 20)	c 70

(1) Leseranalyse: includes basic awareness and frequency of reading questions for 12 international titles

Table 52 - Criteria for Inclusion

Survey	Coverage	Criteria
<i>Type: Pan-European Press</i>		
PES 5	16 European countries (12 EC)	Titles chosen by committee of survey sponsors with RSL on basis of editorial, readership and circulation criteria. Selection for each country comprises major international and national <i>business</i> and <i>high status</i> publications
EBRS 1991	16 European countries (12 EC)	Restriction imposed by available space (one page) on self-completion questionnaire. Titles chosen by committees of sponsors and advertising agencies with RSL on the basis of editorial, readership and circulation criteria. Selection for each country comprises major international and national <i>business</i> publications
<i>Type: National Business Press</i>		
BRMC 1990	UK	Titles chosen by committee of survey sponsors with RSL on basis of editorial, readership and circulation criteria
LAF 1991	Germany	Sponsor titles only. Admission to sponsor decided by GWA and existing sponsors
<i>Type: Pan-European Television</i>		
PETAR 6	5.5 European countries (3.5 EC)	All stations included

3. EVALUATION OF MEDIA SURVEYS

3.1. Evenness of Treatment

There are two distinct issues.

The issue we have been asked to address is how evenly surveys treat different media titles. A separate issue is evenness between seller and buyer, which raises questions of transparency, access and systematic under- or (more likely) over-estimation of audience measures. Some of these are important to the international issue of comparability, which we cover in section 3.2., but they are not directly related to questions about whether surveys favour one or more titles at the expense of others. We simply note the existence of these other issues in passing.

We have identified four areas where unevenness may occur. They are:

- Choice of universe;
- Choice of audience measure;
- Criteria for inclusion in survey;
- Conditions of access.

We will examine each in turn. In identifying where unevenness may occur, it is, as we said in the introduction, necessary to consider whether the potential unevenness is inevitable or could be deliberate.

3.1.1. Television

Choice of Universe

All national television surveys sample individuals in private households and omit pubs, clubs, hotels, guest houses and institutions (or other out of home locations, such as doctors' surgeries and offices). The excluded types of housing represent only a small fraction of the total population (say, in the order of a percentage point), and would in any case pose significant methodological problems of measurement. Since getting on

for 99% of the homes in each EC member state possess a television set, and around 95% in most EC member states have a telephone, the variations that exist over whether to include homes without TV or without telephone are almost certainly trivial and without bearing on the evenness of the surveys.

More problematic are the geographic restrictions. It could, for example, be argued that the decision by the South Belgian panel to accept households speaking any one of the three national languages versus the decision by the North Belgian panel to include only Flemish speakers favours the stations in the South by over-stating their effective universes. This would affect the reported ratings if, as a process of "natural selection", the South panel over-represented French speaking homes in Brussels. It probably does, and a bias of Southern over-estimation in the order of several percentage points is conceivable. It may not matter as North and South Belgium are usually treated as discrete advertising markets.

A different set of problems is posed by the Greek panel, which is restricted to urban areas. The lack of independent reference data for this universe makes it possible for unevenness to enter, though it is unclear how this would affect individual channels.

Most television surveys report data from individuals aged 4+. A few have opted for the slightly raised threshold of six years. Such practice might conceivably disadvantage channels targeting children, except that some panels have genuinely judged the data from four and five year-olds to lack sufficient reliability.

Lastly, the questions of nationality, language and ethnic origin. The only socio-demographic restriction, which four channels report, is that of language. However, it is of questionable importance since, as one contributor told us, language is likely to be a natural restriction during the establishment survey and recruitment of panel homes. Unless the research company can communicate easily with members of the chosen household, it is unlikely they will be added to the sample. This means that foreign language overspill channels will be disadvantaged relative to domestic channels regardless of whether the survey universe exercises a specific language restriction.

On balance, we believe the choice of universe to have a trivial effect on the evenness of treatment by national surveys of television viewing, with the single exception of language, where we believe the unevenness to be largely inevitable.

Choice of Audience Measure

There has been much recent controversy to do with national variations over the calculation of ratings, and whether some arithmetical routines, or algorithms, do not engender specific distortions in the reporting of ratings.

To illustrate what is meant by algorithms for calculating ratings, consider how two systems might work out ratings for a given channel during the course of one minute. System A (e.g. Mediamat in France) counts the exact number of seconds of viewing to that channel by each panellist during the minute, adds the lot together, and then calculates the total seconds of viewing to it as a percentage of the maximum possible. In theory, this is the most precise and true way of doing the calculation (in reality, it is not necessarily true owing to limitations in the measurement hardware), except that it is expensive on storage. Accordingly, system B (e.g. AGB Hellas in Greece) opts for the simplified and less taxing approach of taking a snapshot at the halfway stage of the minute, and attributing the whole of that minute for each panellist to the channel he/she was watching at that moment. It acknowledges the existence of errors at the individual level, but assumes they will balance out across the entire sample and over time.

We have met with four different kinds of algorithms among national panels in EC member states. The point to recognize is that they will all give the same total rating for the period in question as they all attribute the same viewing records somehow. The question is whether the errors engendered by each approach balance out, especially where it concerns the viewing of commercial breaks. The hearsay evidence we have received from the research companies is that they will, though the results of various tests are unpublished or else not widely distributed. We think it very unlikely that algorithms give rise to systematic bias, though others may put forward a different view.

Although we very much doubt that the divers methods of calculating ratings are a cause of unevenness, other contributing factors almost certainly are. We have identified four main causes.

1. Establishment survey data provide crucial information on channel penetration, which may be used as a control on the representativeness of panels and/or in grossing up data for reporting against selected universes. In those cases, how good is the estimate of channel penetration? Only the British and Italian surveys carry out an extensive check on channel penetration in their establishment surveys (see Table 8: the South Belgian survey only checks for channels claimed). The rest ask for channel reception with varying degrees of thoroughness. The risk is that they will under-estimate the minority channels with low penetration and audiences. If, for instance the

housewife is the one questioned, he/she may not know whether their children watch MTV on a separate set, or recall it at the interview. And so on.

Establishment surveys - even BARB or Auditel - will in any case have difficulty in accurately measuring penetration of minority channels owing to the invariable clustering of reception which is associated with community antennae and DTH reception. Partly, it is question of priority, with the surveys devoting a greater share of resource towards fulfilling the requirements of the main stations (e.g. over-sampling of regional overlap by BARB). But also, the presence of clusters makes sampling more difficult, and is likely to risk more under- than over-estimation. It is hard to evaluate the precise effects. All we can say is that disputes have certainly arisen over the establishment survey procedures employed by BARB, which we know best, but they are almost bound to happen.

2. A further opportunity for unevenness concerns the representativeness of panels. Except for major channels, surveys invariably report ratings based on channel penetration within the survey panel. In the absence of individual controls for each channel, which would be impracticable, there is a consequent risk of unevenness. This will be greater (and even considerable) for smaller channels.

Of course, it is perfectly possible that a minority channel gets over-represented on a panel depending on the causes at work. In general we would expect a greater risk of under-estimation, especially for foreign-language overspill channels, but each case needs to be judged individually.

3. There is in any case the basic issue of sample size. The lower the channel penetration the smaller its reporting sample, unless disproportionate sampling is carried out in order to ensure adequate numbers. This is a particular problem for minority television stations owing to the small samples employed for most panels.
4. Peplemeters only measure viewing in private homes and sometimes incompletely at that, depending on how many and which kinds of sets they are able to monitor, and whether they measure timeshift viewing on video. In the case of out of home viewing, guest viewing is usually measured as a substitute, but this has its drawbacks and will only account for some out of home viewing.

The question is whether the lack of completeness of measurement constitutes a selective bias, affecting some channels more than others. Thematic channels like CNN and MTV are the ones most likely to suffer. Indeed, MTV has just published some in-house research in which it

claims that BARB under-estimates its true viewing levels relative to other channels because of substantial out of home viewing of it.

In conclusion, we believe there exist very substantial risks of unevenness in the choice and reporting of rating measures. The problem is not the rating itself so much as the variable quality of survey procedures used for assessing channel penetration and limitations over what peplemeters can measure. The bigger the channel the less any of these potential causes of error matter. But, for those smaller channels, which make up the minority 10% or so of national viewing, problems exist, and we expect that they will mostly entail under-estimation. Whilst some of the problems are inevitable, reflecting limitations that are inherent in peplemeter methodology, others (e.g. accurate estimates and controls for channel penetration) border on the greyer area of trade-offs between affordability, position of influence, priority and the desire for getting things right.

Finally, we observe that the mere fact of complaining does not imply the existence of unevenness. We are aware of the current dispute between GfK and the two new stations, Vox and n-tv, which we assume is on the lines of what we have described. The channels may have justifiable grounds of complaint, or the truth is that their ratings really are low.

Criteria for Inclusion in Survey

All systems we have come across will measure every use of the set. In that sense there is no exclusion. However, they will not necessarily store or later report the ratings for individual channels. The channels listed in Table 11 are in many instances only a selection of those received.

The exclusion of a particular channel from the reported ratings will affect that channel only. Leaving it out will not, for example, affect the audience share of other channels as it will be included in the "Other viewing " category. We have met with four basic reasons for excluding a channel from the reported ratings. Namely:

- The station is not a subscriber to the survey.
- The sample of receiving homes on the panel is too small to give reliable estimates. Here there exist both limitations of sample size and dangers of imbalance in the reporting sub-sample. The two go together. The Irish TAM and French Mediamat go so far as to exclude DTH homes from their panels on grounds of minimal penetration (around 1%).

- The main controllers of the survey, or copyright holders decide as a matter of policy not to report a station.
- The market has insufficient interest in the station; too little, that is, for the survey to invest in the extra time and resource for storing and reporting data on it.

We discuss the issue of payment below under "Conditions of Access", because it is necessary to distinguish between cases where the charges are reasonable and where not.

Low penetration is an inevitable cause of unevenness. Another "natural" limitation concerns the ease of obtaining transmission logs, which are necessary for the production of programme and commercial ratings. Although a research company can create its own transmission logs (as we believe does Sofres A.M. for the domestic channels in Spain), the practice requires extra resource, and it is customary for the stations to supply the research companies with their own records. This works against foreign overspill channels, for which only time-based ratings (e.g. quarter hour by quarter hour, etc.) are generally given.

Two EC member states, Belgium and Ireland deliberately do not report some channels, or do not report them in as much depth as they might. Both countries are more at risk than other EC member states from foreign overspill on account of sharing their languages with much larger neighbours. In Belgium, the issue is worst in the south. As we understand it, the South Belgian panel could supply the market with commercial ratings for the French channels (which would like it to do so), but will not, and it can supply advertising ratings for commercial spots, but buyers will only see them for their own campaigns and can obtain them only from the advertising sales concessionaires for the stations in question (RTBF or RTL TVi). The Irish go further by not publishing data on the individual overspill channels from the United Kingdom.

Conditions of Access

Most surveys will provide all stations with whatever ratings data they want, but for some minor restrictions, which have less to do with direct commercial issues, than with other sensitive public service information, as in the case of the Intomart survey in the Netherlands. Thus, RTL-4 does not get to see some of the ratings data for the individual broadcasting societies making up the three public network schedules, which Intomart prepares for NOS and Ster, nor, as we have been told, is it at all interested.

The three main exceptions among EC member states with regard to openness of access to all stations are Belgium, Ireland and Germany.

Each imposes restrictions differently. Besides reporting limited time-based information on the foreign channels, the data from the surveys in North as well as South Belgium are only available to members of the national joint industry body, CIM. RTE controls the distribution of data from the Irish TAM, and simply does not release any data on foreign (UK) channels. And lastly, the group of stations sponsoring GfK have effectively restricted access to some outside parties by setting high tariffs. The annual cost of the GfK panel to the TV stations is around DM20 million. Outsiders could gain access a year ago for a fee of DM500,000. This is very high for a station like MTV Europe, which is (a) less adequately catered for in the survey than the main sponsors (for the kinds of reason mentioned earlier under "Choice of Measure"), and (b) enjoys a fraction of their advertising turnover from the German market. Recently, the main German sponsors have raised the asking price to DM1 million per annum. This simply begs the question of what is a fair and reasonable charge. Joint industry bodies like Auditel and BARB also set tariffs for outsider access, and one representative from RAI has commented to us about the difficulties of devising perfect criteria, when really there ought to be multiple and variable criteria depending on the parties concerned. The own service systems in Portugal, Spain, and Greece, operate, as far as we know, with standard contracts for each sector. This is a sensitive area to explore in any depth.

3.1.2. Press

Choice of Universe

Our comments for press are the same as for television. There is an inherent language restriction in all readership research. We are also not clear to what extent the thresholds for including children are legal thresholds (i.e. the research companies are prevented by law from interviewing children below a certain age), practical thresholds for obtaining sound data, or commercial thresholds reflecting general lack of interest due to lack of titles. The latter is probably the main limiting factor. Some countries do carry out specific surveys in order to measure reading among children. Thus Doxa has recently carried out Junior 1992 on behalf of five magazine publishers, utilizing a sample of children aged 6-13.

Choice of Measure

Although sampling variables may cause unevenness of treatment with press, just as they clearly can do with television, there is no obvious way of quantifying them since print publications do not have fixed geographic

reception boundaries like television transmissions have. Nor are the readership questions limited to audience measurement in specific home settings. Instead, the potential causes of uneven treatment by press surveys have much more to do with the selection of measure and the nature of the press interview.

We have identified three main points of concern.

1. Whereas, television surveys all measure ratings in much the same way, European press surveys employ two quite different techniques: Recent Reading and First Read Yesterday (FRY). We have described these in section 2.1.

We first emphasize that both measures rely on memory, and that this gives rise to several potential sources of error. It goes without saying that there is already a vast literature on the accuracy of recent reading measures, the older of the two techniques, and a growing literature about FRY.

Recent Reading and FRY are not the only techniques of measuring readership. Recent Reading is much the most common technique in Europe, but has been challenged from the beginning of eighties by FRY. This rival technique attempts to improve on Recent Reading in two ways: by reducing the burden on memory (only yesterday is being asked for, though First Reading questions do not have to be restricted to yesterday); and simultaneously eliminating two characteristic errors of Recent Reading, known respectively as "parallel" and "replicated" reading. However, FRY presents its own problems, specifically in connection with the difficulties of communicating the concept of first reading to interviewees, and with the limited number of first reading events that will normally take place on any one day, thereby necessitating greatly increased sample sizes in order to generate sufficient volumes of readership data.

The Biennial Worldwide Readership Symposium has over the past decade become the accepted main forum for international debate over research issues such as the relative merits of Recent Reading versus FRY or other methods. The proceedings of the first four symposia have been published in a book titled "Dear Reader" (1990). The book is a review of all the contributions on different aspects of readership research that have been made at successive symposia. It is a small corner of the total research literature on reading, but an authoritative international source, which we have consulted in examining the issue of evenness of treatment.

The main points we have drawn from "Dear Reader" are:

- The main thrust of the research concerns general issues of under- and over-claiming readership. This could be important in discussions of harmonization, but is not necessarily related to questions of selective bias.
 - The papers reviewed indicate a number of ways in which selective bias, and therefore unevenness of treatment could enter survey designs (for example, in the balance of "positive" and "negative" multiple choice answers in questions about last reading - an affect reported by the Allensbacher institute responsible for AWA).
 - Concerning general causes of uneven treatment found with the Recent Reading technique, the review concludes, "Overstatement of readership can occur in Recent Reading surveys, and certainly does, particularly amongst relatively regular readers, who will tend to recall their past reading events as both more frequent and more recent than is truly the case. Underclaiming is also widely prevalent, principally in respect of irregular, infrequent reading of a given publication, particularly when such reading occurs out-of-home."
 - As for uneven treatment by FRY, the review concludes, "It is possible that Average Issue Readership estimates based on the FRY technique may display less of the bias that derives from sheer forgetting of reading events, from misplacing them in time, from confusing one issue with another or from parallel and replicated readership. But, unfortunately, the precision of FRY estimates is severely limited, for all publication groups other than daily newspapers (for which "first reading" is hardly an issue). In any given period, the sheer number of "first reading events will be small, so that the proportion that "first readers" represent of the population will be subject to wide margins of error, relatively speaking."
2. The general difficulty of laying specific causes of uneven treatment at the door of any survey method, let alone the basic techniques themselves, is twofold.

First, the imputation of inaccuracy, and hence unevenness, requires calibration by an independent yardstick; however, this only begs the question of what is an accepted, valid yardstick, which gets us nearer to the actual truth about reading events. It is very difficult to tackle such issues experimentally without introducing other kinds of artificiality.

Second, and following on from the preceding statement, the difficulties of calibration, or setting absolute yardsticks of truth, arise from the deeply empirical nature of the subject matter. That is to say, many causal variables will affect readership estimates, and therefore could be causes of uneven treatment. They include, for example:

- Number of filters;
- Number of titles on list;
- Similarities in wording or presentation of titles (viz. causing errors of confusion);
- Stimulus materials for presenting titles (with any number of options available to the research company);
- Choice of prompts to aid readers' memories;
- Wording of questions (again many variations possible);
- Question order;
- Length of interview.

And so on. Given the interactions that are bound to exist, it is practically impossible to attribute specific biases to individual surveys without detailed case by case examination. Even then there is no guarantee the answers will be clear-cut.

3. Different publications have different needs. For example, a Sunday newspaper, which is published in eight sections, may want to analyze readership data by section (what is known as section traffic) on the grounds that this segmentation is essential support for advertising sales. Other publications may have no interest; however, the length of readership interviews is an important consideration for all parties, such that the inclusion of the extra section traffic questions might cause one kind of unevenness, whilst their exclusion might cause another.

In conclusion, we firmly believe in the likely existence of uneven treatment in national readership surveys, which can be attributed to the choice of measure, and how it is administered. We can readily imagine that certain practices will affect specific categories of publication (viz. monthly magazines, supplements, etc), favourably or otherwise. We further suspect many surveys to be guilty of some ossification of practice in order to supply results that are consistent, but not necessarily the most accurate over time. There is, though a real problem of obtaining consistent results, whether or not they are accurate.

To illustrate the care that some national bodies take, the AG.MA in Germany has found that different institutes will consistently obtain different overall levels of readership, even though they are handling exactly the same survey. One study found the difference between highest and lowest to be as much as 20%+. Recognizing that each research institute has its own signature, the AG.MA employs as many as

six research institutes for the print and electronic sections of the Media Analyse (altogether eight, as four companies contribute to either section) and each year there is a rotation of one institute per section. By these means, the AG.MA attempts to avoid long-term bias, whilst at the same time trying to obtain readership levels that are consistent from one year to the next.

Survey Periods and Delays in Reporting

Most readership surveys cover the majority of the year (see Table 23). We have not tried to analyze the information further by investigating whether specific categories are measured over shorter intervals (viz. the survey may be conducted over 360 days, but measures readership for monthly titles during the spring and Autumn only), but unevenness can enter the designs where shorter periods are used, as in the case of the Italian ISPI and ISEGI press surveys, for which fieldwork is restricted to six months per annum during Spring and Autumn. Two kinds of uneven treatment are conceivable. Though we have not heard any claims to this effect, titles will be affected by the choice of survey months if they are subject to seasonal variations in readership. The other cause of unevenness, which we have heard attributed to the Italian press through hearsay, is if titles take advantage of the restricted survey periods by running coincidental promotions during them in order to boost readership scores.

The emergence of computer assisted techniques of measuring readership makes possible much shorter delays between the collection of data and the publication of results. But still, as Table 28 indicates, delays of up to 4 months can occur, which may not be necessary. Various commentators have observed that the longer the delays the harder this makes it for new title launches, which must also face the hurdle of eligibility to join the survey. Depending on when the launches take place and the specific survey rules, delays of two to three years are conceivable before a new title can offer national readership data in support of its advertising sales.

Criteria for Inclusion in Survey

Unevenness of treatment is inevitable because of the time constraints on readership interviews, which make it possible for national surveys to sample only some of the titles available to the public. We have listed the main criteria of inclusion in Table 25. We are not aware of which criteria, if any, are a particular cause of grievance in the EC member states. Two items, though, call for special comment.

1. The most common criterion of inclusion is circulation, be it minimum circulation, or audited circulation. This begs the question, how is circulation audited? Followed by, is the measurement of circulation a potential cause of uneven treatment?

We have collected some preliminary information on the measurement of circulation, but not attempted an analysis, considering this to be a large field of enquiry that merits separate investigation. In brief: we have been made aware that there are considerable variations of national practice, such as could greatly affect the accuracy of the data. Just as readership surveys only measure part of the market, so do circulation audits cover some titles. Therefore, what criteria of inclusion do they employ? Do they include foreign titles? When, over what time intervals, and how do they audit circulation? For example, by auditing the number of copies distributed to the trade? Or copies appearing at points of sale? Or copies sold? And so on. In one case - the Netherlands - it appears that the circulation data are not audited, but are supplied instead as publishers' estimates.

The criterion of circulation is not only important for the inclusion of titles in readership surveys, but as a separate substitute measure for consumption in the absence of readership data.

We suspect that the main risk is of particular titles or groups of publications holding to practices, which yield inflated estimates. We do not know the scale of this risk, but it has been suggested to us by one senior representative of a national circulation bureau that appreciable opportunities for faulty practice do exist.

Granted that surveys use circulation criteria, a further question is whether circulation numbers are sufficient on their own. A special problem arises with similar titles (e.g. What Car?; Which Car?; I Like my Car; etc) where the inclusion of, say, just the one title which passes the minimum threshold is likely to yield inflated estimates through confusion with the remaining titles that did not make the survey.

2. Three surveys (CIM - Belgium; MA - Germany; NRS - United Kingdom) report the use of selection criteria based on value to the advertising industry or membership of the controlling organization. Depending on how they were exercised, the criteria could entail unequal treatment of media. For example, the Belgian CIM might use its discretionary powers to restrict the CIM survey to indigenous Belgian publications.

Conditions of Access

Table 30 summarizes information on conditions of access. By contrast with television, readership data are mostly easy to obtain in printed summaries, and many fewer restrictions on access appear to exist. A few surveys limit purchase to members of the joint industry association, which purchased the study. This would make it possible, say, for the CIM in Belgium to erect a further barrier against foreign own-language titles from France and Netherlands to sell advertising space in split editions aimed at Belgian audiences. We note that only two readership surveys report measurement of foreign newspapers or magazines (see Table 24), but it may be that split run editions are commonly regarded as domestic titles (as with the Readers' Digest, which appears in many national surveys).

The Italian Audipress is the only survey to report restrictions to parts of the survey data. We are aware of an earlier argument between the publishers and advertising community over the publication of data on high frequency readership, with the advertisers and agencies wanting it, but the publishers refusing to accept access by anyone, themselves included, out of fear, it was alleged, that the figures would show them in a worse light. The quarrel has since been dropped. In this case the issue of unevenness applied to the intermedia competition between the publishers and television stations, which has been a field of bitter dispute during the last two years. This is not, however, a purely Italian problem. The growing importance of television and the far more precise and stringent measure employed in television research have stimulated demand by the advertising community in some countries for more qualified (i.e. tougher) measures of readership. These are perennial matters of dispute and debate.

3.1.3. Radio

Radio presents a more difficult challenge to assess than either television or radio. Television is simplest, both because the available choice of media is more limited and easier to define geographically, and because the meter measure of audiences is precise and places minimal burdens on memory. It is perhaps easier to see with television where unevenness is likely to occur, and to predict the directions it will take. Press is more difficult on account of the segmented structure of the print media and the relative crudeness and subjectivity of the measures, relying as they do on what people remember. However, all the press surveys in EC member states are well established and closely related in methodology. To understand what unevenness actually exist requires in each case, (a) a general understanding of the potential causes of unevenness associated with the measuring technique (i.e. Recent Reading or FRY), (b) particular knowledge of the survey in relation to the local market conditions, and

(c) recognition of the local political context embracing the publishers and the advertising community. Then there is the separate question of what biases exist in favour of some titles being included in the survey, and others excluded from the survey.

Radio is altogether more problematic to assess. (a) The research methods seem generally to be much cruder. (b) There is no uniformity of method as with television or press. (c) Background establishment data, the equivalent of TV station penetration or print circulation and distribution are often poor, or of dubious quality.

Accordingly, we have limited this section on radio to a few brief observations.

1. The same general comments about choice of universe apply to radio as they do with television and press.
2. Some radio surveys use much weaker measures than others. We hypothesize that, as a rule, the weaker the measure (e.g. daily reach at one extreme versus quarter hour rating at the other), the weaker the discrimination, and the better the smaller stations will appear in relation to the stronger stations. The issue would then be more one of which spectacles to wear in comparing stations than actual distortion. After all, who is to say a survey cannot use a reach measure in preference to ratings? Except that, if the ideal is to measure actual audiences for programmes and commercials, ratings and not reach figures are wanted. In short, the correct research choice ought to be to employ the more precise measure; but if a survey is not doing that it may be a moot point whether the ensuing unevenness, if any, reflects deliberate design, or has been forced on the survey by lack of funds and the mosaic structure of local radio, which favours larger samples at the expense of fineness of detail.

If our hypothesis about the choice of weaker measures is correct, we would expect some tensions to exist between the conflicting demands of national public stations at one extreme and small local stations at the other extreme. In fact, we know this to be the case with Audiradio in Italy, and one cause of the failure of Audiradio to appear last year or this year (to date). The question is whether similar experiences have happened in other countries.

3. Like press measures, radio measures make varying and often extensive demands on memory. As a result, the kinds of bias that can occur with press surveys must also count as a risk for radio surveys. It would be interesting to know, for example, how easily listeners confuse the names of stations. The general assumption seems to be that they do not; but it is unclear how correct this is, or whether there do not exist selective biases whereby survey respondents tend to

overclaim for well-known or more frequently listened to stations, and underclaim for less well known or less frequently listened to stations.

4. Compared with press and television, radio surveys appear much broader in coverage and to impose few restrictions on access. In other words, we doubt whether the criteria for inclusion or conditions of access to data matter greatly to the even treatment of radio stations by national surveys of listenership.

In conclusion, radio represents a grey area where substantial unevenness may exist in some countries, but has yet to be identified.

3.1.4. International surveys of press and television

The issue of even treatment applies differently to the international surveys in so far as they are deliberately selective by market sector and aim to be supplementary to national surveys. We have identified two main kinds of issue concerning their evenness of treatment. (a) The international surveys purport to offer equivalent measures with the national surveys, albeit within their own chosen universes. The question is, do they offer inflated or understated audience estimates relative to the national surveys. (b) The criteria for inclusion and conditions of access could favour some media at the expense of others within market sectors, which the international surveys are trying to serve.

Equivalence of Measures with National Surveys

The three surveys pose different issues.

The EBRS presents the most clearly defined and self-contained universe. The main concern is with the adequacy of its self-completion methodology. Not only does it differ fundamentally from the personal face-to-face and telephone interviews used by other surveys, but also it does so in a way which could bias the response rates. Response rates (i.e. the proportion of a contacted sample that agrees to enter the survey) are a problem for all research surveys, which could entail selective distortions in the data. They are perhaps a greater problem for self-completion surveys like the EBRS, where prospective interviewees can look at the survey before they choose whether to respond. Conceivably, this may cause a higher differential response rate among more frequent readers of publications listed in the EBRS.

By contrast, the PES employs the same basic face-to-face interview methodology as most national surveys. It also uses the same Recent Reading measure. Furthermore, comparative data, which we have seen

(cf. Media International - July 1992), suggest that PES estimates for national titles by country correspond reasonably well with local estimates from national surveys: much more so in fact than the EBRS estimates, which cannot easily be compared because of the tightness of the EBRS universe definition. Less clear is whether the PES sampling methodology creates a bias of higher or lower readership estimates for the international publications, which are less likely to be included in the national surveys. The problems that the PES faces are: (a) lack of solid establishment data on the composition and geographic dispersion of its target universe; (b) country by country variations in the applicability of its criteria; and (c) inevitably restricted national sample sizes caused by the need to cover a large number of countries combined with the high costs of identifying eligible respondents. None of this is to imply any judgement about the quality of the PES methodology or of its results. It is only that there is a significant risk of uneven measurement in a survey of this kind.

Lastly, PETAR falls somewhere between the EBRS and PES. Its universe definition is less problematic than the PES definition; however, like the EBRS, it uses a different methodology from national surveys. Our impression is that the diary data produced by PETAR 6 and previous PETAR surveys are very similar to national peplemeter data with regard to estimates of total viewing and audience share for the main stations in each country. Just as we suspect that some peplemeter systems tend to understate viewing to minority channels, it has been suggested to us that diaries may overstate viewing to minority channels.

Criteria for Inclusion and Conditions of Access

EBRS, PES and PETAR have all been designed round the needs of their sponsors. Inevitably, they will measure audiences more adequately for some titles than others. For example, the PES universe definition is a compromise between the differing requirements of its sponsors - perhaps better suited for a restricted business title like the International Herald Tribune than a more general title like Time magazine, which has a large readership outside the PES universe. Likewise, the PETAR surveys will produce sufficient sample sizes by selected demographics to measure some channels, but not others. However, that is for the sponsors to agree between themselves, and we are unaware of specific restrictions on which media may sponsor the surveys. Nor are we aware of deliberate restrictions on which particular titles they cover beyond the consensus decisions on which titles are important for the survey to cover. We have come across specific restrictions for some national specialist surveys (e.g. LAF in Germany), but not the international surveys: none that is, which affects the evenness of treatment of different media.

3.2. International: Cross-border Comparability Of Audience Data

Section 3.2 focuses on national surveys of television viewing and press readership. We have left out radio partly because it is the least international of the three media in terms of advertising interest, and partly because it is very clearly the least harmonized in terms of the basic measures used. As Table 37 shows, national radio surveys exhibit a wide range of measurement definitions, some of which appear very much later than others; but in any case, there is no real point of comparison between surveys publishing ratings (however defined and counted) and surveys publishing reach figures.

In marked contrast to radio, national audience surveys of television, and likewise press, are very similar to one another with regard to choice of methodology, concept of measurement, and audience definitions. However, there has been dispute over the comparability of measures. As noted in the Introduction (Section 1), the achievement of comparability is central to the current debate on harmonization of audience measures, and has two aspects. One is comparability in the sense of different surveys using equivalent measuring scales: the specific issue of comparability. The other is comparability in the sense of measures which are compatible in their reporting. Sections 3.2.1 and 3.2.2. cover specific issues of *comparability* for television and press separately, followed by section 3.2.3. which discusses general issues of *compatibility*, which are common to both television and press. Lastly, section 3.2.4. introduces the question of free flow of audience data across borders, and summarizes current progress towards harmonization.

3.2.1. Specific Issues of Comparability - Television

National television surveys throughout the EC share more or less the same basic concept of measurement. Some define television viewing as presence in the room with the set on; others as presence in the room with set on and watching. The latter criterion appears the more stringent on the surface, and ought theoretically to entail lower audience figures. There has also been much argument over which definition ought to be used. One recent study by CESP in France found a 10% difference in response levels during a telephone study in which interviewees were first asked who was in the room with the set on and watching, and then who else was in the room. The CESP warned, however, that the telephone questions were asked under totally different conditions from the administration of panel viewing instructions, and probably represented the extreme of differences that might be found. The general consensus,

backed by some hearsay evidence, is that the choice of one or other definition makes no difference whatsoever, as each panellist creates his own psychological interpretation of the viewing instructions.

The other topic of much recent debate concerns the choice of algorithm for computing ratings out of individual viewing records. As we have already observed in section 3.1.1., the choice of algorithm will at most affect the measured balance of viewing across channels (possibly at the expense of minority channels during commercial breaks), but not the total viewing levels. Those whom we have spoken to at the research companies have uniformly dismissed the choice of algorithm as an important influence on measured viewing, and several have cited hearsay evidence from their own experiments in support of this view.

In short, we believe that the basic rating measure is the same across all national peplemeter systems in the EC. But, there are two ways in which the output of ratings can differ in absolute terms.

1. First, the precise methodology of each survey could easily effect the absolute size of measured ratings. Faulty survey design and poor application of quality controls may easily lead to biases within selected demographic categories, or even across the whole survey. Two examples will illustrate this point.

- One critical factor in the measurement of ratings is the representativeness of the survey sample, or peplemeter panel. But representative of what? The BARB system in the United Kingdom has found that claimed weight of viewing is an important control in recruiting panel members, without which the panel is in danger of producing inflated ratings as heavy viewing homes (as identified by simple questions in the establishment survey) are more likely than the others to say yes to joining the panel. Some, but not all, other surveys also employ weight of viewing as a panel control. Without arguing the pros and cons of either position, the question we are left with is, will those surveys, which do not employ weight of viewing as a panel control, yield systematically higher ratings than those that do for the same actual audiences? If so, what margin of difference does it make? The problem is made complicated by the fact that the degree of bias may vary by country, whilst the variation caused by weight of viewing may be largely accommodated by the application of other, overlapping variables, such as household size.
- Nielsen launched its national peplemeter panel in the USA in 1987. Two years later it provoked a storm of controversy when the panel recorded an unprecedented year on year fall in measured ratings among selected demographic groups (e.g. young housewives with children). Even now, after possibly the most

exhaustive methodological investigation to which any measuring system has been subjected, opinion is divided over the extent to which there was a real fall in viewing, or simply a "fatigue" effect of panellists failing to push their buttons as often as they should after extended periods of service on the panel. If fatigue proves to be important in Europe, then a crucial research specification will be a threshold of minimum annual turnover of the panel, or maximum period of service.

The point to stress is that peplemeter methodology is still very young and little systematic information exists on different national practices. Indeed, the current study by the European Association of Advertising Agencies, due to be published in June, is the first detailed, descriptive survey of different peplemeter systems in Europe.

2. If methodology is a grey area, where we cannot say with certainty how close or how far apart different peplemeter systems are in measuring audiences, the area of user conventions is, by contrast, clear-cut. By user conventions, we refer to the specifications on the form of output, as usually decided by the survey contractors, or the advertising industry in general. As an example, we know for certain that the inclusion of guest viewing to individual viewing records can inflate the reported ratings by a factor of 5%+. This is less a point of methodology than a convention about what ratings should include: the grounds for inclusion of guest viewing being that it compensates for out of home viewing by panel members. Methodological problems are associated with measuring and reporting guest viewing, such that some panels will include it and others will not. As a result, they will not be reporting directly comparable measures even though they may measure viewing in identical fashion.

The main areas of choice over user conventions, which will affect measured ratings in easily predictable ways, include:

- Guest viewing;
- Addition of timeshift viewing of channels on video to, "live" viewing at the time of transmission (the inclusion of timeshift being referred to as consolidated viewing");
- Treatment of holidays and absences by retaining or excluding homes from the panel;
- Measurement of different types and numbers of sets in each panel home;
- Age breaks for defining child and adult categories (in this case, variations will not necessarily make much difference to the ratings, but they will affect the measurement of impacts (i.e. audience numbers), which are used for calculating unit costs of audience delivery).

On balance, we think that, but for the above cited points of variation over user conventions, most European peoplemeter surveys are not that far apart over the absolute overall value of ratings, but sizeable discrepancies may very easily exist for certain audience categories. A lot remains unknown about the principal methodological causes of variation and error.

3.2.2. Specific Issues of Comparability - Press

There are two main categories of issue, which will affect the comparability of different national measures: sampling, and the role of memory.

Sampling

The first concerns sampling and response rates (i.e. the number of successful contacts giving rise to an interview). All national surveys try to produce representative samples. This is partly a function of the quality of their selection procedures (viz. choice of sampling frame, degree of stratification, etc) for locating prospective interviewees, and partly a function of the ensuing acceptance or response rates. The point of concern then is whether the non-acceptors differ in any way from the acceptors. It becomes even more crucial for surveys given that many readership surveys are used as the national "parent" sources for national socio demographic profiles. Gradually declining response trends in recent years have naturally been a cause of worry for surveys like the British NRS, which currently achieves a response rate of about 60%.

From the perspective of international comparability, the really crucial distinction is between surveys like the NRS that pre-select their contact addresses, and surveys like the French CESP, which merely set demographic quotas. National surveys of the pre-selective type probably entail biases of a roughly comparable nature, whereas quota methods could cause significant demographic biases of selection on a number of other grounds. This is because the pre-selected methods specify which addresses the interviewer must go to and what degree of substitutability, if any, exists; whereas the quota methods merely lay down targets and rules for going from location to location without much further control. Because of this, quota methods are open to greater abuse and/or variability of selection beyond the quota characteristics. To give some idea of the extra scope for error, the French CESP has recorded a response rate of about one in fifteen (7%) on its latest time budget survey. This does not automatically mean that the French quota sample is less representative than other national pre-selected samples, but it leaves considerable room for doubt. It may be that in France and,

possibly Belgium, quota methods have been resorted to partly on account of legal restrictions on the use of address lists.

How seriously different national practices over sampling affect the international comparability of readership measures, is impossible to say. We are aware of some odd bits of research suggesting that the main differences between non-respondents and respondents are more likely to have to do with lifestyle, which would include media habits, than demographics. In short, sampling differences, especially between pre-selected and quota methods, probably do affect the comparability of national surveys, but the differences are unknown and almost impossible to quantify.

Role of Memory

As with television viewing, most national surveys of readership employ the same concept of reading (see Table 23). Most employ the Recent Reading technique of measurement, though the choice of Recent Reading versus FRY does not imply different absolute estimates. If both techniques are perfectly managed, they ought to produce the same estimates of Average Issue Readership.

The problem is that all measurements of readership currently involve memory recognition and recall. These can be affected by the most apparently innocuous variations in the wording of questions, never mind by gross differences in survey design and procedures.

We have identified three levels of difficulty with trying to achieve comparable measures of readership.

Level 1: Reading measures can be affected by multiple causes. We have cited some of the main ones in Section 3.1.2. They comprise such variables as question wording, reading stimuli, number of filters, length of title list, interviewer, and so on.

Level 2: The main causes of variation are frequently interactive. The point is made in "Dear Reader" about a number of studies, which yield conflicting findings. One good illustration of the complex interplay of variables is the fairly recent (c. three years ago) experiment on page traffic estimates by AG.MA in Germany. The questions about page traffic (i.e. which pages read or looked at) followed on from the standard Recent Reading interview. AG.MA found that this extra task had the proactive effect of reducing response rates to the earlier, standard questions on reading by as much as 10% overall. We have already observed in Section 3.1.2. how the German Media Analyse uses five research institutes to carry out the fieldwork, and that there is almost 20% average difference between the reading estimates from the

"highest" and "lowest" institutes. Doubtless the degree of negative proactive interference caused by the page traffic questions would have varied as well by research institute.

Level 3: Market differences force variation in factors that could bias the absolute estimates of reading. For example, it appears that the longer the list of titles the greater the probability of underclaiming. It is, however, inevitable that larger markets (e.g. Germany) will possess many more titles pressing for inclusion in their readership surveys than smaller markets (e.g. Ireland).

Further difficulties with comparing readership estimates are caused by the diverse models that are used to generate derived measures such as cover and frequency. Because readership surveys are discontinuous, it is impossible to measure individual contacts with a particular publication over time. Instead, the surveys must rely on their measures of latest reading combined with their estimates of reading frequency. It is necessary to convert the responses into reading probabilities and model them statistically in order to generate cover and frequency estimates. The outcome of each schedule analysis will vary, often quite considerably, depending on the models used and the assumptions on which they are based.

Granted the range of available statistical models ought to be similar from market to market, the problem of making comparisons between differently derived estimates is as much a domestic as an international issue. Continuous peplemeter measurement makes television less problematic than press in so far as cover, frequency and other derived measures can be calculated from the raw individual respondent records. That said, television viewing data have to be weighted, and some modelling will invariably occur during the calculations. Even seemingly straightforward computations like audience share can require some modelling owing to the way the data are held in storage.

Overall, it is impossible to say how great a margin exists between the most inflated and the most conservative survey estimates within EC member states. Quite a few manipulations of the readership interview variables can, under the right circumstances, yield significant differences of 10% or greater between highest and lowest measures. Given the interactive effects of the variables, one could not simply add the effect of each manipulation as a way to calibrating the overall difference between two surveys. All we can say is that it would not surprise us to learn that an average difference of up to 30% existed between the reading estimates produced by the most conservative versus the most inflated national readership surveys within EC member states. However, this is a guess. The easiest way to grasp the problem of comparability between surveys is to see the interviews in progress. Accordingly, we supply as an annex to this study a videotape of different national survey practices,

which Research Services Limited put together for the 1991 Biennial Worldwide Readership Symposium in Hong Kong.

Lastly, two final points.

- First, a national readership survey, like the British NRS, where we have talked at some length with RSL, makes no claims about measuring the exact truth, which there is no means of knowing for certain. Those responsible are more concerned with treating different kinds of publication (e.g.. daily newspapers versus weekly or monthly magazines) evenly: that is to say, without bias in favour of this or that publication group. This is part of the main goal, which is to offer the industry a stable and accepted currency of measurement. Given that the question of absolute truth is not regarded as important nationally (because it cannot be answered), the question of absolute differences internationally between different national measures seems empty. Of course, some techniques (e.g. German MA) appear more stringent than others (e.g. French CESP) on the RSL videotape, but the judgement of differences must remain subjective and unquantified.
- Second, the question of progress. There has been much talk over the years of an electronic "wrist-watch" gadget that will passively record reading activity, and thereby dispense with the need for subjective memory. This still seems beyond the horizon, but more important now is the introduction of computer assisted personal interview (CAPI) techniques of measurement, which promise to speed the processing of results and cut down on the number of interviewer errors. We expect that CAPI methods will gradually replace the pen and paper methods, which are still most common in Europe. As a result, we expect that different national survey methodologies will look more alike in the future than they do now, but until the "wrist-watch" measuring tool makes its debut, and for as long as current methods rely greatly on memory, wide national differences must remain a perpetual possibility.

In the final analysis, there is no such thing to chase as literal comparability with reading measures based on memory. It is really a question of the international market being prepared to accept the equivalence of different national measures, just as national markets have accepted their own domestic measures as absolute yardsticks even though they know the exact absolute truth may be a little different. We do not think it is ready to do so now, not least because much more attention has focused on television, and our impression is that few, if any, have thought through the issues of comparability in relation to press.

3.2.3. Compatibility - Television and Press

The other substantive issue affecting comparisons is the compatibility of formats in which the data are presented. We have included a few tables in the sections on television, press and radio in order to give some idea of the national variations in output, but they are only a selection. It is often said that the problem of compatibility will gradually diminish irrespective of the harmonizing forces at work simply because it is becoming more and more the practice to offer data electronically in a form which allows users to choose their own breaks. Then the only constraint is the coding of individual variables required for analysis.

Compatibility is nevertheless likely to remain an obstacle for years to come.

(a) The international demand for customized break-outs is likely to be greatest for advertisers interested in specific brands, but many enquiries - probably the great majority - will be more general and ask for comparative data across broad target groups. Such enquiries are much more easily accommodated by the provision of standard reports containing precalculated data.

(b) The sampling methods, panel controls (in the case of television) and weighting procedures go hand in hand with the selection of standard break-outs. The further users wander away from the standard reporting breaks, the more they are likely to encounter problems of representativeness and sample size limitations.

(c) Different national surveys use different codes for many variables. In some cases it is possible to get round this by dual coding. For example, if survey A employs standard age breaks of 15-19, 20-29, 30-39, etc, where survey B goes from 16-24, 25-34, 35-44, etc, direct matching comparisons remain possible if both surveys have coded the exact ages of their interviewees. It is called dual coding because one set of codes is used for standard aggregated analyses, whilst others can be chosen for special analyses.

Age is quite simple. The problems are very much harder for other variables. They include the important socio-demographic variables of social class, occupation, education and income, over which the European Society of Opinion and Marketing Research (ESOMAR) has spent much effort in order to construct and establish a European scale of measurement. Its work in this field commenced in 1981 and has resulted in a standardized questionnaire, which has been employed in the two most recent Eurobarometer surveys.

The ESOMAR working party on Eurodemographics has created two scales: one, a 35-cell social grade matrix cross-referencing terminal age

of education (five levels) against occupation (seven levels); the other, a ten-point economic status scale based on household penetration of ten durables. A final report on the application of the two socio demographic scales in the Eurobarometer work was supposed to be due last September, but has not been forthcoming, and we still await a final pronouncement from ESOMAR on them.

The ESOMAR scales are supported by multinational industry groups like the EBU working party or the EAAA, but reactions have been much less positive among national industry groups and research companies. Among the difficulties:

- The inclusion of extra ESOMAR questions creates extra costs - even if relatively minor ones - which national advertising industries are generally not so keen on paying. The problem here is that those who most want Eurodemographics contribute little to the funding of national research.
- Various research companies have been extremely critical of the ESOMAR work, especially the ten-point scale of economic status. Nor is it clear just how well any single European socio demographic scale can be expected to work, bearing in mind that in order to succeed it must create useful as well as meaningful discriminations at a national level in each European country besides fulfilling its mission of enabling useful and meaningful international discriminations. With disparities in national wealth, education and occupational patterns being what they are across Europe, the ESOMAR ideal of harmonized Eurodemographics is bound to be very difficult to realize.

To our knowledge, the annual time budget survey conducted by CESP in France has employed the ESOMAR scales, but no other national media survey has followed their lead. Even if the ESOMAR scales do not gain wide acceptance, we still expect to see "creeping harmonization" over the coming years, for some multinational research projects (like the Eurobarometer study) will want common scales, and research companies will likewise often find it desirable or necessary to employ common scales on international projects.

In conclusion, the issue of compatibility presents a significant practical barrier towards making cross-border summaries and comparisons of national data on audience measurement. It would be wrong to overplay the difficulties, which we anticipate will diminish gradually over many years, but they exist and undoubtedly get in the way of cross-country comparisons. We have dwelt more on the demographic break-outs in analyses, but there are also important differences of format, such as national customs for breaking the year into "reporting months", and so on. Progress in these areas will probably come about gradually through the efforts of multinational industry groups like the EBU-hosted working

party of seven international trade associations to develop guidelines on best practice.

3.2.4. Free Flow of Audience Data Across Borders

This is an unexplored area, which we comment on briefly.

The issue of free flow concerns television more than press chiefly because of the international market for programmes, with the main interest likely to come from distributors and producers seeking an international market for their works. The advertising industry also has use for multinational data, and buyers already have reasonable access through their international networks of offices. The main question for them, perhaps, is whether fax and postal methods of data transfer are sufficient for their needs.

Few distributors and fewer still producers enjoy strong network support as do many advertising agencies and media independents. Very few indeed have much access to ratings information from other countries, though we believe there are many who would like it if they could get it. Therefore, what causes the lack of free flow? We see three main possibilities.

(a) Free flow is inhibited by physical restrictions on communications.

(b) Free flow is prevented by the lack of market opportunity. That is to say, the owners of copyright can only make the data available at prices, which the users cannot afford or justify in light of the commercial benefits they expect to reap.

(c) Free flow is deliberately blocked by the copyright holders.

We know from talking to distributors and producers that a demand exists for audience data, and it is growing. We believe that several US companies obtain some access to international ratings information, and at least one company has been set up in the USA for marketing international ratings information to US clients in Northern America. As far as we can tell, it has enjoyed mixed reception, not because of lack of interest in the information, but because the international returns on investment are still reckoned to be limited by the big US distributors, even though ratings information is now vital for domestic sales. Quite recently, one European company, Mediametrie, has reached agreement with copyright holders from other countries to market their national programme ratings data to users in other countries. So far, we believe the client base to be quite small, but the service is in the early stages of development. There are a number of potentially inhibiting factors to do

with physical, commercial and copyright constraints. For the present, however, their precise role in restricting the free flow of audience data across borders is not clear and requires separate investigation.

4. PART III - AUDIENCE MAPS OF MEDIA PLURALITY

4.1. Introduction

Parts I and II of this study have covered the principles of audience measurement, described in detail the main national surveys of audience measurement in EC member states, and assessed them for their evenness of treatment. Part III presents a brief introduction to the feasibility of creating audience maps for the purpose of studying the plurality of media. This follows from DG XV's brief, which has asked us to assess whether existing audience data are sufficient to allow us to construct a European landscape of audiovisual audiences and press readers subdivided by media controllers or owners.

It is a fairly simple task to identify the major media groups in each country. A number of sources regularly publish information on the main media groups, and details of most are readily obtainable from company reports.

The harder tasks are to define media control in relation to plurality and to specify the relevance of the audience measures to it. Accordingly, we start by defining terms, follow this with the main section on the measures available and their limitations, and end with a section on the feasibility of linguistic media maps.

4.2. Defining Terms

The Green Paper on pluralism and media concentration covers two distinct but easily confused issues. Both concepts are related to audience. Even though, as DG XV has noted, the usual approach is to evaluate media concentration in terms of shareholdings and market share, the underlying concerns are as much social and political, to do with the effects on the public as they are economic. With pluralism, the connection with audiences is still more important: it is paramount.

The theoretical blurring of the boundaries occurs because, pluralism is not just about pure choice of what people could watch, read or listen to, out of all the possibilities available to them, but is also about exercised choice: what they actually end up watching, reading or listening to, since it is through the public's exercise of choice that media controllers are able to influence it. So, in other words, audience share is important to the study pluralism just as it is central to the media concept of media concentration.

The practical blurring of the boundaries also occurs, when it comes to deciding which media measures to apply to pluralism. Two examples may serve to illustrate this point.

- Even were the meaning of pluralism restricted to pure choice (i.e. availability of sources), using some index of pure choice as a measure of pluralism is valid only to the extent that the media sources behind each choice are commercially independent of one another. This is not wholly true for any media, but least of all for television, where, in addition to the competition for advertising and direct payment, which determine the quality of choice that each media source is able to offer, media owners must also compete over talent, production resources, televised rights, and bought-in programmes. If, to give a hypothetical illustration, the outcome is that two media owners win 80%-90% audience share in a market of ten channels run by ten different media owners, the measure of audience share probably gives better insight into the real choice open to the public than an index of pure choice, where the two dominant media owners would each count as a mere 10%.

Similar arguments may be applied, though to a lesser extent, to press and radio. Without entering into detail, we consider that audience share is important to the study of pluralism in television because of the intense competition for resource across a broad front over programme materials; but we question whether it has as much value in connection with press and radio.

- Some media measures occupy the middle ground between measuring pure choice and pure consumption. The main example is reach, which may best be described as choice, which the public takes up. As an audience measure for exploring pluralism it is arguably preferable to audience share since it is neutral with respect to the time spent consuming each media title, where the segmentation of choice on offer creates problems of interpretation. That is to say, audience share comparisons treat one hour spent with one medium as equivalent to one hour spent with another medium; but how in the name of pluralism are we to treat the equivalence, say, of one hour spent doing a crossword with one hour watching the news on television?

The blurred boundaries between media concepts of pluralism and media concentration make for one set of issues. Another set of issues concerns the definitions of media sources, which lies outside the scope of this study. Overall, and simply from the perspective of audience measurement, we consider that the construction of audience maps in order to investigate pluralism is open to debate. In making the case for one or more measures, we consider it necessary to decide whether the audience measure(s) we are interested in concerns:

- Choice of media properties (i.e. titles or channels);
- Choice in terms of what people want to watch, listen to, or read;
- Choice in terms of the variety of media properties that people take up;
- Amount that people watch, listen to, or read.
- Or some other concept of choice and consumption.

4.3. Measures Available And Their Limitations

4.3.1. Introduction - Levels of Measurement

Broadly speaking, all national surveys of audience measurement and supplementary "establishment" data yield measures of choice and consumption.

We have identified four levels of measurement.

Level (1) - Number of Media Properties

This is the simplest measure. It is merely a tally of the television and radio channels, or press titles, that are available in each market. In the case of press titles, finer differentiation may be achieved through classifying titles by such variables as audience (e.g.. consumer, trade, business, etc.), geographic distribution (e.g.. national, regional, local, etc), frequency of publication (e.g.. daily, weekly, monthly, etc), and subject matter (e.g.. general, news, womens, sports, etc.).

Level (2) - Availability of Media Properties

Level (2) takes level (1) a stage further by taking into account distribution in order to give a measure of choice. The relevant statistics are channel penetration in the case of television and radio, circulation in the case of press. In our view, this extra step is essential. In gauging the extent of pluralism in a market, there is self-evidently a world of difference between country A, where all the population has access to say the same 20 channels, and country B where 20 channels are available, but only to that 10% of the population which subscribes to cable, whilst everyone else has access to only two or three channels.

Level (3) - Coverage of Media Properties

As noted in section 4.2., measures of available choice (i.e. Level (2)) are limited without taking into account some measure of public interest, of which the simplest is cover, or reach, be this weekly, monthly, yearly, and so on. Other closely related or alternative concepts, which have sometimes been used, especially for television, include repertoire of use, and patronage. Whereas reach estimates apply criteria of minimal exposure (i.e. the reach for a channel or publication is the percentage of the population that has had any exposure at all to it across a specified unit time period), the concept of patronage entails the notion of a

minimum period of "meaningful contact" (e.g. at least one five minute sequence of continuous viewing/listening). Basic reach, though, is much the commonest measure of coverage.

Level (4) - Volume of Consumption of Media Properties

Level (4) takes into account how much each media property is watched, listened to or read. As we have written in section 4.2., we consider it more appropriate for comparing media groups in terms of market control, and less relevant to pluralism, except in the case of television.

The following subsections summarize the limitations of each measure for television, press and radio.

4.3.2. Audience Maps - Television

Level (1) - Number of Media Properties: It is quite easy to identify all the channels which can be received in EC member states. The number is small compared with press or radio, and the general conditions of licensing and transmission give clear indication of the likely choice. Only where penetration is well below one per cent is there much chance that the audience surveys will fail to identify it.

Level (2) - Availability of Media Properties: The simple measure of availability is station penetration. This presents greatest problems for satellite and cable channels in some countries, for which errors of estimation may be caused principally by (a) inaccurate establishment data on cable, SMATV and DTH reception, and (b) discrepancy between homes receiving a signal and the sets within homes that are actually tuned to it. Conceivably these errors may be substantial for some minority channels in some countries (say, out by as much as 30%), but the reasons are likely to be specific to the country, and to the particular channel in the case of extreme deviations; such that the overall distortions will be barely discernible as far as the leading media controllers are concerned.

Level (3) - Coverage of Media Properties: Coverage and reach are often used interchangeably in television research because they are the same measures. It is more common to talk of the cover achieved by a schedule of advertising spots, and the reach, or sometimes coverage (usually daily, weekly, or monthly) of a television station; but there is no strictly observed rule.

Reach estimates are calculated directly from individual viewing records, and will be as dependable as the quality of the survey from which they

are drawn. They will be directly affected by false estimates of penetration, but also by distortions in panel methodology concerning such items as universe specification, panel selection and control. The distortions attributable to panel methodology are more likely, however, to affect absolute ratings rather than reach (where individual differences flatten out, especially over longer intervals, since we are only speaking of "at least one" viewing occasion); and, as with penetration estimates, we would expect the overall reach figures to be pretty sound, especially for the leading stations.

Because reach estimates for television viewing are directly calculated from individual continuous viewing records, there is nothing to prevent the use of related measures such as patronage or individual viewing repertoire except the practical absence of software. Individual viewing repertoire (average number of channels watched by each viewer over a specified period) is perhaps the most appropriate index of pluralism from the point of view of the receiving public, but only where a large number of channels are available will it convey useful information (hence its reporting in the PETAR surveys, but not, to our knowledge, by any national survey).

Level (4) - Relative Volume Consumption of Media Properties: The critical measure here is audience share. All national surveys monitor all uses of the television sets, and include any that they do not break out separately within a separate, "other" category. Consequently, all are capable of producing audience share figures that are calculated directly from the individual viewing records, though, for practical software reasons, one or two appear not to do so. The question is whether there is any unevenness of treatment. This is an issue of relative bias only as audience share is a simple, relative measure. Again, we can envisage potentially significant distortions for minor satellite and cable channels owing to incorrect penetration estimates and faulty survey techniques, where the cost emphasis (as in Germany) is on measuring accurately the main channels. At a national level, however, they are unlikely to have much effect on measured audience share of the leading media controllers.

Our overall assessment is that television is very amenable to the construction of accurate "audience maps". Nor can there be much objection to the figures being used in this manner, even if there are some distortions, as they are widely accepted in their countries as the national currencies of measurement. In other words, the main potential grounds of criticism come back to (a) the relevance of each measure to pluralism, and (b) the validity of the definitions of media controller.

4.3.3. Audience Maps - Press

Level (1) - Number of Media Properties: This poses a problem due to the large number of titles and highly segmented market structure of publication types as compared with television. As a result, it is important to be able to assess pluralism in the press with reference to market sector. Here, classification is essential. Probably several dimensions are wanted, such as type of market (i.e. consumer versus trade and technical); frequency of publication; and so on. A likely obstacle to the acceptance of audience maps is the absence of international standardization of category headings in national indices of publications.

Level (2) - Availability of Media Properties: We have proposed in section 4.2. that availability rather than volume of consumption is the more important variable for judging plurality in the press. Whereas channel penetration is the precise operational statement of availability for television or radio, no index of press distribution or circulation offers the same precise fit. Circulation is the best measure we have of availability, but several questions require answers if it is to be used.

- The first question is how to define circulation. National practices differ vary over what they report, sometimes quoting more than one figure. Thus, are we to consider circulation as (a) the print run? (b) the number of copies displayed on newstands or in shops? (c) the number of copies actually sold with or without the addition of complimentarys? And so on.
- Assuming an acceptable standard definition can be found, the next question concerns the accuracy of circulation audits. We have been made aware by several persons, whom we have contacted, that some national methodologies are less thorough than others, though the comments appear to reflect more on magazines than newspapers.
- Several factors besides choice of methodology could make the interpretation of circulation data problematic. (a) Circulation audits cover only a selection of titles. (b) Some publications (especially those most often read out of home) have many more readers per copy than others. It is not just a question of interest, but also of availability (as, for example, with publications read in doctors' surgeries). (c) There is not an instant solution to the question of how to reconcile circulation figures for titles with different frequencies of publication. Take, for sake of argument a newspaper selling 100,000 copies per day six days a week. Is this equivalent to a weekly newspaper or magazine selling 600,000 copies? The answer is debatable.

Level (3) - Coverage of Media Properties: All national readership surveys within EC member states employ more or less the same concept of

Average Issue Readership, whether they approach it through the Recent Reading of FRY methodologies. This is equivalent to the average reach of a single issue of a publication; however, because all print surveys involve discontinuous interview-based measures, reach (or cover) and frequency curves must be modelled, treating individually recency and frequency scores as reading probabilities. Likewise, reach across a group of titles also has to be modeled. Not only do the wording of the questions and the need for modeling create room for substantial variations between countries (a problem for international audience maps of the print media), but also, variations over the choice of model can occur within national markets. All this detracts somewhat from the value of print measures of reach, as opposed to television measures that are calculated from individual viewing records.

Level (4) - Relative Volume Consumption of Media Properties: The difficulty is that (unlike television), there exists no literal measure of share of readership. Of course, calculating a media owner's sum readership scores across all his titles does give an insight into his market dominance. But, as with circulation statistics, the indices are problematic. For example: (a) the means by which the audience "map-maker" reconciles average issue readership scores across titles is debatable; (b) even fewer titles generally appear in readership surveys than in circulation audits, such that they by no means measure all reading of newspapers and periodicals, albeit they probably capture most reading of consumer publications (in that case, what part do they miss?); (c) by virtue of the readership measures being discrete and discontinuous, they are not really capable of recording with any precision the amount of time spent reading, which will probably vary every bit as much as the number of readers per copy.

Our overall assessment is that readership measures raise more practical problems of acceptance than television concerning the creation of audience maps. Probably, circulation statistics are more relevant than readership measures for assessing pluralism in the print media. In addition, the print media pose an extra problem of classification due to the specialization and segmentation of titles.

4.3.4. Audience Maps - Radio

Level (1) - Number of Media Properties: Arguably, radio lies somewhere between television and press with regard to complexity of market structure - closer to television perhaps than press. Except for small pirate stations, which probably account for a very limited share of listenership, most appear readily identifiable.

Level (2) - Availability of Media Properties: We have not examined this in any depth. As with television, channel penetration offers, in theory, a direct measure of availability. The problem concerns how to measure it accurately. It is not just an issue of delineating the footprints of radio transmitters, or providing any separate estimates of the pockets of poor reception, etc., but also a case of the mobility of radio listening. Whereas the great majority of television viewing occurs at home, much radio listening occurs outside the home or between destinations. Factor in the far greater fragmentation associated with small local radio stations as well as the complexities of networking arrangements, and the accurate measurement of radio channel penetration is evidently problematic. We suspect that national data on channel penetration are often poor or unreliable.

Level (3) - Coverage of Media Properties: All national surveys yield reach data. However, there exist substantial differences in survey methodology, which appear sufficient to undermine confidence in the cross-the-board quality or comparability of estimates of reach.

Level (4) - Relative Volume Consumption of Media Properties: The Dutch and British diary-based surveys involve continuous measures of listening over periods of a week, but most are restricted to day after recall, possibly with supplementary questions on listening frequency. However they measure listening, not all so much as provide volumetric ratings data. The outcome is that a few surveys may offer reasonable time-based estimates of listening share, whilst others get no closer at best than print measures of readership.

Our overall assessment is that radio is closer than press to television in being capable of producing precise measures of availability and share. National market structures of radio also generally appear simpler and less differentiated than for press, though more complicated than for television. The chief drawbacks, which give rise to new kinds of difficulty of interpretation such as do not exist to anything like the same degree with press or television, are the variability of methodologies for measuring listenership, and the suspect quality of some. As with press, this is not to say that nothing useful can be learned about plurality of media sources from "audience maps" of radio listening, but that the quantitative measures need treating with care.

4.4. International Audience Maps of Pluralism

4.4.1. Audience maps - Linguistic Region

We envisage two possible approaches to the construction of linguistic maps. Either we could treat the EC as one demesne, and assess the media coverage of each language across the EC. Or we could restrict analyses to territories sharing the same native language, in which case there are three groupings to consider within the EC: namely France and South Belgium (French); Netherlands and North Belgium (Dutch/Flemish); United Kingdom and Ireland (English).

In our view, neither approach is satisfactory, but entails further problems of interpretation beyond those that already interfere with the construction of national audience maps.

- Both approaches suffer from the lack of comparability and compatibility of national surveys, especially for press and radio.
- The specific difficulty with treating the EC as one demesne is that most national surveys pay little attention to foreign language stations or titles (cf Tables 11, 24, and 34), whether because presumed availability and/or consumption levels are low, or because of insufficient market interest. In addition, we have seen how language can be either a deliberate or natural barrier to survey selection of foreign nationals.
- The specific difficulty with the alternative approach of combining different territories, which share the same native language, is that the two countries most involved, Belgium and Ireland, are arguably the most restrictive in reporting foreign media, and in the conditions they impose on access.

Lastly, just as there exist basic obstacles of comparability and compatibility in drawing up international audience maps, so there exist basic obstacles to assessing plurality across media. As we have seen, television, press and radio present very different challenges, and the measures they yield of choice and consumption are neither equivalent, nor easily compared. Some countries (e.g.. France) regularly conduct time budget surveys of media consumption and other activities. Such surveys provide a common matrix for comparing all media, but are limited in the detail they can present, especially for print and radio, the two most fragmented media.

4.4.2. Audience Maps - EC as a Whole

Most of our comments in section 4.4.1 apply here as well. The interest in attempting to construct international audience maps for the EC as a whole is understandable in view of the fact that media owners like Kirch and VNU have a strong presence in two or more states. In most respects, the issues will be the same for an EC map as for the national map. The essential difference is provided by the lack of comparability between different countries.

The lack of comparability may not matter very much with television, since measures of penetration, reach and audience share are hardly or not at all affected by the absolute value of each rating point. Station penetration is, indeed, an independent measure, which will determine rather than be determined by the measured ratings, whilst audience share is a measure of relative rather than absolute differences.

Press and radio present greater difficulties. The variability of radio survey methodologies across EC member states may prove to be too great to permit meaningful media maps, with press somewhere in the middle between radio and television. Although all markets use circulation data and employ more or less the same definitions of reading, and the same basic concept of average issue readership, there is evidently sizeable variation over the definitions and measures of circulation, whilst many factors in survey design and modelling procedures could conceivably undermine the comparability of different national measures of reach. Nor do the surveys provide usable measure of readership share.

Our overall assessment is that international audience maps across all EC member states are perfectly feasible for television, provided penetration, reach or audience share are judged to be acceptable indices of pluralism. They are much less feasible for radio, and we have some doubts about their feasibility for the press. In the case of press, each national market will mostly accept its own circulation and readership data because it has to for purposes of buying and selling space, but there is no specific reason for it to accept the equivalence of unharmonized circulation and readership data from other countries.

5. SUMMARY OF MAIN CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary Of Main Conclusions

The main object of this study has been to describe the general principles and practice of audience measurement for television, press and radio among the EC member states, to answer specific questions of DG XV about the organization of measurement surveys, and to assess their evenness of treatment of different media.

By far the main uses of audience research are for the buying and selling of advertising space and for programming and editorial purposes by the media owners. The data are hardly accessed at all beyond these user categories for press and radio, though a third, and relatively minor user group of television audience data comprises programme production and distribution companies. We found one instance where data are being purchased for copyright purposes, and several instances where government departments also access audience data, but nowhere, we believe, for the purpose of monitoring media concentrations. It is hard to quantify how much use government departments make of audience data since they can obtain the information via public service broadcasters in most European countries.

Nearly all surveys of media measurement are national, and market forces press for a single general source of audience data for each of the display media. The tendency towards "natural monopolies" appears chiefly a product of the high costs of audience research and the universal need within national advertising communities for a single accepted currency of measurement. Very occasionally, two sources exist, and in some markets the main general surveys of readership are supplemented with readership surveys serving specific niche markets, such as businessmen or children.

The major share of funding for nearly all surveys is by the media owners. Although it may be true to say that, in general, the more a party contributes to funding, the greater the degree of control it can exert over survey design and specification, the two are distinct issues. We have identified three basic models of survey organization.

- Joint Industry Committee (JIC);
- Media Owner Contract (MOC);
- Own Service.

No two instances within each category type are exactly the same, nor do JIC or Own Service structures of organization automatically imply less control over survey design by media owners than do MOC structures.

Our impression is that national surveys of audience measurement probably treat most television and radio stations, or newspapers and magazines, quite evenly within the limits of the survey budgets.

There are nevertheless ample possibilities for uneven treatment to occur, whether through the execution of the surveys or in the terms and conditions of access by prospective users of the data. We identified four main areas, where it was possible for surveys to favour one media owner relative to another. We labelled these as :

- Choice of universe;
- Choice of audience measure;
- Criteria for inclusion in survey;
- Conditions of access.

Our aim was to find out whether the causes of unevenness were inevitable, being inherent in the methods used, or were deliberate, reflecting, in particular, the influence of the dominant media owners behind the surveys. We came across examples of both.

Examples of inevitable unevenness of treatment include the following:

- Few national surveys report audiences for foreign media. Whilst lack of market interest, weak presence, or policy decisions supply an assortment of inevitable and deliberate grounds for the low presence of foreign titles, one of the inevitable grounds is that surveys will rarely recruit individuals speaking a foreign language owing to difficulties of comprehension. We would expect national surveys to under-represent foreign-language overspill media irrespective of other factors being at work.
- The delays associated with conducting and publishing the results of readership surveys make market entry more difficult for new title launches.
- The constraints of interview procedures necessitate the setting of restrictions on the number of titles that a readership survey can include. This inevitably causes uneven treatment between included versus titles excluded. There also exists a grey area of trade-offs

between number of titles that get included and depth of readership questions.

- Relying as they do on memory, readership surveys are open to more even treatment of some titles than others. For example, easily confused titles represent a problem of measurement. Likewise, the research literature suggests that press measures tend to underestimate readership of monthlies and out-of-home reading.
- By contrast with press or radio, peoplemeter measures of television audiences are objective and impartial; however, variables of panel size and panel representativeness can present difficulties for minority (i.e. in the sense of low penetration and low reach) and specialised channels. They are partly caused by the high costs of peoplemeter research. We suspect that there is a general tendency for peoplemeter panels to under-rather than over-estimate audiences for these stations. In so far as peoplemeters are restricted to measuring audiences at home, this will inevitably work against channels like CNN
- International and MTV Europe which claim that a substantial share of their viewing is out-of-home.

Overall, we doubt whether these "natural" causes of uneven treatment result in very significant distortions, except occasionally for the smaller stations and titles.

Several of the effects just mentioned could also be caused by deliberate uneven treatment. We have met with a few examples where deliberate unevenness appears to exist. It is though, one thing to make an allegation, and another to sustain it. This is especially true where resource issues are involved, as with the collection of establishment survey data on the penetration of minority television channels.

Our main doubts concern the terms and conditions of access for television and radio surveys, and the criteria for including titles in the print surveys.

We note, for example, that at least three peoplemeter panels (Belgian, Irish and German) impose reporting restrictions that appear to favour the leading domestic broadcasters, whilst the high tariffs demanded by the German stations belonging to AGF (the controlling body for the German panel) for sale of their audience data to non-AGF members represents a significant barrier against outside access. This could be a significant issue for several other television and radio surveys.

By contrast, criteria of inclusion rather than conditions of access appear important in judging evenness of treatment by print surveys. The commonest criterion is circulation. Although, the examination of

circulation audits lies outside the scope of this study, our preliminary enquiries suggest that national methods and standards for collecting circulation vary in quality.

Overall, we consider that national surveys may provide a reasonable picture of relative audience sizes for different media in a given country; however, international comparisons are impaired by the lack of comparability and compatibility between different national measures.

Of the three media, television possesses the most unified methodology and offers the cleanest, or most impartial measure. Although differences persist between national panels, which will affect audience estimates (e.g. the inclusion or exclusion of guest viewing), the underlying measures of viewer ratings appear not so far apart, and convergence is gradually taking place as a result of mounting pressure within the broadcast and advertising sectors for harmonization.

By contrast, radio research methodologies and measures of listenership vary appreciably, whilst comparability of national readership data is undermined by the reliance of readership measures on memory, which exposes them to the influence of a large number of variables.

Lack of compatibility in the presentation of audience data is a further obstacle to international comparisons for all media. Another issue is the free flow of audience data. There has been growing interest in international services, which can provide television programme ratings across many countries; however, little has so far come of efforts to develop the market. It is unclear to what extent this is due to commercial, copyright, physical barriers, or to other factors.

Lastly, we examined the feasibility of audience maps of pluralism. In our opinion, they probably are feasible, though we have noted a number of potential issues of acceptance. We have proposed that one or more measures could be used to measure pluralism, and that the choice of measure need not be the same for each medium owing to the distinct structural properties of each. We identified four basic categories of media measure:

- Number of media properties;
- Availability of media properties;
- Coverage of media properties;
- Audience share of media properties.

Of the three media:

- Television appears the most amenable to the construction of audience maps. It is less structurally complex than radio or press, at least in

terms of the number of media properties. It also offers more precise measures of availability and audience share.

- Press poses various additional practical problems of interpretation. Prominent examples, to which we have referred, include the treatment of (a) variable publication intervals (e.g. dailies versus weeklies, etc), (b) editorial and geographic segmentation and (c) non-exhaustiveness of readership (and possibly, circulation) surveys. Assuming the practical problems can be resolved satisfactorily, standard circulation and AIR data (or possibly derived reach data based on standard time units, such as day, week or month) appear the main candidates for trial.
- Radio suffers from the wide variability of methodologies and measures across Europe, though this may not matter for the general reach-based measure of "listenership", which all surveys appear to produce. As with television or press, further consideration needs to be given to the time intervals employed (e.g. day, week, or month, etc).

The measures we have recommended vary by medium. This is partly because the basic measures are different, although it is conceivable that we could apply a "reach" measure, which would be the same for all three; but partly because, in our view, the three media are fundamentally different and require different operational interpretations of pluralism. In each case, the basis of constructing maps ought to be share (viz. share of audiences, share of circulation, or share of listenership). Share by media source is the appropriate measure of diversity. At the same time, it is a relative measure, which by-passes many of the potential problems of absolute comparability.

Lastly, the construction of multi-country audience maps poses an extra layer of issues owing to the lack of comparability and compatibility between different national surveys. These cannot be removed by the use of share measures. However, they may prove to be of minor importance: for, the fundamental principles and practices of audience measurement for each of television, press and radio, are much the same from country to country within the EC. Assuming the variations do contribute to absolute differences in measured audience size, they are likely to matter much more for the detailed analyses by specific target groups, and much less for the global measures of audience share and reach.

Indeed, we question whether the differences will have any effect at all on the means we have proposed for measuring pluralism for television. Conceivably they will prove relatively minor for radio as well, if we stick to the broad measure of listenership. As for press, there is no escaping the sampling variability between two surveys, wherever they are conducted, but the core concepts of circulation and AIR are at least the same everywhere, and we believe that multi-country comparative

audience maps of press pluralism can probably be justified if we use circulation share as our measure. We have observed that national practices for auditing circulation vary in quality and over the precise operational definitions which they employ. However, further investigation is required to ascertain their significance. We also observe that, for both circulation and AIR statistics, it is customary for international planners and buyers to treat different national figures as the same.

In conclusion, we are optimistic that the construction of audience maps will prove feasible, though some further exploratory work is required on the production of audience data, especially for press circulation.

5.2. Recommendations

The present study has served to highlight a number of real or potential issues concerning audience measurement in EC member states and its effects on the pluralism of media choice. Taking into account its interests and policy objectives, we see two ways forward, which we recommend to DG XV.

1. Impact of Audience Measurement Practice on the Single Market

We have identified a number of areas where current audience measurement practice within EC member states either could or does cause uneven treatment within television, press or radio. The effects we have described will generally favour the strong at the expense of the weak. Prominent examples we have raised of real or potential causes of uneven treatment include: (a) conditions of access for television and press; (b) criteria for inclusion of titles in print readership surveys (especially circulation criteria); (c) free flow of television audience data across borders; (d) penetration estimates for minority television and radio stations; (e) treatment of foreign overspill media.

The question is, how important are the causes? Are they an issue? In particular do they matter to the main users of the data? These are the questions we recommend that DG XV should focus on in considering what course of action to pursue. We propose it take up one or more of the issues we have raised and assess their affects and importance through enquiries among the main users. Since any distortions that exist will matter to the buyers as well as sellers of media, we propose that the next stage of investigation should judge the effects from both perspectives.

2. Controlling Influences on Pluralism

The second part of our study has opened up the discussion of pluralism in terms of the relationship between media concepts of choice and audience measures that are available whilst the construction of audience maps of pluralism poses a number of practical issues of measurement, we think that the approach is broadly feasible. In that case, we recommend case studies as the appropriate way forward. These may take one of the two forms, depending on whether we wish to focus on the control exercised by media owners, or the variety of media sources available to the general public within the EC.

Either, we could use case studies of a few media owners (suggested television and/or press, but not radio to begin with) to identify the key points of influence and control over viewer/reader choice, and then analyze their implications for our audience measures of availability, coverage, and consumption.

Or, we could take an agreed definition of media controller, and try our measures out in order to see exactly what kinds of audience map result over nationally and internationally defined markets defined. Whereas the first approach emphasizes different aspects of media control, the second focuses more on the audience measures.

GLOSSARY OF MEDIA TERMS

Acceptance Rate

The percentage of contacted persons/households who agree to take part in a survey. This is a complex statistic because a range of factors can affect acceptance rates, whose precise interpretation requires knowing the procedural details for making contacts. Non-acceptance figures ought to include failures to make contact as well as refusals. Quota samples create specific problems in defining acceptance rates owing to the enforced rejection of some persons/homes, which are not wanted for fulfilling the quotas.

The term, "response rate" is sometimes used as well. It refers to the percentage of successfully completed interviews or other measures out of the total attempted.

Aggregated Analyses

The standard, "precalculated" audience analyses, which surveys produce, and for which purposes data are edited and then weighted in order to correct for imbalance between the composition of the survey sample and that of the survey universe. They are important for programming purposes and for evaluating advertising costs of audience delivery.

Two important distinctions exist.

(a) Standard analyses, which are offered to all users and includes the aggregated analyses, are to be distinguished from special analyses, where users specify the choice of target audience. In the process of conducting special analyses, data are re weighted from the raw audience records of individuals selected for them.

(b) Aggregated data is to be distinguished from raw data. The process of pooling and weighting data across individuals (see also under "raw data" and "panel/sample weights") in order to produce aggregated analyses entails loss of information about specific individuals in the sample. For example, there is no means of knowing the degree of duplication between two programme audiences from aggregated ratings data. For this, it is necessary to go back individual viewing statements, or "raw data". The duplication is either calculated from the individual statements (viz. by establishing the number of panel members who watched both programmes), or is modeled. It has to be modeled from frequency data in

the case of readership surveys by converting readership scores into probabilities.

Audience Share

A standard measure in television research and some radio research to denote the share of audience achieved by a channel across a specified time interval. It represents the average rating of a channel as a percentage of the total average rating across all channels measured and reported by the survey. In practice, audience share figures are not always given consistently, depending on whether or not include video and other uses of the television set within total viewing.

Average Issue Readership (AIR)

AIR is a common measure of all surveys of readership. It is the estimated average number of readers per issue of a newspaper or magazine. In general, readers are defined as persons who have read or looked through any issue of a publication, no matter where, and regardless of the source of the copy, within the last publication interval. Very similar wording is used by all surveys.

The basis of estimating AIR is individual memory of past reading events. Besides errors of remembering, two types of methodological error are associated with AIR measurement. "Parallel reading" is where more than one issue is read during the publication interval, and will contribute to under-estimation of true reading. Conversely, "replicated reading" is where the same issue is read across more than one publication interval, and will contribute to over-estimation of true reading. Much research has been devoted towards estimating the magnitude of these natural and opposite errors in estimating AIR. For general working purposes it is assumed that they are not that significant and will tend to balance out.

CAPI (Computer Assisted Personal Interview)

Collection of personal interview data with the help of a portable computer. The main benefits are (a) faster coding and processing, (b) more streamlined interviews, with a reduced burden on the interviewer in administering the questions (e.g. rotating the order of stimulus cards in readership surveys, etc.,).

Channel Penetration

Applied to either television or radio, channel penetration is the percentage of homes within the survey universe, which (a) can be reached by a specific channel's signal, (b) are able to receive it, and (c) actually have their receivers tuned to it.

Circulation

The number of distributed copies of each issue of a publication. As noted in the main text, the concept is simple, however, definitions and surveys auditing practices vary from country to country. A few surveys publish more than one circulation figure, depending on the definition wanted. This could be the print run, or the number of copies distributed to retail outlets, or the number of copies sold or paid for subscription, and so on.

Continuous (and Discontinuous) Measurement

Continuous measurement can mean two different things. (a) Often it is used to describe survey which take continuous measurements from their respondents over a specified period (usually one week or longer). In this sense, panel measures are continuous, whilst interview measures are discontinuous. (b) Continuous measurement is also used to describe surveys, which collect data throughout the year (or practically all of it), as opposed to discontinuous surveys, which run during specific periods (sometimes the separate periods are referred to as waves).

Cover

See under "reach". Cover means the same as reach (i.e. cumulative audience across a set period, such as quarter hour or a campaign of advertising spots), but is used more in the evaluation of advertising schedules, where reach is more commonly used in connection with the performance of programmes or channels.

Coverage

See under reach. Coverage is commonly used in two senses; either as a direct substitute for reach, in which respect it is employed in similar circumstances, or (incorrectly) as an alternative for channel penetration. Most precisely, it refers to the total cumulative audience of a channel or publication. In the case of radio, the term, "listenership", is mostly used. The listenership of a radio station is the same as its coverage.

Establishment Survey

Large baseline survey for finding out the composition of the survey universe. Establishment surveys are required for panel measurement, where the audience measurement samples are relatively small. They are essential for national television surveys of viewing in the EC as all employ panels. Their primary functions in television audience measurement are to establish (a) the demographic composition of the survey universe, (b) household ownership of TV-related equipment, and (c) channel penetration.

First Read Yesterday (FRY)

Methodology of measuring readership that first asks which publications were read yesterday, then how many different issues of the positively identified titles were read, and lastly, which of the positively identified issues had been read yesterday for the first time.

Gross Rating Point (GRP)

Generally refers to the audiences for television and radio programmes or commercials, expressed as ratings (see below under rating). Each rating stands for the average audience as a percentage of the maximum possible. GRPs are cumulated in order to estimate the total audience across a number of programmes or commercials. A GRP total of 100 for a given population or target audience means a total audience, which is equal in size to that population or target audience. If the campaign of commercials gains 400 GRPs, it means that members of the specified population or target audience were exposed to that campaign four times on average.

GRP totals are also used to sum average issue readership figures. Hence there exist print as well as television and radio GRPs, though the measures are not precisely the same.

The television GRP is more commonly known as the TVR (television viewing rating) in the United Kingdom.

In-Tab Sample

The daily reporting sample of a panel. The average daily reporting sample will always be less than the gross panel size due to breakdowns (e.g. meter malfunction, electrical faults etc.): invalid records, plus the presence of some spare homes, which are not reported.

Interview Measurement

Form of research methodology employed by all surveys of readership and most surveys of radio listening, where audience data are gathered through personal interviews, which may be face-to-face or over the telephone.

Joint Industry Committee (JIC)

Form of research organization. The JIC constitutes a formal tripartite body representing media owners, advertisers and agencies (including media independents). It is responsible for specifying and awarding an industry contract with the research company(s) carrying out the fieldwork and supplying the data. The two main day-to-day functions during the course of the contract are management (including the exploitation of the data), and technical supervision.

Listenership

The total number or percentage of individuals listening to a radio station over a specified time period (usually daily, or weekly). It is equivalent to the global market size, or reach, or coverage, of a station. As noted above (see under "coverage"), these words have different nuances, but are frequently used interchangeably.

Media Owner Contract (MOC)

Our term. It is a form of research organization, in which the main contract(s) is/are between one or more media owners and the research company carrying out the fieldwork and supplying the data. In some cases the media owners retain copyright and decide the conditions of licensing the data for use by other parties. In others, they guarantee the basic funding and let the research company(s) keep the data copyright for sale to other parties. MOC structures may incorporate tripartite technical sub-committees or advisory groups.

Own Service (OS)

Our term. It is a form of research organization, in which a research company carries out fieldwork and supplies market data as a private commercial enterprise. As a rule, the research company will sign multiple individual contracts with all users, will separate standard contracts for each user category. OS structures may incorporate tripartite users' committees.

Panel Control

Panels are recruited in order to be as closely representative of the survey population as possible. The establishment survey will define the demographic and ownership composition of the survey universe. The panel controls are the demographic and other variables used by the survey for ensuring that the balance of these variables on the panel is as close as possible to the proportions found by the establishment survey. In practice, panels will never be perfectly balanced, and the term, "tolerance", is used to refer to the margin of deviation that is accepted before corrective action is taken.

Panel Measurement

Form of research methodology employed by all surveys of television viewing and a few surveys of radio listening within the EC, where audience data are gathered continuously from permanent or semi-permanent sample.

Panel/Sample Weights

Scaling factors used to adjust for the lack of representativeness of samples. They feature particularly in panel measurement, where the in-tab sample will vary from day to day, and is in any case never identical in composition to the survey population defined by the establishment survey. If, say, the proportion of women aged 15-24 on the panel is less than its proportion in the survey population, then a weight of more than 1 is used to correct the imbalance. Conversely, a weight of less than one is used to multiply the figures if the proportion of the specified segment in the sample is greater than the population found in the total population.

Weights are also used by readership surveys in order to compensate for (a) differential response (i.e. acceptance) rates among specific categories of individuals, and (b) the probability of selecting addresses within specific categories of addresses. The technical term for these categories is cells. Where a selection of interlaced variables (e.g. age, sex, household size, etc.) is used, the weighting structure is commonly referred to as "cell matrix" (although there exists at least one alternative to cell matrix weighting used by television peplemeter panels - known as rim weighting).

Peplemeter

A device for measuring television audiences, which is in use throughout the EC. It separately meters the tuning of the television set(s) in each

survey household (referred to as "set status"), and individual presence as a viewer. Nowadays, the universal practice is for panel members to press their own dedicated buttons on a remote control handset at the start and end of each viewing session. Individual viewing statements thereby comprise a series of on-off statements on which are superimposed the separate record of set status.

Periodically, (usually once a day in the early morning via telephone lines), the central processing unit of the research company polls the set and individual data from which it produces the individual viewing statements. These constitute the basic building-blocks for computing ratings.

Populations

In general, the number of individuals belonging to the survey universe or to a particular segment of it (i.e. sub-population belonging to a target audience/group).

Pre-selected Sample

A pre-selected sample refers to a method of drawing a representative "random" sample by supplying the research fieldworkers with a list of contact names and/or addresses or telephone numbers for contacting. If the contacted households or persons do not answer, or refuse to participate, the fieldworkers must follow set procedures of attempting recontacts or making substitutions. Either they may be given a specific name/address etc., or follow a random walk or dialling procedure for making the next contact.

Publication Interval

This publication period of a newspaper or magazine. Normally, this is defined as one day for a daily newspaper, seven days for a weekly newspaper, supplement, or magazine, 14 days for a fortnightly title, one month for a monthly title, and so on. The publication interval is used as the basis for estimating AIR.

Quota Sample

Quota samples are obtained through setting demographic (e.g. sex, age and social class) or other (e.g. region and city size) targets, which the research fieldworkers have to achieve.

Random Sample

Random samples are samples drawn "at random" without rejecting any eligible cases.

In practice, pure random selection risks many kinds of bias and is vulnerable to clusters of population variables that may affect the survey findings. That is to say, the goal is to achieve a random sample, but the means of getting there are to follow set procedures in order to minimize the risks of sample bias. For this reason random samples are often called probability samples: meaning that the survey has attempted so as to achieve true representativeness, whereby such that the incidence of a specified characteristic within the sample equals the probability of its occurrence within the survey population.

Random (or probability) samples are obtained by treating all persons/homes as eligible for interview, and following set "random" procedures for making contacts in order to minimize or eliminate the divers risks of bias. Random samples are distinct from quota samples, which will reject persons/homes if they do not fit the quotas being sought, albeit quota methods will also employ set procedures in order to improve the randomness of contacts, and prevent clustering.

Disproportionate sampling is occasionally employed in order to over-represent certain sectors of the population relative to others. It is not the same as setting quotas, but can be achieved by either random or quota methods. Where it concerns random methods, disproportionate samples are achieved by means of stratified pre-selection.

Rating

The basic trading "currency" of audience measurement for television viewing and most radio surveys of listenership. The average rating is a time based-volume measure. It is simply the average audience across a set interval. This can be a unit of time (e.g. one minute, quarter hour, daily average, etc.), or a programme, or a commercial break/minute, or even the advertising spot. National audience surveys vary over the standard reporting intervals and over the operational criteria they set for defining and computing ratings from the raw data.

The rating is expressed as a percentage. It is the average proportion of a given population (either total universe population, or more commonly, a sub-population or target audience) viewing across a set interval times one hundred. Ratings are often added across a number of programmes or commercial breaks etc. (much the most common use), as a measure of total audience. This is known as the GRP, or gross rating point.

Raw Data

Used in more than one sense. The rawest data (or raw "raw" data) are the unedited survey responses of individuals. In practice, raw data refers normally to the cleaned up, or edited, individual records coded by survey information on demographics, ownership of items, or any other variables, for which information has been collected by the survey (that is, any information apart from names and addresses that could lead to identification of the individuals - those data are kept strictly secret from all users). Such individual data are the basis of cover and frequency analyses (see under "aggregated data"). Raw data are distinct from aggregated data, where the information on individual viewing is lost during the process of pooling in order to produce total estimates of audience.

Not all surveys give direct access to individual records of responses. The issue is largely unimportant for print research, which is based on single interviews, but is important in television research, where very few surveys permit direct access to individual viewing statements for a mixture of commercial, political and technical reasons. Chiefly this is an issue between the advertising community and the media owners, which (a) bears upon the transparency of the research methodology (i.e. being able to examine individual viewing statements is important for judging the performance of a panel), and (b) concerns the choice of software for analysis.

Reach

Reach or cover denotes the cumulative audience across a specified interval, such as a programme, time period, or schedule of advertising spots. It is customary to talk of daily, weekly, or 4-weekly reach, etc., for a television or radio station, and 1+, 2+, or 3+ cover, etc., for a campaign of advertising spots. In the latter instance, 1+ cover denotes the percentage of the population, which is exposed to at least one showing of a commercial, or issue of a publication containing an advertisement; 2+ at least twice; and so on. 1+ cover refers to the total cumulative audience.

As with ratings, reach/cover estimates are always qualified by target audience, and the underlying measures are affected by the precise operational definitions employed by each survey. Of particular importance are the threshold criteria for counting as a viewer, listener, or reader.

Readers per Copy

Readers per copy is AIR divided by circulation. Crudely speaking it is the number of copies read per copy sold, subscribed to, or otherwise circulated amongst the survey population.

Recent Reading

Methodology of measuring readership, which asks when people last read or looked at a newspaper or magazine, no matter which issue, and counts as a reader anyone who last read a copy of that title within its publication interval, starting back from the time of the interview.

Sample Stratification

Set of procedures that are employed in order to improve the representatives of "random" samples by capitalizing on the known variability of the survey population in selecting the sample points. Typical variables used for stratification comprise geographic regions, city size, urban versus rural, types of television reception, and types of housing. The reference source(s) constitutes the sampling frame. Random or quota samples may be stratified. Quite often stratified random samples are referred to as multi-stage probability samples; meaning that several (say, up to eight) levels of stratification have been used in order to select the sampling points, whence samples have been drawn.

Sampling Frame

All national surveys of audience measurement attempt to draw representative samples (or where disproportionate sampling occurs, weighting is employed in order to correct for the deliberate deviation from the ideal representative sample). To do this, they rely on basic reference information about the population, such as census data, telephone lists, postal files or electoral registers (the four most common sources), which can provide some details on the geographic dispersion of the population as well as names and/or addresses of potential contacts for survey recruitment. Such foundation sources vary over the level of detail and reliability. They provide the "sampling frames" from which the survey samples are drawn.

Sampling Points

Geographic locations from which a list of contact addresses is issued, or a set number of quota interviews are completed. They control the geographic selectivity of the surveys.

Special Analyses

Customized analyses in which the users specify their own choice of variables, or other conditions, for analysis.

Standard Analyses

Often referred to as precalculated analyses, standard analyses are basic weighted outputs of aggregated ratings data, or its derivatives, such as audience share, which available to all users of the survey.

Target Audience/Group

Audience measures are always quoted for a specified population. Sometimes this is the universe population of "All individuals". For the great majority of programme and advertising purposes, users are more concerned with ratings evaluation against a specific sub-population of the survey universe, such as "all adults", "men 25-44", and so on. These segmented audiences are termed target audiences or target groups.

Through-the-Book (TTB)

Methodology of measuring readership. TTB is the oldest established method, which has been replaced almost everywhere by Recent Reading or First Read Yesterday. It is still used by one of the two main national surveys of readership in the USA, but no longer in Europe. The TTB method involves showing interviewees a particular issue of a publication, and taking them page by page through it and asking if they read key articles.

Universe

The total defined population that is being measured. A range of criteria may serve to define the universe, such that the survey universe sizes for national television, press and radio surveys will never quite be the same. For example, a television universe may be defined as all individuals aged 4+ living in private households with at least one television set and a

telephone, whereas a readership universe may comprise all individuals aged 12+ living in private households and belonging to a specific nationality.

It is possible for surveys to provide data against more than one universe so long as other universes fall within the national universes, which all national television, press and radio surveys of audience measure cover.

