

Statistics Commission



Report No. 38

Official Statistics: Value and Trust

January 2008

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"It is important for our statistics to be good. But it is just as important for the statistics to be trusted by all those – Government, the Opposition parties, pressure groups, citizens – involved in debating policy"

Tony Blair MP, Preface to *National Statistics Code of Practice*, September 2002

"Producing the right data is only one side of the story. Statistics do not speak for themselves...Statisticians have to explain numerical data, put it into context and show its limits in order to make it more transparent and easier to use for ever ybody. Objective and high quality communication to the general public on statistics is essential. Only then can official statistics truly fulfil their function as a public good and a powerful tool in a modern democracy."

Joaquín Almunia, European Commissioner for Economic and Monetary Affairs, speaking at the Eurostat Conference Modern Statistics for a Modern Society, Luxembourg, 7 December 2007

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Foreword



There is much to commend in the UK statistical service. Both its staff and many of its products compare favourably with the best around the world. Its highly decentralised structure, whilst uncommon among advanced countries, has some real strengths in an age when statistics are increasingly drawn from the administrative records of central and local government rather than from sample surveys.

Nonetheless, stronger governance structures and further development of the service are necessary to meet the needs of society and to boost the public's confidence in the service.

The Government has recognised this in the Statistics and Registration Service Act which received Royal Assent in July 2007 and which gives the new Statistics Board the objective of promoting official statistics that serve the public good.

This report draws on the work of the Statistics Commission over the period 2000-2008 and gathers together our views on the current state and future development of official statistics in the United Kingdom. As well as looking back at issues on which we have reported in the past, it considers the new arrangements now being introduced and makes proposals on ways to get the best from them. As part of those arrangements, the role of the Statistics Commission will be subsumed into the broader remit of a new Statistics Board, so this report represents our exaugural perspective.

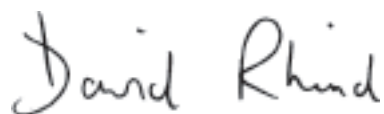
The Statistics Commission itself was created to give independent advice and so provide an additional safeguard on the quality and integrity of the UK statistical service. Our track record in advising on statistical matters suggests that we have fulfilled that remit. But we have also argued that, in the long run, a non-statutory advisory body is unlikely to prove a strong enough voice to be clearly heard and acted on by all the bodies responsible for official statistics across all four UK administrations. We – and many others – regard the Commission's 2004 report *Legislation to Build Trust in Statistics* as having laid the ground for many of the changes now being introduced.

The Statistics and Registration Service Act is undoubtedly one of the most important developments in the evolution of UK official statistics. However, introduction of the new arrangements should not be seen as the goal in itself; they should be seen as a means to drive forward improvements in the statistical service for the good of society, and to promote trust in that service. It follows that they should also be judged in that context.

The Commission has argued in particular for better statistical planning; for better engagement with users; for more helpful commentary to accompany statistics when they are released and for strong safeguards against misuse of statistics. The need for progress on them now creates an opportunity for the new Statistics Board to take a lead in building on the authority it has been given in the recent legislation.

In the period since passage of the legislation we have sought to anticipate the needs of the Board and develop an approach which we hope will support and expedite their work. We extend our best wishes for the journey ahead to all the members of the new Board, to the National Statistician and to the members of the government statistical service.

We would also like to offer our warm thanks to the very many people, from government, academia, consultancy, business and the news media, who have helped and supported the Statistics Commission in its work over the past eight years.

A handwritten signature in black ink that reads "David Rhind". The signature is written in a cursive, slightly informal style.

Chairman, Statistics Commission

Section 1: Overview and Conclusions

The UK statistical system has evolved greatly in recent decades but so has the environment in which it operates. Whilst this report focuses mainly on the service itself, we touch on some developments in society that both underline the need for a strong and effective system of official statistics and pose new challenges to achieving that goal.

The report is arranged as a series of short sections, each of which considers an aspect of the statistical service or the environment in which it operates. There is no grand structure here but rather a core of questions and messages that have emerged repeatedly in the last eight years. This first section draws some of those together, points to some of the concerns that the Commission has addressed in its work to date and summarises actions that we would commend to the statistical service.

The subsequent sections in the report draw on messages from the Commission's many reports over the years 2000 to 2008 and set them in the context of our current views on the evolving statistical system.

Tests of success

The statistical service is made up of statistical units in all four UK administrations, in most government departments and in a number of other agencies. It is centrally co-ordinated by the Office for National Statistics under the leadership of the National Statistician, but neither she nor the office has direct control over the wider service. The new Statistics Board will have broad responsibility for the whole service but again will not have direct authority over large parts of it. So the service is best seen as comprising some twenty or more substantially autonomous units each responsible to a different part of government.

The success of the new Board itself will ultimately be judged by the progress of the statistical service and the level of trust in it. However that is a longer term perspective. In the shorter term the Board may need to focus on whether key players believe it is taking the right steps – that is raising the right issues and putting in place processes to address them. Clearly government departments and the devolved administrations will be among those stakeholders, but these bodies have many competing interests and may not always consider the role of the Board objectively. Equally important will be the external commentators whose views will influence a wider audience. We refer elsewhere to these people as the 'opinion formers'. They include individual politicians, journalists, academics and representatives of international bodies – Eurostat, United Nations bodies, OECD, etc. We would commend to the Board paying close attention to these voices and building a good dialogue with them.

Turning to how the success of the statistical service as a whole should be judged as it evolves under the new statutory regime, we suggest below some distinct tests. In practice these are closely interconnected and might be best seen as multiple spotlights on a single picture. They all relate to matters on which the Commission's attention has focused in the past.

Some tests of success:

1. Is there an adequate **governance framework** that binds the many producer bodies to common values and standards and a common strategy?
2. Is the statistical service taking steps to enhance **trust** in itself, particularly in its capacity and willingness to give independent, public advice about statistical data?
3. Is the service **responding effectively** to a changing society and information environment?
4. Is it dealing adequately with **inherent tensions** – conflicting user needs, sharing of data, confidentiality protection, the targets culture?
5. Is it improving the **explanation that accompanies statistics** when they are published?
6. Has it developed effective **dialogue with the decision-makers** across society?
7. Has it broadened and deepened its **skills and enhanced** its human capital to respond fully to increasing demands?

The following paragraphs look at each of these tests:

1. Is there an adequate governance framework?

The Commission recommended¹ in 2004 that legislation be introduced to help build a trusted statistical service. The model we recommended at the time involved a statutory Code of Practice, overseen by an independent Commission, to be binding on all producers of official statistics, with compliance checked through systematic assessment and reported to Parliament. In most respects this is what the Statistics and Registration Service Act introduces and there is much in the Act which the Commission supports. However, there are also some weaknesses in the legislation:

- The new Statistics Board is to have both a scrutiny role and direct responsibility for the production of statistics within ONS, presenting a risk of confusion of roles.
- It will not have direct authority in relation to statistical work in bodies other than ONS.

¹ *Legislation to Build Trust in Statistics*, Statistics Commission Report No. 18, May 2004, can be found on the Commission's website www.statscom.org.uk

- Assessment is to be carried out only in relation to 'National Statistics' rather than all official statistics, and ministers rather than the Statistics Board will nominate sets of statistics not currently designated as National Statistics for assessment.
- The rules on pre-release access to statistics will not be within the remit of the Statistics Board – instead they will be set out in secondary legislation and will reserve certain powers to Ministers.

These and other weaknesses might leave room for the *perception* that the statistical service could still be subject to undue political influence – for example that departments could shield statistical series from independent scrutiny or evade the requirements of the Code of Practice. To counter that, the new Board will need to be determined and robust in pursuit of its scrutiny role. Ways in which the Board might develop its role are discussed in sections 4-9 in particular.

2. Is the statistical service taking steps to enhance trust?

It is evident from public surveys that trust in official statistics in the UK is low². In part this probably reflects public scepticism about government and authority in general, and to that extent may have little to do with attitudes to the statistical service itself. However, there are steps that could, and should, be taken to enhance trust. For example, there is sometimes a perception that the content or timing of statistical outputs may be influenced by non-statistical considerations. This is something that could be addressed more systematically. In particular, the distinction and separation between statistical releases on the one hand, and departmental/ministerial comment about the statistics on the other, may need to be made more tangible and obvious. At the very least, the statistical results must be published – and be seen to be published – before any political comments on them from ministers or their advisers are made to journalists or in public statements.

There are other things that could be addressed as well. Statistical priorities sometimes appear to be driven solely by the needs of government departments. They must be seen to be driven by the needs of society as a whole. Government statisticians do not normally respond in their professional capacity to public debate about statistics. It would do more for trust if there were greater public engagement by the professionals, regardless of the political ripples that might then create.

These are just examples of the sort of steps that could enhance trust. If the public do not trust the adequacy and integrity of the figures, they will not trust the decision-makers who use them, and that is something that government ministers need to keep in mind. It is natural that departmental ministers see departmental statistics as part of their own responsibility but there is much to be gained by putting some meaningful distance between their own zone of influence and the statistics produced.

² In 2005 ONS reported “only 17 per cent of people believe that official figures are produced without political interference and only 14 per cent say the government uses official figures honestly”, ONS News Release, September 2005, <http://www.statistics.gov.uk/pdfdir/pco0905.pdf>

Trust can also be affected by unexpected corrections and revisions to statistics. Official figures are rarely matters of fact – the work of government statisticians often involves coping with incomplete or unsatisfactory data and making judgements on the best methods of estimation; that is the nature of the job. The consensus is that some figures can – and should be – updated when better information becomes available. However, occasionally, statistics need to be revised, not as part of the regular updating process but because mistakes have been made in their production. The statistical service must set out the reasons for revisions and be ready to discuss errors openly when they occur and improve systems to prevent similar occurrences. Where there are perceptions that something has gone wrong, these need to be addressed in a transparent and systematic manner regardless of whether the concern has substance.

3. Is the service responding effectively to a changing society?

Statistics are produced and used in an evolving environment and the statistical service has to be able to respond flexibly to new developments and challenges. Computing power continues to increase and become cheaper, bringing new expectations and opportunities (such as the scope for the use of new administrative data in statistical work). Greater population mobility poses problems for collecting information and measuring trends; attitudes to authority and changing social structures place further confidentiality demands on data gatherers. Changes to the structure of the economy through growth in the service sector necessitate collecting different information. Policy initiatives, notably devolution and target-setting for the public sector, have further changed the context in which statistics are produced and used. Taken together, these factors pose serious challenges for the statistical system and need to be addressed through a coherent planning system – discussed further below and in Section 9.

In any discussion of statistical planning, we need to keep in mind that official figures have a long shelf life. Analyses of trends, say in public health or the environment, might look back 50 years or more. Society is now making use of information on a scale and in ways that could not have been imagined when some of it was first collected. Statistics on some matters may even increase in their potential to influence decisions as time goes on due to their power to act as a contrast for present circumstances. So a long view about statistical priorities and availability of historical information will always be required.

4. Is the service dealing adequately with inherent tensions?

The statistical service is bombarded by conflicting messages. Different bodies have widely differing priorities – to cut costs, improve small area data, update definitions, maintain consistency over time, focus on the needs of ministers, respond to the external user, deal with parliamentary and media queries, expand the range of available data, concentrate on helping users, ensure international consistency, focus on local or regional needs, improve access to administrative data, or to protect confidentiality at all costs. The tensions here,

explicit and implicit, can lead to protracted internal debate and stasis. The service may not always be able to find a route ahead that commands wide support within government, with every proposal for change seeming to provoke more negative than positive reactions. We see the best solution here as more public and full discussion of the issues, coupled with a decisive Board focused on longer terms gains. Effective public debate on priorities and options, coupled with a transparent planning system that allows interest groups to see the decision-making processes at work, and challenge them if they wish, must also be central to balancing the pressures.

At present there is no central mechanism to enable government departments and devolved administrations to engage collectively with the wide range of users, and potential users, of official statistics. Rather, each department plans its own collection and sets aside part of its budget for statistical work, informed principally by its own policy needs. Issues that straddle departments may be missed, duplicated or handled *ad hoc*. Even where major consultation exercises take place (for example in relation to the 2011 Census), the process of weighing and trading off the different user demands is less than fully transparent.

Key to any new system for planning must be to make sure that the needs of users, and the trade-offs made, are open to debate and challenge. But there is another reason too for a pan-government approach. It is increasingly common for statistics to be created from administrative databases managed by bodies whose primary role is not statistical. Only by effective planning across government can the statistical interest ensure that time series drawn from these administrative sources are not disrupted unnecessarily by changes to these systems.

5. Has the service improved the explanation that accompanies statistics?

Statistical outputs too often seem to be written under the assumption that the user is already quite familiar with the data and with the various technical terms and concepts involved. This may be a valid assumption for regular users of statistics within government but is not true for a lot of other users. Better explanation of the *messages* contained in official statistics is likely to be one of the most potent ways to ensure they are better used – and thus deliver greater value. Better explanation means widespread and routine dissemination of statistical commentary written in a way that is understandable to a broad readership, with key messages highlighted and the limitations of the statistics considered in the context of their likely use. This may or may not necessitate fuller analysis of the statistics. Sometimes all that may be needed is to relate the statistics to what the user is likely to want to do with them. Of course, in order to do this, statisticians will need to ask users what they intend to do with the product. That in itself might offer a quick win for the statistical service.

6. Has the service developed effective dialogue with decision-makers?

The value of statistics comes from their beneficial influence on decisions. Indeed one might argue that the value of statistics exactly equals their aggregated beneficial influence on decisions. As mentioned above, in certain cases statistics may go on influencing decisions for decades after they are published but the principle still applies. Official figures are unlikely to be used to full effect by decision-makers if the messages from the figures are not well understood. Users of statistics often tell us that government statisticians seem to stop short of identifying and supporting their use of the statistics directly. This culture has old roots. In the early days of the Royal Statistical Society, in the first half of the 19th century, there was great anxiety that statisticians should not express opinions. Those ideas still have some currency among statisticians around the world but times have moved on. The user wants to know what the statistician thinks, what the numbers mean as well as what the numbers actually are.

The decentralised nature of the statistical service also means that related sources on the same broad topic are sometimes generated by different parts of government for different purposes, using different questions, classifications and approaches to sampling. Many users need help to understand and navigate this statistical landscape. The Statistics Users Forum has argued for departments to dedicate new resources to supporting users rather than simply producing more statistics. This is a proposal and a perspective that deserves careful consideration.

7. Has the service broadened its skills and enhanced its human capital?

Individuals within the statistical service are undoubtedly well trained as government statisticians; they are involved in a learning process that takes many years – often a lifetime. But progress in the matters discussed above requires a greater variety in the skills within the service. To improve communication and explanation of statistics, to foresee and respond to technological and societal changes and to deal with tensions within the statistical system, requires many different sets of skills and experience. The arrangements for recruitment and appointment of individuals to posts, and the structure of those posts, need to be tailored to respond to the full and changing range of skills required. The public needs to have confidence in the range and depths of the skills of those involved, or it will not trust their products.

SOME CONCLUSIONS

Based on the considerations above and the material in the body of this report, we have drawn the following conclusions and, where we are able to do so, have couched them as points for action:

- i. A consensus on the criteria by which the success of the new governance framework will be judged – in effect the criteria by which the Statistics Board and the service itself will be judged – needs to be developed through open debate. We have set out some ideas above. We hope the Board will foster internal and external debate to build a shared understanding of the priorities.
- ii. The statistical service itself must develop and promote a persuasive view about the societal benefits that can be drawn from official statistics – in society, in democracy and in government. Too many otherwise serious public commentators seem unaware of how fundamental statistics are to our understanding of society and government.
- iii. In order to maintain standards, build trust and underpin the new assessment function³, a clear Code of Practice for all bodies that produce official statistics will be needed. Our recommendations on this are set out in a separate report *Proposals for a Code of Practice for Official Statistics*⁴.
- iv. The co-ordination of statistical activities across the four UK administrations must be improved whilst respecting the autonomy of the devolved administrations. We offer some thoughts on this in Section 6.
- v. The challenge of joined-up planning in a decentralised statistical system will not easily be overcome but the new Board may nonetheless prove to have sufficient practical authority to make real progress. One goal of any new planning system must be to engage all the many ministers and senior officials who in practice take important decisions about statistical priorities, resources etc. There are a lot of individuals in this group and without exception they are likely to perceive that they have higher priorities in their own worlds than buttressing the effectiveness of the national statistical service. Nonetheless, a way to engage them in regular and open dialogue about changes to the statistical programme needs to be found. Many statistical issues require not just the identification of the public interest, but the weighing and balancing of competing public interests (for example containing the costs and burdens of surveys versus providing finer geographical detail). The planning system must therefore be sensitive to a fine balance of different interests. Our ideas on developing the planning system are discussed in Section 9.
- vi. Unless decision-makers trust the statistical evidence they will not regard it as good enough to use it. And unless the public trust the figures, they won't trust the decision-makers. Public trust in official statistics must be addressed in a way that leads to long term improvement. (Section 11).
- vii. Where statistics are used by official bodies in a way that is fundamentally misleading or otherwise likely to undermine trust in statistics, the new Statistics Board must be ready to challenge that publicly. (Section 11)

³ The assessment function is discussed in Section 4.

⁴ Annex B contains the text of the draft Code, taken from the Commission's Report No. 35 which can be found in full on the Statistics Commission website.

- viii. The statistical service needs to develop a more distinct, audible and effective public voice. To do this it will need to give priority to issues of accessibility and communication – communicating the reliability of the statistics, messages from the statistics – and form an image of itself as an independent source of advice. Numbers are not enough. (See Section 13).
- ix. Quality management arrangements for official statistics need to be made more systematic – centrally planned and based on consideration of risk. They also need to be designed to complement, rather than duplicate, the external Assessment function. Our report *Managing the Quality of Official Statistics*⁵ was published in 2005, before the statutory Assessment function was proposed but we believe the arguments in that report remain valid.

⁵ *Managing the Quality of Official Statistics*, Statistics Commission Report No. 27, October 2005.

Section 2: Aspirations and advances since 1997

This section summarises some of the ideas behind developments in statistical governance in the UK over the last ten years. In doing so, it reflects on what Government was seeking to achieve and highlights where there is still some way to go. It also gives a flavour of some of the real advances in statistical products over the period.

Following the 1997 general election, the Government's aspirations for improvement were summarised in a consultation document '*Statistics: A Matter of Trust*' (1998). An extract from this is reproduced below:

EXTRACT FROM *STATISTICS: A MATTER OF TRUST*

February 1998 Cm 3882

It is seldom suggested that Ministers actively change the numbers, rather that there remains scope for statistics to be subjected to political influence in more subtle ways: a range of sources indicate particular public concerns over unemployment statistics, crime statistics, statistics on National Health Service waiting lists, and measures of inflation. The ways in which political considerations can impinge on statistics include:

- *Statistical outputs:* Where there is a perception that the choice of statistics to be collected, and the definitions and methods used, is politically influenced, public confidence in integrity is undermined. Such concerns have afflicted the unemployment statistics, in particular. Appropriate mechanisms need to be in place which define the statistical outputs to be produced, in the light of users' requirements. Decisions on these matters must be transparent and based on clear principles to guide the body of statistics published;
- *Release practices:* Public confidence is affected when there is any perception that the form and timing of publication of statistics may be politically influenced. Good practices to counter this, set out in the Official Statistics Code of Practice, include the advance publication of release dates for key statistics, and the separation of statistical releases and commentary from any political comment;
- *Openness:* To safeguard the credibility of official statistics, statisticians must be free to air their professional concerns within government and to respond, in their professional capacity, to public debate and concerns about statistics;
- *Resources:* Like all activities, official statistics must be produced within what is affordable – both in terms of direct costs and in terms of minimising the burden on data suppliers. But the financing arrangements must be open and their effects on statistical activity transparent.

EXTRACT FROM STATISTICS: A MATTER OF TRUST (continued)

- The root of most concerns is that the current system is regarded as lacking appropriate safeguards against political interference and as being insufficiently open, which serves to breed distrust of the figures. Quality needs to be assured, and the production and presentation of statistics needs to be free from political interference, and to be seen as such. Priorities must be driven by the requirements of all users – Parliament, government and the wider community.

The Government accordingly wishes to ensure a sound accountability and governance framework for official statistics, as a fundamental step to addressing these concerns.

The text quoted above is a useful summary of the issues prior to the introduction of the non-statutory *Framework for National Statistics*⁶ in 2000, which, among other things, laid the ground for a new National Statistics Code of Practice and established the Statistics Commission. The way in which the Statistics and Registration Service Act has now approached a similar range of issues is discussed later in this report.

The key concerns in 1998, as can be seen from the text above, were:

- statistical work might be subject to subtle political influence;
- statistical outputs could be affected by politically influenced choices over what is collected, the definitions and methods used. Decisions on these matters needed to be made transparent and based on clear principles;
- good release practices are important. Statistical releases have to be separated from political comment;
- statisticians have to be free to air their professional concerns and to respond to public debate;
- financing arrangements have to be open and their effects transparent;
- the governance arrangements need to have appropriate safeguards against political interference and be sufficiently open;
- priorities have to be driven by the requirements of all users – Parliament, government and the wider community – not just those of central government.

There has undoubtedly been some progress in these areas over the ten years since the concerns were expressed. The mechanisms put in place under the Framework for National Statistics – including the current Code of Practice, the concept of National Statistics, the role of National Statistician and the Commission itself – brought about some beneficial

⁶ *Framework for National Statistics*, ONS, operational from June 2000.
http://www.statistics.gov.uk/about_ns/downloads/FrameDoc1.pdf

changes. But the judgement of many commentators was that these mechanisms had significant weaknesses and did not drive change to the extent that had been anticipated. The introduction of the Statistics and Registration Service Act 2007 indicates that Government shared that view in some measure and was keen to establish a more robust framework.

It is worth highlighting some of the areas in which progress was less than had been wished. For example, statistical outputs continued to be driven largely by departmental requirements rather than by a coherent planning system focused on the needs of a wide range of users. The National Statistics Code of Practice brought about some improvement, notably in release practices, but the goal of effective separation of statistical commentary from political comment remained a problem area. Often the same departmental press office would be handling both the statistical release and the ministerial reaction to the statistical release at the same time – with obvious risk of the distinction being blurred.

The issue of government statisticians being free to air their professional concerns and respond to public debate remains problematic. It is a view widely shared by commentators outside government that government statisticians have not yet developed a voice which is sufficiently distinct and independent from the administration of the day to allow them to respond effectively to matters of public debate and to demonstrate independence from politicians. Such a voice has been developed in some other countries, for example in Canada.

Advances

However, despite reservations about progress in some respects, it is evident that there has been progress in improving the statistical product. Necessarily, many of these improvements have been technical and would not make headlines on their own. But we have selected a few below, mostly within ONS where information on developments over time is more readily accessible than elsewhere in the statistical system:

- There have been developments in methodology including a series of topic-based quality reviews, the introduction of annual chain linking in National Accounts, a modelled historical series for labour market statistics and the introduction of hedonic regression on various price series.
- The introduction of new approaches to specific issues: for example, the derivation of low pay estimates, measures of the impact of fraud on foreign trade, research on measures of productivity, public sector employment and of e-commerce, and a new publication on pensions.
- An expansion of data at local level – the advent of neighbourhood statistics, the introduction of regional GVA estimates and regional retail prices, alongside small area estimates for income and unemployment.

- Some improvement in access to microdata for researchers, including the sample of anonymised records from the census, a productivity research facility based on business microdata, the creation of ‘microlabs’ for analysis of microdata in a confidential environment and a microdata release panel.

The wider statistical system has achieved marked development in certain statistics based on administrative data – for example from the Department for Work and Pensions which now produce a wider range of valuable statistics based on benefit claimants and related records, from NHS records and from individual school pupil records. As well as producing more statistics from such sources, there has also been improvement in the online availability of the statistics. So, in practice, the user does now have access to a much wider range of statistical information than 10 years ago.

The service is better than ten years ago but, as often happens, new developments bring new problems in their train. Online publication has made more statistics available to more people, but the quality of official statistics websites generally requires improvement. Neighbourhood Statistics⁷ created a valuable new resource, pulling information together from a number of sources and offering users some degree of interaction. But there have been problems keeping that system up to date, and provision of local level data have sometimes suffered where hard decisions on priorities have had to be made.

The development of statistical outputs from administrative data has sometimes been hampered by confusion over the extent to which legislation limits the statistical use of such data. The policy issues which have driven the creation of new series have generally been the priorities of the major government departments rather than other users.

It could be argued that the statistical system has progressed most in those areas where it was already competent – developing sources, conducting surveys, and in publishing the results. The areas in which progress was less strong included bringing statistical services to the attention of potential users, supporting the user directly, engaging in debate about priorities and user needs and introducing greater coherence to the service as a whole.

⁷ Neighbourhood Statistics
<http://neighbourhood.statistics.gov.uk/dissemination/LeadHome.do;jsessionid=ac1f930bce6db1b02de1f6d4e72a0cdb2ef5b84467e.e38PbNqOa3qRe34Pc38RbhyTbhZ0n6jAmljGr5XDqQLvpAe?bhcp=1>

Section 3: The changing environment

This section reviews some features of the wider environment in which the statistical service operates and identifies some challenges created by this changing world.

While the statistical service has continued to develop in recent years, the world in which it operates has also moved on, dramatically in some respects. Computing power has increased massively and software tools have improved hugely, bringing new opportunities and expectations. Enhanced population mobility, diminishing deference to authority, changing expectations of public services and rapidly evolving social structures have placed new demands on data gatherers. Policy initiatives, notably devolution and target-setting for the public sector, have changed the context within which official statistics are produced and used.

Technology

Developments in information technology, notably broadband internet access and associated technical innovations, have assisted producers of statistics whilst stimulating the expectations of the user. Statistical data can be processed more swiftly and presented more effectively than was the case a decade ago. But users now expect to be able to access information on websites which are attractive, well-explained and easy to understand. They look at products such as Wikipedia and Google Earth and expect to get the information they want easily, instantly and free of charge. A new wave of websites, such as Gapminder.com and Swivel.com are leading another revolution in drawing statistical data from different sources together in a dynamic fashion and in ways shunned by some official statisticians – but loved by many users.

In the wake of these developments, the gap between capability and user-expectation is probably wider than ever, and growing. This is not a comfortable position for any service but it is one that offers opportunities as well as threats. The statistical service cannot be expected to beat the leading information providers at their own game, but it might be able to do business with them.

Growing computing power has also impacted on the civil service monopoly over the production of readily available economic and social statistics. There are now many more statistics available from private, public and not-for-profit bodies, some of doubtful provenance, but competing nonetheless for the attention of users. In the case of information about hospitals and other health service providers, there is now an established industry selling professionally packaged data back to the NHS and to the public. There has also been a growth in agencies which take existing freely-available official statistics and add value to them through analysis, integration with non-official data and user-friendly

presentation. Many organisations – commercial and governmental – appear willing to pay the premium for such services rather than rely directly on the less packaged statistical products of government itself.

Private sector role

Much statistical work – especially data collection – is intrinsically expensive and requires specialist skills. So it is not surprising that some parts of government have seen the attraction of working with private agencies. The boundaries between the traditional public-interest statistical service and private sector intermediaries are now starting to blur, notably, but far from exclusively, in the field of health statistics.

The private sector has also had a long-standing and substantial role in the regular collection and processing of official statistics on a contractual basis. The processing of Census data, for example, is carried out by private companies on behalf of ONS and many social surveys are contracted to specialist companies.

So there is already a substantial, and mostly successful, history of private sector involvement. But the rules of engagement are changing and the private sector role is steadily expanding. The challenge, for the statistical service and for the Statistics Board, will be to establish a way of working that keeps the public costs to a minimum whilst maintaining quality, retaining a public service ethos, and maintaining free access to those statistical products for which free access is in the public interest.

Social and demographic change

Populations are fluid, both over time and between geographical areas, and have always been hard to count accurately. However, it seems very likely that keeping track of the population is getting ever harder. One obvious reason is the growth in the proportion of young people who live as students in temporary accommodation near their place of study for part of the year. So term-time population can be significantly different from the rest of the year in many towns and cities. Another reason is the growth of international migration and the consequent transience of population in some areas. Many people do not just come to this country and settle in one place. They come and they go and they move around, often over short periods – as of course do many UK-born people. At present, the measurement of such flows, particularly at a local level, is one of the biggest challenges facing the statistical service.

These difficulties with population measurement also illustrate a wider point. Concepts and definitions – what we mean by ‘migration’ for example – necessarily change over time and the statistical system has to keep adapting its sources and practices to keep pace⁸. Sometimes this can throw up major problems. These problems are exacerbated when internationally agreed definitions become outdated as may be happening with migration.

⁸ The advent of low price airlines, for instance, has certainly had some effect on short-term migration.

Attitudes to authority

A recent survey⁹ reported that levels of trust in a wide range of public professions have declined since 2003. The survey recorded double-digit falls in the percentages of respondents expressing a great or fair amount of trust in school teachers, police officers, NHS managers, senior civil servants, MPs and senior local council officials. Occupations outside the public sector also registered falls, most notably journalists.

The decline in respect for, and trust in, authority is also evident in recent survey evidence from Europe and America. Clearly this decline is not limited to the world of statistics but it nevertheless makes statistical work more difficult. People are more reticent about giving information to interviewers, less likely to respect statutory obligations to comply, and less trusting of the statistical product when it emerges.

Surveillance anxiety

A manifestation of mistrust in authority, and perhaps a reaction against the growing power of information technology, is public fear that organisations will seek to misuse, or fail to keep safe, information about them. There has been a vigorous debate on the utility of identity cards and what should be stored on them. Again, this relates to a far wider canvas than official statistics, or indeed the public sector. But whatever its roots, the concern about privacy creates an environment in which the sharing of data for purely statistical purposes is regarded with suspicion and hostility. This may prove to be a major obstacle to some much needed statistical developments. In our report *Counting on Success, The 2011 Census – Managing the Risks*¹⁰ we argue for the Census to be replaced, in whole or in part, by an approach that makes much more use of existing administrative data. This will only be possible if people have confidence in the security of their personal information. Other countries, including most of those recognised as having the best statistical systems, have found ways to secure that confidence. The UK statistical system needs to do the same.

Target-setting

The present government administration is not the first to set statistical targets for the performance of public services but it has done so in a more comprehensive way than its predecessors. To some degree this reflects a broader trend across all sectors to use enhanced technology to produce management data.

⁹ *Getting the balance right: Implementing standards of conduct in public life*, Committee for Standards in Public Life, Report No. 10, http://www.public-standards.gov.uk/publications/10thinquiry/report/chapter1_part3.aspx

¹⁰ *Counting on Success: The 2011 Census – Managing the Risks*, Statistics Commission Report No. 36, November 2007.

However, a number of users interviewed for the Commission's report on *Perceptions and Trust*¹¹ noted that the emphasis on performance indicators and targets sometimes pushes official statistics beyond what they are capable of measuring. Whilst the use of statistics (amongst other evidence) to inform decisions about public services must be seen as a good thing, it is possible to take quantification too far. Not every aspect of the police service, the NHS, or education is best forced into statistical form and not all statistics that are collected are to be trusted to tell a valid story. An independent statistical service will increasingly need to be ready to advise caution and restraint in the use of statistics as well as encourage their use where appropriate.

Devolution

One consequence of devolution to Scotland, Wales and Northern Ireland has been a proper concern to collect statistics which illuminate local issues in each of the countries. The disadvantage is that this has sometimes made it difficult or impossible to produce UK-level data. This problem has been raised in relation to a number of topics during the Commission's research. We explore this further in Section 6.

¹¹ Annex B of *Official Statistics: Perceptions and Trust*, Statistics Commission Report No. 24, February 2005.

Section 4: Building on the statutory framework

Viewed internationally, the UK has been in a small minority of countries in not having its statistical governance underpinned by legislation. We have argued (eg in our 2004 report *Legislation to Build Trust in Statistics*) that this has contributed to low public trust and that one necessary, though not sufficient, step in reversing the decline in trust will be to create a strong statutory framework. We were pleased therefore that the Chancellor announced plans for legislation in 2005.

The Statistics and Registration Service Act which received Royal Assent in July 2007 has the potential to strengthen independent oversight of the statistical work of government and to strengthen public confidence in it. The Act creates a single legal entity – the Statistics Board – which comprises both the appointed Board and the current statistical functions of the Office for National Statistics (referred to in the Act as the ‘executive office’). The chair of the appointed board is chair of the whole organisation (Board and office); and the National Statistician, as head of the executive office, is chief executive of the entire organisation.

Under the Act, the Board is given a broad objective to watch over all statistical work in government – “promoting and safeguarding the production and publication of official statistics that serve the public good”. However, the decentralised nature of the UK statistical service means that much of this work is not under the direct control of the Office for National Statistics and will in future fall outside the direct control of the Statistics Board. For example, the Board will not be able to decide, on its own authority, to count and classify criminal offences differently in the national crime statistics, whereas Home Office ministers can make such decisions and will most likely continue to do so. In practice, final authority over most of the statistical work of government will, both formally and in day to day reality, continue to rest with departmental ministers and the devolved administrations. This includes key decisions on funding and priority setting as well as questions of definition and classification.

To achieve effective and credible oversight in this complex environment, there needs to be sufficiently clear separation between the scrutiny role of the Statistics Board and its role as the direct authority for the work of, what is currently, ONS. Without this, the views of the Board, particularly on matters relating to the work of ONS, might not be seen to be independent. Whilst this hazard will be less in relation to statistical work elsewhere in government, there is another risk in that context – the risk that the views of the Board will be seen just as the views of another part of the civil service; and thus not afforded the respect that an independent statutory authority would normally command.

Another reason for seeking clarity and separation of roles is that the National Statistician is the *government’s* chief adviser on professional statistical matters, as well as the Board’s. She thus needs to have the unchallenged authority to lead the whole statistical service, not just the office that reports to the Board. If separation between the executive and scrutiny roles is not established, the parts of the statistical service located in government departments and the devolved administrations may see neither the National Statistician or

the Board as offering professional leadership in their own domain. In practice this might mean that statistical issues requiring difficult, politically sensitive, judgements would be resolved within the department rather than in consultation with the National Statistician; and that would be a backward step.

Terminology

The catch-all use of the word 'Board' in the Act creates a problem of terminology. The role of the appointed Board will be distinct, in practice if not in law, from that of the executive office (currently ONS). We need to be clear about which body is being referred to when discussing issues of governance. We will refer, from here on, in this report to the appointed Board of non-executive and executive members as **'the Board'**. And until the executive office is formally given a title we will refer to it as **'the Statistics Office'**. Where it is necessary to refer to the entire legal body, we will call that the **'statutory Board and office'**.

Distinguishing roles

The distinction in roles between the Board and the Statistics Office is important and, in some respects, unusual. The Board has statutory objectives and responsibilities in relation to all official statistics, including those produced in the devolved administrations and by arms-length agencies such as within the NHS. In particular it is given objectives under the Act to promote and safeguard:

- The quality of official statistics
- Good practice in relation to official statistics, and
- The comprehensiveness of official statistics

The Act also expands on the meaning of various terms including 'public good', quality and good practice though it is not necessary to dwell on those concepts here.

The Act requires the Board to 'monitor the production and publication of official statistics'; to 'monitor the arrangements for the release of official statistics, and any access to official statistics in their final form prior to publication'. And the Board is empowered to report any concerns it has about the quality of official statistics, good practice or comprehensiveness to the person responsible for those statistics and also to publish its findings and reports.

These responsibilities are necessarily placed on the statutory Board and office (the only legal entity available in the Act) but it is clear – both from the context within the Act and from statements in Parliament during the passage of the Bill – that the primary responsibility for these things rests with the appointed Board rather than with the Statistics Office.

The National Statistician is to be one of three executive members of the appointed Board as well as being the head of the Statistics Office and chief executive of the statutory Board and office. Thus, when the appointed Board is seeking to perform its role of monitoring and reporting in relation to statistics produced by the Statistics Office itself, it will need to be able to demonstrate that it is doing so not as the top management of the office but as the independent authority responsible for upholding the public interest. Before discussing ways in which this might be approached however, it is helpful to look at the levers and mechanisms available to the Board in carrying out its monitoring role.

The Code of Practice

First among these is the power to determine the content of a Code of Practice which will apply to all bodies that produce official statistics – although only those statistics which the Government chooses to have designated as National Statistics are formally required to be compliant with the Code. The Code will however apply to everyone involved in the production and release of the statistics, not just the professional statisticians. As Lord Davies said on behalf of the Government during passage of the Bill: “I should emphasise that this duty [to comply with the Code] applies not only to statisticians, but to every individual within a department who plays a role in the process – from those involved in preparing briefing for Ministers to the press officers, and everyone in between”. The Statistics Commission has published a report setting out proposals in relation to the content of the Code¹². It will be for the Board to decide whether to adopt that or a different version but we expect it to be as wide-ranging as, for example, the European Statistics Code of Practice.

Assessment and designation

The second mechanism is the statutory assessment process (ie the one which the Board is empowered to undertake by virtue of the Act) which has two aspects. Statistics which have not been designated as National Statistics can only be assessed against the Code at the request of an ‘appropriate authority’, which means either the relevant Minister or the National Statistician depending on the body that produces the statistics. (There is also a mechanism for the Board to seek such a request if it feels one should have been made but has not been). If the assessment is satisfactory, the Board is then required to designate the statistics as National Statistics.

Statistics which are already designated are to be periodically assessed against the Code at the discretion of the Board, subject to the intention to do so being indicated in a published programme of assessment. In practice, the assessment of existing National Statistics may need to look across large areas of statistical work at once – all health statistics perhaps –

¹² The Commission’s draft Code is included in Annex B. The Commission’s full report *Proposals for a Code of Practice for Official Statistics* (Report No. 35, September 2007) can be found on our website.

or major areas of statistical practice – release practices for example – rather than just contemplate the Code compliance of individual statistical series. This would enable assessment to engage with questions of tailoring the service to the public interest and not just specific issues of compliance.

To support the Board in the assessment and designation functions, the Act requires it to appoint a Head of Assessment who will report directly to the appointed Board and will not work within the Statistics Office. The Head of Assessment, a statutory office holder in his or her own right, will be able to employ further staff at the discretion of the Board.

Together with the power to report to Parliament **any** concerns it has about statistical practice in Government, these are the primary tools available to the Board. Their combined effectiveness will depend largely the adequacy of the Code of Practice, the thoroughness and nature of the assessment work, and the credibility of the Board's public reports. Public credibility will in some measure turn on the merits of the published assessment reports. However, as some of the statistics being assessed will be produced by the Statistics Office itself, the Board may need to take steps to ensure that the assessment function is seen to be truly independent. We suggest that:

- Both the programme of assessment and the assessment work itself should be overseen by a committee comprising some of the non-executive members of the Board. None of these people will have direct involvement in management decisions relating to the Statistics Office. There are arguments either way for the chair of the Board to be a member of the assessment committee but on balance it might be better for the chair not to be directly involved so that his, more complex, role is seen as distinct.
- All assessment work should be published in formal reports for which the Board should be responsible, both in terms of the content of reports and the subsequent implementation of recommendations. Assessment reports should normally be shown to the body responsible for the statistical work, and to the National Statistician, before being completed, and their responses included the report. This would both serve as a quality check on the report and bring to the surface any differences of view at the time of publication. It could also save time subsequently.
- Responsibility for pursuing the conclusions and recommendations of all assessment reports should rest with the appointed Board.

Section 5: The Board and the National Statistician

We have argued above that a clear separation of roles is needed in relation to scrutiny and assessment activities. However, there are also some other areas in which the appointed Board and National Statistician may have to be clear about the boundaries of their roles.

Circumstances might arise, for example, in which the National Statistician, as a senior civil servant, is required to respect collective government responsibility for decisions that have a direct bearing on statistical work in a government department. Whilst this might be a rare occurrence, the National Statistician would be a party to the government decision, whereas the Board would not be and might wish to distance itself from the decision.

Whilst such potential tensions are unlikely to be common, the working relationship between the Board and the National Statistician needs to be designed to accommodate differences in perspective and obligation, and not allow these to precipitate an internal crisis. It will also be essential for the Board to consider openly the circumstances under which interests might diverge and how to accommodate them. For reasons of this kind, we do not think that the same secretariat can support both the Board and National Statistician. We understand that it is now planned to have separate secretariats and we welcome that.

The Government recognised the potential tensions during the passage of the Bill in the House of Lords. Lord Davies said:

“the relationship between the Chair and the National Statistician may change in respect of their personalities and how they work together. We all know that there has to be recognition of evolving change in those terms, but this Board is like no other. We seek to create an effective Board with the two key figures working together to reach the objectives for which it was established, but we recognise that the relationship between them may change over time.”

Whilst the language is parliamentary, the recognition of the need to explore and establish the relationship is clear. It is also clear that, whilst there are some structural parallels with commercial company boards, the function and responsibilities of the Statistics Board are unique. It is unlike any other Board of which we are aware.

Section 6: The devolved administrations

The Statistics and Registration Service Act establishes that the statistics to which the Board's responsibilities relate include those produced by the devolved administrations in Scotland, Wales and Northern Ireland.

The Act also gives Ministers in each of the devolved administrations a measure of authority in relation to how the Board will function. One central question will be how the assessment function should best be organised to provide adequate scrutiny of the statistical work undertaken under the authority of the devolved administrations – and do so in a way that maintains the confidence of all four UK administrations. One option may be to establish committees of the Board (as provided for under the Act) to include people who are neither members nor employees of the Board. The Act explicitly precludes such a committee from determining whether official statistics comply with the Code of Practice but there may be scope for a committee to assist the Board in determining the programme of assessment and provide it with information and advice relevant to the Board's determination of compliance with the Code. Whether or not such committees are established to assist in the liaison with the devolved administrations, the Board will need to establish a way of working that commands confidence in all four administrations.

Harmonisation

Another issue will be how to ensure that the harmonisation of statistical practice – essentially all four administrations agreeing to adopt common definitions, classifications and methods – is addressed effectively but without infringing the autonomy of any of the four administrations. This is an important and potentially difficult question. It is not necessarily the case that Whitehall departments are strong supporters of harmonised practice whilst the devolved administrations are reluctant. It can be the devolved administrations that see virtue in harmonisation of definitions etc whilst the big Whitehall departments may not want the potential costs of changing their current practices.

The long term needs of users of the statistics must be the key consideration and the Board will need to look afresh at how to enable the four administrations to engage effectively, and jointly, with users in determining, firstly, whether harmonisation of statistical practice is justified in terms of cost and secondly, where it is justified, how best to approach the changes needed. Regardless of the details, this process will need to be fully transparent so that the background to decisions can be discussed publicly and challenged by those who disagree. Once the arrangements are in place, there would be a case for the Board to organise public meetings in each country to allow views to be exchanged.

We are confident that, with the good will of the four administrations, a neutral and transparent process could be devised relatively easily which would help to determine whether further harmonisation of statistical practice between the four countries is judged to be in the public interest, and how to bring it to pass. Making it work would, of course, require time and resources but, as the issues are by their nature long term ones, we think that the process need not prove to be a major commitment for any of the parties.

Section 7: The news media

The objectives of the Statistics Board relate to ensuring that official statistics serve the public good. In practice this means not only ensuring that the right statistical outputs are produced, but also promoting public confidence in the quality of those outputs – where justified – and that their production is in the public interest (that they are useful and cost-effective for example). To do this, the Board will need to operate in ways that give it the best chance of gaining the confidence of the news media. Without that, it will have little prospect of commanding wider public confidence in these things.

Cautious voices will argue that in such a politically-charged context as official statistics, gaining the confidence of the news media may prove difficult; and even that attempting to do so may prove counter-productive. However, the Statistics Commission believes that its own experience has demonstrated that an open and effective dialogue with journalists on statistical issues is possible as long the consequences are understood and accepted and the nature of the relationship is clear.

The prevailing culture within the civil service is to keep the news media at arms length. Civil servants are normally only expected to speak publicly on behalf of their minister and thus anything they say to a journalist is open to interpretation as a statement from the minister; or as a failure on the part of the civil servant to correctly reflect the minister's view.

So there are undoubtedly some hazards to cross-government co-operation if the Board establishes a more open and engaged approach either for itself or for the Statistics Office. In simple terms, other government departments may be less open in their dealings with the Statistics Office if it is known that the Board and office are likely to be more open with the press. Faced with these hazards, the benefits and risks of an active media dialogue need to be weighed up carefully by the new Board. However, the Commission's view is that, in the end, the significant benefits justify the risks. Indeed, the consequences of *not* establishing an active media dialogue are both predictable and damaging: public trust could diminish still further and the Board could be seen as simply an extension of ONS.

Avoiding conflicting interests

For the Chair and non-executive members of the Board to command public credibility when speaking in the context of their scrutiny functions, the Board may have to avoid, as far as possible, speaking on behalf of the Statistics Office. It might be best for the National Statistician, who will of course be a member of the Board, to continue to take direct responsibility for announcements and statements on *behalf* of the Statistics Office. Alternatively, or additionally, one of the non-executive members of the Board, perhaps a deputy chair, might speak on matters relating to the Office but never on behalf of the scrutiny functions.

Where the scrutiny role of the Board addresses issues directly affecting the Statistics Office, it could be the role of the Chair or non-executive members to announce the findings, and the National Statistician (or a designated non-executive) to respond to them. Such relatively rigid separation in such matters, however it is arranged, may prove important in avoiding the appearance of conflicting interests – something which the press would be quick to pick up and interpret.

The Statistics and Registration Service Act empowers the Board to publish its findings and reports. The Commission's experience has been that a key to building a constructive relationship with the news media is to present findings in concise and straightforward terms. The Board's reports and findings should be published in a media-friendly format while being consistent with rigorous standards. The Board also needs to be ready to explain and defend its works when invited to do so in either the press or broadcast media.

The statistical service and the media

To the extent that the Chair and non-executive members of the Board require staff to support them in these dealings with the media, those staff should not be staff of the Statistics Office. There is a separate issue however about direct access for journalists to statisticians and other staff who have prepared statistical outputs. It is a convention, not always observed, that the name and contact details of the government statistician responsible for a statistical output should be included in the statistical release itself. Clearly the intention here is that this expert will be available to answer questions of a technical nature. But journalists have complained to the Commission that government statisticians often refuse to speak to them directly. We have some sympathy for statisticians caught between an expectation of openness and the culture and norms of the civil service.

There are many matters of statistical interpretation that are regarded as sensitive inside government so the question of what principles should apply to public comment from statisticians across government is not straightforward. A searching examination of the rules under which statisticians work both in the Statistics Office and more generally in other government departments is now needed. We argue that the benefits of direct dialogue between expert and journalist outweigh the risks to reputations or co-operation that might arise from antagonistic reporting.

We do feel strongly that no part of the statistical service – which is after all seeking to be recognised as independent – should be expected to deal with the media via departmental press offices. These press offices are, in effect, the guardians of the Whitehall conventions that the statistical service needs to challenge. However, if there is to be a special policy for statisticians, the Board will need to agree ground rules with the Cabinet Office and other relevant departments. There may also be other aspects of Whitehall conventions that need to be examined in this context. Government departments are increasingly exhorted to operate in a joined-up, collegiate spirit and are open to criticism for not doing so. The Statistics Office, and to some extent the entire statistical service, will sometimes sit outside that collegiate spirit and this could be a source of tension unless the position is explored and agreed up front.

When things go wrong

The way the Board responds when something is seen, in the eyes of commentators or the media, to have gone wrong within the statistical service will substantially influence public perceptions of the Board itself. There has been no shortage of examples of cases in which statistical outputs have attracted public criticism in the past; and there is no reason to suppose that this will be different in the future. Official statistics are rarely matters of fact. The work of government statisticians often involves coping with incomplete or proxy data (that is, data that are relevant but not exactly what is wanted – eg police recorded crime as a measure of crime in society). A key part of their role is to select, present and explain the most relevant statistics and help users to interpret them sensibly. It is precisely because statistics can be inherently unreliable in themselves that the statistician's expert advice is such a valuable service.

Thus improving the statistical service may often mean improving the advice given with the figures rather than improving the figures, at least in the shorter term. Explaining these issues to journalists before a problem erupts may make it easier to explain what has gone wrong, and what needs to be done to put it right, when the time comes.

Opinion formers interviewed for the Commission's report *Official Statistics: Perceptions and Trust*¹³ called for a more open dialogue about mistakes, with producers willing to admit that things have gone wrong and commentators willing to accept that statistical work is inherently prone to problems; it is rarely a simple question of technical competence. The Board needs to foster both a new frankness on the part of producers of statistics, and greater public respect for the complex and problem-prone work of the statistical service.

These arguments also point to the need for a coherent media communication strategy – not a strategy in the sense of one designed to put a positive gloss on official statistics but rather one to ensure that the Board is recognised publicly as a trusted voice. Elements of that strategy are likely to be:

- Openness to approaches from journalists and willingness to speak on the record
- Pro-active (and perhaps pre-emptive) engagement with key journalists on important issues
- Disclosure via the internet of all but the most commercial or otherwise necessarily confidential documents (such as early drafts of material for publication) considered by the Board
- A role for media representatives in some aspects of the assessment work (there is precedent for this, for example in the 2006 Smith Review of crime statistics)

¹³ *Official Statistics: Perceptions and Trust*, Statistics Commission Report No. 24, February 2005.

- A new frankness on the part of producers of statistics, both in statistical commentary and in discussing problems with, and constraints on, the service itself
- Communication of a clear strategic direction for the statistical service that both accepts the need for change and points to a realistic way forward.

Public statistical literacy

Implicit in anxieties about a more open dialogue with journalists is a well-justified concern that neither the general public, nor many journalists, have much understanding of even basic statistical or numerical concepts. Concepts such as random samples, sampling error, significant differences, trend in data, confidence intervals and so on, seem alien and distrusted. Statisticians use the term 'statistical error' in a technical sense. It means something quite specific, and, at least in that sense, has nothing to do with mistakes. Revisions are not normally corrections of mistakes either. The scope for misrepresentation of what the statistician is saying is obvious.

Whilst there is little prospect of dramatic improvement in public understanding in the short term, consideration needs to be given to the part that the statistical service might play in fostering greater understanding, perhaps especially among commentators and journalists. The Royal Statistical Society has taken some initiatives in this area and the Statistics Board might want to look at the opportunities to add its weight to extending comprehension of the work of government statisticians and statistical concepts in general.

Section 8: The decentralised service

To achieve its goals, the role of the Statistics Board will need to be understood and supported by all officials who produce statistics across the departments and administrations of government. In particular, all the professional statisticians and others who collectively make up the government statistical service must recognise that the Statistics and Registration Service Act reflects a desire on the part of Parliament for a new approach centred on the authority of the Board and, on professional matters, the authority of the National Statistician.

This is all the more important as neither the Board nor the National Statistician will have formal authority to direct statistical staff beyond the boundaries of the Statistics Office – in effect, they have no *direct* authority over the majority of the work. So it will mainly be through the voluntary recognition of their authority that the Board and National Statistician can exercise the leadership that Parliament intended.

There are however some mechanisms through which the Board's influence can be enhanced. The publication of various kinds of reports and the scrutiny of Parliamentary committees following such reports will be a particularly important mechanism. But such formal process, whilst an essential element, is likely to prove an inadequate tool for effective leadership more generally.

The Commission hopes that the major Whitehall departments will respect and accept the larger role that Board and the National Statistician will in future play in setting the standards and strategic direction for all parts of the statistical service. However, achieving this is likely to require a better understanding (than we detect currently) in all four UK administrations of the new legislation and the intentions of Parliament. An early priority for the Board might thus be to find ways to explain its role to all those in government who need to understand it. Letters and visits to ministers and permanent secretaries may be one mechanism. But direct engagement of departments and the devolved administrations in the Board's review and planning activities may prove equally effective in this regard.

To make the decentralised statistical system work well there may also need to be clearer separation within departments of statistical work from policy work. This would help to avoid suspicion that statistical outputs are influenced to support particular policies. We have drawn attention to this issue in our reports over several years. In the previous section we argued for statisticians to be free of the influence of departmental press offices in their dealings with the media. That is one example of how in practice the statistical functions of departments might be made more independent. The Government has not made any general commitment in this area but has issued outline proposals for publication of statistical outputs (press releases and reports) through a central location – the so-called publication hub. We welcome this initiative which may serve to create some degree of separation between statistical and policy comment. However, the Board will need to be sure that it has sufficient control over the content and timing of the publication activities that are undertaken in its name.

We would further like to see publication of statistical outputs before ministerial (or departmental) statements on the statistics. This would do much to highlight the separation of statistical and policy comment and serve as a public acknowledgement of the leadership of the Board. We understand that some countries, including the USA, do operate a minimum time interval between some key statistical releases and political comment – it might be as little as 30 minutes but still sends a clear message that the statistics come first and political comment after. It has been argued in Parliament that such an interval would be unsustainable in the UK. The Commission's view is that an interval would be practicable if there was sufficient political will to introduce one. The present arrangements, which allow and enable simultaneous release of the statistical output and the political reaction from ministers can cause both confusion about the statistical message and a suspicion that both statements are politically coloured. A public consultation on the secondary legislation that will govern pre-release access to statistics, a pre-requisite for simultaneous political comment, was launched by the government in December 2007. At the time of writing we do not know where exactly this debate will lead.

However, for the time being, we expect to see departmental statistical releases continuing to be shadowed by ministerial statements that put the Government's interpretation forward and quote selectively from the statistics being published. In our report *Proposals for a Code of Practice for Official Statistics*¹⁴ we argue that such ministerial statements should, at least, meet certain standards and that the Board should check that these standards are observed. In particular, ministerial statements should explicitly refer to the statistical release and where the reader can find it, and should not be designed to distract media attention away from the statistical release. And they should not be issued to the media under embargo, or otherwise trailed, ahead of the statistical release.

The use of embargo arrangements for the statistical outputs themselves (ie showing them to the press on a confidential basis ahead of release) is a different but related question. Whilst we understand the reasons that it is sometimes used (essentially to give journalists time to understand the statistical product before writing about it), we think it is a practice that should be very strictly limited and publicly authorised by the Board in every case. It opens the door to a race to get embargoed political comment to the media before the embargoed statistical comment. And such practices are not consistent with the principle of 'equal access for all'.

Release practices are an area in which the potential to undermine trust in the statistical product is a real concern. Ministerial statements need to recognise that the statistical release is an important output in its own right, with many users inside and outside government, and not just a springboard for departmental policy statements. If the media and public perceive ministers and officials attempting to 'get their story out first' ahead of the statistics, it will continue to weaken trust.

¹⁴ *Proposals for a Code of Practice for Official Statistics*, Statistics Commission Report No. 35, September 2007.

Section 9: Statistical planning

At present there is no coherent planning *system* for the content of UK official statistics or for the statistical service more generally. What exists instead is a series of plans drawn up in various departments to meet departmental priorities with little systematic engagement with other users. Although there are many informal mechanisms to keep different parts of the statistical service informed about developments elsewhere and share methods etc, there is no formal mechanism to ensure statistics produced by different parts of government are coherent.

A more structured and informed approach across government is needed, led by the National Statistician and supported by the Board. The goal of the planning system should *not* be primarily to draw together existing departmental plans – a cumbersome task and one that tends to result in lists of technical projects that few people are in a position to understand. Rather it should be to pinpoint for public consideration key issues of difficulty or controversy, including emerging needs that are not currently catered for in departmental plans.

Such an approach has been suggested before. In our report *PSA Targets: The Devil in the Detail*¹⁵ we argued for a robust cross-government planning system to pick up future data requirements relating to targets; this is a view shared by the National Audit Office in one of its reports on targets¹⁶. That could be part of the wider planning process. In another report¹⁷ we noted that ONS needed to take more account of concerns that local population estimates are not regarded as being of sufficient reliability for the purposes of various bodies. And in 2004 we commented on the importance of identifying systematically the use made of health statistics in research and decision-making¹⁸ to guide planning.

The planning system needs to be designed to engage users of statistics in a constructive long-term dialogue designed to identify the key issues, and to present ministers and Parliament with an annual account of these issues and the Board's judgement on the best way of resolving them (taking full account of the National Statistician's advice on these matters). Thus the planning system should be led by the National Statistician but must ultimately be owned and supervised by the Board. The detailed design of such a system is a matter for Board itself but one approach might be as follows:

- The planning system should focus on identifying – in an annual planning document – those major issues that present real challenges and for which no satisfactory plan already exists. At present, examples might include:

¹⁵ *PSA Targets: The Devil in the Detail*, Statistics Commission Report No. 29, March 2006.

¹⁶ *Value for Money Report*, National Audit Office, Third Validation Compendium Report http://www.nao.org.uk/publications/nao_reports/06-07/0607127es.htm

¹⁷ *Counting on Success: The 2011 Census – Managing the Risks*, Statistics Commission Report No. 36, November 2007.

¹⁸ *Enhancing the Value of Health Statistics: User Perspectives*, Statistics Commission Report No. 21, October 2004.

- improving migration statistics (including foreign worker figures);
 - the need for an address register to support the 2011 Census;
 - an agreed approach to statistical co-ordination between the four UK administrations;
 - the need to tailor statistical outputs to meet diverse user needs;
 - the way forward on environmental statistics;
 - enhancing accessibility to all official statistics.
- It should avoid setting out plans that have already been agreed and funded except where this is necessary to put the unresolved issues in the proper context. The regular reporting of, and against, established plans can be swept up in Annual Reports and elsewhere.
 - The planning system should have an annual cycle with the main planning document published at the same point each year. That document should be directed at those ministers and others in charge of all government bodies that produce official statistics and should seek their responses on the issues raised. To the extent that this results in issues remaining unresolved, that would then be explained and addressed in an annual report to Parliament.
 - It should not seek to identify too many issues in any one year, bearing in mind the need to pursue all of them to a resolution. But in relation to each that it does raise, it should discuss the evidence for the user requirement, the consequences of inaction, the likely costs and practical implications (eg inputs from multiple departments) of addressing the need and the nature of the public benefit that would flow from that.
 - It should also include, and draw on, major planning exercises involving users of statistics to consider the future statistical requirements of government and society – we would expect the National Statistician to lead that kind of horizon scanning but to involve a wide range of user interests.

In all of this, the definition of ‘user’ should be broad. It should not be limited to the public sector, let alone central government. The Commission recognises that it is not a simple task to establish the views of a fuller range of users. While various mechanisms already exist, users tend to be heterogeneous in their real or perceived needs and it is unlikely that existing consultation mechanisms capture this diversity adequately.

The formation of the Statistics Users Forum with support from the ESRC and Royal Statistical Society has helped to draw users together. But this body is still best seen as the embryonic form of something bigger and more influential. The Statistics Board will need to take responsibility for encouraging and developing co-ordination of the diverse user community: this may be something to address at an early stage in order to ensure effective dialogue.

The Board will need to approach all aspects of planning in an open and transparent way. We would expect it to publish all the statistical work programmes and related funding across all parts of government – but this is more a matter of reporting than planning as such. The two are linked but in this section we are drawing a distinction between them. The Board might also want to make available information on the risks facing these work programmes and gather together information from departments on the local consultations leading to the establishment of departmental priorities.

The case for effective pan-government planning will become even stronger if the use, and drawing together, of departmental administrative data to create statistics increases in the future. The Statistics and Registration Service Act facilitates such use by providing mechanisms to allow the sharing of administrative data for statistical purposes – it is otherwise inhibited by a range of tight statutory controls. The long term benefits are likely to be large in terms of reduced costs and faster statistical production. In several European countries, for example, the need for a decennial census has been overcome by effective exploitation of administrative data. The 2011 Census in the UK is likely to cost some £500 million so the potential savings from this one example alone are substantial. Yet there are also pitfalls to over-reliance on administrative sources: were one government department to change its administrative systems unilaterally, this could well have a serious impact on the statistics; so effective planning at the highest level of government would be needed to underpin such arrangements.

Section 10: Enhancing public value

This section includes numbered cross-references to the Commission's published reports listed at Annex A.

There are many ways of expressing the value of official statistics but the Statistics Commission has adopted the simple premise that they only truly earn their keep when they are used to influence decisions. There are of course other potential benefits such as enhancing public awareness, but it is the nature and extent of that eventual use that determines the value. The decisions that the statistics influence may relate to broad aspects of public policy, to the allocation of funding for public services, to operational issues facing private or voluntary organisations, or to decisions by individuals about themselves and their families.

The value that statistics deliver to society (public value) needs to be interpreted broadly. Clearly if government policies are better informed because of statistical evidence then there is value there. But, equally, if a charity uses official figures about local circumstances to target its resources, it is contributing to the well-being of society and creating public value.

Similarly, if a private company uses official figures to help it in its commercial business, it may still be delivering a measure of public value if the nature of the service it provides to customers is itself of net value to society. More generally, statistical data can help markets operate efficiently, to the benefit of society.

Another aspect of public value relates to the processes of a democratic society. A healthy democracy requires that the citizen should have access to honest and reliable information on public issues. Jack Straw MP encapsulated the democratic role of statistics in a speech to the Royal Statistical Society in 1995:

"Democracy is about conceding power to those with whom you disagree....and about ensuring that every citizen has similar access to the information on which decisions are made, and governments are judged. In a modern democracy, the system of official statistics should be a dignified part of the constitution."

Aggregated across society, these decisions and their associated public value constitute the rationale for spending public money on providing a statistical service geared to the needs of all of society – rather than one focused primarily on the needs of a relatively small and specialist group of users inside central government, even if they control the allocation of funds.

The UN Fundamental Principles of Official Statistics¹⁹ capture this sentiment:

“Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens’ entitlement to public information.”

These perspectives on where value arises have implications for how government should set about planning statistical services and judging the extent to which they serve the public good. In practice, the statistical service needs to achieve an effective trade-off amongst many attributes: subject matter, accuracy, precision, timeliness, consistency through time and across geographies, and availability at suitable spatial levels. But no one trade-off is likely to be ideal for all users and, inevitably, statisticians themselves must play a central part in judging where the best balance lies. That places on all government statisticians an obligation to try to understand the current and potential uses of particular statistics and to share that understanding throughout the statistical system. The Statistics Commission has detected some reluctance on the part of statistical offices to make public comment on their understanding of the expected uses of the statistics. That reluctance needs to be further explored and resolved.

With these considerations in mind, we would urge the Statistics Office and other major producers of statistics to invest a non-trivial share of their resources in exploring the uses that are, or could be, made of them. It is also important that some judgement is made about the value associated with those uses. Only by doing this can a reasoned assessment of value be made to set against the relatively well documented, and substantial, costs of collecting and publishing statistics.

¹⁹ *United Nations Fundamental Principles of Official Statistics*, April 1994
<http://unstats.un.org/unsd/dnss/fundprinciples.aspx>

Section 11: Enhancing trust

Building trust is important in itself, but also because trust is integral to the value of official statistics. Statistics that are not trusted cannot deliver the same value to society as ones that are. If they are not trusted by users, use of the statistics will be limited or tentative and their value – in terms of their influence on decisions – substantially diminished. Similarly, if the public do not trust the statistics that underpin policy initiatives and that measure their success, then government and public bodies themselves will not be trusted since the citizen cannot effectively hold those bodies to account.

Users need to have confidence that statistical outputs are sufficiently reliable in terms of measuring the relevant social and economic characteristics – and that any weaknesses in this regard will be fully explained. Users also need to be confident that the statistical products have not been amended (or concealed or delayed) so as to suit a particular policy or argument. These two components – quality and probity – are central to the concept of being trustworthy.

In relation to the quality component, producers of statistics must be open about the fact that official figures are often just the best estimates that can be made, at the time of publication, on the basis of incomplete raw information. For instance, statistics of violent crime are never likely to be particularly reliable or consistent if only because they are dependent on reporting by the victims and concepts of violence vary greatly across society and over time. The key to quality in the statistical output is that the producer must *advise* the potential user on the merits of the estimates and the potential pitfalls of relying on them. A statistical service that says clearly “these are our best estimates but you shouldn’t rely on them too much for the following reasons...” gives more value to the user than one that simply presents the figures without the cautionary remarks, regardless of the fact that users often say they find the cautionary remarks irritating or pedantic.

There can also be instances where statistics are reliable enough on their own terms, but do not actually measure what many potential users want. For example, official CPI inflation measures have been the subject of some public scepticism because people tend to be more interested in their own experience of price inflation rather than an overall average. School examination performance tables can be highly accurate as technical summaries of the assessments of thousands of pupils and millions of individual tests, but can also be misleading if treated as a single measure of the quality of teaching. Again it is the understanding of the strengths and limitations of the data that is key to utility, and thus key to the service provided.

On the second component, issues of probity rarely arise from manipulation, suppression or delay of data already collected. In the past eight years, the Statistics Commission has seen little evidence of any of these things²⁰. Rather there is a concern that statistics *could* be subject to such malign influences and it is this concern, rather than substantive evidence,

²⁰ Though we have seen the exclusion of material which might have been embarrassing for some statistical producer bodies.

that prompts criticism of the service. So commentators express concern at the lack of separation between policy functions and statistical production within government departments, particularly when those statistics reflect on the performance of the same department or the minister. They express concern at unexplained delays in production of statistics, and early access of ministers and their advisers to the figures; and concern that there might be insufficient separation between those who scrutinise statistical production and the producers themselves.

A 2005 survey undertaken by ONS found that less than one in five people in the UK believe that official figures are produced without political interference. A recent Eurobarometer report put the UK last of all the 27 EU member states in terms of public trust in official statistics²¹. There are unlikely to be any quick solutions which will drive the UK dramatically up those rankings. But part of the answer may involve the evolution, over an extended period, of a trusted central authority to which the public can look for clear explanation of all official statistical data. This is of course part of the intention behind the establishment of the Statistics Board as a more independent and powerful entity than the current ONS. One country that seems to have done well in this regard is Canada. Statistics Canada is now widely recognised and trusted but it has not always been so. Its high reputation was built incrementally after a troubled period in the 1970s. There may be lessons for the UK in the way that this, and some other national bodies, have approached the challenge and the time period required to accrue trust.

Over the years of its existence, the Statistics Commission has pointed to a lot of steps that could be taken to enhance public trust. Some of these have fallen on more fertile ground than others. Here is a summary of some of the things we have said:

- It is necessary, but not sufficient, for public trust that the management of official statistics should conform to appropriate standards of probity. But it is also necessary for those management arrangements to be transparent, easily accessible and understood. Planning processes need to be clear and inclusive. They should set out the options considered, and explain reasons for adoption and rejection. Recommendations on these points have been made in Commission reports on education, health and European statistics (21, 26, 28).
- One Commission report noted a user view that mistakes are inevitable but it is how these are dealt with that is critical to trust (24). The same report urged that, on contentious issues, the statistical service should be less defensive, more open in its response to criticism and proactive in answering queries.

²¹ Eurobarometer 67 - Special Eurobarometer, *Europeans Knowledge On Economical Indicators*
<http://www.oecd.org/dataoecd/59/51/39562127.pdf>

- The Commission's 2005 report on managing the quality of official statistics recommended the development of a quality review programme with an audit-based approach, which should cover the design of statistical systems, the management of the production process and the guidance given to users; an appropriate response to risk; and purposeful periodic reviews of outputs (27).
- Other reports have recommended monitoring the reliability of statistical projections (12), the use of European frameworks in reviewing quality indicators (11) and clearer record keeping to link substantive decisions on policy and resources to the monitoring of targets (29).
- Statisticians must not only act independently but be seen to be independent. This argument shaped a Commission recommendation to locate the compilation and publication of crime statistics at arm's length from Home Office policy functions (30).
- Similarly, the Commission has been concerned that extended time intervals between statisticians being aware of problems with data and the announcement of those problems have created suspicion of political interference (17, 24).

Politicisation

Statistics have been, and always will be, used selectively by politicians and commentators in the course of public debate. The selection and emphasis of particular statistical information to favour, or contest, a policy argument has to be tolerated as part of the political process. It is essential however that, to balance the politically selective use of statistics, the figures themselves, with full explanation, should be equally accessible and understandable to everyone. There should also be public corrections of manifestly misleading interpretations.

In Commission report 24, a sample of 'opinion formers' (people who are widely influential) suggested that the emphasis on the use of statistics as performance indicators and targets (in effect as a measure of the effectiveness of government policies) had politicised statistics and placed them in a position where they were sometimes pushed beyond their capability. Any such over-use of statistics needs to be challenged. Too often the desire to measure performance of policies and public services runs ahead of the adequacy of the statistical data for that purpose and can risk a situation where the statistics are less trusted and less trustworthy than they might otherwise have been. We recognise the right of governments to set targets and to monitor performance: but our concern is that the process of using statistics in this way fosters disrepute if the evidence base is unsuitable.

Whilst seeking to enhance trust may require public reassurance that statistical processes are free of *inappropriate* political influence, it would be wrong to suggest that political influence is inappropriate in all respects. Many political uses of statistics – for example to monitor party-political commitments – are valid and important to the democratic process. The key is to distinguish a valid expression of a political (or policy) requirement for new or different statistical information from an attempt to influence the existing statistical product for political advantage. This distinction can be a difficult one and it is one to which the Statistics Board will need to give some attention. Work on the measurement of public sector productivity (following the 2005 Atkinson report) is an example in this area which has been much debated. The challenge is to ensure that the work remains firmly focused on meeting a specific and clearly explained statistical requirement.

Section 12: Improving the product

As indicated earlier, there have been major improvements in official statistics in recent decades, often driven by the availability of new sets of administrative records relating to schools, hospitals, social security benefits etc. Sample survey data and estimation techniques have also moved forward, improving the range and quality of statistical data further. However, as statistics are used to inform decisions ever more widely across society, so demand has also expanded and looks likely to continue to do so. The development of internet-based services in both the public and private sector has created much higher expectations in terms of the statistical information that will be readily available in user-friendly form. And some form of data collection (eg sample surveys) are becoming more difficult in many parts of the world due to falling response rates and an increasingly mobile population.

This section reviews in general terms some of the concerns about statistical products that users have expressed to the Statistics Commission and draws attention to some conclusions and recommendations from our reports.

Comparability and consistency

Users often want to bring together more than one set of statistics to inform decisions. The Bank of England will do so, for example, in deliberations concerning interest rates. It needs to be confident that, as far as possible, the definitions, methodologies and classifications used in different series are compatible and known to be so.

The Statistics Commission has commented extensively on matters of this kind:

- The need for greater harmonisation across the four UK administrations was mentioned in our reports on crime statistics (report 30), education statistics (report 26) and health statistics (report 21). In Section 6 of this report we consider the kind of mechanism that would enable each case for harmonisation to be considered on its merits in a systematic and transparent way – without infringing the autonomy of any of the four administrations.
- The need to address the availability, and consistency, of data for local geographical areas. Estimates based on sample survey data can rapidly become unreliable below the national level; and administrative data may not always be consistent between areas. The Allsopp Review²² in 2004 made extensive recommendations to improve local data for economic policy-making. The Commission's report on crime statistics recommended that police forces should agree to publish, in a co-ordinated way, standardised comparable analyses at local level (report 30) and more recently the Home Office has taken an initiative in this area following publication of the Smith review²³.

²² *Review of Statistics for Economic Policymaking*, Christopher Allsopp, March 2004, http://www.hm-treasury.gov.uk/media/8/8/allsopp_final_ch1to3_384.pdf

²³ *Crime Statistics: An independent review*, Professor Adrian Smith, November 2006, <http://www.homeoffice.gov.uk/rds/pdfs06/crime-statistics-independent-review-06.pdf>

- The need for co-ordination at a European level has been raised in relation to health and education statistics (reports 21, 26) and was identified by opinion-formers as a means to increase the impact of figures by ensuring that there is an international context against which they can be judged (report 24).
- The Commission's report on the effect of EU demands on UK statistical systems observed that one merit of these demands was that they helped ensure consistency over time and between countries (report 28). Whilst the rigidity of statutory requirements carries the risk of becoming a straitjacket on statistical development, it does have some benefits in terms of consistency.

We recognise that achieving consistency of data is not always possible or necessarily desirable. For example, the Census form in Scotland may well need to contain some slightly different or additional questions to that in England and Wales to meet specific needs of the devolved Scottish administration. Definitions also sometimes have to change to meet the requirements of a changing world but may, in consequence, render a valuable statistical time series inconsistent.

However, it is important that decisions on whether or not to give up consistency to meet specific local or temporal needs take account of the *full* range of user requirements, not just those of a few big players in central government. We have also argued elsewhere in this report for careful review of user needs before taking important decisions on statistical services. For the most part we have not seen much evidence that government departments are, as yet, prepared to commit resources to doing this. One exception is the Census for which real efforts to map out the user requirement are both made and documented. The arguments for doing this in relation to other statistical sources are just as valid as in relation to the Census.

Confidentiality and data sharing

Users make the case that valuable uses of official statistics are sometimes obstructed by over-zealous interpretation of rules concerning the protection of confidentiality of individual records. The Commission has observed that data producers should observe sensible restrictions to protect confidentiality of personal data but still allow information to be used effectively (Annual Report 2005), and we have noted that legal requirements governing the confidentiality of information have sometimes prevented data-matching to produce new or better statistics (report 13). We have also encouraged ONS to lead government-wide consideration of a common approach on disclosure control methods to ensure that the best methods for preventing the indirect disclosure of confidential information in statistical tables are adopted consistently (report 22). There were, for example, inconsistent practices adopted between Scotland and England in relation to 2001 Census data. There are many ways to deal with this problem and none is perfect. However a common approach is in the interest of the user.

The Commission supports the Government's view – as reflected in provisions on data sharing in the Statistics and Registration Service Act – that greater sharing and linkage of records from which statistics can be produced would be in the public interest. Providing appropriate, effective and formal safeguards are in place, such transfer of data would pose little risk of the disclosure or misuse of personal information. The recent much publicised case involving large numbers of benefits records from a government department going astray was in a different context – there were no formal procedures controlling the transfer of that information. In the statistical case there would be very strict ones. This is normal practice in many countries.

In several of the Nordic countries administrative records provide the basis for much of official statistics: and only the national statistics office has the legal authority to link data for statistical purposes. The resulting detailed linked information cannot be disclosed to **any one** else. The result has been that this gives little or no cause for public concern. Nevertheless, public concern in this country about the possibility of records being disclosed or misused cannot simply be dismissed. It is thus a real constraint. There are though some further things that government could do to ensure that the approach recommended serves the public interest:

- Prevent individual government departments and agencies from treating administrative records they hold as their private property and throwing up obstacles to the re-use of those records for statistical purposes. This is at least as much a matter of attitudes as legal constraints;
- Design the systems that hold administrative records to be as suitable as possible for the extraction of statistical information and linkage with other records for statistical (not administrative) purposes on a continuing basis;
- Explain more clearly to the public that the sharing of information for statistical purposes is different in kind from the sharing of information about individuals for administrative purposes. In particular, it can be done in ways that protect the identity of the person to whom a record relates.

Timeliness

Many users say they would prefer rougher estimates soon rather than better estimates later. In one of its reports, the Commission encouraged ONS to consider how far greater use of forecasting methods can provide acceptable data on a faster timescale (report 12). It was evident from the Commission's work in 2006 that timeliness is a key issue for certain users, some of whom feel that producers prioritise accuracy instead (report 33). Opinion-formers observed that taking long periods to produce data raised the suspicion of political influence on the timing (report 24).

There are no easy answers. Some statistics can take a long time to compile. Early estimates may be subject to large revisions after the availability of better information these then lead to accusations of incompetence and a loss of trust. The use of projections and forecasts within official statistics is controversial and requires large subjective judgements. However in some contexts, not least statistics published by the Bank of England, the visual display of a range of forecasts is accepted practice and well understood. More generally, we think there is real virtue in a somewhat less cautious approach to the release of early estimates in a number of fields and we see this as an issue that needs to be examined in depth between producers and users of statistics in the future.

Scope

The scope of official statistics – in the sense of the range of phenomena measured, and the frequency, geography etc of the figures produced – is not currently determined by a systematic planning system. One Commission report indicates that some key users feel that developments in the economy are not always afforded as much importance as they should be (24). The absence of a cross-departmental planning system also creates a danger that emerging needs are not identified where they do not fit easily within the remit of a single department. The Allsopp Review, mentioned above, also illustrated that user needs for more and better regional data for economic management were not being systematically identified or acted upon prior to the HM Treasury-commissioned report.

Historically, government departments produced the official statistics they needed for their own purposes and resisted proposals to provide a wider service. Indeed, in the early 1980s, it was government policy to restrict the statistical service to meeting departmental requirements. That policy changed to one that recognised the public value of statistics. But it was only in relatively recent times that the UK statistical system had had a large enough central office (ONS was established in 1996) to begin to take an overview of the whole statistical service. Until now that central office has had little practical authority over the statistical work outside its own boundaries (estimated to be some 80 per cent of the total). Though the Statistics and Registration Service Act does not establish direct central control over statistical activities in departments, the creation of the Statistics Board, with greater practical authority, now creates an important opportunity to develop statistical planning to focus on a broad range of user needs (see Section 9).

Section 13: Improving the service

Earlier we stressed that we saw the role of government statisticians as providing a key *service*. The previous section looked at some broad issues relating to statistical products. Here we consider issues that relate to the service more generally.

Recognising the user

We have argued that the value of official statistics is only realised when they are used to improve decision-making. Clearly, looked at in this way, public value is more likely to be realised if statistics, and related material, are *tailored* to the issues about which people need to make decisions. To have any chance of doing this, producers of statistics need to have at least a reasonable understanding of the decisions that will ultimately be informed – and use that knowledge in designing statistical services.

In particular, we believe that producers of statistics should pay more attention to the uses of official statistics by individuals and organisations beyond the public sector (report 33). Currently, the influence of the user voice seems to diminish with distance from central government. We recognise that this is difficult to do in a comprehensive way – not least when funding is provided via departmental channels – but it should nonetheless be possible to make some progress. The goal must be an approach which is both systematic and transparent, allowing users to see and assess their influence on the statistical service over time.

We have observed that better communication and packaging of existing statistical data would help to meet the needs of a wider range of users (Annual Report 2005), a conclusion based on research relating to education (report 26), population (report 22) and economic statistics (report 17), and to the use made of official statistics outside government departments (report 33).

In each case, the reports have stressed that, for any one set of statistical data, a variety of outputs are required to meet the needs of different users. In particular, occasional or inexperienced users are likely to want different outputs from those provided for expert users. Existing statistical outputs often assume a relatively high level of expertise and familiarity and this may very well discourage some uses (report 30). On the other hand, the Commission found in 2004 that experienced users of health statistics felt that the presentation of data was targeted *towards* the less experienced user (report 21). So it is not just a case of needing to make statistical releases and reports easier to understand. The needs of *different* groups of users, in terms of the level of analysis, explanation and summarisation required, should be explored and statistical products designed accordingly. Online systems that enable users to tailor the product to their own needs (for example the Neighbourhood Statistics system offers some scope for this) are one potential way forward here (report 33).

Better explanation

Communication between producers of statistics and actual or potential users (decision makers) has a number of facets, including tailoring the statistical product and making sure the user knows it exists and can access it when needed. We look at communication here under two headings – explanation and accessibility.

We believe that there would be real benefit if all statistical outputs included frank commentary giving an indication of the strengths and limitations of the figures (Annual Report 2006). The discussion of limitations should include reference to the potential uses of the data, their reliability, and limitations in respect of uses (reports 4, 11, 23, 27, Annual Report 2005). Clearer explanations may be of greater practical value to users than increasing the range of data, as the Commission's report on education statistics observed (report 26). There is an implication here that more money should be spent on publishing and communication and less on data collection.

There is some inhibition currently among government statisticians in relation to providing commentary or guidance alongside the statistics. This seems to arise partly because of uncertainty about the needs of users and partly through a concern not to say anything that would be unwelcome, or be seen as inappropriate, inside government. But an independent statistical service needs to wear its independence visibly and be seen to operate in this fashion. Better explanations not only contribute to enhanced value, but also to enhanced trust (report 24). This may be particularly the case in relation to methodological changes (report 20) and to revisions. One Commission report (report 17) concluded that revisions to statistical series can be an essential part of providing a sound evidence base but that poor explanation of the reasons for, and timing of, the revisions can easily weaken public trust. It recommended that ONS explore ways to influence external perceptions so that revisions are not simply equated with correction of errors, and that scheduled and exceptional revisions should be clearly and separately identified, with the rationale for each explained.

Report 17 also called for work to be done to assess users' comprehension of, and reaction to, changes to the information about revisions in statistical releases; and it urged the inclusion of more information about past revisions in these releases. Some progress has certainly been made here, with releases now often providing helpful explanations of the history of revisions. However, the media in particular remain suspicious of revisions, seeing them sometimes as a form of manipulation or as indicating professional incompetence. Opinion-formers surveyed by the Commission have urged further efforts to improve explanation. Some users favoured 'kitemarks' to indicate degrees of provisionality and hence the likelihood of future revision (report 24).

Better accessibility

Even well-explained and relevant statistics are of limited use if potential users do not know how and where to find them. Producers must communicate the existence of information, and be prepared to offer further explanation and advice as appropriate. Commission research on the use made of official statistics uncovered significant user criticism of the ONS website (and the statistical elements of other government sites). Some users felt that the ONS site attempted to meet the needs of academic specialists and those with a more casual interest but failed on both counts (report 33). The same report found some users who regretted the demise of hard-copy reports, feeling that these helped alert them to key trends and to the resources available.

Commission research published in 2007 used a 'mystery shopper' approach to examine accessibility of web-based official statistics (report 34). It found that UK government statisticians have readily embraced the Internet as a vehicle for publication of statistics but have been slower to adapt their presentation and publication policies to the new medium. In the report, the Commission recommended an explorative and experimental approach to dissemination and access to statistical data, seeking the full involvement of web professionals. User needs, interests and capabilities should drive the design and operation of online dissemination. We also suggested that data should, where possible, be presented in a layered or hierarchical way to allow users to drill down to the level of geographical or other detail they desire.

A 2004 Commission report on health statistics (21), produced a number of recommendations to improve accessibility which are of more general relevance:

- A comprehensive list of national statistics should be easily available;
- A publication programme for national statistics should be easily available on the websites of producer organisations;
- A standard template should be used for metadata;
- A central enquiry point should be considered.

Echoing the final points above, the Statistics Users Forum has called for the creation within each government department of 'statistics access teams' to support users. This is an idea to which government departments appear to be resistant but which might do much to deliver the policy of providing a statistical service that serves the public good.

Section 14: On independence

This short section draws attention to the need for care and consistency in language when proclaiming independence in the context of the new statistical governance arrangements.

The new Statistics Board is being established in an environment where different parties – the Government, ONS and the Statistics Commission among them – use the word ‘independent’ with a range of meanings in relation to, variously, the Board itself, ONS, the statistical service, the scrutiny role of the Board etc. There are several possible meanings of the word and thus scope for confusion and argument:

Independence from Government – the Statistics Commission, whilst government-appointed and government-funded has been effectively independent. It is not part of the civil service and its programme of work, its views, its staffing and its dialogue with the press and politicians is unconstrained by government rules or conventions – except in relation to financial propriety and related controls. The Commission also publishes its meeting papers and correspondence and holds an annual Open Meeting, inviting comments on statistical matters.

The statutory Board and office will be a government department (albeit a non-ministerial one) and is not, in the same sense, independent. The National Statistician, as a senior civil servant, will also be constrained in some circumstances by collective responsibility for government decisions, at least where those decisions affect the Statistics Office and the service it provides. So, for example, the National Statistician is unlikely to be able to comment independently on the adequacy of funding for statistical work, or on whether a minister’s use of statistics to support a political argument is justified. In practice such matters may be addressed vigorously between civil servants and ministers within government but there is a strong convention that they are not discussed by civil servants in public.

The Statistics Office will be bound by many (though perhaps not all) civil-service rules and conventions – touched on in Section 7. In light of this, it would be inappropriate to describe either it or the ‘statutory Board and office’ as independent in this sense of the word.

Independence from Ministerial decisions/oversight – The Statistics Office will publish statistics without the involvement of ministers. However some major decisions such as whether to hold a Census will still be taken by ministers. Under the Act, the Board will be largely free of any obligation to seek the agreement of ministers to its use of resources or its public statements although there will still be a range of matters, including the level of funding for the statutory Board and office, and the number and location of staff it employs, which ministers will determine. Despite this, the Board can be said to be substantially independent from Ministerial decision/oversight since the vast majority of its actions, decisions and public comments will be within its own determination.

Independence from producers of statistics – although the Statistics Office will be a major producer of official statistics, its assessment function must be – and be seen to be – independent of the interests of producer bodies. For this reason, the Act requires that staff working on assessment do not work for the Statistics Office. It is therefore right to say that the assessment function will be carried out independently of both producers and ministers.

Demonstrable independence – a body might be said to be independent only to the extent that it **acts** independently. The appointed Board will need to do more than assert its independence. It will need to convince external bodies, not least the news media, that it is fully informed about – but acts independently of – the wishes of government, ministers and producer bodies.

Annex A: Statistics Commission Reports

This annex recapitulates the main recommendations made by the Commission in some of the 37 reports it published between 2000 and 2007, starting with the most recent.

Report No. 37: *Tax Records as a Statistical Resource: A Review* (November 07)

This reviewed the current and potential uses of taxation records for statistical and research purposes and made the case for providing users with more support and – in some cases – more data drawn from UK tax records. Our recommendations were mainly addressed to HM Revenue and Customs. We argued HMRC should: try to find out more about the users and uses of tax statistics; ensure availability and accessibility of a comprehensive set of statistics; consider the case for a larger Survey of Personal Income in terms of sample size and develop it into a longitudinal survey; establish a secure ‘datalab’ facility to access tax microdata; consider enhancing existing official longitudinal microdata sets; make use of provisions set out in the Statistics and Registration Service Act to provide a legal gateway for tax data releases for statistical purposes. *We understand that these recommendations are being considered by government but we are not aware of any official response.*

Report No. 36: *Counting on Success: The 2011 Census – Managing the Risks* (November 2007)

Following publication of the Commission’s interim report in February 2007 on preparations for the 2011 Census (Report No. 32), we developed our recommendations further and set them in the context of the new governance structure established under the Statistics and Registration Service Act. In Report No. 36 the Commission argued for: engaging all interested parties and stakeholders in building a consensus on success measures for the 2011 Census; robust migration estimates and open debate about their credibility; a good quality national address register; action to promote understanding of the risks to the 2011 Census and the scope for many organizations inside and outside of government to help contain those risks; increased user consultation to gain better understanding of user requirements; high-level discussions about what will replace or supplement future censuses. The Commission also responded in late 2007 to a House of Commons Treasury Sub-Committee inquiry into ‘Counting the Population’ and to a House of Lords Economic Affairs Committee inquiry into the effects of migration, drawing on the main messages in its report. *We understand that these recommendations are being considered by government but we are not aware of any official response.*

Report No. 35: *Proposals for a Code of Practice for Official Statistics* (October 2007)

Work on this report was initiated in 2006 following discussions about compliance with the existing National Statistics Code of Practice. We noted at the time that the NS Code was not well suited to a process of independent assessment and subsequently issued an interim report (No. 31) – including a new draft Code – for consultation at the end of 2006. Drawing on the many valuable responses received, the Commission redrafted the Code proposals and included a full discussion of the observations and issues that were raised in the consultation. The Commission's draft Code was largely derived by distilling the essence of the existing NS Code and by adopting aspects of the UN Fundamental Principles of Official Statistics and the European Statistics Code of Practice. We hope that the proposals will support the new Statistics Board in its consideration of a revised Code of Practice. *The Commission's proposals were generally well received by interested parties, and the Office for National Statistics has used it in relation to trial assessment work ahead of the establishment of the Statistics Board. (The Commission's proposed draft Code is at Annex B).*

Report No. 34: *Data on Demand – Access to Official Statistics* (June 2007)

This report looked at the ease with which both experienced researchers and novices could find and use UK official statistics on the Internet. Commenting on the overall accessibility of official statistics we recommended: encouraging wide a use of official statistics wherever possible, including use of microdata where appropriate; adopting an explorative and experimental approach to dissemination and access; full involvement of web professionals in the presentation of statistical data; recognition that web design and culture are still developing and further review accessibility issues; user needs, interests and capabilities should determine design and operation of statistical dissemination; presenting data in a layered or hierarchical way to enable users to drill down to the level of detail they need; one point of entry – a statistics portal linking all government statistics sites. *The Statistics Users Forum and other stakeholders welcomed the recommendations made in this report. Whilst the report did not produce a direct response we understand that it has contributed to government thinking on the proposed statistical publication hub and the development of relevant websites.*

Report No. 33: *The Use Made of Official Statistics* (March 2007)

This looked at the use made of official statistics by public and private sector organizations and examined the public value associated with these uses. We proposed the following issues for consideration by the Statistics Board: the need to improve statistical planning across government departments in order to maximise the public value of official statistics;

how to improve consultation with users in order to help identify uses, and potential uses, that offer enhanced value; how to improve communication with users in a way that recognises that not everyone speaks the statistical language fluently and that there is diversity among users in terms of skills and confidence; how best to enhance the online accessibility of data. *The National Statistician wrote to the Commission in April 2007 to welcome the report and commenting that it would make a valuable contribution to the thinking of the Statistics Board.*

(Interim) Report No. 31: A Code of Practice for National Statistics (December 2006)

This report was the consultation stage before Report 35 above. We argued that a future Code should cover much the same ground as the existing National Statistics Code but should: be shorter, simpler and more imperative in style; provide an unambiguous structured basis for independent assessment and audit; be closer in style to the European Statistics Code; be drafted to apply to the whole of departments and other producer bodies – including ministers and senior managers – not just to statistical staff or the statistics themselves; be drafted so that its principles are applicable to all official statistics whether branded as ‘National Statistics’ or not. *The report prompted a range of high-level responses which were considered in detail in Report 35.*

Report No. 30: Crime Statistics: User Perspectives (September 2006)

Following an expert seminar on crime statistics (held in October 2005), we had discussions on the issues with the then Home Secretary and in November 2005 the Home Office announced a review of crime statistics to be chaired by Professor Adrian Smith. In December 2005 the Commission published its own interim report, identifying five issues of concern: lack of trust in crime figures due to confused media reporting; the adequacy of measurement of fear of crime; the adequacy of measures of ‘total crime’; the problems related to international and inter-administration comparisons of crime trends; the need for greater use of local area crime data. In September 2006 the Commission published its final report, drawing extensively on a detailed *Review of Crime Statistics* conducted on the Commission’s behalf by Matrix Research and Consultancy. Our recommendations included: structural separation between Home Office policy functions and the compilation and publication of crime statistics; improved communication with users through clearer presentation of statistics; better, more consistent, crime data for small areas, through more systematic exploitation of existing police data sources; further technical research on options where the existing statistics do not fully meet demand – including measures of ‘total crime’, and ways to improve inter-administration comparisons of crime statistics. *In November 2006 the Home Office published the Smith Review, which included recommendations that aligned with those of the Commission on the communication and accessibility of crime statistics, but rejected the Commission’s arguments for looking further at moving*

responsibility for the British Crime Survey to the Office for National Statistics. On the use of local data, Ministers have indicated that the Home Office will be discussing producing a national account of crime alongside local monthly release of figures by the police service.

Report No. 29: *PSA Targets: the Devil in the Detail* (March 2006)

The Commission's concern here was to assess whether the statistical evidence used to support Public Service Agreements was fit for purpose. We reviewed each of the 109 individual targets associated with the allocation of resources from the 2004 Spending Review and recommended that government departments follow up issues that we identified in relation to specific targets. High-level recommendations included: 'Technical Notes' should be developed into more comprehensive Target Protocols; a brief record should be kept by departments of the more substantive decisions that had been influenced by target monitoring; and a robust cross-government planning system for official statistics was needed so that future data requirements could be picked up at the earliest possible stage and fed effectively into the allocation of departmental resources. *The Commission received good responses to the draft report when it was issued for consultation (October 2005), and although no formal government response to the final report was received we believe it was influential in some respects.*

Report No. 28: *Impact of European Demands on the UK Statistical System* (January 2006)

This report looked at some of the benefits and burdens placed on the UK statistical system and its users by EU requirements. We found substantial commonality between demands for statistics within the UK and from Europe and that UK officials play an important role in shaping the development of the current European system. However, the Commission argued that the transparency and visibility of the UK government's contribution to the development of EU statistical regulation needs to be enhanced, and that consultation on statistical requirements should be organised more coherently. The Commission also questioned whether the proposed European statistical advisory body would be too small to fulfil the functions of providing a responsive and independent voice on implementation of the European Code of Practice whilst also representing user interests.

Report No. 27: *Managing the Quality of Official Statistics* (October 2005)

This looked at the quality management of statistics across government and concluded that although the definition of statistical quality is not straightforward, there should be greater emphasis on 'fitness for purpose' rather than on abstract concepts such as accuracy or coherence. We recommended: Ministers should re-affirm the responsibility of the National Statistician for the quality of all UK official statistics; the quality review programme should be

developed into an audit-based approach – led by the National Statistician – covering the design of statistical systems, the management of the production of statistics and the guidance given to those who use official statistics; two of the protocols of the National Statistics Code of Practice (on Quality Management and on Data Management, Documentation and Preservation) should be tightened and augmented so that they are able to provide a suitable base for quality audit. *The Statistics and Registration Service Act 2007 gives the new Board the duty to promote and safeguard the quality of official statistics. However, we believe that several strands of argument in this report are still valid. There has been no government response to the report.*

Report No. 26: School Education Statistics (June 2005)

The Commission invited the National Foundation for Educational Research (NFER) to carry out a review of UK school education statistics, focusing on the extent to which the needs of users, both within the education sector and more generally, were being met. As part of the review, the Commission recommended: the four UK administrations should aim to improve the transparency of their planning processes for education statistics and adopt a consistent approach to the publication of performance data for individual schools; statistical producers should re-assess whether the scope and nature of existing statistical products are meeting users' and potential users' needs; full and informative commentary should be provided alongside the published figures; the UK administrations should make a commitment to continuing participation in international comparative studies of education performance. *There have been some positive discussions on the Commission's recommendations, although practice in relation to publications of individual school performance data is still inconsistent between the four UK administrations.*

Report No. 25: Revision to Public Sector Finances: Estimates of Depreciation for the Road Network (June 2005)

Following a review of the background to changes to the *Public Finance First Release*, the Commission accepted the case ONS had made for revisions to correct a problem of double counting in relation to depreciation on roads. This issue arose out of controversy over the proper counting of expenditure on road repairs, as announced in the *Public Finance First Release* on 18 February 2005. We saw no evidence of any inappropriate involvement of Ministers or policy officials. On the question of the way the revision was made, we noted that there were, and remain, essentially two accounting options which have different effects at more detailed levels of the national accounts but have the same effect on the fiscal aggregates.

Report No. 24: *Official Statistics: Perceptions and Trust* (February 2005)

The Commission investigated how key opinion-formers view official statistics as part of a wider research programme on public confidence undertaken with the Office for National Statistics. We concluded: there were needs for greater effort in planning the collection of statistics across government and for improved communication; growing emphasis on performance indicators on performance indicators and targets has shown that official statistics are perceived as sometimes being pushed too far, beyond what they are capable of measuring; there is need for a greater range of comparable UK-wide statistics. *The Statistics and Registration Service Act opens the possibility of the Statistics Board addressing these issues afresh.*

Report No. 23: *Measuring Standards in English Primary Schools* (February 2005)

An academic expert asked the Commission to consider whether Key Stage 2 (KS2) test scores are suitable for monitoring trends in standards over a period of years. Our report concluded that the improvement in KS2 test scores between 1995 and 2000 overstates the improvement in attainment, but there was nevertheless some rise in standards. We also argued Ministers and others need to be made fully aware of any caveats about their interpretation of KS2 results and public presentation of the KS scores in statistical releases should include a clear statement about the uses to which the data may safely be put, and the limitations in respect of those uses.

Report No. 22: *Census and Population Estimates and the 2001 Census in Westminster: Final Report* (January 2005)

The City of Westminster approached the Commission about the difference between the (relatively low) Census population for the area and the (relatively high) previous estimates. This report built on the recommendations in our *Interim Report on the 2001 Census in Westminster* (Report No. 15). Most of the issues raised in this report – better statistical planning, improving population estimates and a better, more robust national address register – have since been re-visited and further developed in our report on preparations for the 2011 Census (Report No. 36).

Report No. 21: *Enhancing the Value of Health Statistics: user perspectives* (October 2004)

This report was based on a detailed review of health statistics commissioned from the York Health Economics Consortium. Our approach was to identify a small number of high-level proposals which had wide relevance. We argued for: the development of an easy to use, regularly updated health statistics index; accessible and relevant metadata; more user

consultation on specific disease or medical conditions for which fuller statistical datasets are required; addressing the inconsistencies in definition and availability of key health statistics; more general consultation on statistical requirements and the use made of health statistics in research and decision-making. *We think there has been some progress on these things, with more metadata and further datasets being made available. A web-based user survey has also been introduced.*

Report No. 20: *Changes in the Calculation of the RPI and RPI Governance* (September 2004)

The Commission looked at the methodological changes to the Retail Prices Index announced in 2004 and considered the handling of the announcement and the special governance arrangements that exist for the RPI. In particular, we argued for more, publicly available and clear information on the roles and responsibilities of the Chancellor, the National Statistician and the Retail Prices Advisory Committee in respect to the RPI. The Commission also recommended the Chancellor should no longer be responsible for the scope and definition of the RPI but that these should instead be the responsibility of the National Statistician. *The Statistics and Registration Service Act sets out the powers of the Statistics Board more clearly, but retains the final say of the Chancellor in relation to the RPI.*

Report No. 19: *Report of the June 2004 Seminar on School Level Education Statistics* (July 2004)

This document reports on a seminar of education statistics experts held as a first step towards a review of school level education statistics in the UK (see Report No. 26). The seminar examined the areas of particular interest for the review to address, such as the adequacy of education data and the uses to which they are, and might be, put.

Report No. 18: *Legislation to Build Trust in Statistics* (May 2004)

The Commission was invited by the Government to review the need for legislation – the review to be undertaken after the June 2000 *Framework for National Statistics* had been in force for two years. We argued in favour of legislation and considered three possible models for the development of a strong, underpinning structure. The Commission's preferred model involved a statutory Code of Practice, overseen by an independent Commission, to be binding on all producers of official statistics, with adherence checked through assessment and reported to Parliament. *In many respects this is what the Statistics and Registration Service Act introduces and there is much in the Act which the Commission supports. However, there are some weaknesses in the legislation, notably the Board's dual role combining scrutiny of all official statistics with direct responsibility for the production of statistics within ONS; and its lack of direct authority in relation to statistical work in bodies other than ONS.*

Report No. 17: *Revisions to Economic Statistics* (April 2004)

Following critical media comment about the impact of statistical revisions, we commissioned research from the National Institute of Economic and Social Research (NIESR). We argued for: more systematic performance assessments of forecasting models used in GDP estimate compilation and greater transparency; a review of existing quality control arrangements in all instances where GDP data is compiled outside ONS; ONS to provide more information about the purpose of revisions, clarify revision practices and explore ways to influence external perceptions. *We think that there has been some progress on these things with ONS now providing substantially more information on, and analysis of, past revisions. Service level agreements with government departments have been revisited and there have been assessment reviews of forecasting models and methodology.*

Report No. 16: *Report of July 2003 Seminar on Health Statistics* (November 2003)

The Commission held a seminar of health statistics experts as a first step in its planned review of health statistics (see Report No. 21).

Report No. 12: *Forecasting in the National Accounts at the Office for National Statistics* (December 2003)

The Commission undertook a research project into forecasting in the National Accounts. The paper was based on the Report of a Scoping Study of Forecasting in the National Accounts at ONS. The report recommended that ONS should devote resources to regular performance monitoring of forecasts; communication with users about the role of forecasting in data production should be improved; and ONS should consider whether and how far greater use of forecasting methods can provide acceptable data on a faster timescale. *More information about the past performance of forecasts is now routinely published.*

Report No. 11: *Reliability Study Report* (December 2003)

The Commission had asked ONS in 2001 to assess the feasibility of collecting information and the extent to which reliability of National Statistics output is known to and understood by statisticians producing the data and disseminated effectively to users. The report also tested whether ONS' approach is relevant to, and works effectively, in other government departments producing National Statistics. It was concluded that: the range of quality indicators should be reviewed with reference to the European Statistical System framework for quality measurement; GSS staff should improve communication about the purpose of data series, statistical outputs and their limitations and appropriate use; the complexities of

the concept of reliability for National Statistics need to be communicated widely, highlighting the subjective fitness for purpose components as well as the quantitative measures for accuracy, completeness and timeliness. *Whilst there has been some progress on these things we think the conclusions remain valid.*

Report No. 8: *Does the General Household Survey now meet users' needs?* (June 2002)

This report looked at the findings of a scoping study into fitness for purpose of the ONS' General Household Survey (GHS).

Report No. 7: *National Statistics to monitor the NHS Cancer Plan: report of a scoping study* (February 2002)

This report looked at the findings of a scoping study into the fitness for purpose of National Statistics to monitor the NHS Cancer Plan.

Report No. 6: *Access to National Statistics on Transport via the Web* (January 2002)

This report investigated the accessibility of transport statistics via the Internet and by way of a small scale 'mystery shopping' style study. It concluded that vast amounts of transport statistics are available via the Web, not all are easily accessible due to varying standards in content and structure of Internet sites.

Report No. 4: *Statistics Commission views on topics to be covered in the ONS Review of Regional Accounts* (September 2001)

The Commission recommended the following topics for inclusion in the Review of Regional Accounts produced by ONS: Communication of the reliability and precision of regional GDP estimates; contributions of views of non-ONS users on methodology; and understanding of regional GDP through commentary on base data.

Report No. 3: *Report of Scoping Study on Seasonal Adjustments at the Office for National Statistics* (June 2001)

This reported findings of a scoping study into Seasonal Adjustments used by ONS.

Report No. 2: *National Statistics to monitor the NHS Cancer Plan – Report or Pre-Scoping Study* (May 2001)

The Commission issued some first thoughts on a planned report on the findings of a scoping study into the fitness for purpose of National Statistics to monitor the NHS Cancer Plan (see Report No.7)

Report No. 1: *Building links with stakeholders* (December 2000)

This report investigated the Commission's progress in building links with stakeholders.

Annex B: The Statistics Commission's Proposals for a Code of Practice for Official Statistics

This annex reproduces the Commission's draft Code which was part of our Report No. 35 *Proposals for a Code of Practice for Official Statistics*, published in October 2007. Work on this report was initiated in 2006 following discussions about compliance with the existing National Statistics Code of Practice. We noted at the time that the NS Code was not well suited to a process of independent assessment and subsequently issued an interim report (No. 31) – including a new draft Code – for consultation at the end of 2006. Drawing on the many valuable responses received, the Commission redrafted the Code proposals, reproduced below. We hope that the proposals will support the new Statistics Board in its consideration of a revised Code of Practice.

Preamble

- i. Official statistics²⁴ are fundamental to good government, the delivery of public services and decision-making in all sectors of society. They are also essential to democracy, providing Parliament and public with a window on society and the economy, and on the work and performance of government.
- ii. Such statistics are produced by a large number of public bodies. Observance of a common Code of Practice by all such bodies is central to maintaining a unified statistical service that meets the needs of government and the wider community and is both trustworthy and trusted.
- iii. The Statistics and Registration Service Act 2007²⁵ requires that the Statistics Board prepares and publishes a Code of Practice and assesses compliance against the Code. Official statistics assessed as compliant with the Code are designated National Statistics. The Act requires that bodies which produce National Statistics must ensure that the Code continues to be observed in relation to those statistics.
- iv. This Code is consistent with the United Nations Fundamental Principles of Official Statistics²⁶ and the European Statistics Code of Practice²⁷.

²⁴ Official statistics are as defined in the Statistics and Registration Service Act 2007.

²⁵ *Statistics and Registration Service Act 2007*, 26 July

²⁶ *Fundamental Principles of Official Statistics*, UN Statistics Division, United Nations 2006

²⁷ *European Statistics Code of Practice: For national and community statistical authorities*, Eurostat, 24 February 2005

Preamble (*continued*)

- v. The Code applies to all public bodies that produce official statistics, some of which are outside the civil service. The Code is, however, consistent with the civil service core values²⁸ of integrity, honesty, objectivity and impartiality. In relation to statistical work, these should be interpreted as follows:

Integrity – putting the public interest above organisational, political or personal interests

Honesty – being truthful and open about the statistics and their interpretation

Objectivity – using scientific method to collect statistics and basing statistical advice on rigorous analysis of the evidence

Impartiality – acting solely according to the merits of the statistical evidence, serving equally well all aspects of the public interest.

- vi. The Code contains ten principles and, in relation to each, a statement of associated practices. It has been framed to support the assessment of compliance both by the bodies that produce the statistics and independently by the Statistics Board. Two guidance notes, on practice in relation to the release of statistics and on consultation, are incorporated within the Code.
- vii. The requirements of the Code are specific but there will often be a need for interpretation and professional judgement. The National Statistician and the Statistics Board will provide supplementary advice and guidance to assist producers of statistics.
- viii. Some practices set out in the Code are relevant to more than one principle. In the interests of conciseness, the practices are not normally repeated under different principles. That does not mean they are less relevant where not cited explicitly.
- ix. Under some circumstances it may be appropriate for the Board to agree exemptions or exceptions to the practices, though not the principles. Bodies that produce National Statistics and are aware of a need for an exemption should make a case in writing to the National Statistician in the first instance. All exceptions and exemptions that are agreed will be reported by the Board to Parliament.
- x. The Code has the effect of placing different obligations on different groups of officials within bodies that produce official statistics: those with direct responsibility for statistical functions have obligations in relation to professional independence and for quality assurance; other officials need to ensure an environment in which statistical production and professional independence are supported.

²⁸ The Civil Service Code, 6 June 2006, Cabinet Office.

Preamble (*continued*)

- xii. It is implicit in the Code that, within those bodies that produce official statistics, there will be sufficient managerial separation between officials responsible for National Statistics and other staff of the organisation to ensure clear lines of accountability for observance of the Code.
- xiii. The Code employs the phrase ‘production, management and dissemination of official statistics’ to refer to the entire statistical process from the decision to collect data through to providing advice to the user.

Principle 1: Integrity

At all stages in the production, management and dissemination of official statistics, the public interest should prevail over organisational, political or personal interests.

Practices

- 1) Issue statistical reports separately from any other statement or comment about the figures and ensure that no statement or comment is issued to the press or published ahead of the statistics.
- 2) Ensure that those producing such reports are protected from any political pressures that might influence the presentation of the statistics.
- 3) Follow all statutory obligations and internationally endorsed guidelines governing the collection of data, confidentiality, privacy and release.
- 4) Release National Statistics in accordance with the Guidance on release practices (Annex A).
- 5) Produce, and make publicly available, assessments of user satisfaction in relation to key outputs and services.
- 6) Keep records of feedback from users, including complaints, and make these records available on request, together with what action was taken.
- 7) Inform the National Statistician about complaints which relate to professional integrity, quality or standards whether or not they can be resolved directly.
- 8) Implement controls to ensure that individuals do not abuse the trust placed in them for personal gain.

Principle 2: Relevance

The production and dissemination of official statistics should be planned so as to meet the requirements of informed decision-making in government, public services, business and the wider community. As far as possible, official statistics should be internally consistent, consistent over time, and compatible between producers.

Practices

- 1) Under the guidance of the National Statistician, adopt systematic statistical planning arrangements, including transparent priority-setting, that reflect the obligation to support all uses that serve the public interest.
- 2) Investigate and document the needs of users of official statistics, the use made of existing statistics and the types of decision they inform, and the key areas of emerging demand and unmet need. Take these into account in the planning process and report the results.
- 3) When changes are contemplated to official statistics, consult users effectively. Consultation should follow the Guidance on consultation (Annex B).
- 4) Adopt common statistical sampling frames, questions, definitions, statistical units and classifications (including common geographic referencing and coding standards) to promote comparability across official statistics. Make the reasons for deviations from standard models publicly available.
- 5) Adopt international standard concepts, definitions and classifications to promote international comparability wherever practicable and support the development of those standards through effective engagement with international organisations.
- 6) Where time series data are revised, or changes are made in methodology or coverage, consistent historical data should be produced wherever possible, taking into account user requirements.

Principle 3: Sound methodology and assured quality

Methods for the production, management and dissemination of official statistics should accord with scientific principles and internationally recognised best practice and be fully documented. Quality should be monitored and assured following centrally determined procedures which take account of internationally agreed concepts of statistical quality.

Practices

- 1) Ensure that official statistics are produced according to scientific principles and deliver the quality of output required by users. Make publicly available detail of the methodologies adopted, including explanation of why particular choices were made.
- 2) Adopt quality assurance procedures that assess each statistical product against user requirements, and in terms of how they harmonise with other products. In doing so, draw on all available sources of expertise.
- 3) Support centrally managed reviews of statistical outputs including reviews of standards and classifications.
- 4) Seek to achieve continuous improvement in the processes underlying all outputs.
- 5) Identify any potential sources of statistical bias in estimates and provide users with an evaluation of the extent and direction of bias wherever practicable.
- 6) Maintain back-up arrangements to minimise the risk of loss or corruption of statistical resources, proportionate to the importance of each resource.
- 7) Manage official statistics in accordance with relevant public records legislation and codes of practice on records management.

Principle 4: Value for money

The resources allocated to statistical work should be used optimally to deliver outputs that meet the needs of users inside and outside government.

Practices

- 1) Monitor expenditure against business plans and demonstrate effective stewardship of funds allocated to statistical work.
- 2) Seek to balance quality against costs (including both costs to government and providers), taking into account the expected uses of the statistics.
- 3) Make full use of shared statistical planning arrangements with other producers of official statistics both to minimise the risk of duplication in statistical production and to make it possible to use existing sources, in combination where appropriate, to meet user needs.
- 4) Plan statistical production in such a way that it adds value to other parts of the statistical system where possible.
- 5) Maximise opportunities for use of existing administrative data, cross-analysis of sources and for the exchange and re-use of data. Where possible, use common information technology and information management systems which facilitate the flow of information between producers of statistics.
- 6) Use project management techniques, risk management and business continuity planning in ways that secure value for money.
- 7) Ensure that the balance between resources committed to the production of statistics and resources for their presentation, dissemination and communication, is such as to encourage maximum use of official statistics in the public interest.

Principle 5: Communication

Official statistics, and information about statistical processes, should be published in a form convenient to users and in as much detail as is practicable and allowed by confidentiality constraints.

Practices

- 1) Make statistics available in as much detail as is reliable and practicable, subject to legal and confidentiality constraints, offering choice and flexibility in the format according to the level of detail required by the user.
- 2) Publish documentation on procedures followed in the production and dissemination of official statistics – in sufficient technical detail to allow calculations to be reproduced.
- 3) Announce substantial methodological changes well in advance of the release of statistics based on the new methods.
- 4) Provide a statement explaining the nature and extent of revisions at the same time that they are released.
- 5) Release statistical work in progress, in whole or in part, where justified and approved by the National Statistician. For example, ‘experimental statistics’²⁹ may be published in order to involve users and other stakeholders in their development. They must be clearly marked as such and explained in both technical and lay terms.

²⁹ Experimental statistics are National Statistics undergoing evaluation. They are published in order to involve users and stakeholders in their development and as a means to build in quality at an early stage.

Principle 6: Presenting statistics

The style and content of statistical reports should be balanced and impartial, and meet the needs of user communities.

Practices

- 1) Present statistics impartially and in ways that users find helpful.
- 2) Provide full and helpful commentary on the relevance and reliability of statistics in relation to the range of potential uses.
- 3) Prepare and disseminate analyses which aid interpretation and provide context, including analysis of the main findings.
- 4) Where it will help users, include factual information about the policy context of official statistics. However, statistical text and interpretation should not be subject to approval by anyone other than those responsible for the statistical product.
- 5) Release datasets and reference databases in formats that are convenient to the widest range of users.
- 6) Adopt formats for the presentation of statistics in graphs, tables and maps that provide clarity and consistency.

Principle 7: Accessibility

Official statistics should be equally and readily accessible to all users.

Practices

- 1) Make official statistics equally available to all and at the same time, subject to any rights to pre-release access established under the Statistics and Registration Service Act.
- 2) Make access to official statistics as straightforward as possible by providing easy-to-use entry points and exploiting all appropriate means of dissemination, working with other producers and with organisations outside government as appropriate.
- 3) Release all regular statistical reports on the internet without charge to the user.
- 4) For any supplementary statistical services for which a charge is made, adopt clear pricing policies that comply with legislation and government policy.
- 5) Ensure that official statistics are disseminated in forms which enable those with disabilities to access them.
- 6) Publicise official statistics in ways that enable users to identify and access information relevant to their needs.
- 7) Assess user satisfaction with the form and timing of official statistics outputs and the publicity provided for them – following the Guidance on consultation (annex B).
- 8) Ensure that official statistics are made publicly available in forms that enable and encourage re-use.
- 9) Deposit official statistics with the relevant national archive in accordance with relevant legislation. Deposits should be accompanied by information about their purposes, design and methodology to aid their re-use.

Principle 8: Confidentiality

Information identifying a particular person (including a body corporate) that is collected or used for statistical purposes should be strictly protected and not subsequently used for non-statistical purposes, except as provided for in legislation and authorised by the National Statistician.

Practices

- 1) Make a public commitment that no statistics will be released that reveal personal information (except as provided for in the Statistics and Registration Service Act or specifically agreed with the individual). Notify all respondents to statistical surveys accordingly at the time of data collection.
- 2) Take into account the potential for indirect disclosure³⁰ and the implications of that disclosure for the individuals concerned when deciding whether to release statistics.
- 3) Inform respondents of the main intended uses and access limitations applying to the information they provide in response to statistical surveys.
- 4) Develop and apply methods for the management of data that are sufficient to maintain the guarantee of confidentiality to data providers, recognising users' needs for high quality statistical research and results.
- 5) Keep data (that identify personal information) collected for statistical purposes secure and ensure that they are used exclusively for statistical purposes.
- 6) Restrict access to data identifying personal information to the minimum number of staff necessary to the production of official statistics and ensure that they have been trained in their obligations to protect confidentiality. Require anyone to whom such access is provided to sign a declaration that makes clear their obligations to protect confidentiality and this Code, and that provides them with information about how those obligations shall be upheld. Maintain records of these declarations.
- 7) Only allow access to confidential data to a third party (a contractor for example) after a written agreement has been signed that sets out how the data are to be processed and for what statistical purposes, and that the third party will follow all the requirements of this Code of Practice. Keep records of any such access.
- 8) Should a situation arise in which the law requires information identifying an individual, which has been collected for statistical purposes, to be made available for other purposes – such as police enquiries – the information may only be provided on the written authorisation of the National Statistician.

³⁰ In this context, 'indirect disclosure' refers to the possibility that otherwise non-disclosive material could reveal confidential information if subsequently put together with, possibly as yet unpublished, information from another source. For example, local crime statistics might be put together with information subsequently disclosed in court.

Principle 9: Proportionate burden

The cost burden on data providers should not be excessive and should be assessed relative to the benefits arising from the use of the statistics.

Practices

- 1) Report annually the estimated costs (on businesses, service providers, the public etc) of responding to statistical surveys and strive to develop methods that will reduce the costs to individual organisations or people.
- 2) Seek participation in statistical surveys through informed consent wherever possible, and exercise statutory authority for data to be acquired by compulsion only when there are clear benefits in doing so.
- 3) Promote statistical purposes in the design of administrative systems so that maximum use can be made of them for statistical purposes, thus reducing the need to carry out separate data collections.
- 4) Carry out analysis of the costs of proposed new surveys to data providers against the potential benefits of conducting them, and repeat these analyses periodically for regular surveys.
- 5) Wherever possible draw on existing data sources and data estimation as alternatives to new surveys.

Principle 10: Adequate resources

The resources made available for statistical activities should be sufficient to meet the requirements of this Code.

Practices

- 1) Ensure that statistical services have the financial and human resources to produce and disseminate official statistics to the standards of this Code – and in so doing meet the needs of users.
- 2) If changes in resource allocation to particular statistical activities are under consideration, ensure that users are consulted before decisions are made. Build specific resources for user consultation into budgets.
- 3) Ensure that the allocation of resources matches the requirements of the work programme that emerges from the planning process, and that an adequate audit trail is maintained and made publicly available.
- 4) Use an appropriate competence framework to set the requirements of statistical posts and the development needs of staff.
- 5) Ensure that posts which require professional statistical skills (as set out in the relevant competence framework) are filled by individuals who have been appointed through external or internal schemes that specifically assess such skills to common standards.
- 6) Support staff in their continuing professional development to maintain and extend their knowledge and skills.
- 7) Support the mobility of statistical staff between organisations to assist the transfer of knowledge, expertise and good practice and the development of broad experience.

Annex A: Guidance on release practices

The practices set out below are designed to ensure that statistical reports are released into the public domain in an orderly manner that gives equal access to all and promotes public confidence.

- 1) Release statistics as soon as they, and any accompanying commentary and analysis, are judged ready so that there is no opportunity, or perception of opportunity, for the release to be withheld or delayed.
- 2) Maintain a rolling **Timetable of Statistical Releases** for a year ahead. This should state the month of release as early as practicable and the exact release date no less than two weeks in advance.
- 3) Be consistent from one period to the next in release arrangements for recurring Releases.
- 4) Ensure that, subject to the ultimate approval of the National Statistician, the responsibility for the format and content of statistical reports rests with the relevant statistical Head of Profession and require the name of that person to appear in each report for which he or she is responsible.
- 5) Draw public attention to any change to a pre-announced release date and explain fully the reasons for the change at the same time.
- 6) Limit access before public release to those people essential to production and publication, subject to compliance with the rules and principles on pre-release access made under the Statistics and Registration Service Act (which may allow pre-release access to a wider range of people). Maintain records of all who have access prior to release.
- 7) Ensure that no indication of the content of a statistical report is made public, or given to the media or any other external party, before publication. Report to the National Statistician immediately any accidental or wrongful release and initiate immediate investigation of the circumstances.
- 8) Do not give journalists, or others, embargoed access to statistical reports except where the Statistics Board has authorised that to do so is in the public interest. Such embargo arrangements shall be regarded as exceptional and reported to Parliament by the Statistics Board.

9) **Market-sensitive statistics** – special arrangements apply to market-sensitive official statistics. Any attempt to profit from pre-release access to these statistics is liable to criminal prosecution. For the purposes of the Code the following are currently identified as market sensitive:

- Index of production
- Index of services
- Producer prices
- Consumer price indices
- Labour market statistics
- Retail sales
- Public sector finances
- UK trade
- National accounts (all measures)
- Balance of payments

10) **In releasing market-sensitive statistics**, producer organisations will:

- Give markets time to understand and respond to the information during normal working hours by issuing statistical reports at 9.30am on a weekday
- Provide the date of release at least six months in advance.
- Should the need arise, require anyone given pre-release access to make a signed declaration that they have only used the information for the specific purpose for which they were given such access, and that they have not passed it to anyone else.

Annex B: Guidance on consultation

- 1) Unless a specific agreement already exists, contact user groups and discuss with them the best means of obtaining views before consultation starts.
- 2) Alert users as information about consultations becomes available.
- 3) Balance the importance of the issue and the likely impact of user views against the time and resources available so as to obtain good value for money from the consultation process.
- 4) Inform the National Statistician about any formal consultations in order to avoid duplication and to make widest possible use of ideas, comments and other materials that are offered in responses.
- 5) Work with other producers of official statistics to co-ordinate consultations in order to give participants the best opportunity for effective input and to minimise the burden placed upon them.
- 6) Make all consultation documents publicly available.
- 7) Be clear in the documentation about who is being consulted, about what, and for what purpose.
- 8) Express the issues as simply and concisely as possible; and in non-technical language where possible.
- 9) Make a timetable for each consultation publicly available and ensure that each part of the process is given sufficient time for those interested to participate fully and properly.
- 10) Offer a variety of means of participation including, as appropriate, web sites, email, telephone, written submissions and face to face meetings.
- 11) Follow Cabinet Office guidance on how consultations should be conducted.
- 12) Exploit the many mechanisms available, including:
 - Formal consultation documents (which should set out and summarise the key issues);
 - Issuing a discussion paper to interested parties;

- Listening events such as conferences, roadshows and seminars. Events held by professional bodies, user groups and other organisations can provide valuable opportunities;
 - Meetings with groups or individuals;
 - Correspondence and phone calls with groups or individuals;
 - Market research;
 - Internet mailing groups;
 - Complaints monitoring and suggestion schemes.
- 13) Put individual responses into the public domain unless anonymity is requested.
- 14) Make publicly available the records of decisions and actions following a consultation, together with explanations for them.

Annex C: International Perspectives

This annex looks at some of the similarities and differences between the UK statistical system and its counterparts in other countries. The material is based on discussions with some of the key statistical players in European countries³¹ and also Canada and the United States. We have sought to draw comparisons between national approaches to broad statistical issues rather than to describe other countries' arrangements. Whilst the coverage of this note relates to only a small part of the international picture, our experience is that taking time to have discussions about statistical arrangements with selected countries is an important way to gain perspective on the UK position and to build a shared understanding of common issues. We hope that the new Statistics Board will be able to give this some priority.

The Nordic contrast

In matters of statistical governance, 'Nordic' is not so much a geographical reference as a set of characteristics and values that have evolved from the nineteenth century or even earlier – the Netherlands', Finland's, Sweden's and Norway's statistical systems (visited by the Statistics Commission) can all be seen as sharing some of the Nordic approach though with marked differences as well. In the UK, aspirations to have a system more like those in the Nordic countries are regularly expressed by both statisticians and commentators; and it is possible that the Statistics and Registration Service Act may facilitate some steps in this direction. The fundamentals of the Nordic model can be described in different ways, and take different forms in different countries, but they include:

- A long established statistical office whose public service role and independence is formally recognised in legislation, and which is a trusted source by government, the general population and the news media.
- A reliance on registers – of population, households, addresses, businesses etc – rather than sample surveys as the basis for most of the key social and economic statistics.
- Well developed arrangements for engagement with users of statistics and other stakeholder groups.
- Practical dominance in the field of official statistics, in the sense that few other official bodies seek to produce statistics separately from, or without the formal endorsement of, the national statistics office.
- Well developed ethical and professional codes.³²

³¹ Papers on our various visits can be viewed on our website, most recent publications are *The Nordic Contrast* (on visits to statistics offices of Finland, Norway, the Netherlands and Sweden) and *UK Parallels with the US Federal Statistical System*.

³² such as Statistics Finland's *Guidelines on Professional Ethics*, Statistics Sweden's *Sufficient Quality Criteria for Official Statistics* and Statistics Netherlands' Code of Practice.

All four countries we visited have trusted statistical offices with substantial independence, though their relationships with other parts of government vary. In Norway and Finland, responsibility for deciding society's needs for statistics and statistical services rests squarely with the statistical office and, ultimately, with the national statistician. Legislation and culture demand that the statistical office gives high priority to identifying emerging needs and responding to those within its resources. There is little chance of other parts of government establishing alternative centres of statistical knowledge and advice.

In Sweden the situation is more complex. The statistical office provides specific services to other government bodies. In 1994 the Swedish government decided to transfer responsibility for determining a large part of statistical requirements from Statistics Sweden to 24 other government bodies. However, Statistics Sweden has maintained its capacity and influence, partly through providing other government bodies with statistical services on repayment terms but also by being the single recognised source of statistical expertise and authority in the country³³. The work of Statistics Netherlands is overseen by a Central Commission for Statistics (CCS) made up of 11 senior figures from commerce, academia and government. The Director General attends meetings but is not a member. The role of the CCS is to evaluate and approve the statistical office's long term work programme, assuring its coherence and relevance to society's needs. The CCS is also involved in drawing up the statistical budget and supervising the director general's authority in a number of respects. There are some parallels here with the prospective role of the UK Statistics Board in relation to ONS and it might be helpful to compare experience with the CCS in due course. Statistics Netherlands is the dominant producer of official statistics and has complete methodological autonomy, but its work programme is subject to a substantial measure of oversight in the public interest.

The development of register data varies between countries but in each case their use for statistical purposes has statutory authority and is accepted by society – indeed some offices are under a statutory *obligation* to use such administrative data if they exist and have corresponding powers to access the records from any part of government. The statistical offices we visited recognise that reliance on registers does have some disadvantages. They cannot dictate what information will be held on the registers and they cannot prevent changes being made when deemed necessary for administrative purposes. Nonetheless, they speak with real enthusiasm for the many benefits of linked registers³⁴.

³³ The Swedish Council for Official Statistics, formed in 2002, assures co-ordination among government bodies. It is chaired by the Director General of the statistical office and comprises six of the heads of the 24 relevant government bodies on a rotating basis. In a manner broadly analogous to the UK's concept of 'National Statistics' enshrined in the Statistics and Registration Service Act, these bodies have the authority to determine which statistics shall carry the label for 'Official Statistics of Sweden'. In each case the label implies that the statistics have been produced in accordance with centrally determined and assured guidelines.

³⁴ Most strikingly, periodic censuses can be replaced by a flow of continuously updated, and generally reliable, information about people, households and businesses, saving a great deal of money in the process and producing statistics which are much more up-to-date than those obtained by a massive census. This can be supplemented where necessary with sample survey information that uses the register as a reliable sampling frame.

Given the advantages, we might ask why the UK is not making more rapid progress towards adopting the same approach. There seem to be two main reasons. One is that the task of establishing reliable population and other registers in large countries, with significant migration in and out, is likely to prove more difficult and expensive. Another is that public, and Parliamentary, opinion appears less ready to accept that having such registers would be in the public interest and used only in the public interest. Despite these reservations, the development of computerised administrative records in the UK has moved on rapidly in recent years and looks set to continue. The Statistics and Registration Service Act has lowered the hurdles that need to be crossed before such information can be used for statistical purposes and, subject to strong ethical safeguards to protect personal information, we hope that it will be possible to extend the statistical use of such systems.

We did not see, in any of the four European countries, a perfect model for engagement with users, or even a particularly structured concept of who should be regarded as the important users. All four statistical offices accept the importance of improving focus on the use made of statistics and are doing what they can to ensure effective communication. There are advisory councils, working groups and committees of various kinds, almost always structured around statistical themes – such as education, economics, crime etc – rather than grouped by user type – government, public service, business, voluntary. One factor that complicates the user dialogue is that centralised statistical offices tend to have a provider-customer relationship with many other parts of government and it is easy for the priorities of those customers – sometimes paying customers – to become dominant. One discussant said that government departments are expected to speak on behalf of users more generally. That is not a model that we regard as desirable in the UK. Our decentralised system has the potential to get the statistician closer to a range of users as long as all parts of government accept that this is the right thing to do.

We were impressed by the set of indicators of public and user satisfaction that Statistics Finland has established which gives regular updates on how the reliability and objectivity of its work are assessed. The other statistical offices also monitor their public image regularly. In the UK, we may need to decide whether it is the image of the central institution, ONS; the new authority, the Statistics Board; or of the service (the Government Statistical Service) that we should monitor. Given the range of producer bodies, it might prove most practicable and relevant to concentrate on assessing the reputation of the Statistics Board.

The slight fuzziness about who should be regarded as important users of statistics is balanced in the Nordic countries by a sharp appreciation of the need to treat all users equally and to respect the needs of the general public. Rules on pre-release access to statistics are very strict. In most circumstances, all four statistical offices regard pre-release access as being in breach of the UN Principles of Official Statistics and the EU Code of Practice. We need to remember this in the UK where those provisions are given a looser interpretation. Our pre-release practices, which will be set out in secondary legislation in 2008, are unlikely to enhance the UK's statistical reputation abroad. The strict Nordic rules often extend to a ban on releasing statistics under embargo to the press – with a few minor exceptions. The Statistics Commission shares the Nordic disquiet about both pre-release access and embargo arrangements.

The Canadian experience

From its creation as a statutory office in 1918, Statistics Canada has had wide-ranging powers within the federal government system, including the right to access and use – for statistical purposes – administrative records from any organisation in Canada³⁵. In practice, this power is used with discretion and after negotiation. The statutory position is further supported by less formal arrangements such as letters from the Prime Minister to Ministers with responsibility for statistics reminding them of the value of maintaining an arms-length relationship with Statistics Canada. The federal standing helps to give Statistics Canada a powerful position in any negotiations that are required, and it has never faced any real challenge to its authority or dominance over statistical work – making it one of the most influential and respected of all national statistical offices.

In terms of its structure and powers, Statistics Canada is quite different from the current UK system, and indeed from the future UK system following implementation of the Statistics and Registration Service Act 2007. In the UK, we have a comparatively short history of any substantial central authority over statistical work (the creation of ONS in 1996 can be seen as a benchmark). Statistical activity in Whitehall is decentralised, and the relationship between departments, ONS and the devolved administrations is fundamentally different – and more elaborate – than the relationship between a federal authority and its provincial counterparts. The creation of the UK Statistics Board does take the UK a step closer to having a central statistical authority and, in that sense, a step closer to the Canadian model although there remains a big difference in terms of statutory and political control. In the UK, political level decision-making about statistical matters is still widely decentralised and devolved. And while the Canadian National Statistics Council advises the chief statistician on the exercise of his authority, the relationship between the UK Statistics Board and the National Statistician will be more complex – with the Board acting in some respects as the employer and political authority for the Office for National Statistics and in some respects as a scrutiny body with independent oversight of ONS and all other producers of official statistics.

Statistics Canada has, for the most part, a constructive relationship with the news media³⁶. Whilst it is unlikely that the UK news media, regarded internationally as exceptionally aggressive, will ever be as amenable as the Canadians to a supportive relationship with statistics office, progress in that direction must be a high priority. Similarly, the Canadian system's well established statistical planning system – supported and respected by a wide range of users – illustrates the importance of good planning for the longer term. More generally, Statistics Canada has a strong, central influence over the communication of statistics and the messages derived from them compared with the multitude of official sources publishing statistics in the UK. In Canada, the online 'Daily', a digest of statistical

³⁵ For example, information from tax and other records is obtained and added to data about individuals from longitudinal sample studies to provide much enhanced datasets.

³⁶ In the 1970s, damaging publicity undermined confidence in Statistics Canada but corrective action at an official level soon started to re-build confidence (based largely on a review by Claus Moser).

outputs in a summarised and readily assimilated form, seems to work well. We were told however of the many years it took to develop and distribute the skills needed to get the system working smoothly and effectively. Plans in the UK for a publication 'hub' for official statistics might offer a route towards a similarly well-respected source.

The US Federal Statistical System

There are some informative parallels between the co-ordination functions that will be needed in the UK under the new statutory framework and the current arrangements in the United States. Even compared with the UK statistical system, the US Federal Statistical System is more decentralised and multi-faceted, with some ten major statistical offices and a further 70 statistical agencies embedded in other government bodies. Its development since the beginning of the twentieth century has been evolutionary and mostly without a central plan. However, as it has developed, a number of statutory and informal mechanisms have been created for ensuring co-operation and co-ordination among the different agencies. In this sense the US and UK statistical systems have something in common and are fundamentally different from the more common European and international models in which a single national statistical office was established at an early stage and further developments then centred on the powers and the responsibilities of that central office.

Thus one parallel between the US and UK statistical systems is that their governance superstructure has in each case emerged out of a recognition, by both the legislature and executive, that a system composed of several distinct and largely autonomous agencies requires active central co-ordination and leadership. There are however important differences between the US and UK solutions; in the US, the chief statistician, who is a senior official within the Office and Management Budget (part of the Executive Office of the President) has no direct responsibility for the production of official statistics, has only a few staff, but in effect exercises substantial statutory authority over the statistical system. This statutory authority is not vested in her as an individual but in the Director of OMB. Nonetheless, to a large extent, it is exercised at the discretion of the chief statistician. In the UK, the National Statistician has a large and direct responsibility for a wide range of key statistical functions but little direct authority over those parts of the UK statistical system outside ONS. This will remain the case under the new statutory regime in the UK but a parallel can still be drawn between the statutory role of OMB on the one hand and the statutory role of the new UK Statistics Board on the other. To the extent that the UK National Statistician is able to exercise authority with the agreement and on behalf of the future Statistics Board, the parallel will be stronger still.

In the US, the statutory authorities derive from several pieces of legislation and executive orders. One important statute is the *Paperwork Reduction Act* of 1995 though it, in essence, updated functions that have resided in OMB since the 1930s. OMB has nine main statistical functions³⁷, which – allowing for some difference in language – have strong similarities with the statutory role of the UK Statistics Board. Whilst the OMB functions do not make explicit reference to a Code of Practice it is clear in the reference to developing and overseeing ‘the implementation of Government-wide policies, principles, standards and guidelines’ that a set of common standards and practices is implicit. Similarly, the requirement to ‘evaluate statistical program performance and agency compliance with Government-wide policies, principles, standards and guidelines’ might be seen as analogous, at least in intent, to the statutory Assessment function required under the new UK legislation.

There are however some elements of the OMB functions that do not, yet, have a clear counterpart within the UK system. One of these is the requirement to ensure that budget proposals of statistical agencies are consistent with system-wide priorities and prepare an annual report on statistical program funding³⁸. In the US, this report is published annually under the title *Statistical Programs of the United States Government*. This, among other reports, supports the oversight role of various Committees of the Congress of the United States that take an interest in statistical activities and budgets. There are elements of this model which the UK Statistics Board may find valuable. As yet, there has been no formal announcement about which parliamentary select committee will take the lead responsibility for the work of the Statistics Board but it is likely that several parliamentary committees would have an interest in a full analysis of statistical budgets and plans. The Statistics Commission has long advocated the need for much greater pan-government planning and reporting of statistical programmes.

Under the US legal framework, the role of the chief statistician and her staff can be set out under these headings:

- **Long range planning and budget formulation** – the role is to formulate long range plans to improve the performance of the Federal statistical programs so that robust measures are available for use by public and private decision-makers.

³⁷ These are: 1) co-ordinate the activities of the Federal Statistical System to ensure efficiency, effectiveness, integrity, objectivity, impartiality, utility and confidentiality of information collected; 2) ensure budget proposals of agencies are consistent with system-wide priorities; 3) develop and oversee the implementation of Government-wide policies principles, standards and guidelines concerning: statistical collection procedures and methods, data classification, presentation and dissemination, timely release of statistical data, statistical data sources required; 4) evaluate statistical program performance and agency compliance with Government-wide policies, principles, standards and guidelines; 5) promote information sharing for statistical purposes consistent with privacy rights and confidentiality pledges; 6) co-ordinate US participation in international statistical activities, including development of comparable statistics; 7) appoint a chief statistician; 8) establish an Interagency Council on Statistical Policy to ... be headed by the chief statistician; 9) provide opportunities for training in statistical policy functions to employees of the Federal Government

³⁸ In the US, this report is published annually under the title *Statistical Programs of the United States Government*.

- **Policy and standards setting** – these standards include classification systems for industries, products, occupations, geographical units and the collection of data on race and ethnicity; also standards for statistical surveys, maintaining confidentiality and the compilation and release of economic indicators.
- **Statistical programme evaluation and review** – under the Paperwork Reduction Act, all information collected from ten or more members of the public must be approved by OMB. This provides the chief statistician with a powerful tool for oversight of statistical survey work, promoting new work where appropriate as well as containing burdens on data suppliers. But there is also an important related role for the Committee on National Statistics (CNSTAT) of the National Academies. This body is independent of government and has been in existence since 1972. Its original mandate was to provide an independent, objective resource for evaluating and improving the work of the Federal statistical system. Its work is funded directly by the National Science Foundation (NSF) and the Federal statistical agencies, through a mixture of core subscription funding (25 per cent of total budget) and repayment for individual reviews. CNSTAT has developed a strong reputation for the quality, depth and professionalism of its reports. The diversity of the reviews undertaken by CNSTAT and the respect which the reviews are afforded suggest that there may be valuable lessons here for the development of the Assessment function within the UK system. In particular, there are aspects of how CNSTAT assures the quality of its own reports that the UK system may find of relevance.
- **Interagency and International Co-ordination** – the main vehicle for this is the Interagency Council on Statistical Policy (ICSP) which comprises the heads of fourteen statistical agencies at any one time advises the chief statistician on the various co-ordination functions including matters such as the formulation of principles, standards and guidelines. One of its initiatives has been the development of FedStats, an interagency website offering access to a wide-range of Federal statistics. There is also a Federal Committee on Statistical Methodology which produces technical working papers on methodological topics. OMB co-ordinates the Federal Government's participation in international statistical activities drawing on the expertise of ICSP members as required. The parallel here with the co-ordination arrangements within the UK Government Statistical Service is quite strong. Departmental 'Heads of Profession' meet and work together on a regular basis in both countries. However, what may now be missing in the UK model is formal recognition of the important role of the collective grouping of the Heads of Profession in helping the Statistics Board to carry out its statutory responsibilities.

The role of the US Census Bureau in the co-ordination of statistical activity has some parallels with the current and prospective role of the Office for National Statistics. The Census Bureau is a large agency with a wide range of outputs beyond the decennial census – including the American Community Survey (ACS – a large rolling survey which replaces the census ‘long form’), small area income and poverty estimates, the National Longitudinal Mortality Study, small area health insurance estimates, quarterly workforce Indicators, detailed local economic statistics, mapping products and many specialised reports. These are widely used within the Federal Government and can be seen in many respects as a central statistical service to other agencies.

To produce these outputs it draws on the Census and ACS data but also on a wide range of administrative records from other government agencies. Indeed it is under a statutory obligation to ‘use administrative records information as extensively as possible in lieu of conducting direct inquiries’. Among the sources on which it draws most heavily are tax records from the Internal Revenue Service; Medicare and Medicaid records; State Unemployment Insurance Files; and Food Stamp participation records. The tax data alone feed into ten Census Bureau programmes. Whilst the Bureau does not have an absolute right to access the administrative records of other agencies – unlike in some countries such as Canada – it does have the support of the Federal Government in doing so and whilst each use of administrative records must be individually justified – and requires the formal agreement of the agency that holds the records – as well as having to comply with various other forms of approval, the process is clearly well established and effective. The Census Bureau also operates strict security arrangements to protect the confidentiality of the records that are provided to it.

Under the Statistics and Registration Service Act, the statutory impediments to the Office for National Statistics making equivalent use of administrative records in the UK will be eased. But there are statutory, cultural and historical differences in the standing of ONS as compared with the Census Bureau that could yet impede full use of UK administrative data for statistical purposes. It may however be possible to draw on the evident success of the US Census Bureau in maintaining the confidence of other agencies and the public, and producing a wide range of valued outputs, to illustrate more forcibly the potential benefits.

The 2010 Census in the US will be radically different from its predecessors. To that extent, the situation has some parallels with developments in Finland, the Netherlands, Norway and Sweden which have largely dispensed with a traditional census. But the US approach is different in that it relies upon the new ACS to collect – in effect continuously – detailed information across the country with the decennial Census collecting a much smaller core of information than previously. The prime driver for introduction of the ACS was not the saving of money but rather to get better reliability from a continuously employed and better trained if smaller workforce – and to deliver an annually up-dated description of the changing demography and socio-economic characteristics of small areas in the USA.

In conclusion

This annex gives just a flavour of the contrasts and parallels to be found in other advanced countries and the important messages, or questions, they raise for the UK. Many other national statistical systems could have been cited but we have limited our comments to those we have visited recently. Over the eight years of its existence, the Statistics Commission has become convinced that direct dialogue with other countries is not a luxury; it is essential to understanding both the international context and the range of solutions to shared statistical issues.



Annex D: Past and current members of the Statistics Commission

Brief biographical details of all the members of the Statistics Commission since its inception are given below.

Chairmen

Sir John Kingman (2000-2003)

Sir John Kingman FRS was Vice-Chancellor of Bristol University for many years and third director of the Isaac Newton Institute for Mathematical Sciences, serving from October 2001 to September 2006. He has served on a wide range of national and international bodies, including the British Council, the British Technology Group, the Parliamentary and Scientific Committee and the boards of IBM UK and SmithKlineBeecham. In 1988 he chaired the committee which produced the government report on the teaching of the English language. He is also a past Chairman of the Institute of Statisticians and a past President of the Royal Statistical Society.

Professor David Rhind (2003-2008), formerly a member 2000-2003

David Rhind was Vice-Chancellor and Principal of The City University in London until July 2007. A Fellow of the Royal Society and an Honorary Fellow of the British Academy, he was until 1998 the Director General of Ordnance Survey, Britain's national mapping organisation and a government department. He is a non-executive director on the Bank of England's Court of Directors, has been a member of the Economic and Social Research Council and is a Fellow of the Royal Statistical Society (RSS). In past times, he was centrally involved in building or using major statistical databases, notably of census data. He was appointed to succeed Sir John Kingman as chairman in May 2003.

Vice Chairman

Sir Derek Wanless (2004-2008) formerly a member 2000-2004

Sir Derek Wanless is Chairman of Northumbrian Water Group plc and a member of the Board for Actuarial Standards. In 2002 he reported on UK health services to the Chancellor of the Exchequer and in 2004 on Public Health to the Prime Minister, Chancellor and Secretary of State for Health. As a Senior Associate of the King's Fund, in 2006 he wrote the Wanless Social Care Review and, in September 2007, a further review of health services. Sir Derek has also advised the Welsh Assembly Government. He worked for NatWest Bank for 30 years and was its Group Chief Executive for seven years. He has an MA in Mathematics from Cambridge University and qualified as a Member of the Institute of Statisticians (MIS).



Sir Kenneth Calman (2000-2007)

Sir Kenneth Calman is Chancellor of the University of Glasgow and was Vice-Chancellor and Warden of the University of Durham until March 2007. Before that he was Chief Medical Officer for the Department of Health and chaired the Executive Committee of the World Health Organisation. He was previously the Chief Medical Officer for Scotland. He is a Member of the Nuffield Council on Bioethics. He is a surgeon by training and has a particular interest in the field of cancer treatment and research.

Dame Patricia Hodgson (2000-2005)

Dame Patricia Hodgson is Principal of Newnham College, Cambridge. She is a member of the BBC Trust, a Governor of the Wellcome Foundation, a member of the Committee for Standards in Public Life and of the Higher Education Council for England, and a non-executive director of the Competition Commission. Until the beginning of 2004 she was chief executive of the Independent Television Commission and, before that, a main board director of the BBC. She also served for six years as a member of the Monopolies and Mergers Commission. She chaired the Higher Education Regulation Review Group between 2004–06 and was also a non-executive director of GCAP Media plc.

Ian Beesley (2004-2008)

Ian Beesley is a retired senior partner at PricewaterhouseCoopers who now runs his own strategy consultancy. He is a Fellow of the Royal Statistical Society, the British Institute of Management and has recently been appointed as chairman of the Postcode Address File Advisory Board. As a consultant he worked with organisations in the media and arts, defence, UK and foreign public sector and with international agencies. Before joining PWC in 1986, he was Head of the Prime Minister's Efficiency Unit. He started his career in the Central Statistical Office working in the fields of balance of payments, national accounts and monetary policy. He has an MA in politics, philosophy and economics, and a Post Graduate Diploma in statistics, both from Oxford University.



Colette Bowe (2000-2008)

Colette Bowe is the chairman of the Ofcom Consumer Panel and a board member of Axa Framlington, Morgan Stanley Bank International and Electra private equity plc. She is the chairman of the Council of Queen Mary University of London and also a member of the Council of Management of the National Institute of Economic and Social Research. She has a PhD in Economics.

Joly Dixon (2006-2008)

Joly Dixon has been chairman of the Board of Governors, Indirect Tax Authority for Bosnia and Herzegovina since 2003. Prior to this he spent nearly 30 years at the European Commission, holding a variety of senior posts including: principal advisor to the Director General for Economic and Financial Affairs, working mainly on EU enlargement and relations with the Balkans; Director for International Affairs, leading the team advising on the economies of candidate countries and other main economic partners; and Deputy Special Representative of the Secretary General in the UN's Mission in Kosovo, where he was in charge of economic reconstruction. He was also special advisor to European Commissioner Pascal Lamy from 2003-2004. His career began as a lecturer in economic statistics and econometrics at York and Exeter Universities.

Isabelle Low (2006-2008)

Isabelle Low became a member of the Accounts Commission for Scotland in 2001 and has been its deputy chair since 2003, also chairing its Performance Audit Committee until December 2007. She is currently also a board member of the Audit Scotland Board (chairing its Audit Committee), the Scottish Consumer Council and the David Hume Institute; and previously was a panel member of the Financial Director of the Year Awards and a board member of the State Hospitals Board for Scotland. From 1997 to 2001 she held senior posts in the Scottish Executive, including: director of 21st Century Government Group, leading the process of modernising government Scotland-wide; Head of Land Use Division; and Head of Constitutional Policy Division. Prior to that she spent 20 years at the Scottish Office, where her roles included: Head of Management and Organisation Division; Director of Health Care for the NHS in Scotland; and Head of Employment Division.



Janet Trewsdale (2000-2008)

Janet Trewsdale was, until 2005, chairman of the Northern Ireland Economic Council and senior lecturer in Economics at The Queen's University of Belfast. She is a Chartered Statistician. She is a past Vice-President of the RSS and member of the Statistics Advisory Committee (NI). She represented the Royal Statistical Society on the Statistics Users' Council for 19 years.

Martin Weale (2000-2008)

Martin Weale is the director of the National Institute of Economic and Social Research and has written widely on economic statistics. He previously lectured in Economics at Cambridge University, where he was a Fellow of Clare College. Before that he worked in the National Statistical Office in Malawi. He is an Honorary Fellow of the Institute of Actuaries and Treasurer of the Alzheimer's Research Trust. The European Commission has recently adopted proposals from a project he led for producing prompt estimates of economic growth in the Euro Area. He holds an Sc.D. in Economics from Cambridge University.