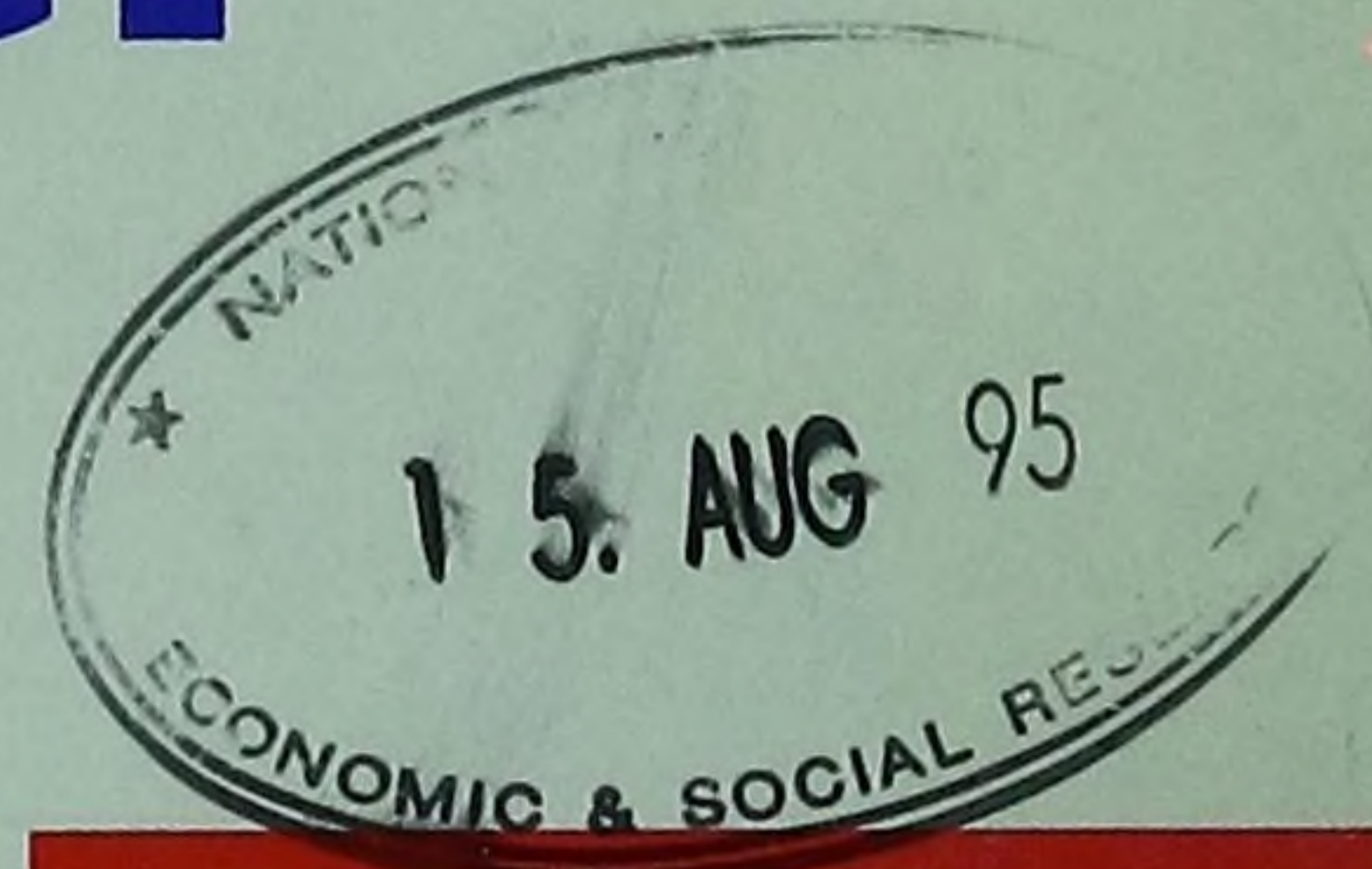


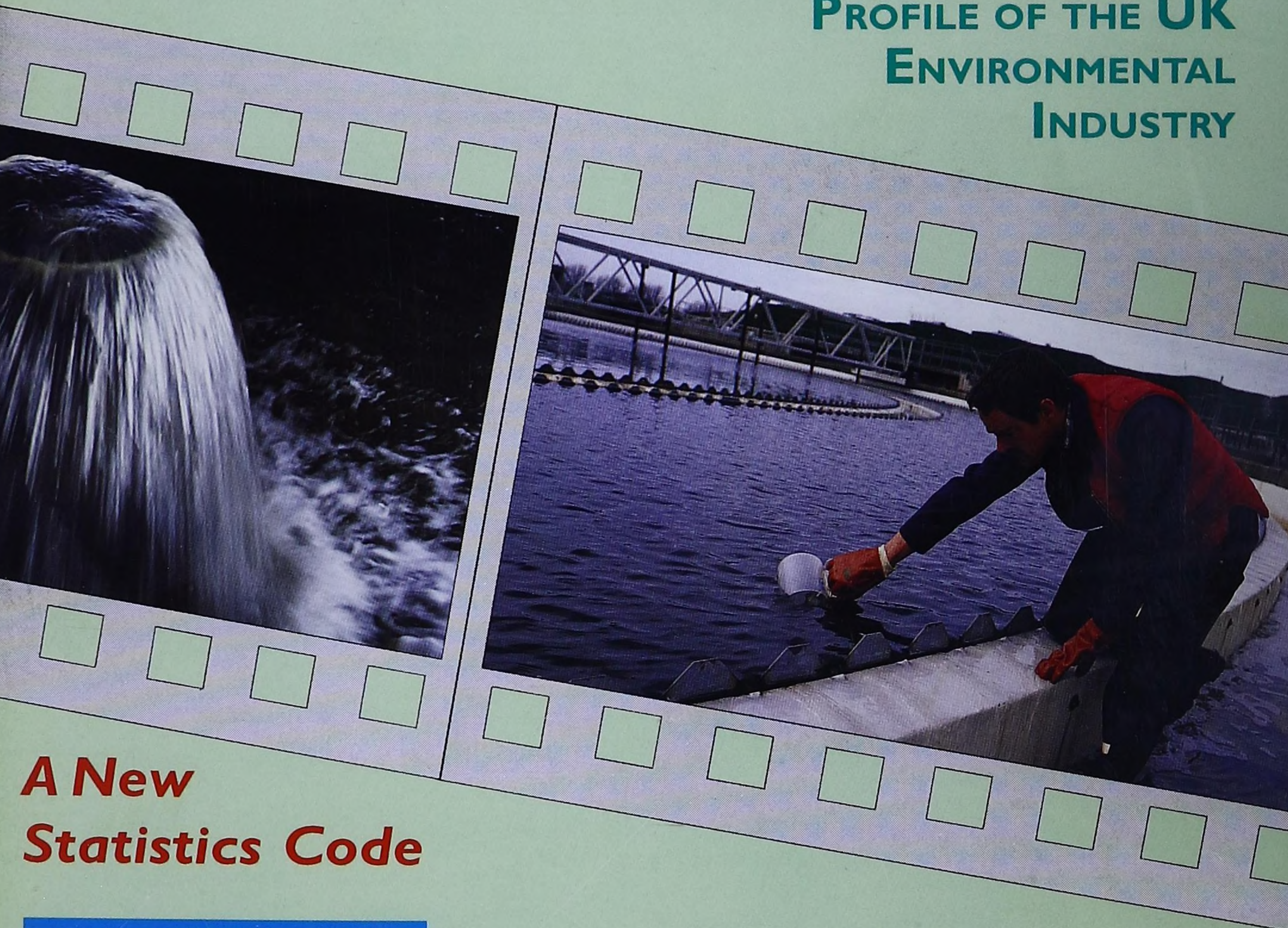
# Statistical News

Summer 1995  
Issue 108  
Central Statistical Office



**NEW HEAD FOR  
THE GSS**

**TOWARDS A STATISTICAL  
PROFILE OF THE UK  
ENVIRONMENTAL  
INDUSTRY**



**A New  
Statistics Code**

**NEWS AROUND  
THE GSS**

**CUSTOMER SATISFACTION WITH  
LOCAL AREA DATA SERVICES**

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It is hoped that *Statistical News* will be of service and interest not only to professional statisticians but to everybody who uses statistics. I should therefore be glad to receive comments from readers on the adequacy of its scope, coverage or treatment of topics and their suggestions for improvement.

Enquiries about individual items in this issue should be made to the appropriate sources where indicated; otherwise they should be addressed to Sallie Taylor, Editor, *Statistical News*, Central Statistical Office, Room D.134, Government Buildings, Cardiff Road, Newport, Gwent NP9 1XG. Telephone: 01633 812915 or Fax: 01633 812693

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# Statistical News

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**Developments in British  
Official Statistics**

**No. 108  
Summer 1995**

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**The Government Statistical Service**



## **MISSION**

To provide Parliament, government and the wider community with the statistical information, analysis and advice needed to improve decision making, stimulate research and inform debate.

**London: HMSO**

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## New Head for the GSS



Dr Tim Holt

### New Head of the Government Statistical Service and Director of the Central Statistical Office

Many readers of *Statistical News* will know that the Government Statistical Service welcomed a new Head this summer. Dr Tim Holt replaces Bill McLennan who returned to head the Australian Bureau of Statistics earlier this year.

We asked Dr Holt to tell us a bit about himself and his plans for the next few years....

**Q** Dr Holt, could you tell us a bit about your career to date?

*I began my career in Statistics Canada working on the design and implementation of surveys. My main area*

*was Agricultural Surveys although I did some work on editing and imputation for the Census. In 1973 I joined the University of Southampton as lecturer then Professor of Social Statistics. As well as a professional statistician I have been heavily involved in management as Head of Department, then Dean of a Faculty and since 1990 as Deputy Vice Chancellor.*

**Q** What areas of statistics have you specialised in?

*By training, I am a mathematical statistician and throughout my career I have worked on aspects of survey methodology. I have a particular interest in the analytic uses of survey data and methods of providing small area estimates. Survey methodological questions arise in all kinds of surveys and solutions are often generally applicable. However as a consultant I have worked on a variety of specific applications as diverse as the design of a statistical monitoring system for a complex public transport network, estimation methods for vehicle sales and the measurement of footballing skills!*

**Q** You have spent much of your career in academia. How do you view the relationship between the Government Statistical Service and academic statisticians?

*I am in favour of stronger ties with academics. Both sides will benefit from closer interaction. We will always learn by understanding how our estimates and data are used.*

*If there are areas where we are not fully satisfying need then we should know about these. Furthermore, if we can share openly some of the technical and conceptual problems which we face then a greater understanding and a more positive relationship will develop. There are already good links between parts of the GSS and the academic community but I am conscious of how*

*much benefit organizations such as Statistics Canada and some of the US Departments derive from strong academic links.*

**Q** The Central Statistical Office and the Office of Population Censuses and Surveys look likely to merge in 1996. How do you think this would change the running and image of the GSS?

*This is a very exciting development which will affect the whole of the GSS to some extent. A single strong agency spanning both social and economic activities will create a stronger identity which will benefit us all. More importantly, it will benefit our users. Each of our published statistical series is generally excellent but the sum total of the statistical information within the GSS is so much greater than the parts. Many of our would-be users are issue driven - they want to assemble all of the available statistical information concerning a social or economic issue. These issues are rarely purely 'social' or 'economic'. A single agency with the responsibility to coordinate statistical information, working with the whole of the GSS, will do much to improve the utility of our data.*

**Q** Have you any message for the 6,000 strong GSS workforce, who work in over 30 departments and agencies?

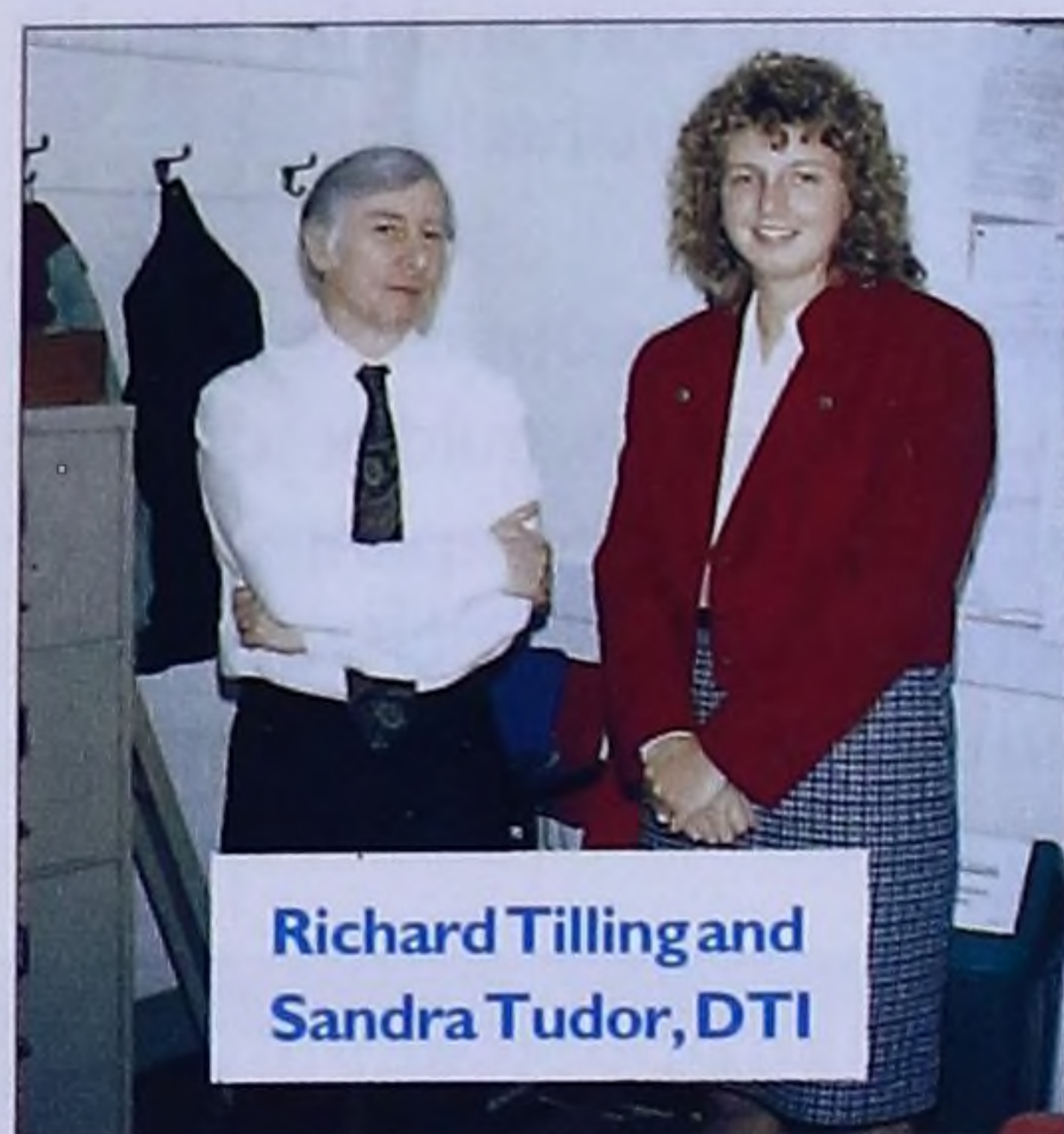
*I am looking forward very much to being the head of the GSS and I hope to meet as many members of the GSS as quickly as I can. I have much to learn and colleagues will have to bear with me during this process. I will try to strengthen the professional identity of statisticians, and in parallel the identity of the GSS as a whole. I would like all members of the GSS to feel part of the service and to identify with it. My aim is that everyone should work to the highest professional standards and that we maintain public confidence in official statistics through the quality of what we do.*

**Q** Can you tell us something about your family life and leisure time?

*I have two children. My son, Dickon, is studying Computer Science at the University of Surrey. My daughter, Sarah, is just finishing a degree in French at the University of East Anglia. My wife, Jill, is a counsellor/psychotherapist currently working in Southampton. I will live in London from Monday to Friday with Jill staying overnight once or twice each week. The idea is that we can take the opportunity to enjoy the theatre, galleries and concerts but only time will tell whether this is practicable. We both enjoy walking and the countryside, and holidays are usually quite active.*



Tim settles into his new job at CSO



## Introduction

Even among environmental specialists there is some doubt whether it is proper to speak of a UK environmental sector. It is certainly true that UK industry includes a large

number of firms which produce goods which, by accident or design, serve to improve or prevent the deterioration of the environment; but on the whole these companies do not have the cohesiveness in terms of product areas or technology to set them apart as a distinct industrial group. Indeed, many firms producing goods for environmental purposes will think of themselves as pump manufacturers or scientific instrument makers foremost, rather than part of the "environmental industry".

Nevertheless, driven by legislation in the UK and abroad, an increasing number of, primarily small to medium size, companies are specialising in goods and services for the environmental market. Within Government, too, it is sometimes convenient to think in terms of an environmental industry, especially when considering the impact of environmental legislation on industrial performance. This paper describes the DTI's first attempt to put together a statistical profile of the UK's "environmental products industry".

The Standard Industrial Classification (SIC), on which many official statistics are based, makes no mention of the environmental sector. However, it was hoped that the detailed breakdown by industry it does provide would be sufficient to allow reasonable estimates to be made of the size and shape of the environmental products sector. The prime sources of data were the Annual Sales Inquiries, the Overseas Trade Statistics, and the Annual Census of Production. The alternative would have been to conduct a survey direct to manufacturers but this was ruled out since the resources were not available to undertake a major survey of this type. Unfortunately there is insufficient official statistical in-

formation available on environmental services to allow even very broad estimates to be made for this important element of the environmental industry.

## Methodology

The first step in the process was to produce a definition of an environmental product that not only described the field of interest accurately but was also workable in statistical terms. In collaboration with policy colleagues we decided to define an environmental product as *a product which enhances or prevents the deterioration of the external environment*. For example, water supply equipment and the products which are used for the maintenance of water quality, products used to reclaim contaminated land, or to prevent pollutants entering the atmosphere are all environmental products on this basis. Products for environmental control within buildings (e.g. central heating, air conditioning etc.) were excluded, and it was considered impractical to stray into the conceptually and statistically difficult area of cleaner technology.

Having defined our area of interest the next step was to consider how the statistical information available could best be employed to provide estimates for the key indicator of total sales of environmental products. Our first attempt, which involved trawling through the Business Monitors<sup>1</sup> in search of appropriate headings, threw up two problems which convinced us that we needed to enlist the help of experts with a firm grasp of environmental technology. Firstly, it was not at all easy to identify the products which had a valid environmental use, apart from a handful of items (e.g. water treatment chemicals) where the relevance was obvious. Secondly, many of the items which we thought were relevant in the environmental context also appeared to have other possible uses. In order to tackle these questions Warren Spring Laboratory was commissioned to produce a full list of sales headings to be included in our statistical definition along with an approximate percentage of the value of each heading which could be regarded as having an environmental use.

Armed with the Warren Spring definition it was then a relatively straightforward task to extract the sales data from the Business Monitors, but there was still a lot of

work to do to put it into usable time-series form. It was sometimes necessary to estimate for missing data occasioned by confidentiality problems and to deal with breaks in series created by changes to sales headings. It was also important to take account of the widely varying coverage of inquiries both between industries and over time. Fortunately our aim was to produce estimates for the sector as a whole rather than at product level where data uncertainties would have made it extremely difficult to construct warrantable results.

Once a clean data set for manufacturers' sales had been produced the figures were deflated at the product level using the most appropriate producer price indices that could be found. The results of this exercise can be found in the next section of this paper.

Sales, though an important indicator in its own right, is an insufficient basis on which to judge an industry. Our next concern was to provide some indication of the UK's trading performance in this selection of products. We recognised that, given inconsistencies between the sales headings at our disposal and the overseas trade headings of the Harmonised System, it would not be possible to construct a set of trade data which would be precisely compatible with the sales figures we had already produced. Nevertheless, in the absence of any other information we felt that we could produce a sufficiently close approximation to be useful for policy purposes. The overseas trade codes were scrutinised for headings as closely equivalent as possible to the Warren Spring definition, the data extracted, and the environmental proportions applied as before. Of course, had we been able to wait for the full implementation of the PRODCOM system incompatibility between trade and output headings would not have been such a problem.

In order to flesh out our picture of the environmental products sector further we decided to attempt to produce some estimates mirroring a number of the variables normally available from the Annual Census of Production (ACOP), particularly employment and value added. Unfortunately, the ACOP data is only available at the 4-digit SIC level, whilst our definition of the environmental industry was couched in terms of a wide variety of individual products. To overcome this, the ratio of environmental product sales to total principle product sales was calculated for each 4-digit SIC heading and these proportions were then used to weight together the ACOP industry results. These ratios varied considerably from year to year.

There are considerable uncertainties in this approach and it is only right to admit that some of the estimates presented in the statistical profile below are less soundly based than others. This is, however, an area where there is a serious lack of data of any sort and the results presented here need to be judged in this light.

Another possible approach, considered by us but rejected in view of the resource implications, would be to define the "industry" as an aggregation of companies rather than as an aggregation of products. In practice only the CSO is likely to be able to undertake this type of analysis with any prospect of success.

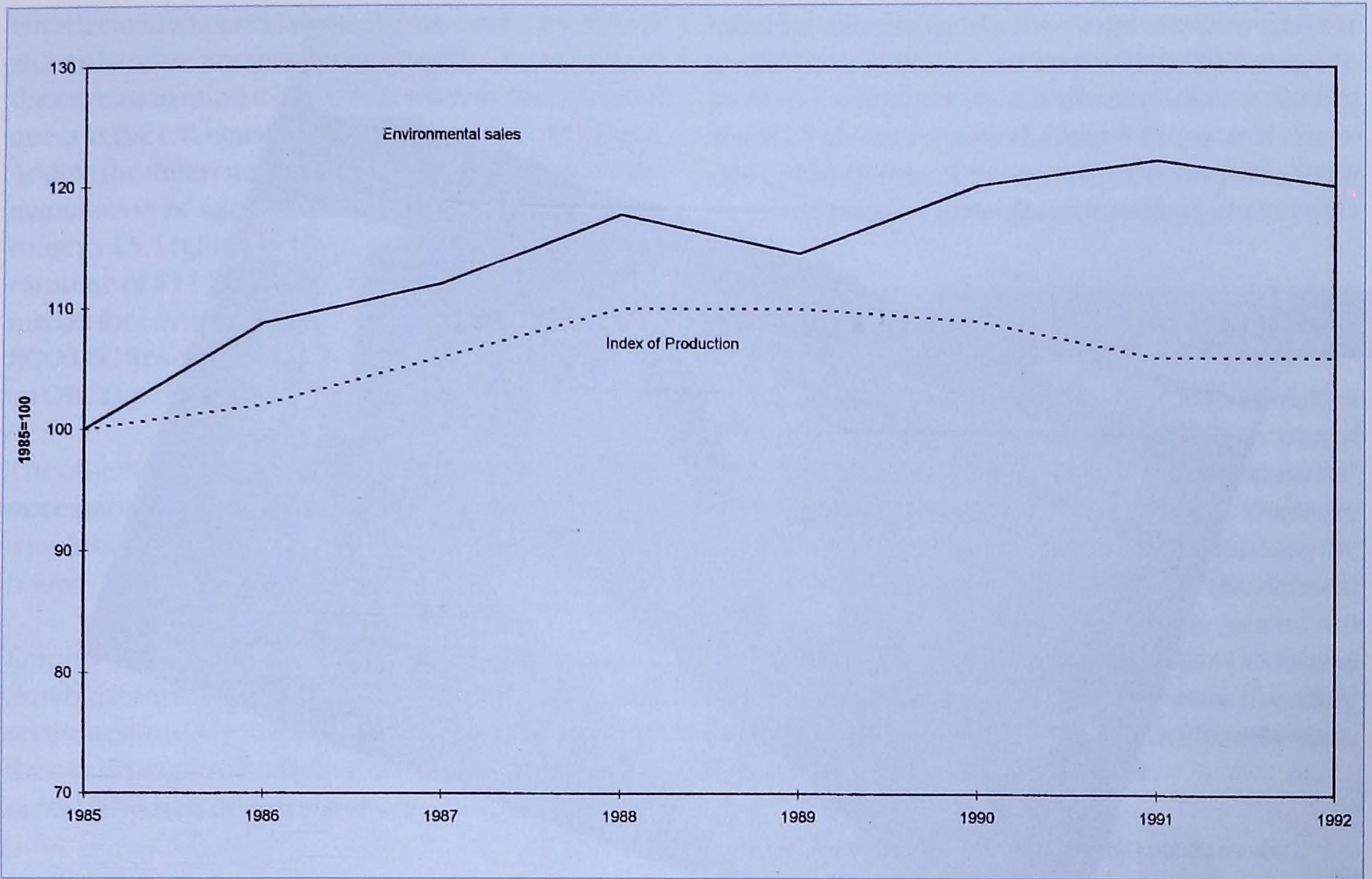
### The UK environmental products industry

According to the estimates derived from the project described above, UK manufacturers of environmental products sold approximately £5.4 billion worth of environmental goods in 1992. Chart 1 shows the index of sales for environmental products compared with the general index of production for all production industries between 1985 and 1992. The stronger growth in the environmental sector over this period is self evident (annual average growth of 2.7% compared with 0.8% for all production industries

[Chart 1: on page 7 illustrates Index of sales of environmental products...]

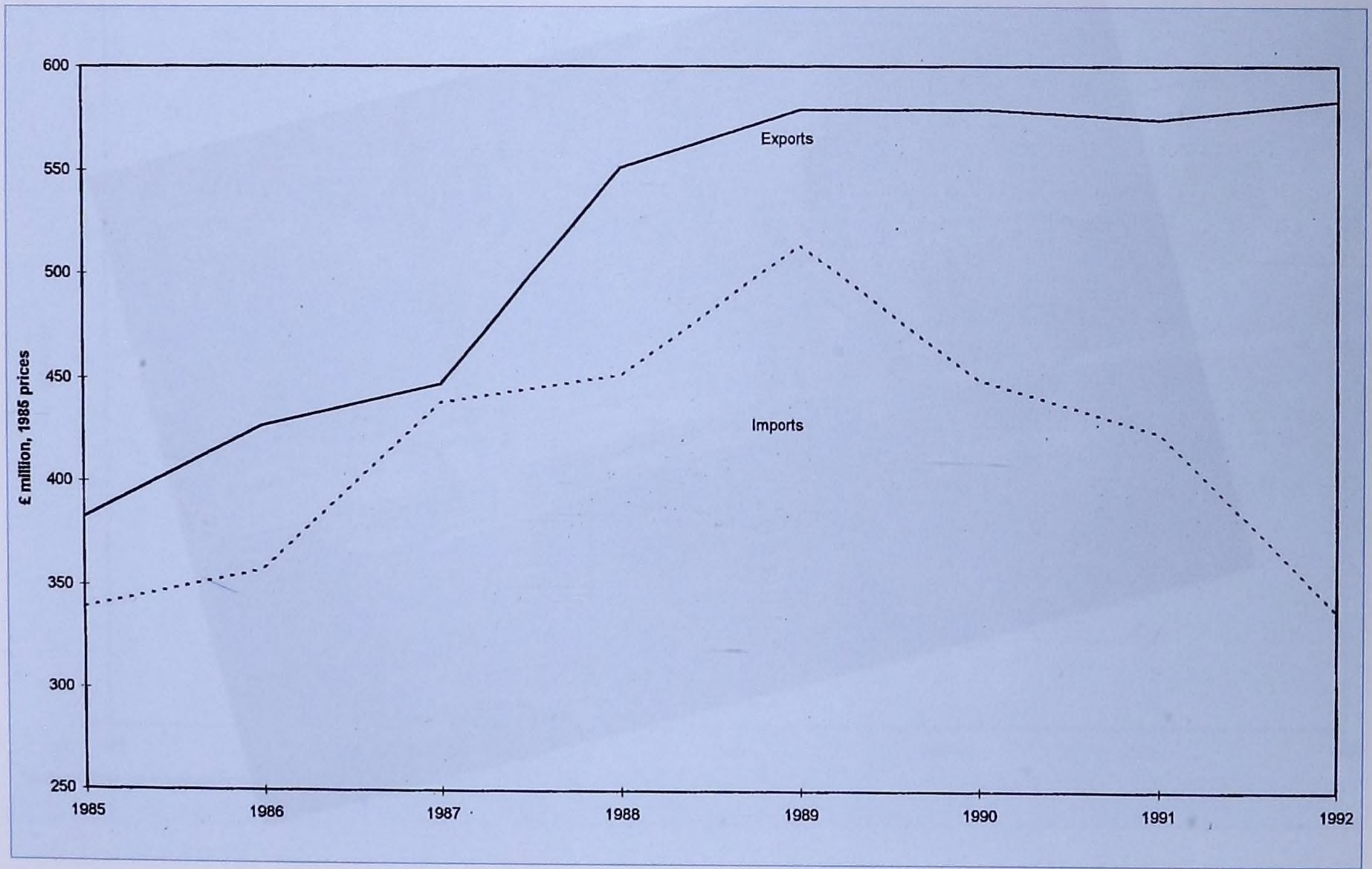
Our estimates show that UK exports of environmental products totalled approximately £850 million in 1992, the equivalent level of imports being £495 million. But these bald figures fail to indicate a much more interesting development over time as UK exports have grown since 1985 whilst UK imports have been falling in recent years. This pattern, shown in constant prices in Chart 2, suggests a sector becoming increasingly competitive in the World market, and for that reason likely to fall more under the policy spotlight.

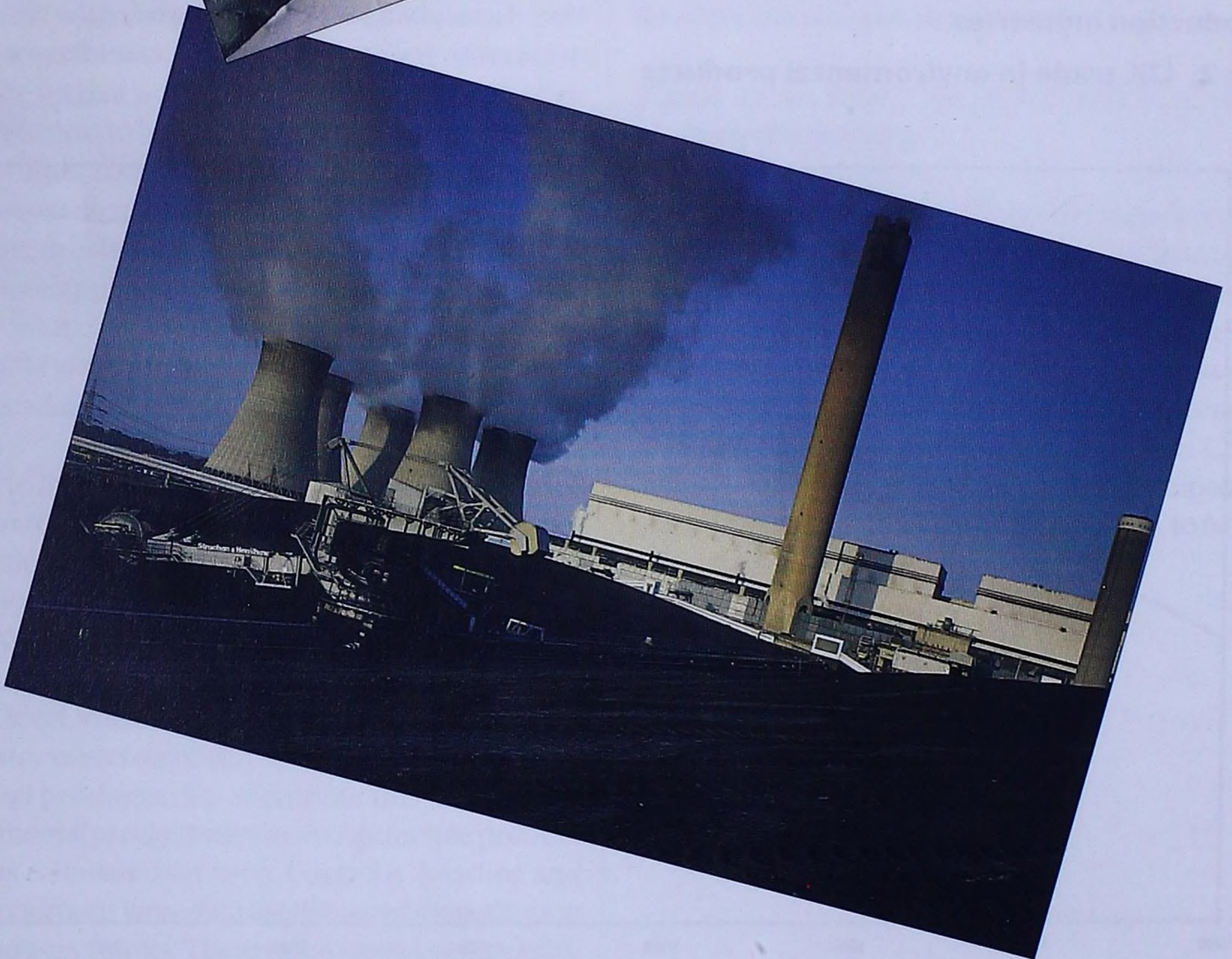
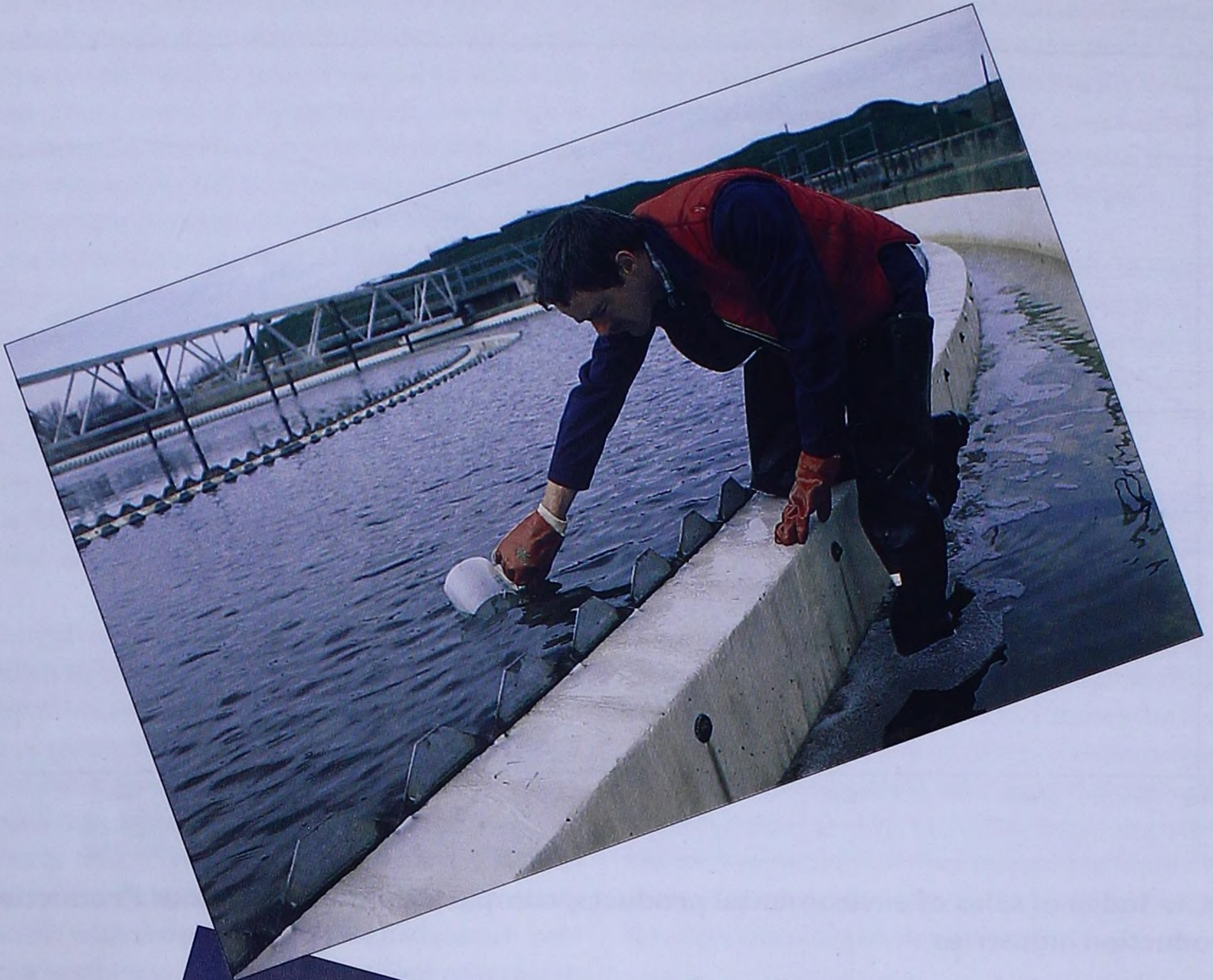




**Chart 1: Index of sales of environmental products, compared with the Index of Production for all production industries**

**Chart 2: UK trade in environmental products**





For reasons mentioned above the sales and trade figures shown here are not strictly comparable, but bearing all the caveats in mind it is possible to make an informed guess at the UK market for environmental products. Adding the difference between imports and exports to manufacturers' sales we obtain a current price figure of roughly £5.1 billion in 1992. (This compares with an estimate of \$11 billion (£6 bn) for the size of the UK market for environmental goods *and services* made by ECOTEC Research and Consulting Ltd. for 1992 and an OECD estimate of \$7 billion (£4 bn) for 1991).

The other variables estimated as part of the project are necessarily less firmly based than the above, and this should be borne in mind when using the figures quoted below.

Employment in the sector has declined rather more slowly than in the production industries as a whole. The sector is estimated to have employed approximately 110 thousand people directly in 1991, down more than 5% on its 1985 levels despite the strong sales performance.

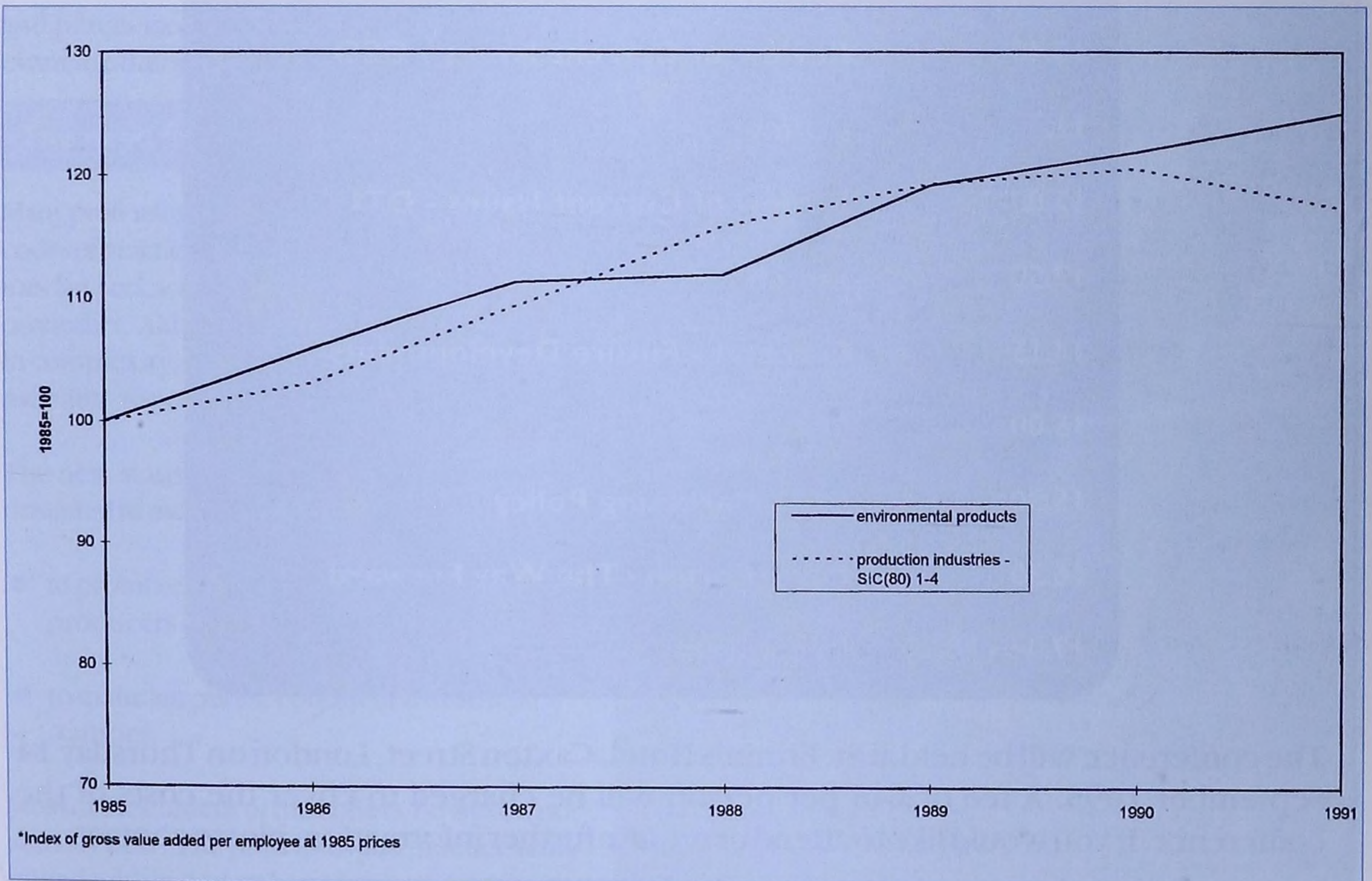
Value added is estimated to have improved strongly over the last 7 years which, combined with the fall in employment, points to a substantial productivity increase of about 25% over the period. Chart 3 shows an index of value added per head at constant prices outperforming the corresponding series for industrial production as a whole.

## Conclusions

We hope that the results of this exercise will make a positive contribution to policy debate in an area of current concern. The issue of non-standard "industries" would perhaps benefit from a wider airing. There are certainly other areas widely regarded as industries by the public that have no statistical status at all. The defence sector, for instance, is frequently in the news even though it has no recognition in the Standard Industrial Classification. The low-tech, low cost, approach we have used in this exercise is one way to provide some basic dimensions for a non-standard sector.

1. CSO Business Monitor PAS series, HMSO publications.

**Chart 3: Index of productivity**



# Statistics for Business Conference

## Launch of Business Statistics Users' Group

All those with an interest in business statistics will wish to note the formation of a Business Statistics Users' Group to promote and develop the use of statistics within the business community. Its prime purpose will be to feed views to CSO and DTI on how existing statistical sources could be more usefully focused on the needs of industry. The User Group will be launched at a Statistics for Business conference to an audience spanning all sectors of the business community.

The Central Statistical Office in association with  
the Department of Trade and Industry and the Statistics Users' Council

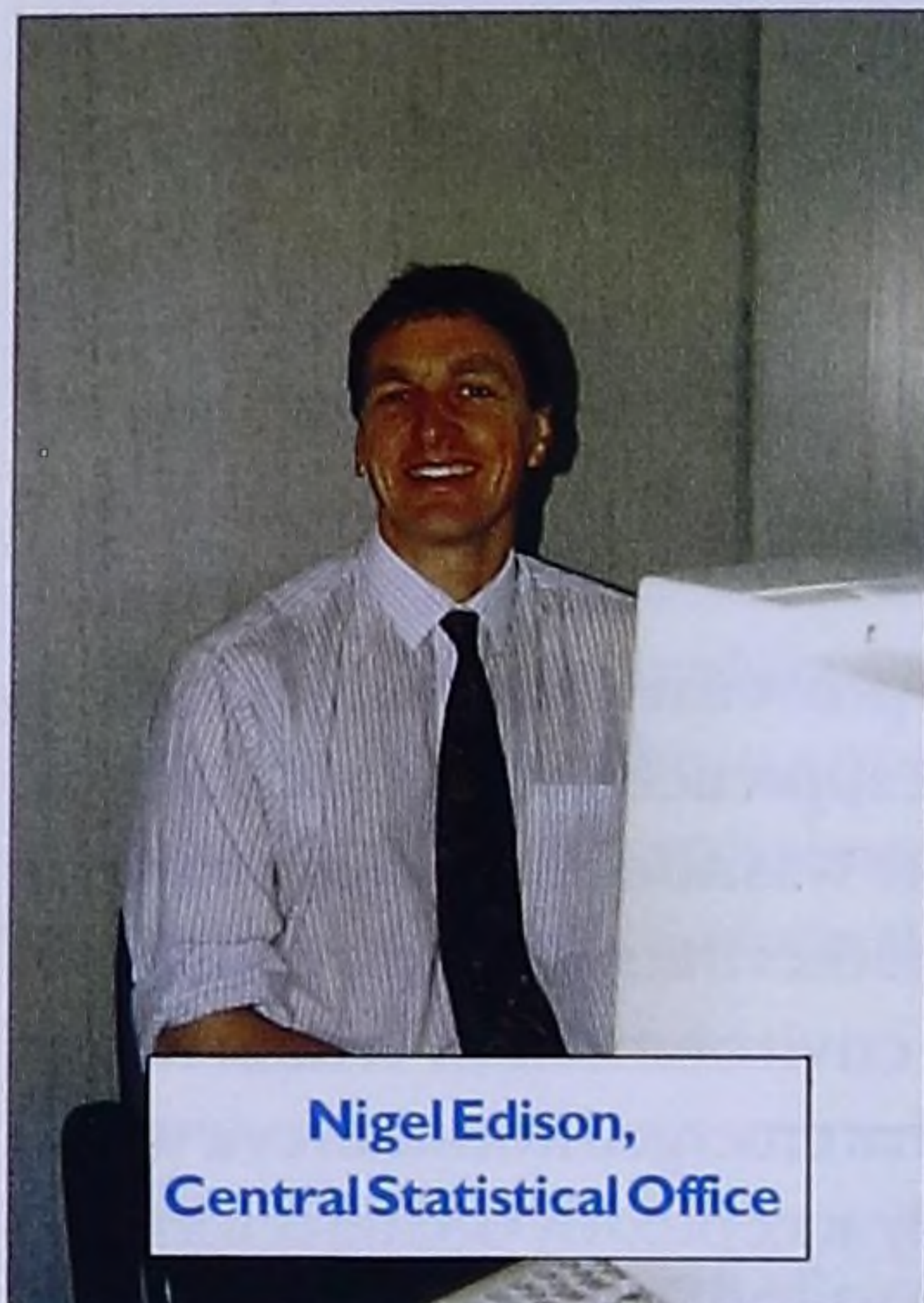
### Programme

09.00	Registration and Coffee
09.50	Opening Remarks
10.00	Keynote Speech <i>Mr Page, DTI Minister</i>
10.15	Launch of BSUG <i>Dr Holt, CSO Director</i>
10.40	Review of Current Issues - CSO
11.30	Coffee
12.00	Review of Current Issues - DTI
12.50	Lunch
14.15	Eurostat - Future Developments
15.00	Tea
15.30	CSO Marketing Policy
16.30	Open Forum - The Way Forward
17.15 - 18.15	Reception

The conference will be held at St. Ermin's Hotel, Caxton Street, London on Thursday 14 September 1995. A fee of £45 per person will be charged to cover the costs of the conference. If you would like to attend or require further information, please contact:

**Michael Prestwood (CSO) on 01633 812861**

# A New Statistics Code



## Introduction

Statisticians in the Government Statistical Service (GSS) have developed a Code of Practice for people involved in the production of official statistics. It was published on 3 April 1995, following wide consultation on a provisional version issued last October.

years. What is new is the integration of all these ideas into one written code.

Changes in Civil Service structure have made it important that we develop a written code. In recent years, Government statisticians have become more isolated from their professional colleagues. This has been caused by an increase in the number of agencies spinning off from government Departments, the growing geographical dispersion of civil servants, and a tendency to "outbid" professional staff with their administrative colleagues. In the past, when most statisticians worked in statistical divisions, often sited in London, good practices could more easily be shared on an informal basis.

We were also given strong encouragement to develop a written code by the Citizen's Charter, and by the Open Government White Paper which spun off from it. The

The Code sets out the good practices that have been built up over many years by statisticians in a wide range of government Departments and Agencies. Although it is focused on the work of government statisticians, many of the principles and practices contained within it are also relevant to others producing official statistics.

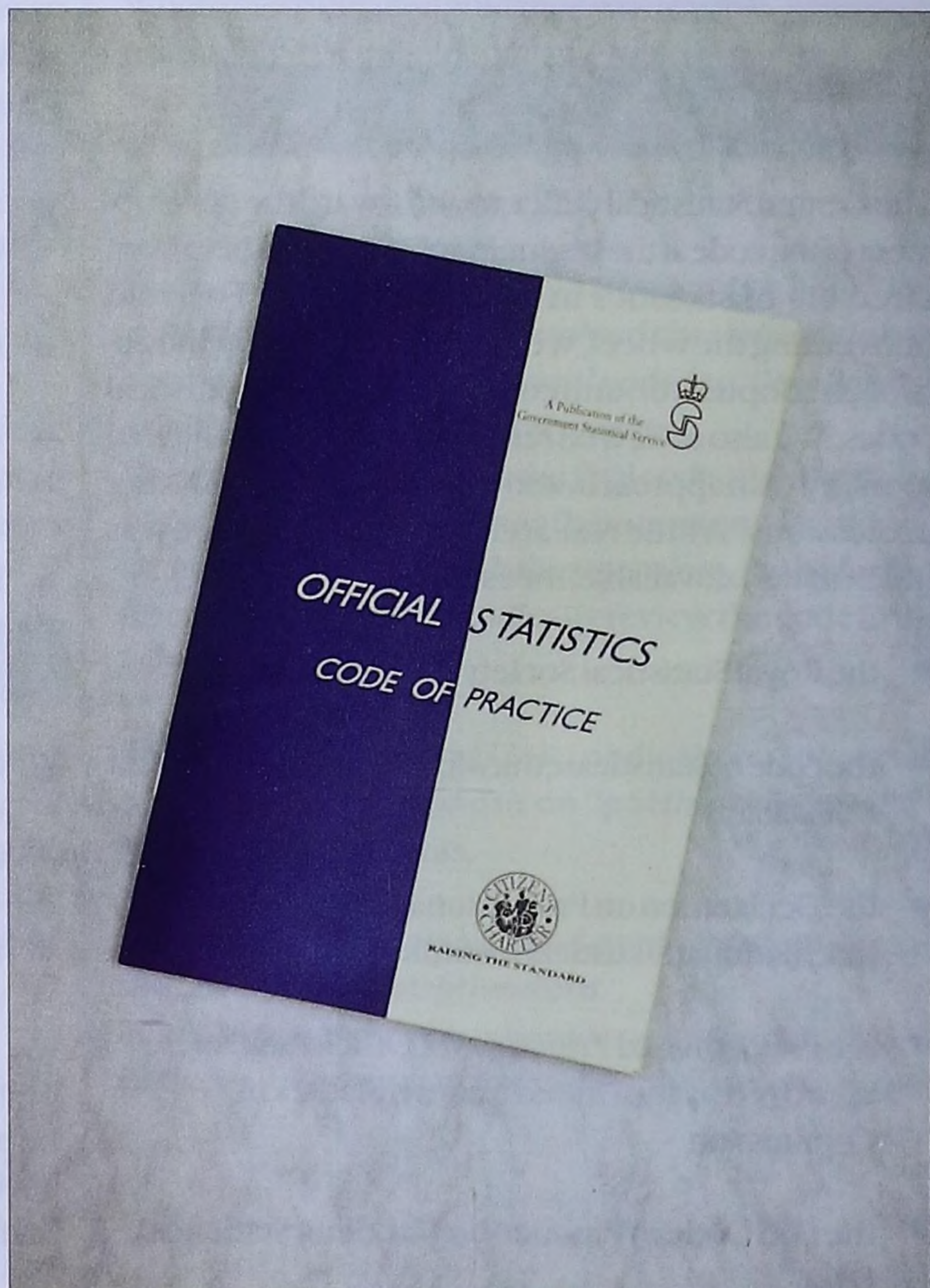
## The need for a code

Many professional groups have developed written codes of practice to underpin their activities. Doctors, lawyers, accountants all have codes of one sort or another. Although codes can vary significantly in complexity, they all have at their heart a common aim - to promote good practice.

The new statistics code is no different. It was designed to meet two main needs:

- to promote uniformly high standards across producers of official statistics;
- to maintain public confidence in official statistics.

Most of the content of the code is, however, not actually new. The principles and practices contained within it have been built up over many



Citizen's Charter laid down key principles of public service and encouraged public bodies to develop their own charters clarifying standards. The Open Government White Paper contained some more explicit statements about statistical standards:

*"..official statistics..are collected by government to inform debate, decision-making and research both within government and by the wider community.. It is the responsibility of government to provide [reliable social and economic statistics] and to maintain public confidence in them."*

Finally, a more recent change that has increased the need for a written code has been the Treasury and Civil Service Select Committee's recommendation that the government should introduce a Code of Conduct for Civil Servants. The Government has since issued a draft for consultation which adopts the committee's recommendation that the code should "recognise the standards governing particular professions". In this context the development of a statistical code becomes even more important.

### Early development

The Central Statistical Office took forward the development of the code at the beginning of 1994, with help from directors of statistics in all departments. To avoid reinventing the wheel, we began by reviewing the approach adopted for, and content of, existing statistical codes. We also reviewed related literature and, to avoid too narrow an approach, also looked at codes from other professions. A little research revealed that there was much material available, for example:

- the Royal Statistical Society Code of Conduct
- the code of statistical ethics for French Government Statisticians
- the Declaration on Professional Ethics by the International Statistical Institute
- the Fundamental Principles of Official Statistics approved by the United Nations Statistical Commission
- the GSS Code of Practice on Handling Statistical Data

- notes and statements on integrity by previous Heads of the GSS
- various papers in Statistical Journals.
- Institute of Chartered Accountants' Guide to Professional Ethics
- British Bankers' Association's Code of Banking Practice.

All of these documents proved useful. But by no means did they suggest a single approach to developing a code. It became clear that there was no obvious right or wrong way to develop a code, rather the style of any code has to reflect the particular environment in which it is to operate. The proposal that emerged from the review, and which was subsequently accepted by GSS directors, was that the code should:

- be short and simple, so that it could be readily understood, both by producers of official statistics and also by users and suppliers;
- be sufficiently general to apply to all GSS activities across departments;
- reflect the principles and practices common around the international statistical community;
- set out achievable best practice - a highly idealistic, unachievable code would help nobody; it would be demoralising for statisticians and bad for public confidence;
- be aimed at individuals, not the GSS as an organisation, so that individuals are challenged to take direct responsibility for their own actions;
- complement the Royal Statistical Society Code of Conduct, not attempt to replace it (many members of the GSS are also members of the RSS);
- be issued for wider consultation, both in and outside the GSS, before finalising.

The next stage was to agree a provisional code that could be put out for wider consultation. Early drafts threw up a wide range of issues for GSS directors to consider. Some of the main ones were:

### **Should the GSS release statistics it judged to be “unreliable”?**

We took the view that where we judged statistics unreliable - for example some detailed industry breakdowns - anonymised datasets should be made available, with appropriate health warnings, for others to analyse.

### **Can we ignore resource constraints?**

No - we live in a world of finite budgets! We agreed that if we couldn't, for resource or other management reasons, live up to the code in specific circumstances, we should at least be prepared to explain why. For example, some statisticians may not be in a position to make datasets available to others for analysis as soon as they would like, because of the resource or practical problems associated with doing so.

### **Quality of statistics:**

There was concern that the first drafts had concentrated on the timeliness of statistics to the exclusion of quality. This was steadily corrected in revised drafts.

### **Confidentiality:**

Initially we had planned to include within the code an update of the existing GSS Code of Practice on Handling Data Obtained from Statistical Inquiries. However, it became apparent that any update of these guidelines would be best left until the completion of various international and other negotiations which are current on this matter, for example the European Union Data Protection Directive.

### **A perceived bias in early drafts towards survey work:**

Later drafts better reflected the significant amount of work which GSS members do with administrative sources of data.

## **The provisional code**

By October 1994 we had a provisional code ready for wider consultation. It was made up of a small number of key principles (eg. operate with integrity), and some 50 or so simple guidelines for applying these principles to the basic stages of the statistical process, from planning right through to disseminating.

The provisional code was released on 26 October 1994, with a deadline for comments by 10 February 1995. Bill McLennan, Head of the GSS at that time announced the code at a regular Wednesday morning meeting of Departmental Permanent Secretaries to encourage their

support. At the same time the provisional code was sent out to all government statisticians to test its usefulness and effectiveness. And it was also sent to a wide range of user groups and suppliers of statistics and others with an interest. A presentation was made to the Official Statistics Section of the Royal Statistical Society in January 1995, where there was much valuable discussion.

The code initiative was welcomed both inside and outside government. Where Directors of Statistics felt it appropriate to consult their Ministers, those Ministers gave their support. Within government also, we were pleased with the Citizen's Charter Unit's comment that the code had earned the right to carry the Citizen's Charter logo. Externally, the involvement of users and suppliers of data in developing the code may in itself have had a positive impact on public confidence in official statistics. There were of course also suggestions for improvement. Some of the key comments, and our responses, were these.

### **A number of users suggested the code might be more detailed in some areas, for example charging.**

Where more detailed guidance was feasible - and would not unduly expand the code - we took these suggestions on board. But we concluded that we may need to develop more detailed guidance in some areas, separate from the code.

### **Some commentators thought it would be helpful to statisticians if the code examined the tensions inherent in following a professional code (eg. timeliness vs quality; respondent load vs quality).**

We opted for providing, in the final code, a bibliography of documents which address these tensions. But we will arrange seminars at which these tensions can be further discussed, and will periodically review the code in the light of experience.

### **The Citizen's Charter Unit, and others, suggested placing greater emphasis on “putting things right”.**

We made amendments.

### **Many GSS members wanted explicit references to the use of administrative data.**

We made amendments where necessary to distinguish between the treatment of administrative and survey data.

**A number of users were concerned that the code had no real force.**

Enforcement is now explained in the introduction to the published code. Directors of Statistics are responsible for ensuring compliance with the code within their area of professional responsibility and encouraging observance of its principles throughout the department. It is part of their responsibility for integrity as set out in the 1981 Government White Paper on the GSS.

**Some GSS members were concerned that the code was biased towards external outputs and was inappropriate for much of the work conducted for Ministers.**

Amendments were made.

**The apparent restriction of the code just to GSS members concerned a number of users, who wanted its application to be rather wider.**

The final draft of the code was drafted in such a way that it might be more widely applicable to all producing official statistics.

### The published code - April 1995

Reflecting the comments received, the code was published on 3 April 1995. The basic structure remains unaltered from the provisional version. It sets out 12 key principles:

## Key Principles

### for producers of official statistics

#### Professionalism

1. Operate with *integrity*.
2. Produce statistics in an *objective, scientific and unbiased* manner.
3. Be *open* about all aspects of the statistical process and *invite and respond promptly to comment*.
4. Continuously seek to improve *professional competence*, with respect to both technical and management skills.
5. Set challenging *service and quality* standards and seek always to achieve them.
6. Continuously seek to provide better *value for money*.

#### Users

7. Maintain the *relevance* of statistical activities to the needs of government and the wider community.
8. Provide statistics *fit for the purpose intended*.
9. Complement statistics with *interpretation and statistical advice*.
10. Make statistics *accessible* to all, in accordance with open government procedures.

#### Data Suppliers

11. Place the *minimum load* necessary on data suppliers, and treat them with honesty.
12. Respect the *confidentiality* of all information given in confidence.



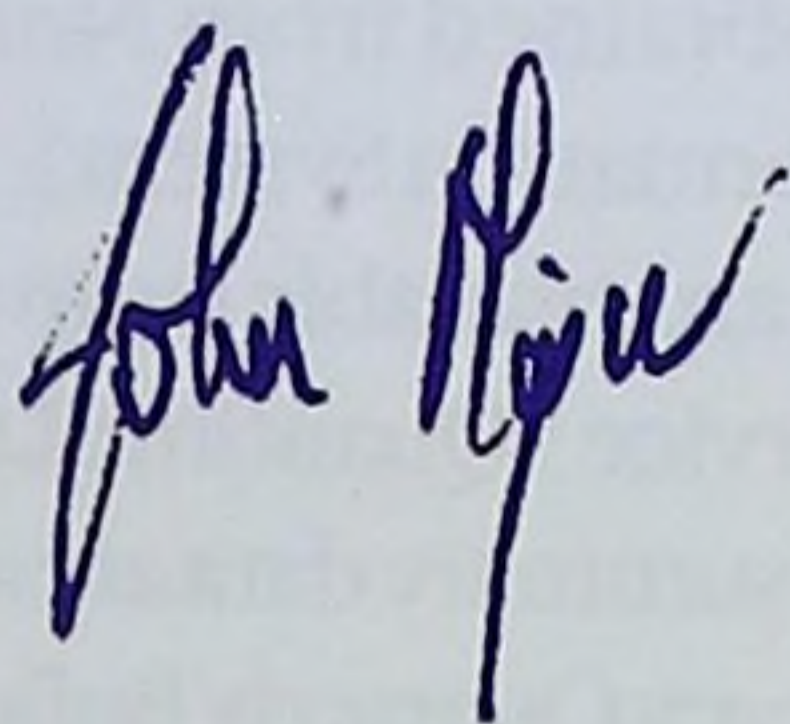
For each of the main activities involved in working with survey and administrative data, which range from planning right through to dissemination, the code then sets out about 50 simple guidelines for applying the key principles.

This produces some important standards to guide personal behaviour. When planning what information is to be collected, for example, the code stresses the need to consult potential users and suppliers, and the need to promote consistency and comparability across official statistics. The code says that users' needs must be taken account of in analysing and interpreting the data and, on dissemination, it highlights the need to provide data as early as possible and to all users at the same time. It also urges statisticians to advance public understanding of statistics and essential issues amongst users and the media.

The Prime Minister, the Rt Hon John Major MP, contributed a foreword, which has sent a valuable signal of the importance to be attached to achieving high statistical standards:

*I am pleased to endorse this code of practice because it is essential for open government that the integrity of, and public confidence in, official statistics is maintained. This will certainly be achieved if the key principles in the code, which relate to professionalism, and dealing with users and suppliers of statistics, are followed closely.*

*The code makes an important contribution to achieving high standards in our official statistics - a vital service for Government, Parliament and the wider community. I commend it to all those engaged in the production of official statistics.*



John Major

Publication of the code was accompanied by a press release, and consequently the code was featured in a number of media articles in the following days. The code was also distributed widely among GSS members and also to data users and suppliers, and our thanks go to all who contributed to its development.

A full copy of the code is available free from the Central Statistical Office library in Newport (telephone 01633 812973).

## Implementation and beyond

Directors of Statistics will apply the code in their own work areas and promote its principles elsewhere in their Departments. The main impact of the code is likely to be that:

- government statisticians will have significantly heightened awareness of their individual responsibility for maintaining the integrity and quality of government statistics;
- the code will help build stronger relationships between producers and users of official statistics, by providing a framework for discussion of key issues and giving users clear scope to question statisticians if things appear to go wrong.

And that will mean a better statistical service both for users and data suppliers.

The code could also provide a framework for developing more detailed guidelines where, for example, some aspects of statistical work are contracted out.

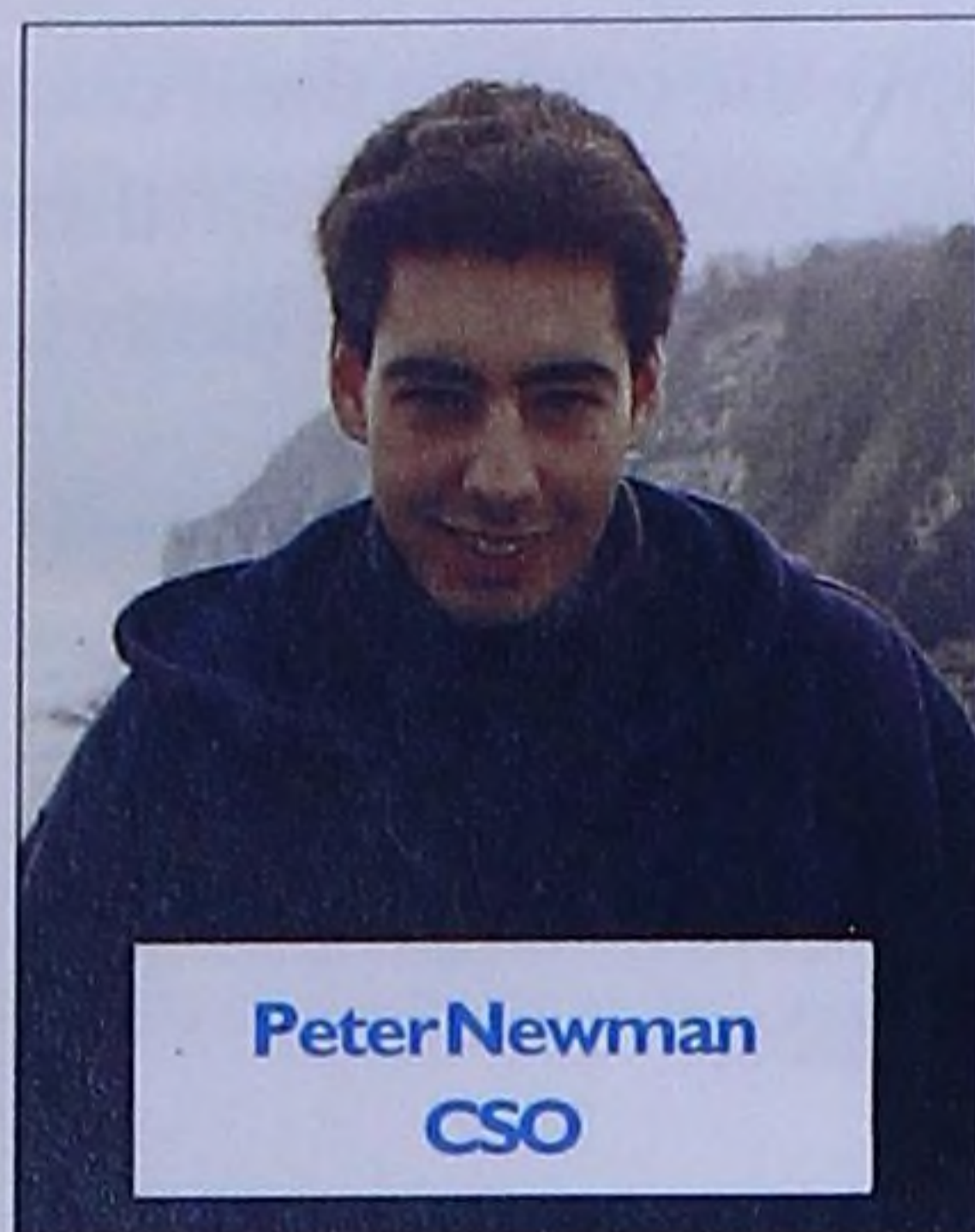
But the code is not a fixed set of rules. Judgements will be required on a day-to-day basis to resolve some of the tensions which may arise - for example the tension between timeliness of data and its quality. It is essential that experiences are shared among statisticians and that we learn from these. We will therefore be encouraging continued debate of the issues, including with external users and with data suppliers, so that the code continues to evolve. It will be reviewed regularly, probably for the first time after two years.

## Your reactions

I would be very happy to hear from anyone wishing to comment on the code or on this article. Please write to:

Central Statistical Office  
Room 1801  
Millbank Tower  
Millbank  
London SW1P 4QQ  
Telephone 0171 217 4865.

# Customer Satisfaction with Labour Force Survey Local Area Data Services



Peter Newman  
CSO

Report of a survey conducted in 1994 by Peter Newman of the Central Statistical Office

## Introduction

Local Area data services form a relatively new product from the Labour Force Survey (LFS), a quarterly sample

survey carried out by interviewing people about their personal circumstances and work. Yet in the brief time that a wide range of labour market information has been available from the LFS at Local Area level, it has already generated widespread interest.

This is why it was decided that a Customer Satisfaction survey should be undertaken to identify customers more clearly, to assess their needs and how successfully these were being met, and to look at ways of improving the services provided. Moreover, as the survey sought the views of many potential users of the services, as well as current users, it had a very important informing role and was also intended to stimulate significant further interest in LFS Local Area services and other LFS products.

The results of the survey, as this article will explain, were extremely encouraging. Customer feedback confirmed that generally the most useful labour market information was already being presented, and in a very satisfactory manner. Strong potential for the further dissemination of the LFS Local Area data services was also identified and a number of improvements that customers requested were noted. There was also very strong support for the development of a Local Area database which includes a LAD code. This would be separate to the full LFS database because the addition of a LAD code to the main database might have meant that confidentiality would have been compromised.

## LFS Local Area data services

The Labour Force Survey (LFS) is the largest regular household survey in this country and provides a rich and

vital source of information about the labour force using internationally agreed concepts and definitions. From Spring 1992, the LFS was enhanced to produce full results for Great Britain every quarter rather than annually. The sampling scheme was altered at the same time, so that a systematic sample of about 60,000 households began to be drawn covering every area of the country each quarter.

It was this improved design that facilitated the production of LFS data for smaller areas than Standard Regions and Metropolitan Counties (all that was previously available). Consequently, a range of LFS Local Area data services have been made available since November 1993 for all quarters from Spring 1992 onwards.

LFS Local Area data have been produced for Counties, Local Authority Districts (LADs), Training and Enterprise Councils (TECs), Local Enterprise Companies (LECs), Government Offices (GOs) and Training Enterprise and Education Directorate (TEED) regions. (Comparable aggregate analyses for Great Britain and Standard Regions were also produced).

The data cover variables such as the main categories of economic activity (all analysed by sex and age); and also include information on ethnicity, education, qualifications and employment by industrial and occupational sectors.

All LFS Local Area data can be obtained from Nomis (National Online Manpower Information System). Local Area analyses in printed form are available from the commercial computer bureau service "Quantime Ltd". (LFS dissemination bureau). Key summary data are also published in the Labour Force Survey Quarterly Bulletin (LFS QB), including a map showing ILO unemployment rates (based on population resident) for counties in Great Britain (see opposite).

## Review methodology

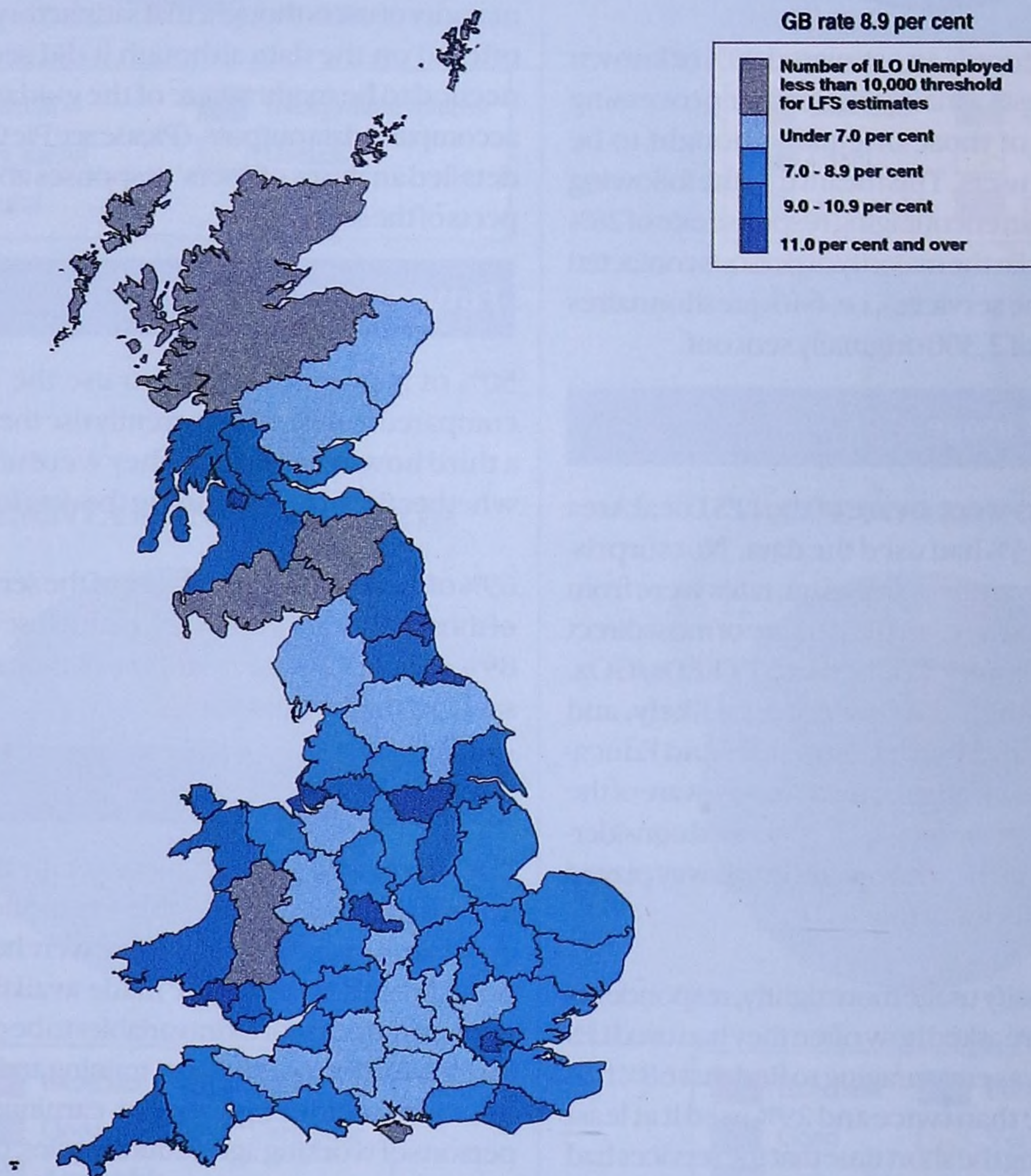
A voluntary postal survey of about 2,300 current and potential users of LFS Local Area data services was conducted. The questionnaires (consisting of 17 ques-

tions on two sides of an A4 piece of paper) were despatched in September 1994. A pilot of the questionnaire had been carried out previously on several users of the data.

Of the 2,300 persons contacted, about 250 were known to have already used LFS Local Area data. These were identified from Quantime client lists, Nomis subscriber lists, and a list of enquirers about LFS Local Area data.

The remaining 2,050 were deemed to be potential or unknown users and were sent questionnaires with an extended covering letter, providing details of the services. These consisted of all County Councils, LAD councils, GOs, TECs/LECs, Employment Intelligence Units (EIUs), Research and Intelligence Units, users of the LFS QB and other LFS products, Nomis subscribers and Quantime clients that had not been identified as users.

### ILO unemployment rates for counties - autumn 1994 (not seasonally adjusted)



Source: LFS Quarterly Bulletin: Results for Autumn 1994.

A reminder was sent to about 100 known users who had not responded 4 weeks later in October. These were given a further 3 weeks to reply, although the final cut off date was actually set for 1 week after that date towards the end of November. We decided not to re-contact those thought to be potential users as it seemed unreasonable to bother them a second time and also would not have been cost effective.

### Summary of the results from the survey

The survey confirmed that a significant number of persons have used LFS Local Area data and that many more plan to use the services in future. It has something to offer to all types of organisations, is used for numerous purposes and there is therefore, strong potential for further dissemination.

According to our records an estimated 80% of known users returned questionnaires in time for processing compared to 21% of those originally thought to be potential unknown users. This meant that the following results are based on an encouraging response rate of 28% (considering that by far the majority of persons contacted were not users of the services), i.e. 640 questionnaires were returned out of 2,300 originally sent out.

### Awareness and usage

75% of respondents were aware of the LFS Local Area data services and 43% had used the data. Not surprisingly, the highest awareness and usage rates were from the types of organisations that the data are of most direct use; TECs/LECs, County Councils and TEEDs/GOs. Somewhat surprisingly, LADs were least likely, and together with Private Sector Companies and Educational establishments, need to be made more aware of the services. However, the survey itself generated considerable further interest in the services and in this way played a very important informing role.

In an attempt to classify usage more tightly, respondents who were users were asked how often they had used LFS Local Area data. It was encouraging to find that 68% had used the data more than twice and 29% used it at least quarterly considering the short time that the services had been available. TECs/LECs, EIUs, and County Councils on average were the most frequent users of the data. LADs and especially Private Sector Companies were the least frequent.

### Rating of various dimensions of the services

Mean scores for the various aspects assessed were calculated on a five point +2 to -2 basis to provide a summary indication of how customers perceived the services; positive attitudes being represented by a positive mean score. This simple method showed that the services were well regarded in every aspect; they were thought to be useful (0.36), well presented (0.48), good value for money (0.52) and to offer satisfactory guidance (0.47).

Indeed, in terms of responses, 86% of all users found the services at least helpful, 95% thought that they were acceptable value for money and the same percentage said that they were presented acceptably. Moreover, not a single user thought the data were very poor value for money or presented very poorly. Finally, the vast majority of users thought that satisfactory guidance was offered on the data although it did seem that many needed to be made aware of the guidance notes that accompany data outputs. (Please see Pie Charts for more detailed analyses of users' responses about various aspects of the services).

### Future use

50% of respondents plan to use the data in future compared to 43% who currently use the data. Just over a third however said that they were undecided as to whether they would be using the data in future.

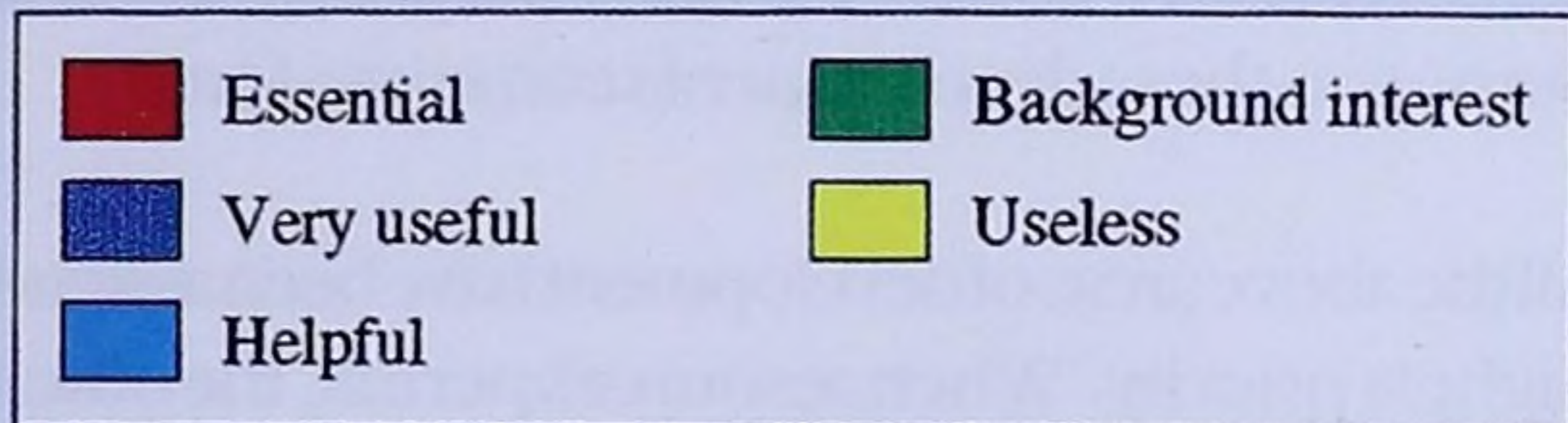
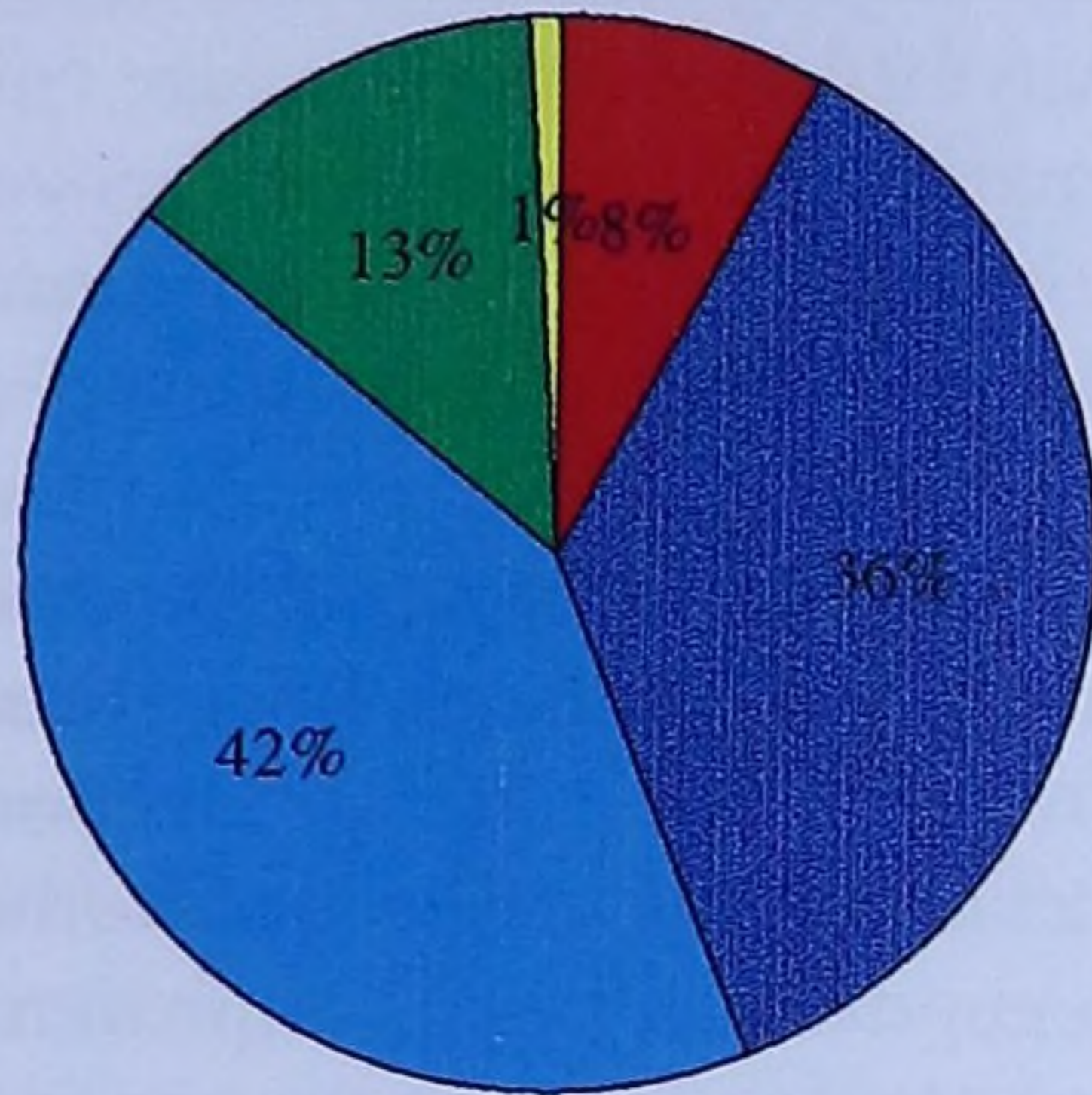
69% of those who were aware of the services, and 35% of those previously unaware, plan to use them in future. 89% of previous users will use data again and just 1% said that they would not.

### Requests

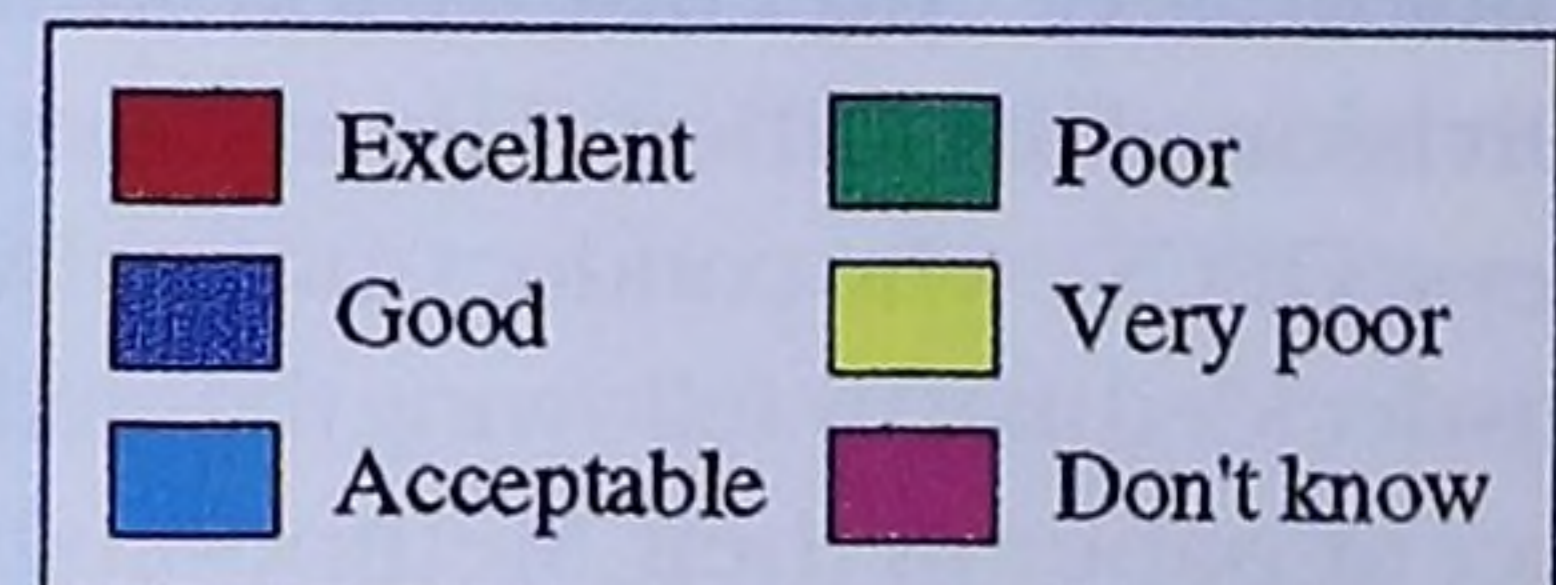
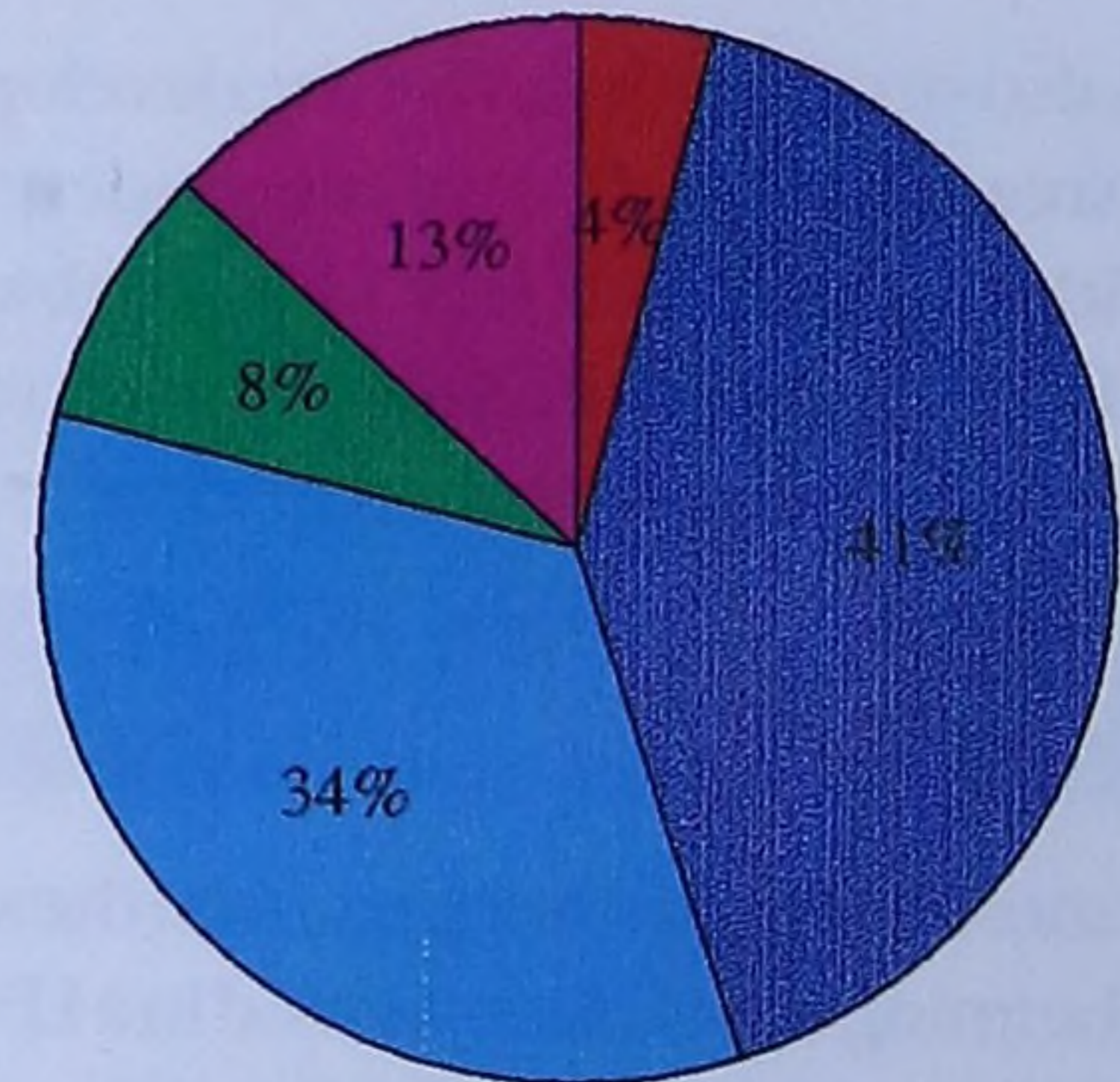
The survey also proved that generally the most useful information that it is possible to produce was already available from the services. There were however suggestions for other data to be made available. The most popular requests for extra variables to be produced were for information on ethnicity, training and qualifications, full and part-time employment, earnings and incomes, persons of working age, redundancies, disabilities, employees and economically inactive by sex. It has been decided that some of this information will be produced. Other suggestions will not be taken up as it would not be possible to produce reliable estimates at Local Area level because the sample sizes would not be large enough.

# Users' responses about various aspects of LFS Local Area data services

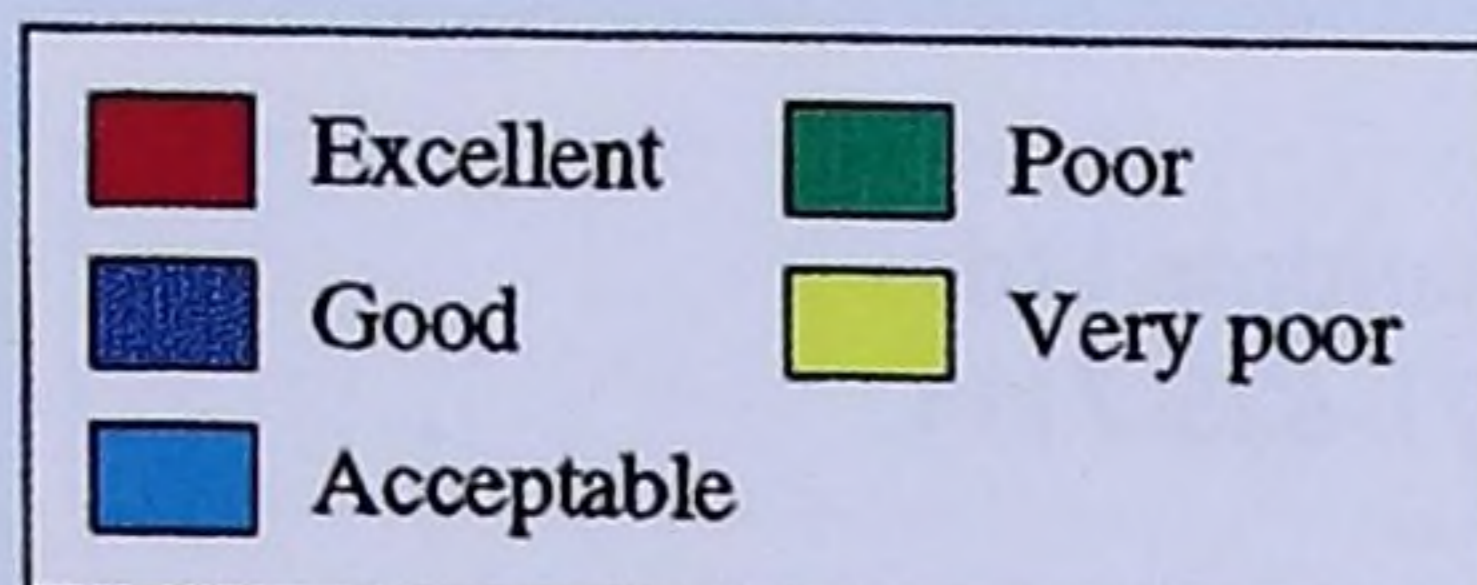
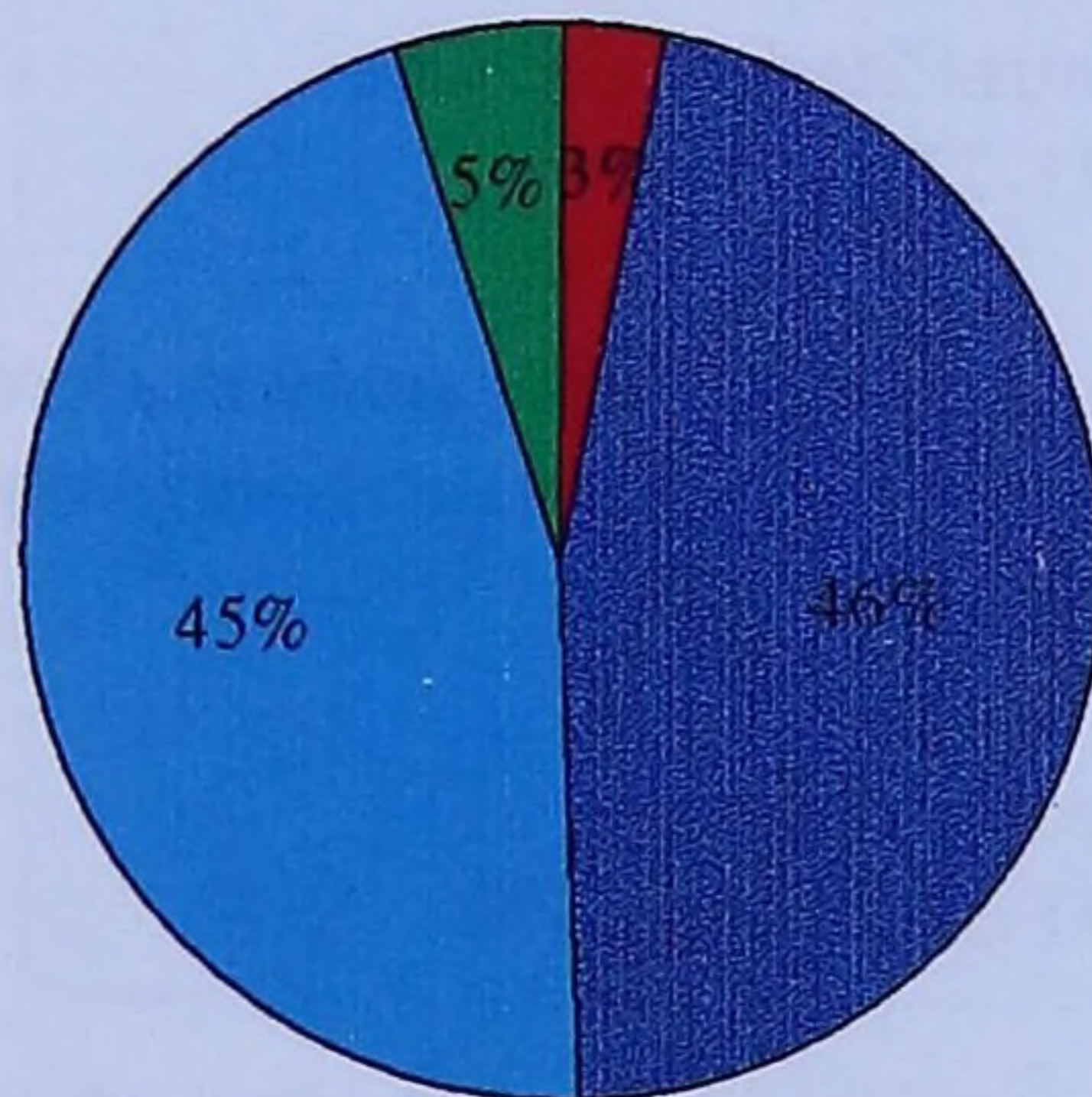
## USEFULNESS OF THE DATA



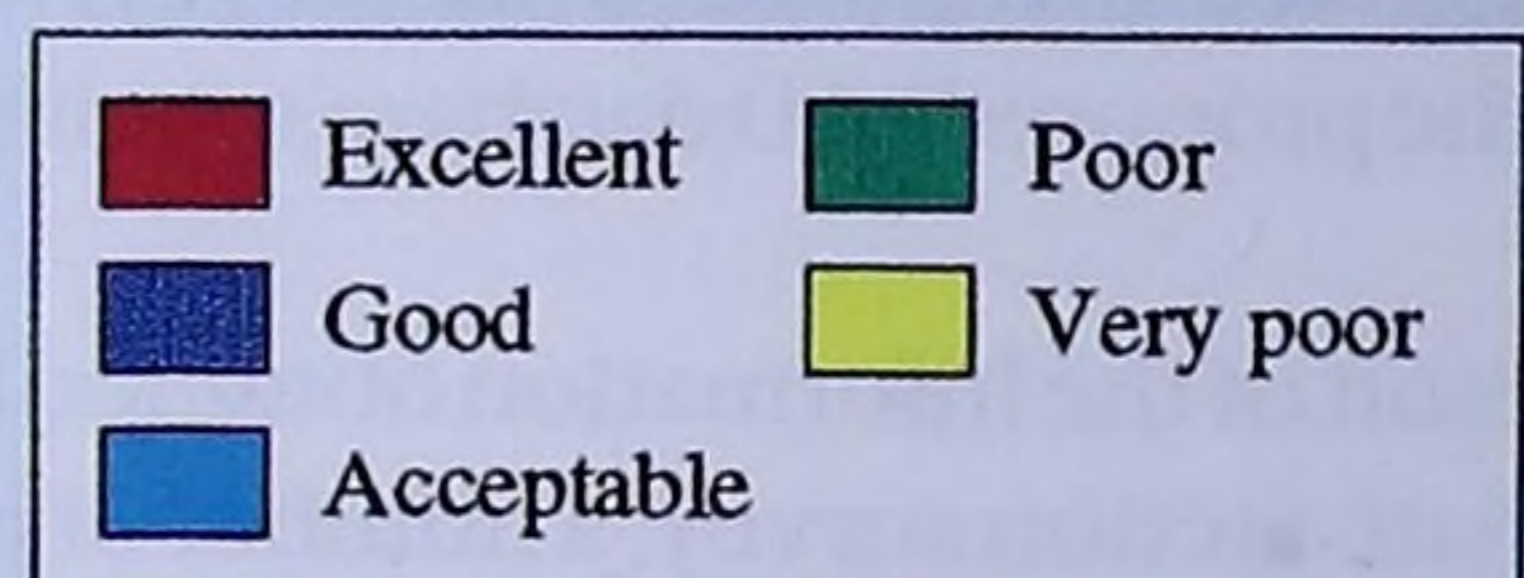
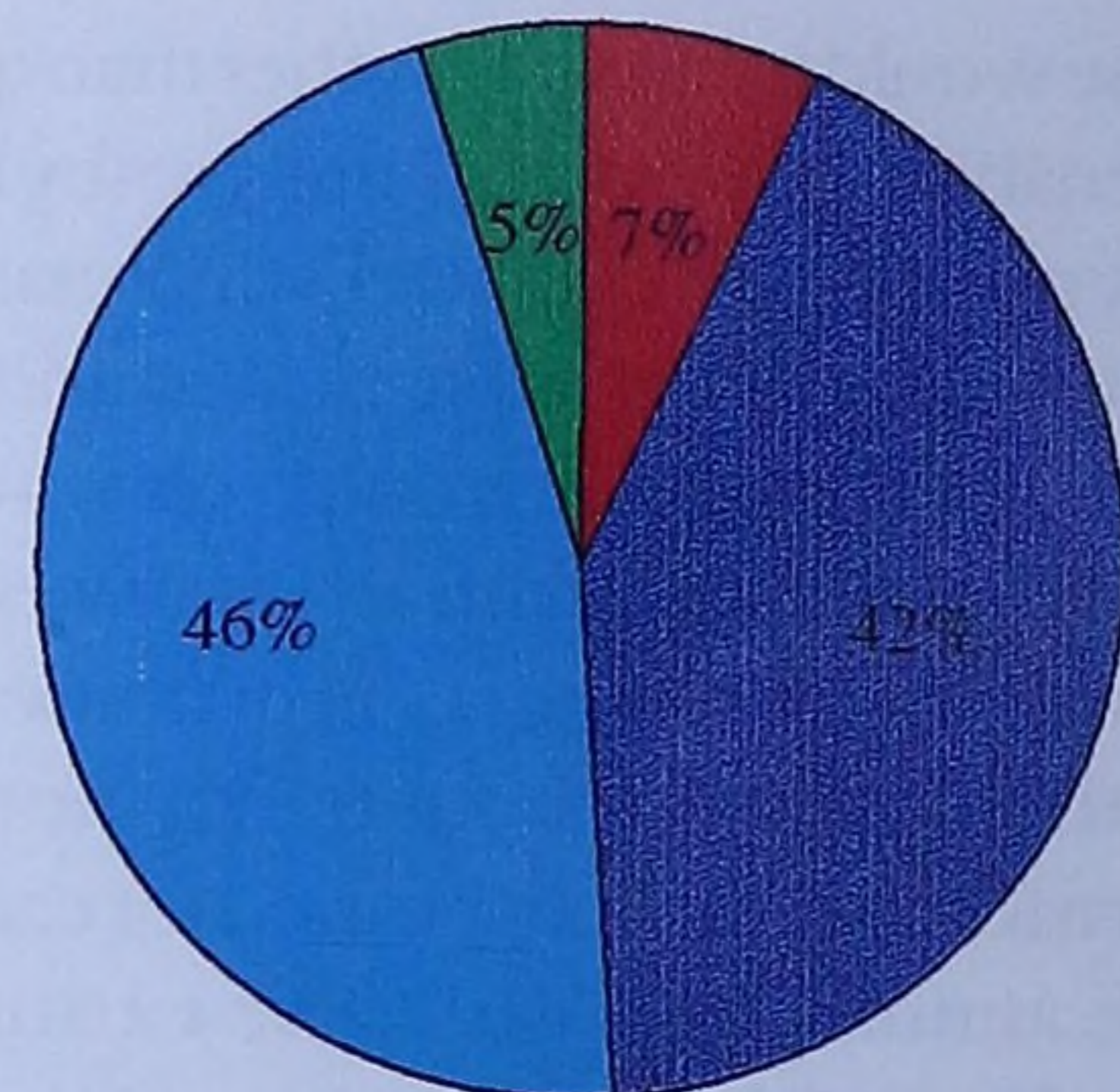
## GUIDANCE ON USE OF THE DATA



## PRESENTATION OF THE DATA



## VALUE FOR MONEY



Source: LFS Local Area data services Customer Satisfaction Survey 1994.

About half of respondents would like information to be produced for Travel to Work Areas and there were also a number of requests for data for Employment Service Districts and Parliamentary Constituencies. Many, however, did not ask for data to be made available for additional areas.

There was also strong support for the development of a LFS Local Area database. 81% of respondents said that they would be interested in a LFS database which includes a LAD code. In addition, there were over 100 requests for further details about the services.

### Developments to LFS Local Area data services

One of the most significant findings from the survey was the overwhelming interest expressed in a LFS database which includes a LAD code. The first issue to address was confidentiality. After discussion with the Social Survey Division of the Office of Population Censuses and Surveys (OPCS), who conduct the fieldwork for the LFS, it was decided that by following the guidance given in the recent paper in their Methodology Bulletin, "Confidentiality in Public Use Databases containing LAD identifiers", it would be possible to retain the same (acceptable) level of confidentiality that there is on the main database. This would be done by deleting all but a small number of key data items, and by broad-banding the codes used for these, while adding the LAD indicator.

The database would be annual, rather than quarterly, and would enable more detailed analyses by LAD than are currently possible. At LAD level, an annual database would help to smooth out both sampling and seasonal fluctuations in the data. It would relate to 96,000 households compared to a quarterly database's 60,000 households. (Note that 80 per cent of households are retained in the LFS from one quarter to the next, and only one quarter's data would be used for each household on the annual database.) The existing list of variables used for LAD level tabulations, plus additional variables suggested in responses to the survey, will largely determine the proposed LAD database specification.

Also, as a result of the information obtained from the Customer Satisfaction survey, a number of improvements to LFS Local Area data services will be made to meet customer needs. The survey confirmed the value of Local Area data services to both the public and private sector and it is hoped that the introduction of these

developments will make a major contribution to the aim of disseminating LFS data as widely as possible.

It has been decided that a number of new variables will be produced for all geographies for all quarters from Spring 1993. The data will now also include information on full and part-time employment, the main categories of economic activity for persons of working age, employees and the economically inactive by sex, and persons economically active in Ethnic Minorities. This information will be released in June 1995.

The survey has also acted as a catalyst in the process of updating and improving the guidance notes that accompany data outputs. Since, the introduction of the new variables detailed above will necessitate these being revised, other updates and minor improvements will be incorporated into the notes at the same time. Careful consideration will also be given to the presentation of data outputs as these developments come into force.

All the above areas of development have been assigned the highest priority. When resources permit, the other messages will be taken as a starting point for further developments to LFS Local Area data services.

### Further information

The LFS QB is available on subscription from:

Chris Randall  
Central Statistical Office  
0171-273-6110.

For further details about the service offered by Nomis regarding LFS local area data and many other statistics, please contact

The Nomis team  
0171-374-2468/2490.

For further information about the Quantime LFS Service contact:


Quantime Ltd  
0171-625-7111.

For analyses at national or regional level, or for further information about the LFS contact the

LFS Helpline  
0171-273-5585

For further information about LFS local area data please contact

Ian Wood  
Central Statistical Office  
Level 1  
Caxton House  
Tothill St  
London  
SW1H 9NF,  
Tel: 0171-273-5498



## News from around the GSS and beyond

### Central Statistical Office

#### UK Government joins the Internet

Robert Hughes, Junior Minister for Science and Public Service, has announced a pilot project which will provide access to government information via the Internet.

#### Welcoming the service, Mr Hughes said:

"Information superhighways will help to improve public service. In the future, the public could access government information and the new technologies will have widespread and beneficial implications for government business".

"The Information Superhighway has the potential to transform public service and the government is committed to being at the forefront of these developments".

The 'CCTA Government Information Service' has been launched to help government departments respond to the opportunities presented by the emerging Information Superhighways. The pilot information service is accessible via the Internet. Initial contributors include the Citizen's Charter Unit, HMSO and Machinery of Government Division of OPSS.

To access the CCTA Government Information Service on the Internet use [www.open.gov.uk](http://www.open.gov.uk).

The Internet is a world wide network connecting organisations and individuals. It has an estimated 20-30 million systems and 100 million users.

The World Wide Webb (WWW) offers access to text, images and sound. It provides a means of connecting and retrieving documents.

The Government published a report entitled 'Information Superhighways' in June 1994. The report suggests a framework for identifying and forming joint ventures between industry and government in the development of digital-based public information services. Media copies available from OPSS Press Office at the address below.

The government consultative meeting will be held on 21 November, at which the findings of the consultative report will be presented and future opportunities for projects identified. Contact OPSS for further information.

CCTA, the Government Centre for Information Systems, will be hosting the consultative meeting on 21 November. CCTA is part of OPSS (Office of Public Service and Science) and is responsible for promoting business efficiency and effectiveness within government information systems.

Press Office  
Office of Public Service and Science  
Cabinet Office  
70 Whitehall  
LONDON SW1A 2AS

Tel: 0171 270 0634

Out of hours telephone 0399 1133 and ask for pager number 721338

#### University of Bristol appoints head to the largest policy studies school in Europe

The University of Bristol is to launch a major new venture, the School for Policy Studies, in the autumn. The School will be the largest centre of its kind in Europe. Professor Malcolm Johnson, who has an outstanding record of academic leadership, has been appointed as Director.

The School for Policy Studies will inform and examine national and international policy debate. After 15 years of single party leadership and the emerging force of European policy, an informed critique of policy issues in contemporary Britain is vital in order to develop strategies for the future.

Professor Johnson, currently Dean of the School of Health and Social Welfare at the Open University, takes up his post this summer and, in the meantime, is collaborating with members of the University's Departments of Social Work, Social Policy and Social Planning, and



School for Advanced Urban Studies to build this exciting and innovative centre for research and teaching.

The new School, with a staff of over 150, will be developed around specialist research and teaching centres in key policy areas and seven new professors have been appointed to leadership roles. Areas of particular research interest are:

- the widening gap between rich and poor and the crises of unemployment and homelessness
- the consequences of the 1994 Criminal Justice and Public Order Act
- the future of local government
- effects of the NHS and community care reforms
- how to respond to increasing levels of domestic violence
- the future of home ownership in a changing society
- child welfare and the impact of the 1989 Children Act
- regeneration of peripheral estates and inner city areas
- international developments in the European Union
- the operation of the family justice system
- professional education in universities.

The School will also continue to have a community focus to policy work - helping the public and workers within the community to develop and put into practice initiatives that can improve their locality and day-to-day living.

Professor Johnson is available for interview. Please contact him directly at:

The Open University  
Telephone 01908 654124  
Fax: 01908 654124  
Home - telephone and fax  
(01296) 738005

For further information please contact:

Carroll Pierce or Julia Mortimer  
University of Bristol  
Rodney Lodge  
Grange Road  
Bristol BS8 4EA  
Telephone 0117 974 1117  
or Fax (0117) 973 7308.  
E-mail SPS-PR@Bristol.ac.uk.

Professor Johnson is author or editor of eight books and over a hundred published monographs, research reports, book chapters, refereed journal articles and articles in other journals. He was founding editor of *Ageing and Society* (1981-90) and founding associate editor of *Sociology of Health and Illness*. He is currently a member of six editorial boards of international journals.

The School for Policy Studies includes the integration of three high profile University of Bristol departments: Social Policy and Social Planning (which includes the Dartington Social Research Centre and the Socio-Legal Centre for Family Studies), Social Work (which includes the Early Childhood Development Unit) and the School for Advanced Urban Studies. It will start operating from 1 August 1995. A launch event will take place in the autumn.

The new School's research work will be organised into five Centres: Family Policy and Child Welfare, Health and Social Care, Professional Studies, Socio-Legal Studies, Urban Studies. Dartington Social Research Centre and the Early Childhood Development Unit will continue to retain their distinct identities.

There will be a large teaching programme comprising undergraduate, postgraduate, professional and continuing education courses for domestic and international students.

**The seven new professors are:**

- Martin Boddy, Chair in Urban and Regional Studies
- Lesley Doyal, Chair in Health and Social Care
- Ray Forrest, Chair in Urban Studies
- Hilary Land, Chair in Family Policy and Social Welfare
- Carol Propper, Chair in Economics of Public Policy

- David Quinton, Chair in Psycho-social Development
- Sophie Watson, Chair in Housing

## The CSO celebrates the 50th anniversary of the end of the Second World War

The CSO published *Fighting with Figures* this year to mark the 50th anniversary of the end of the Second World War. A reissue of the *Statistical Digest of the Second World War* published over 40 years ago, the new book this time had photographs and commentary by economic historian Peter Howlett of the London School of Economics, to bring the figures alive to a generation which had no memory of the war.

Launching the book at a press conference in April, CSO's Senior Press Officer Mike Finn is seen here with Dr Howlett wearing a authentic tin hat worn during air raids. The event was held in the Cabinet War Rooms below the entrance to the CSO at Great George Street London. Mike made a point of telling journalists that not only was the CSO created in 1941 by Churchill to provide unambiguous figures which were crucial to the planning and running of the war, but that during that period the statisticians were located above the Cabinet War Rooms where the CSO remains to this day.

For a reissue of forty year old figures the book is also, perhaps as a result of the media attention selling surprisingly well.



Mike Finn and Dr Peter Howlett at the launch of *Fighting with Figures*

## Customs and Excise

Monthly data on clearances for consumption in the UK of wines, spirits and hydrocarbon oils (petrol, diesel and fuel oils) are now being published by HM Customs and Excise; they complement the existing publication of the duty receipt figures for betting, gaming and the national lottery. Publication started in march with the release of January 1995 figures.

The statistical bulletins for wines and spirits were published until around five years ago when they were discontinued due to a lack of confidence within the department as to their accuracy. A brief summary of the figures for clearances (apart from hydrocarbon oils) continued to be published in the Monthly Digest of Statistics. Now, after an audit of the data, the Department is confident enough to release the data to the public on a monthly basis as soon as the figures become available.

Publication of all the bulletins is through a marketing agent:

Business and Trade Statistics Ltd  
Lancaster House  
More Lane  
Esher  
Surrey  
KT10 8AP

Contact:

Martin Boyle  
HM Customs and Excise  
Tel: 0171 865 4865

## Defence

In May 1992 the Secretary of State for Defence announced that a survey of the ethnic origins of the regular Armed Forces would take place. The Surveys & Statistical Publications (SSP) branch of the MOD was given the task of completing this important piece of work, to complement the monitoring of applicants and new entrants to the Armed Forces which has been ongoing since 1987.

After extensive consultation with the MOD lead policy branch and each service, a questionnaire was agreed

together with a Question & Answer brief and a Code of Practice about what would happen to the data collected. The Commission for Racial Equality was also consulted for its views. The tasks of printing and collation were undertaken by a private contractor, with SSP sending out the questionnaires to each service unit. This task was started in December 1993 and was completed by May 1994.

With considerable reorganisation taking place, it became difficult to locate some units, particularly in the Army. To a lesser degree, the same also applied to individual personnel as functions changed. Despatching approximately 270,000 questionnaires to several thousand units implied a need to house several thousand boxes. There was only just enough space to fit 'workers' in!

Over the next 6 months approximately 150,000 forms were returned to SSP for processing - a response rate of 57%. Unfortunately another 1% chose to withhold information, usually their service number or ethnic origin, with a few hundred others choosing to write obscenities on their forms (one even put loose curry powder in the envelope!). Such a large response does pose some logistical problems, such as keeping the questionnaires until they are destroyed, and indeed having to destroy them. The initial results show that throughout the three services there are 1.4% who are from ethnic minorities, with more in the ranks than amongst officers.

After this satisfactory first round, a follow up survey is being undertaken to reach those who did not receive that initial questionnaire, due to a recent posting or reorganisation, or who chose not to fill in their questionnaire. After the follow up there will be some investigation into possible non-response bias. It is hoped that the response rate will reach a similar figure to that achieved by the MOD civilian survey - currently 85% (after 3 follow ups).

In disclosing results, we make sure that no individual's ethnic origin can be deduced, a pledge given in the Code of Practice. To this end we use the GSS 'rule of 5'. In addition, we have to make sure that answers to different questions collectively do not identify individuals, especially when some groups are small in absolute terms.

This is a high profile piece of work, which has already generated interest from the media and Parliament. We

suspect that the survey was the easy part, and that the more challenging work is still to come!

## Employment (Now known as Department for Education and Employment)

### Ethnic groups and the labour market

The June 1995 edition of the Employment Gazette contained an article examining the position of different ethnic groups in the labour market in Great Britain, including new information on earnings. This used data mainly from the Spring 1994 Labour Force Survey.

The article reported that in Spring 1994, 5.9 per cent of the population of working age in private households in Great Britain belonged to an ethnic minority group. The unemployment rate for people of ethnic minority origins was more than double that for white people. Full-time employee hourly earnings in 1994 for ethnic minority people were 92 per cent of those of white people.

### Technical revisions to quarterly Labour Force Survey results

In April, the former Employment Department published revised estimates from the Labour Force Survey (LFS) for Spring 1992 onwards. These revisions arose as a result of revised population estimates which were introduced after assessment of the 1991 Census of Population. The sample LFS results have not been revised, but the "weighting" of the results to represent the whole population now takes into account the new population estimates. These reflect a larger population and a revised age structure, with more people of working age and fewer above working age.

The LFS analyses of full-time and part-time work have been extended to cover all people in employment. This will bring them into line with LFS estimates of total employment.

In the spring of each year, statisticians review the seasonal adjustment of LFS estimates, taking account of the extra information about seasonal patterns provided by the previous four quarters' data. For the convenience of LFS users, the revisions described above were introduced in the same quarter as the revised seasonally adjusted estimates which were the outcome of this review.

**SINES points you in the right direction**

Where is the nearest ancient monument to my town?  
What is the deer population of the New Forest?  
How many fires are dealt with by the local fire department each year?

Can you answer any of these questions? If not, who can? There are times when questions such as these are raised and somebody must answer them. A year ago, it would have been almost impossible to find the right person for guidance. The appropriate district council may be a sensible starting point but how long would it take to reach the relevant contact? No-one can predict which questions are going to arise or when, there are infinite possibilities - some queries are straight forward, some are not. Dotted around Local Authorities and Central Government departments are the people to assist with such queries but how can we match the right person with the right question?

In January of last year, Ordnance Survey went live with a new system known as the Spatial Information Enquiry Service (SINES) designed to eliminate the tedious searching so often required when looking for answers to special questions.

SINES is a computerised directory and although unable to provide specific answers, it contains information as to the whereabouts, contents and coverage of 500 Government datasets each containing much sought after solutions to various queries. Other information provided by the system includes the title, purpose, source, date of collection and details on how up to date each dataset actually is:

Ordnance Survey is operating SINES alongside our own customer Helpline on behalf of government. Enquiries can be made via letter, telephone or E-mail. Once received, the query is fed into the system and all relevant information is collated and sent to the enquirer. Since January 1994, the service, which is provided free of charge, has dealt with hundreds of enquiries (some of them international). Among the government departments included on the database are; the Home Office, Ordnance Survey of Northern Ireland, Inland Revenue, the Department for Education and Employment and the Ministry of Agriculture, Fisheries and Food. Although some of the datasets are considered confidential and

cannot be released, Ordnance Survey will give a contact name for the department holding the information.

The good news is that SINES is now even more up to date. We are currently in the process of adding a further 60-70 new datasets allowing Ordnance Survey to provide an even better service.

So next time you have a brain teaser and cannot think who to turn to for support, think of SINES and Ordnance Survey.

For further details concerning SINES please contact the SINES enquiry numbers:

Telephone: 01703 792711

or

Fax: 01703 792452

or

E-Mail: [sines@ordsvy.govt.uk](mailto:sines@ordsvy.govt.uk)

**Lord Chancellor's Department**

**Bigger and better**

Statistical services in the Lord Chancellor's Department (LCD) have been reorganised following the launch of the Court Service as a 'Next Steps' Executive Agency on 3 April. Responsibility for statistics on all courts other than magistrates' courts has been devolved to the Court Service, whereas responsibility for magistrates' courts and Legal Aid statistics is retained at the centre.

Andy Maultby, on temporary promotion to Head of the Planning and Communications Division of LCD, retains an important co-ordinating role as Head of Profession for statisticians in the Department. Although his direct responsibility for much of the statistical analysis and advice has diminished as a result of the reorganisation, he is very positive about the changes, which will bring the statisticians closer to their data suppliers and users. He is confident in the support of senior management, which has been demonstrated by a three-fold increase in the number of statistical posts in the Department over the last five years. The Lord Chancellor, in a recent meeting with the statisticians, underlined his

personal support for relevant, high quality, statistical information.

Mark Camley, Head of the Forecasting and Analysis Branch of the Court Service, is supported by two Assistant Statisticians. Alf Munster concentrates on criminal matters and Alex Saywell on civil. The Branch is heavily involved in the development of workload projections, needed for financial and staff planning purposes and to inform the court building programme. The development of performance indicators and targets will become an increasingly important part of their work. Another priority is to develop an information strategy for the Court Service, to ensure the correct level of management information is made available to it.

Peter Lumb, statistician in the Information Policy Branch of LCD, recently transferred to the Department on promotion from the Department of Social Security. He will be joined by an Assistant Statistician in the Autumn. In addition to responsibility for magistrates' courts and Legal Aid statistics, Peter acts as statistical advisor to several high-profile policy teams, in diverse areas such as civil Legal Aid remuneration and family law.

Andy Maultby is keen to improve the range and quality of statistical information collected and published by the Department, while minimising the burden on data suppliers. He places great importance on determining the needs of both internal and external users of the data. He supports the recent inauguration of the Criminal Justice Statistics Forum, an independent body set up under the auspices of the Statistics Users' Council, to provide the focus for a useful dialogue on criminal justice statistics. He is considering how best to develop links with users of civil justice statistics.

Over the coming months, the statisticians will be reviewing the range and content of statistical publications issued by the Department. The annual HMSO publication 'Judicial Statistics' currently covers all criminal and civil courts other than magistrates' courts. Statistics on magistrates' courts time intervals are covered in a regular series of information bulletins. Press notices covering mortgage repossession and insolvency statistics are issued quarterly. Please contact:

Alf Munster 0171-210 1772



Pictured here outside the House of Lords (left to right): Alex Saywell, Alf Munster, Peter Lumb, Mark Camley and Andy Maultby

## General Practice Research Database

The GPRD (formerly known as the VAMP Research Database) is a database of historical and current data collected from consultations with nearly four million patients by about 550 general practitioners throughout the United Kingdom. The anonymised data includes symptoms and diagnoses, prescriptions, referrals and preventive care also basic patient registration details.

OPCS has been managing the database since December 1993 for the Department of Health who have decided that the day-to-day management is to remain with OPCS for the next two years.

The data is available to researchers interested in non-profit making research in public health and OPCS welcomes enquiries from customers who may be interested in using the data. A small advisory group, chaired by Professor David Lawson of Glasgow University, will examine proposals for research studies to ensure that they are ethically justified and based on sound scientific principles. The data will not be available for use in market research.

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## New OPCS area classification

An article in the Spring issue of the OPCS quarterly journal Population Trends introduced new OPCS area classifications based on the 1991 Census and summarised the results at district level. Area classifications provide a simple indicator of characteristics of areas, and of similarity between areas. Areas are grouped in clusters by measuring similarities in a large range of variables.

Each district in Great Britain is classified as the centre of a small cluster of districts which correspond closely to it in their characteristics. Each district is also classified as a member of a cluster of similar districts - as a member of one of families, and as a member of one of twelve groups, and as a member of one of thirty four clusters.

The classifications can be used to compare performances of local organisations in areas of similar character, and to target resources and activity to particular types of area. Uses of the new classifications will also include the profiling of other data, such as causes of death, to investigate whether occurrence differ significantly by area.

The classifications are detailed fully in a Study on Medical and Population Statistics (SMPS) report, to be published shortly. For further details of the classification of local authority districts and how to obtain the classifications of district health authorities and of wards (postcode sectors in Scotland) contact:

Meryl Wallace  
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or

Chris Denham  
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0171 396 2024.

## ESRC review of Social Classifications

OPCS has commissioned the Economic and Social Research Council to carry out a major review of the OPCS Social Classifications - the Registrar General's Social Class based on Occupation (RGSC) and Socio-Economic groups (SEG).

The classifications are widely used both inside and outside government, and although they are revised before each census, they have never been thoroughly reviewed. Various aspects have been criticised, including their failure to deal adequately with people not currently in paid employment.

The aims of the review are:

- i** to review the characteristics, use, and perceptions of the RGSC and SEG;
- ii** to review existing alternative social classifications;
- iii** to propose recommendations for the revision of the OPCS classifications;
- iv** to assess the effectiveness of the recommended revisions.

The first phase of the review, involving consultations with users, sought to determine the need for a government social classification, the uses and criticisms of the existing classifications and the need for and criteria for assessing any new or revised classifications. This phase of the work has now been completed and it was agreed that the next stage will go ahead to produce a revised social classification based on occupation. The revision will be implemented in time for the 2001 Census.

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## Department of Trade and Industry

### Statisticians succeed in running their business

Back in December, DTI statisticians entered a team in the University of East Anglia's national Business and Investment Management game. The game attracted 270 teams from all sectors of the economy, and the GSS raised the stakes this year by putting forward a prize for the best team in the GSS. 19 GSS teams started the course, with 11 still running at the second round. However, the DTI statisticians were the only GSS team to make it through to the third round and the last 25. Wish us luck, a good pricing strategy and no warehouse fires (!) as we take on the country's elite in the semi-finals.

Sandra Tudor  
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## Department of Transport

The Journey Times Survey 1994 was the second annual survey in a series to monitor trends in average door-to-door journey times for different forms of transport in different parts of London. For short journeys (average length 2.1 miles) in inner London, the survey showed the average total journey time was shortest by bicycle taking 18 minutes, with car averaging 22 minutes. For short journeys in outer London (average length 2.3 miles), the average car journey time of 18 minutes was slightly less than for bicycle (20 minutes). The same journeys by public transport took 39 and 40 minutes on average for inner and outer London respectively. Door-to-door speeds for different modes were also analysed. For car, these included time to find and park in a space allowing over 4 hours parking, and walk to the journey destination. Distances are measured as the crow flies, and the door-to-door speeds are inevitably much lower than usual 'on-road' speeds [*Transport Statistics Report: Journey Times Survey 1994- Inner and Outer London published in April 1994*]

## HM Treasury

### Transfer of civil service personnel statistics from HM Treasury to Cabinet Office

On 1st April 1995 a number of civil service personnel management functions were transferred from the Treasury to the Office of Public Service and Science (OPSS), part of the Cabinet Office. The transfer is designed to bring together in OPSS the central responsibility for civil service management. Among the divisions to move to OPSS was Personnel Management and Conditions of Service division, which includes three branches with particular responsibility for civil service statistics:

- Personnel Statistics Branch, headed by John Imber (0171 270 5420), with responsibility for statistics on manpower numbers, recruitment and retention, and for information about equal opportunities within the civil service;
- Senior Civil Service Statistics Branch, headed by Ken Mears (0171 270 5719), with responsibility for statistics on the Senior Open Structure and the Administrative Fast Stream, and advice on staff planning;
- Information Systems Branch, headed by Mary Hourihan (0171 270 5673), with responsibility for the

maintenance and development of databases, including the Mandate system.

## Northern Ireland

### New Grade 6 for SSD

Following the merger with the Census Office and the General Register Office the senior management of Statistics and Social Division is expanding with the addition of a new Senior Principal Statistician post. Dr Gerry Mulligan, currently the head of the Central Statistics and Research Branch of the Department of the Environment for Northern Ireland, will take up the post in June.

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### Armenian Census of Population

In the Autumn edition, details were given of work being conducted by Statistics and Social Division (SSD) in the Serpukhov region of Moscow. Since March this year, also under the Technical Assistance to the Commonwealth of Independent States (TACIS) Programme, SSD has been involved in providing advice to the State Department of Statistics of the Republic of Armenia, on how to develop its first Census of Population as a Republic. This is due to be taken in January 1999. The project also entails providing assistance on migration survey methodology.

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## Scottish Office

### Household projections

The 1992-based household projections for Scotland were published in bulletin number HSG/1995/3 on 26 April 1995. The bulletin contains details of projected households at local authority district/regional level for selected years up to 2006. This set of projections takes into account the results of the 1991 Census of Population.

Households are projected to increase from 2,067 million in 1992 to 2,293 million in 2006 if past trends continue. The percentage of households which consist of one person living alone is projected to increase from 28.8 to 35.3 over the same period.

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### New Geographical Information System

The Scottish Office Agriculture and Fisheries Department have embarked on work with Ordnance Survey, which will result in a Geographical Information System of farmers field and holding boundaries being established at the end of this year. The work is being done to meet the requirements of the Integrated Administration and Control System regulations arising as a result of CAP reform.

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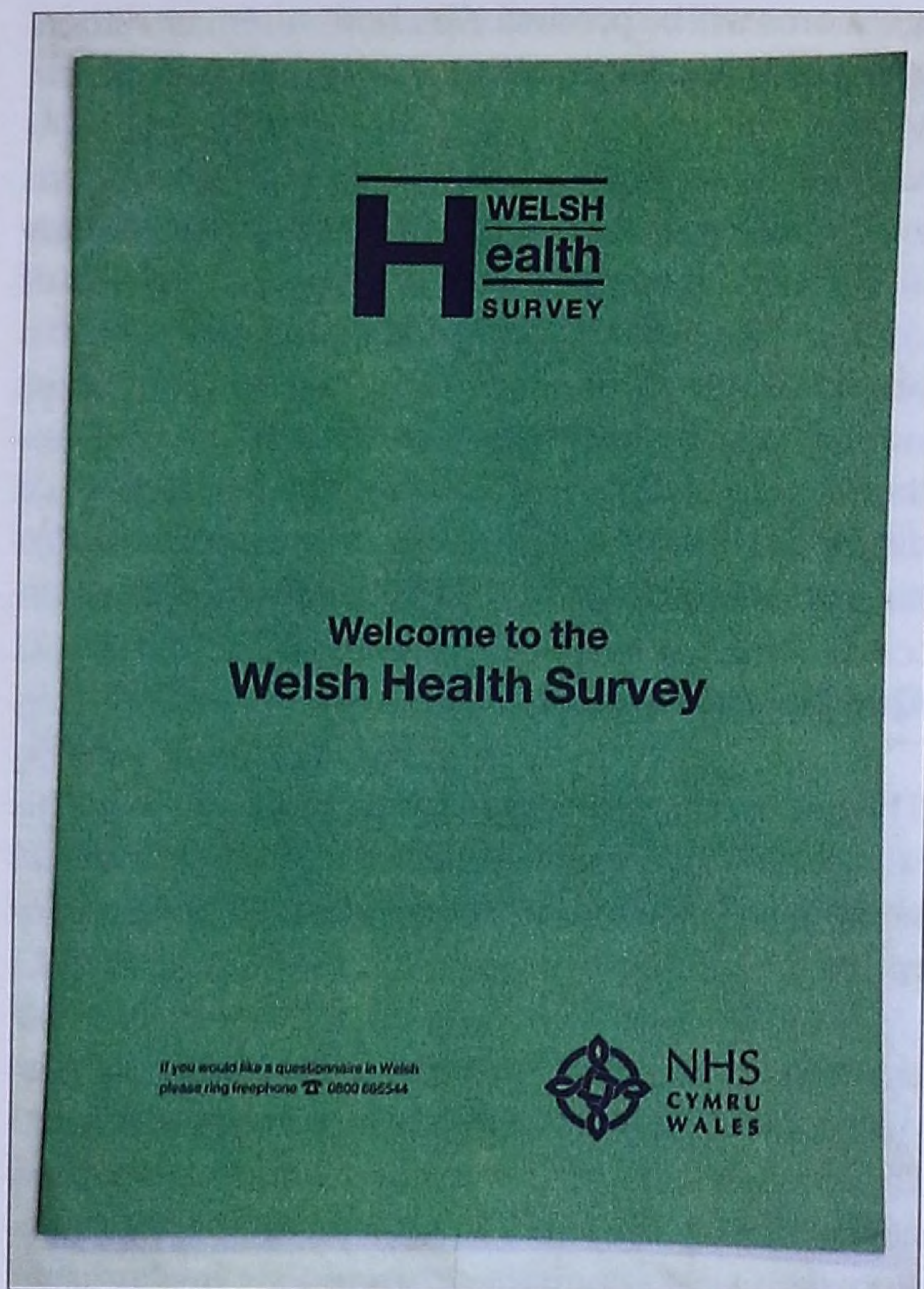
## Welsh Office

### Welsh Health Survey

#### Background

The Welsh Office launched the Welsh Health Survey at the end of April 1995. It is a postal survey designed to provide an accurate picture of the health of the people of Wales, the way the NHS is used, and areas where services could be improved.





The main aim of the survey is to collect information on representative samples of the population with a range of illnesses and disabilities, and information on comparable groups of healthy people - without using any medical records. The information will help those responsible for the NHS in Wales to develop services more finely attuned to the needs of the general population and to carry out further improvements in services.

The questions cover people's views of the NHS and the areas they would most like to see improved, illnesses or disabilities they might have, and how they go about their everyday lives. There are also questions about their circumstances and lifestyle.

An important aim of the survey is to provide baseline data for a range of health status targets, and the intention is for the exercise to be repeated in 1998 and 2002 to measure any significant changes.

The South East Institute of Public Health was awarded the contract for the survey. The Institute is a division of the United Medical and Dental Schools of Guy's and St Thomas's hospitals at the University of London. The total cost of the survey has been limited to £250,000.

## The basic problem

The basic problem is that there is information on how many people are born and what they die of, but there is surprisingly little hard data on their health in between. In the light of this, it was found that the main practical difficulty lay in the collection of data for targets that related to people with specific medical conditions; for example, quality of life of people with a heart disease, satisfaction with services for people with diabetes, physical functioning of people with arthritis. The only way to get the data for this kind of target would be by asking people: in other words, a survey. The major obstacle was an absence of suitable sampling frames: there were no lists of people with heart disease, diabetes, or arthritis from which to draw the sample.

Different approaches to the collection of this kind of data were considered, but the only one that was practicable was to take a (very large) random sample of the general population and to ask them a series of questions to identify any medical conditions which they had - a sifting process. Those with any of the target conditions would be asked differing sets of questions with a later interview.

This approach has been used occasionally for specific illnesses and with fairly small samples, but nothing on this scale had been attempted before. It was therefore necessary to assess the feasibility of the approach.

## The feasibility study

A feasibility study was undertaken by the OPCS to recommend a methodology for the collection of the survey data, with the constraint that the targets could not be changed and that all the data had to be collected. The conclusion of the study was that the health targets needing new survey data could be divided into broad categories depending on the percentage of the general population associated with the target.

The main difficulty lay with targets that applied to a small proportion of the population (between, say, 1% and 10% - for example, people with cancer). A large random sample would be selected and a short postal sift questionnaire sent out in order to identify people with any of the medical conditions associated with the targets - these people would be invited to have a face-to-face or telephone interview.

Unfortunately, this data would be too expensive to collect. Also the sub-sample sizes would be too small for the confidence intervals to be acceptably narrow. The main reason for the expense was the large number of differing sets of questions that would have to be asked at the follow-up interview - remembering that the two fundamental requirements of the feasibility study were for the targets to remain unchanged and for them all to be measured. These requirements were no longer tenable.

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### The approach to a solution

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The primary logistical difficulties lay with the follow-up interviews after the initial postal sift: they were the major contributors to the overall high cost of the original survey methodology. The biggest obstacle was that differing sets of questions had to be asked for each health priority area. If a common set of questions existed, then it would be possible to ask them at the same time as the sift, and eliminate the large number of follow-up interviews by having an exclusive postal survey. The Short Form 36 (SF-36) is just such a set of questions.

The SF-36 is a shortened version (36 questions) of a set of 149 health status questions developed as part of an American study of medical outcome by the Rand Corporation. The aim was to condense the original set of questions into one that could be self-completed by the respondent in under ten minutes while retaining high levels of reliability and validity. By using the SF-36, the two-stage process (postal sift followed by interview) could be replaced with a single postal survey - reducing the burden on individual respondents and greatly cutting costs. The survey will provide data for two of the categories of target identified in the feasibility study: the general population and sub-populations of 2% or more within it.

Three areas of health are measured (functional status, wellbeing, and health perceptions) using eight components, together with a measurement of the change in health. Each component of the SF-36 has a scale which ranges from 0-100, where 0 and 100 represent the worst and best possible states respectively.

Recent research has shown that factor analyses of the eight SF-36 scales have consistently identified two summary components. On the strength of their correlations with the eight scales, they have been interpreted as the physical and mental dimensions of health status. Aver-

age scores will be produced for both summary dimensions according to age, sex, and medical condition.

Another advantage of asking the same questions to everyone (regardless of which medical conditions they might have, if any) - apart from the obvious one of cutting costs - is that this approach avoids the problem of statistical confounding. If differing sets of questions were given to people with differing medical conditions, then it would not be possible to say whether a perceived difference (in, say, quality of life) was a genuine difference or merely an artifact of asking differing questions.

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### Questionnaire design

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The questionnaire incorporated a morbidity sift. This was a series of questions which asked if respondents had been diagnosed by a doctor as having any of a set of medical conditions.

In addition to the SF-36 and the morbidity sift, the questionnaire was made up of a set of objective multiple-choice questions tested over time to ensure their validity and reliability - it included: socio-demographic questions (age, sex), general health questions, quality of life, patient satisfaction, measurements of stigma, and views on the NHS.

The questionnaire wording was analysed using the Flesch algorithm to ensure that it could be easily read by as many of the population as possible.

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### The Welsh Health Survey

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A random sample of 50,000 of the adult population was drawn from the Electoral Register. A 50% response to the survey would result in sufficiently large sub-samples of people with the targeted illnesses and disabilities that any confidence intervals would be narrower than 5%.

One exception was that people with a learning disability make up less than 0.5% of the population and the sift would result in sub-samples that were too small to be reliable. There is a separate survey for people with a learning disability. A sample will be drawn from the Social Services Client Record System. A slightly modified questionnaire has been designed, but most of the questions are unchanged - including the morbidity sift, SF-36, and socio-demographic questions.

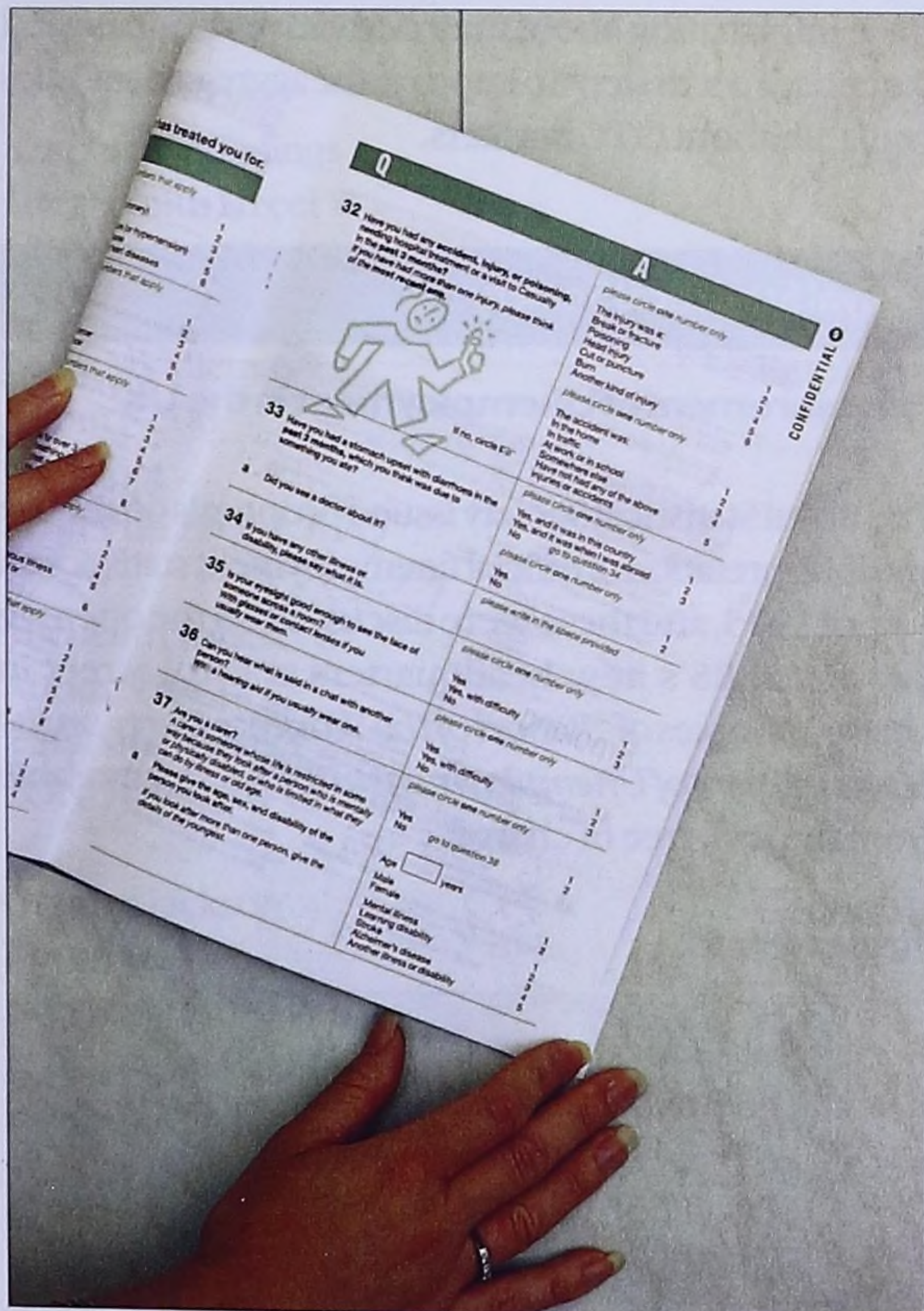
For the main survey, medical records were not used at any stage of the sampling process (or at any other stage of the survey), so it was not possible to tell who among those picked had any illnesses. This was made clear in the letter that accompanied the questionnaire. Nevertheless, it is just possible that a patient could still have asked their GP why their name had been picked - perhaps they had recently been diagnosed as having some medical condition, or had just had an operation. Copies of the questionnaire and a brief outline of the survey were sent to every GP in Wales under cover of a letter from the Department's Chief Medical Officer, Dr Deirdre Hine, so that they could give any concerned patients absolute assurance that their name had been picked entirely by chance.

Nationally, the Welsh Office Minister responsible for health in Wales, Rod Richards, and the Department's Chief Medical Officer were interviewed by local television, radio and the press to publicise the survey and thus improve the potential response. Directors of Public Health Medicine were briefed on the survey and organised local publicity for the launch in their areas.

The same questions were sent to everyone. This might have led some people to think that a few questions seemed a bit inappropriate for them. Most 80-year olds with arthritis would not be taking part in strenuous sports - most healthy 18-year olds would have no trouble in climbing a flight of stairs. Because the sample was random and medical records were not used at any stage in the survey, it was not possible to anticipate how old or how healthy the people were who were picked. To clarify this kind of issue, a bilingual freephone helpline was provided for people who had any questions or complaints about the survey.

Provision was made for people who might have had difficulty in completing a questionnaire because of illness or disability, and who did not have carers able to help. This included large print questionnaires for people who had difficulty in seeing, and the offer of telephone or face-to-face interviews for people who would have had difficulty in physically completing a questionnaire.

The results of the survey will be published towards the end of this year.



## Other Organisations

### Bank of England: Inflation Report

The May *Inflation Report* provided a detailed analysis of recent monetary, price and demand developments in the UK economy, and offered the Bank of England's analysis of future inflation prospects. Inflation on the Government's target (RPIX) measure was 2.8% in March up from 2.5% in December; the RPIY measure of underlying inflation (which excludes the effect of indirect taxes) rose to 1.9% in March. Section 2 of the Report included an analysis of different hypotheses to explain sterling's recent fall, and discussed their different implications for inflation. Section 3 assessed the latest news on demand and output, including the preliminary estimate for GDP in the first quarter.

### Bank of England: Quarterly Bulletin

In addition to regular articles providing commentaries on the operation of UK monetary policy, and developments in the world economy and in financial markets, the May issue of the Bank's *Quarterly Bulletin* contained the following items:

#### Bond yield changes in 1993 and 1994: an interpretation

This article looked at a number of the explanations put forward for the turnaround in government markets, from their prolonged rally in 1993 to a protracted period of turbulence and reassessment for most of 1994. It presented the results of research exploring the role of monetary policy credibility in the yield changes over the two years.

#### Bond prices and market expectations of inflation

The article described the method - introduced last November - used for deriving from gilt prices the inflation expectations that appear regularly in the Inflation Report. It assessed how well the derived expectations would have predicted inflation in the past.

#### Inflation and economic growth

The article (by Professor Robert Barro) presented results assessing the effect of inflation on economic perform-

ance. These suggest that an increase in average inflation of ten percentage points a year reduces the annual growth of real GDP per head by 0.2-0.3 percentage points and the ratio of investment to GDP by 0.4-0.6 percentage points.

#### Risk measurement and capital requirement for banks

The article reviewed developments in banks' use of statistically based tests to measure risks in both their traditional lending and borrowing, and their securities and derivatives trading, activities. It discussed how their increasing use was influencing the development of international capital standards.

#### Statistical information about derivatives markets

The article focused on over-the-counter derivatives. It outlined the main accounting problems they raised, explained current initiatives to encourage firms to disclose information about their derivatives business and described recent steps to improve the aggregate statistics available about OTC markets.

### Royal Statistical Society

#### "Measurement of Unemployment in the UK"

The Royal Statistical Society issued proposals on the use and interpretation of official unemployment statistics on 5 April 1995, and these were discussed on the opening day of the RS's new headquarters at Errol Street in London. Copies of "*Report of the Working Party on the Measurement of Unemployment in the UK*" are available from the RSS, free of charge.

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# Articles in recent issues of Statistical News

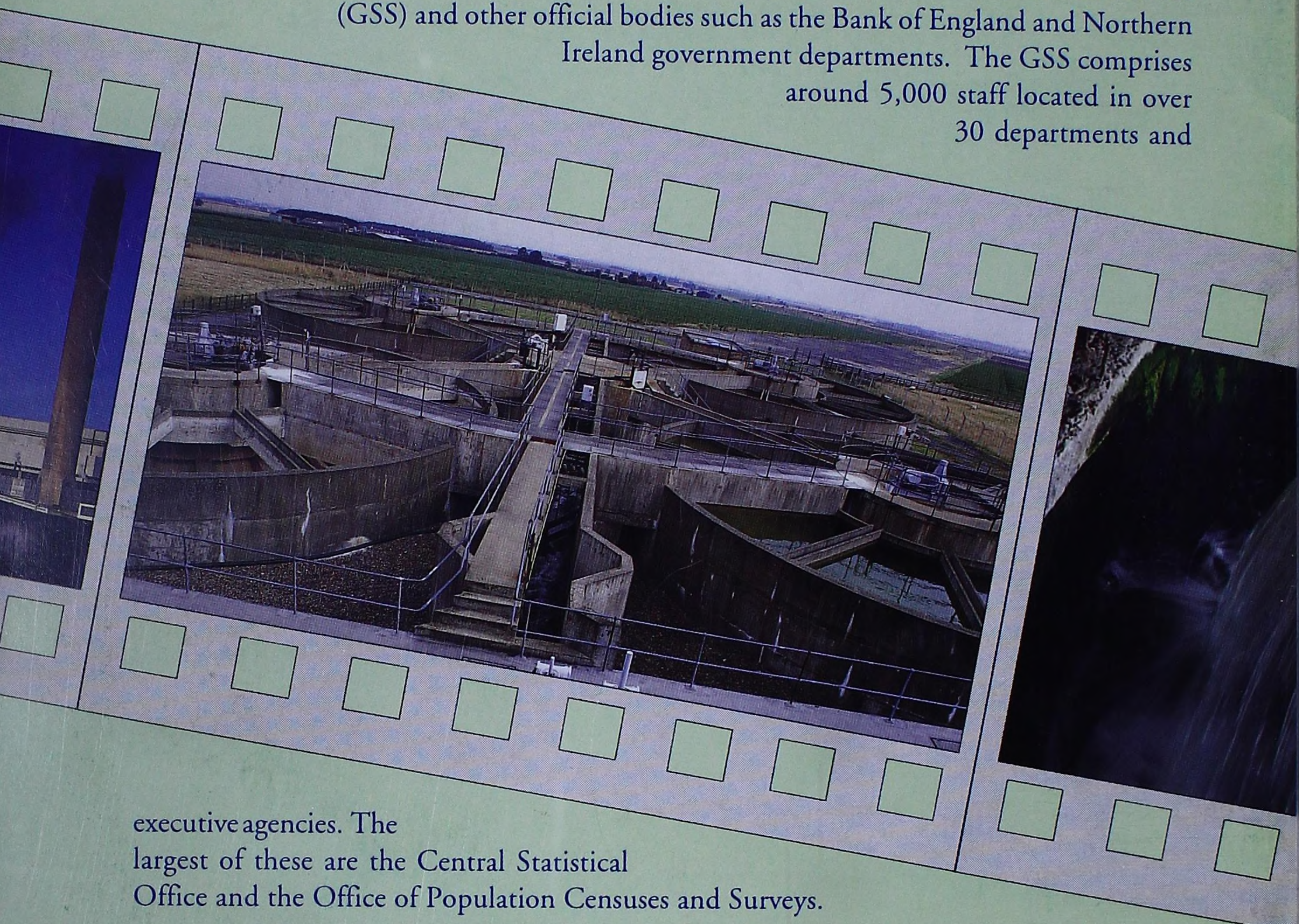
- NO 100 Spring 1993 - International Edition**  
Introduction  
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ODA assistance to statistical services in developing countries  
A day in the life of an ODA statistician in Africa  
Sharing GSS 'know how' with Eastern Europe and the former Soviet Union  
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A good press For European Statistics  
How not to collect fire statistics from fire brigades
- Howell Jones
- David Blunt  
Yves Franchet  
John Wright  
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Performance Indicators for the Police Service  
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Truths, Home Truths and Crime Statistics  
Hospital and ambulance league tables for England  
Ukraine: Statistics for a Market Economy  
Measuring Quality of Service on Cellular Radio Networks  
Intrastat: Electronic Data Interchange (EDI)
- David Fry  
David Povey  
Andy Sutherland  
Stephen Penneck  
Peter Atkinson  
Mike Smith

Copies of the above and earlier articles may be obtained from: Central Statistical Office, Government Buildings, Cardiff Road, Newport, Gwent NP9 1XG, Library Room 1.001. The cost is £5 a copy, inclusive of postage and handling, for the articles listed, and for articles from earlier issues. The appropriate remittance should accompany each order. Cheques, etc., should be made payable to 'The Central Statistical Office'.



Statistical News provides a comprehensive account of new developments in British official statistics, and it is designed to help and inform all with an interest in these statistics. It is essential reading for everyone who needs to keep up-to-date with the latest in this wide-ranging and dynamic area.

Official statistics in United Kingdom are produced by the Government Statistical Service (GSS) and other official bodies such as the Bank of England and Northern Ireland government departments. The GSS comprises around 5,000 staff located in over 30 departments and



executive agencies. The largest of these are the Central Statistical Office and the Office of Population Censuses and Surveys.

Every quarter Statistical News includes four or more articles which describe a subject in depth; these subjects range from the latest surveying techniques to statisticians' projects in Zambia. The News from around the GSS and beyond section carries shorter articles from each department and associated organisation on their latest statistical ventures and plans. The Supplement of New Surveys and Departmental Publications is a reference document for all recent output and products.

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