



SUMMER 2008

# 3MOONS

METHODOLOGY DIRECTORATE  
LEADING THE DEVELOPMENT OF STATISTICAL METHODS

## SUMMER 2008

This is the 12th issue of Methodology Directorate's (MD's) quarterly overview of methodological issues in the Office for National Statistics (ONS). The 11th issue covered aspects such as:



- Independence for ONS and its impact on MD
- a quality tool for best practice in ONS
- managing the change in Standard Industrial Classification, from SIC (2003) to SIC (2007)
- developing a question on sexual identity for use in social surveys
- an introduction to Data Collection Methodology for Business Surveys

Read on for the latest news from MD

### MD success in Excellence Awards

Members of MD were successful in four categories at this year's Excellence Awards.

First prize in the Knowledge Management and Analysis Award went to the Sexual

Identity Question Development Team. The Longitudinal Disability Survey Team won the Promoting Diversity Award. The CommuterView Project Team won the Innovation Award, while the Young Statisticians Meeting (YSM) Team came runner-up in the Communication Award.

Congratulations to Amanda Wilmot, Pete Betts, Tamara Taylor, Charles Lound, Alan Smith, Donna Viney, Hannah Finselbach, Rob Bucknall, and Nick Woodhill, members of MD, whose hard work was recognised at this year's Excellence Awards. The Sexual Identity Question Development Team would also like to thank Katherine Ralph, Jack Eldridge, Kate Gillham and Pete Braj-Dyal for their contributions.

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## An update on the Methodological Consultancy Service

You may remember an article in the winter 2007/08 edition of 3MOONS, outlining the recently formed London-based Methodological Consultancy Service (MCS).

The MCS was given a formal go-ahead by the Methodological Programme Board in November 2007, with Simon Compton as head of the service and responsible for its development. So what is the current status of the MCS, and what is planned for its future?

The service will provide expert methodological advice, primarily to the GSS, on a cost recovery basis. The type of advice will vary, ranging from ad hoc support, training, call off contracts where a specified amount of support can be bought, as well as longer term contracts.

The structure and staffing of the service are currently under discussion, but it's likely to comprise of 10–20 methodologists. There will also be the need for administrative staff to facilitate the efficient running of the service, especially at its formal launch, which is planned for autumn of this year.

As the service will run on a cost recovery basis, and in competition with universities and the private sector, there will need to be a cultural shift in approach to prospective clients. We plan to carry out a skills audit to map out exactly where our collective knowledge lies, and how we can most effectively tap into it. There will also be a series of briefing sessions with ONS staff to explain developments and career opportunities in more detail, along with a section on the Intranet.

Research indicates that there is a high level of demand for the service among heads of profession in other government departments, and that the existing good reputation of ONS methodologists has done much to fuel this demand.

We are currently taking forward expressions of interest on a bilateral basis, and providing ad hoc presentations in order to showcase what the MCS can offer departments. This is already proving successful in drumming up business for the new service.

If you would like further information, or have any questions about the MCS, please email [mcs@ons.gsi.gov.uk](mailto:mcs@ons.gsi.gov.uk)

# Future directions for Methodology Directorate

Having recently taken on the leadership of Methodology Directorate, I can clearly see that we are in great demand and are well placed to support three important directions:

- Independence
- the new ONS vision
- our major statistical developments

Under the new Independence legislation, the National Statistician will take the lead role for:

- promoting the quality of official statistics
- good practice in relation to official statistics
- the comprehensiveness of official statistics

We are also required to develop and maintain definitions, methodologies, classifications and standards for official statistics, and promote their use.

These are important legal requirements. They cover all official statistics and Methodology (the Quality Centre and the Classifications

and Harmonisation Unit working together) will lead by developing a new GSS quality strategy, contribute to GSS statistical policy guidance, and bring together and promote common standards and classifications.

The Methodology Consultancy Service, to be launched in autumn, will help GSS departments by providing, on a cost recovery basis, statistical services that help them to follow guidance and prepare them for the assessment of their statistics by the Statistics Authority.

Our new ONS vision sets out a number of goals that stress the important role Methodology will play over the next few years. We will see a greater focus on analysis, supporting standardised statistical systems and tools, more streamlined designs and integrated sources, and improved collection methods to reduce respondent load. In addition, MD will make important contributions to lowering statistical business costs by developing more cost effective designs, and assisting process improvement.

To do this, we will help strengthen statistical leadership and assist in the broader development of statistical skills across the GSS.

Finally, we will be making some important contributions to some major developments. Methodology continues to support the 2011 Census and is also working with the business to improve population and migration statistics. Work is also going forward to look at ways of integrating more administrative data into our statistical systems.

These are exciting times with Methodology Directorate sitting at the heart of ONS, making a significant contribution to our statistical direction and continuing to be highly valued by our customers.

**Stephen Penneck**  
ONS Director of Methodology

## NEWS

continued

### Advisory committee meetings

The 15th meeting of the National Statistics Methodology Advisory Committee (NSMAC) takes place on 11 November 2008 at Myddelton Street, London. Observers will be invited when the agenda has been finalised. The committee consists of invited academics and peers, and offers advice and guidance on methodological projects. Anyone interested in submitting a paper for future meetings, or requiring further information, should email [Louisa.Nolan@ons.gsi.gov.uk](mailto:Louisa.Nolan@ons.gsi.gov.uk).

The next UK Census Design & Methodology Advisory Committee (UKCDMAC) meeting is scheduled for autumn 2008, and is likely to cover topics including:

- the census outputs strategy
- statistical disclosure control methodology
- quality assurance strategy

The previous meeting focused on output population bases and coverage assessment methodology. The committee was very positive about the ONS proposals. For further details, please contact [Garnett.Compton@ons.gsi.gov.uk](mailto:Garnett.Compton@ons.gsi.gov.uk).

The Quality & Methodology Programme Board (Q&MPB) meeting scheduled for 9 October has been postponed pending the findings of the on-going review into the governance and committee arrangements for the GSS, following the creation of the UK Statistics Authority in April 2008.

For further information, please contact [Paul.Brookes@ons.gsi.gov.uk](mailto:Paul.Brookes@ons.gsi.gov.uk)

### Celebrating 40 years of the Government Statistical Service

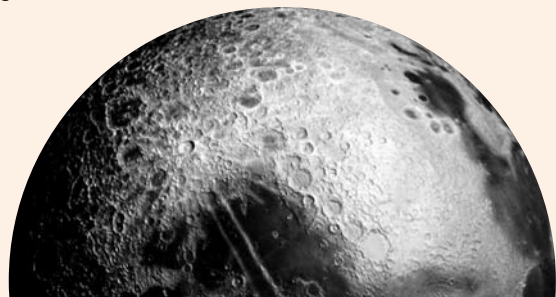
A small delegation from MD was among those attending the GSS 40th birthday celebrations, held at the Royal Aeronautical Society in London on Friday 18 July.

An excellent spread was provided on the roof-top terrace, with speeches from past and present members of the GSS, including guest of honour Lord Moser, the first head of the GSS back in 1968. Nick Woodhill, ex-MDer and part of the organising team for the Young Statisticians Meeting 2008, also made an appearance to talk about the future of the GSS.

### Secondments

MD welcomes applicants from UK government departments, and other national statistics institutes, for short and long-term secondments.

Both organisations benefit from the knowledge-sharing and training elements these arrangements offer. For more information, please contact [Peter.Gittins@ons.gsi.gov.uk](mailto:Peter.Gittins@ons.gsi.gov.uk). To view all current vacancies in ONS, please visit [www.statistics.gov.uk/recruitment](http://www.statistics.gov.uk/recruitment).





# 13th GSS Methodology Conference

The 13th GSS Methodology Conference, held on 23 June in London, covered a wide range of methodological issues with keynote speakers from the great and the good across the GSS.

This year saw a new venue and a new format, a record breaking four parallel sessions before and after lunch, and a plenary discussion session at the end of the day. Was the conference a success? We asked three delegates from across the GSS to give us their views.

'The most interesting parts of the conference were the parallel sessions and the discussion on trust in official statistics. I chose the parallel sessions according to general interest. It is difficult to learn about the work of branches on other sites and so Time Series Analysis was an opportunity to do this. In the afternoon, ignoring the advice not to switch sessions, I attended Demography for two presentations and the final talk in Survey Methods. This last talk was only the second I attended that was not discussing ONS work, it would have been interesting to learn more about the wider GSS. The background and history to ONS Independence in the closing plenary session was informative, it was unsurprising to be told that the public trusts some statistics more than others. Overall it was enjoyable to think about something different for a day, and to break up the routine!'

**James Danielis (ONS)**

'In the morning I attended the session on Quality. I found the talk on the Census statistical disclosure control strategy very interesting. It was also very useful to find out about the Methodology Consultancy Service being set up by ONS. During lunch I caught up with some colleagues in other government departments. In the afternoon I went to the Survey Methods session and learnt about different methodologies currently being used across government. As

in previous years, the conference was a good way to find out about methodologies being used across government and academia'.

**Katherine Merrett (DEFRA)**

'The papers presented in the syndicate sessions provided a useful opportunity to hear about some of the work being done in other parts of the GSS. I was fortunate enough to present some of my own work. This allowed me to develop my presenting skills and raise the profile of my division in a supportive and friendly environment. I would recommend attendance at the conference to anyone working as a statistician in government. I would also encourage my peers to present their work at the conference as this provides an excellent opportunity for personal and professional development'.

**Daniel Ayoubkhani (ONS)**

Planning for next year has already started and we will be looking at all feedback received from delegates. If you have any comments or ideas, please feel free to contact us by emailing [methodology@ons.gsi.gov.uk](mailto:methodology@ons.gsi.gov.uk). Also look out for presentations and papers that will be posted on the web page over the summer.

Thank you to everyone who contributed, making the 13th GSS Methodology Conference a great success!

## An introduction to Classifications and Harmonisation Unit

The Classifications and Harmonisation Unit (CHU) joined Methodology Directorate in April this year and, as indicated by its title, has responsibility for two main areas of work.

On the Classifications side of the unit, CHU is responsible for maintaining and revising the standard classifications used by ONS. The Standard Occupational Classification (SOC) is currently undergoing a revision, and CHU is collaborating on this with the Institute of Employment Research at the University of Warwick.

A comprehensive review of the Standard Industrial Classification (SIC) is undertaken at 10–15 year intervals, to take account of the emergence of new industries, and the growth or decline in activity within existing industries. SIC was revised last year under the 'Operation 2007' programme, and there is some ongoing work from this revision.

The Classifications Helpdesk provides expertise for all classification coding. Last year, the team won first prize in the Technology category of the ONS Excellence Awards, for its work on Occupational Coding

for the Millennium Cohort Study.

CHU is also responsible for the corporate coding tool ACTR (Automatic Coding by Text Recognition), which is used to code the Inter Departmental Business Register for Business Registers Unit, and for the Annual Survey of Hours and Earnings. ACTR is due to be replaced by 'Jasper', designed by Stats Canada, in March 2009.

The CHU team also provides support for the 2011 Census, and has had funding from the Census for a team to carry out Census complex coding activity.

The other main area of CHU work is Harmonisation, involving a cross-governmental programme of work, with the aim of standardising statistical inputs and outputs.

The National Statistics Harmonisation Group (NSHG) is the committee that sets the standards. There are well established processes, via this group, for agreeing, publishing and updating questions, definitions, methodologies, classifications, and standards for official statistics. The most

important of these are maintained on two areas of the website:

- key standard classifications [www.statistics.gov.uk/about/data/classifications/default.asp](http://www.statistics.gov.uk/about/data/classifications/default.asp)
- key harmonised definitions and standards [www.statistics.gov.uk/about/data/harmonisation/default.asp](http://www.statistics.gov.uk/about/data/harmonisation/default.asp)

Work is almost complete on refreshing some of the information in the standards, and to improve navigation on the website, both of which will improve the service provided to users. In addition, an A–Z quick reference guide has been produced for the social surveys.

The next steps for the team are to work towards the harmonisation of economic surveys, and in preparing for the assessment of National Statistics.

CHU is a 16-strong team based in Titchfield and headed up by Jan Thomas. The team looks forward to new opportunities for closer collaboration with colleagues in MD. Please contact [Jan.L.Thomas@ons.gsi.gov.uk](mailto:Jan.L.Thomas@ons.gsi.gov.uk) if you have any questions or comments.

## Recent MD conference presentations

### Work session on statistical data editing (21–23 April 2008)

First thoughts on editing in mixed modes in the 2011 England and Wales Census (United Kingdom)  
Assessing the performance of the thousand pounds automatic editing procedure at ONS, and the need for an alternative approach (United Kingdom)

Heather Wagstaff and Ruth Wallis (MD)

Alaa Al-Hamad, Daniel Lewis (MD) and Pedro Luis do Nascimento Silva (University of Southampton)

### Workshop on Integration of Surveys and Administrative Data (29–30 May 2008)

Combining sources: a reprise

Kevin Moore, Gary Brown and Tullio Buccellato (MD)

Investigating Road Traffic Accident Statistics - Matching Hospital and Police data

Kevin McGrath (MD) and Matthew Tranter (Department for Transport)

### 22nd Nordic Conference on Mathematical Statistics (16–19 June 2008)

Non-response in ONS business surveys

Nick Woodhill (MD)

### 28th Annual International Symposium on Forecasting (22–25 June 2008)

Forecasting Migration Flows

Tullio Buccellato, Gary Brown, Julian Chow, Nigel Stuttard (MD)

### 13th GSS Methodology Conference (23 June 2008)

Methodology and the GSS

How to handle an untimely administrative source - do's and don'ts of forecasting  
Seasonal adjustment in a mass production environment  
New procedures governing the release of microdata derived from Social Surveys  
Data visualisation  
Model-based Local Authority estimation of all labour market states

Stephen Penneck (MD)

Kevin Moore (MD)

Gary Brown (MD)

Carole Abrahams (MD) and Laurel Bran (ONS)

Alan Smith (MD)

Kevin McGrath and Denise Silva (MD) and Ayoub Saei, Health Protection Agency.

V. Gomez-Rubio, N. Best, and S. Richardson (Imperial College) and Philip Clarke (MD)

Dick Heasman (MD)

Caroline Young and Keith Spicer (MD)

Simon Compton and Ceri

Underwood (MD)

Rachael Viles and Sarah Green (MD) and Rachel Skentelbery (ONS)

Bayesian Statistics for Small Area Estimation

A local area model for emigration

Progress on the Statistical Disclosure Control Strategy for the 2011 UK Census  
The Methodology Consultancy Service

Kevin McGrath (MD) and Barbara Noble, Department for Transport.

Process Quality in the Office for National Statistics

Matching UK road traffic accidents as recorded by the police with those from hospital records

Hannah Finselbach, Salah Merad and Kevin Moore (MD)

Estimating the Male/Female Employment Splits in BRES Using Additional Data Sources

Understanding and measuring uncertainty associated with the mid-year population estimates

Joanne Clements and Alison Whitworth (MD)

Telephone data entry – enhancing the system

Mark Peck and Gemma Hamilton (MD)

Coverage assessment and adjustment in the 2011 UK Census

Owen Abbott (MD)

### European Conference on Quality in Official Statistics (8–11 July 2008)

Investigating Improvements in Quality of Survey Estimates by Updating Auxiliary Information in the Sampling Frame Using Returned and Modelled Data

Alan Bentley, Salah Merad, Kevin Moore (MD)

Owen Abbott (MD)

Coverage Assessment and Adjustment in the 2011 UK Census

Examining the Development and Practice of Quality Management at the UK Office for National Statistics, Using both Linear and Non-Linear based Thinking  
EU Code of Practice Peer Reviews 2006–2008 – A Peer's Perspective  
Process Quality in ONS

Karen Williams (MD)

Frank Nolan (MD)

Rachael Viles, Sarah Green, Rachel Skentelbery (MD)

## Your questions answered (please send to [3moons@ons.gsi.gov.uk](mailto:3moons@ons.gsi.gov.uk))

In this issue, we've been asked about the organisational structure of the Statistical Framework Division that recently became part of MD. It is comprised of ONS Geography, CHU, Statistical Training and the MCS. Thanks again for all your queries, from home and abroad – keep them coming!