

INTRODUCTION

1 This paper describes the scope of the review of the Inter-Departmental Business Register (IDBR). The paper has been produced following comments received from interested parties, including the group that has been set up to steer the review. The paper sets out the organisation of the project and a brief description of the broad areas that will be reviewed, along with those that have fallen outside the scope of the review.

BACKGROUND TO REVIEWS

2 The White Paper *Building Trust in Statistics* announced the introduction of a rolling programme of reviews of key National Statistics outputs. The review of the IDBR falls within that programme and within the Commerce, Energy and Industry theme.

ORGANISATION OF THE PROJECT AND PERSONNEL

Review Team

3 Mark Pont of the Office for National Statistics' (ONS) Methods and Quality Division (MQ) will be the full time Review Team leader and project manager (65 days). He will be assisted by Ray Chambers (University of Southampton, 5 days, in a quality assurance role), John Perry, ONS (20 days, as owner of the system) and Gareth Jones, ONS (10 days, representing survey users). Additional resources for analysis will be provided by ONS's Business Registers Unit (BRU) and MQ staff (40 days each).

Project Board

4 The project will be overseen by a Project Board comprising:

Tim Jones, Methods and Quality Division, ONS (chair)
John Kinder, Prices and Business Group, ONS
Graeme Walker, PBG, ONS
The Review Team

5 The rôle of the Project Board is to:

- agree the Project Definition Document in its entirety and any subsequent changes to it;
- commit the necessary resources;
- arrange dissemination of progress and the final report;
- approve the completion of each stage of the project and the plans for the next stage. At completion to formally sign off the project;
- to advise the Project Manager immediately if it is aware of any problems which may affect the outcome of the project; and,
- to ensure that the products are delivered to agreed standards, on schedule.

Steering Group

6 In addition, a Steering Group will:

- provide direction and guidance to the Review Team;
- provide an external perspective on the review;
- assure itself that the appropriate processes have been followed through the review, and the appropriate stakeholders consulted; and,
- offer advice and guidance on issues brought to it by the Review Team.

7 The Steering Group is made up of:

Susan Linacre, ONS (chair)
Janet Dougharty, Department of Trade and Industry (DTI)
Geoff Noon, Business Statistics Users Group(BSUG)/Machine Tool Technologies Association (MTTA)
Iain Bell, Department for Education and Employment (DfEE)
Frances Pottier, Department of the Environment, Transport and the Regions (DETR)
Hayley Harris, HM Customs and Excise (HM C&E)
Mike Pepper/John Kinder, ONS
Tim Jones, ONS
Mark Pont, ONS
Members of the Review Team as necessary

LINKS/DEPENDENCIES

8 This review is closely linked with the work of various groups along with other pieces of research and review work ongoing in BRU and other areas. Of particular note are:

- IDBR Management Committee
- IDBR Strategy Group
- Development of the ARI 2000
- Quality work funded by the Statistical Office of the European Community (Eurostat)
- Efficiency reviews of Complex Business Unit and register updating procedures
- Short Term Inquiry Project
- Work on the Single Business Register/Comprehensive Business Directory
- The Eurostat-funded CLAMOUR project
- Ongoing reviews of registration thresholds by supplier departments

SCOPE

9 Reviews cover three areas:

- fitness for purpose of the outputs;
- appropriateness of the methodology and processes; and,
- quality of the inputs and burdens on suppliers.

Fitness for purpose of the outputs

10 The IDBR has too many customers to consider the fitness of the product for all. The review will concentrate on the major outputs that affect the vast majority of customers. The main customer/output areas are:

- PBG surveys for sample selection and provision of population auxiliary information, and other data relating to the sampling frame, such as the extent and impact of reclassifications;
- DfEE for local area analyses of employment;
- Input/Output for structural tables (and National Accounts Group more generally as users of survey outputs);
- DTI for business demographic analyses, and energy surveys;
- DETR for construction statistics;
- various departments for sub-national estimates (eg DETR Town Centres Project, Scottish Executive, National Assembly for Wales); and,
- the Statistical Office of the European Community (Eurostat) for analyses, and compliance with regulations.

11 By focusing on the IDBR as an output for these main areas, we will be addressing the main processes involved in the register. The choice of main customer areas will not restrict the breadth of consultation on the review. Wide consultation will take place with users within ONS and in the rest of the Government Statistical Service via the IDBR Management Committee, and by other regular communication.

Appropriateness of the methodology and processes

12 The review will provide information for developing a strategy for improving register quality (being taken forward by the ONS Register Strategy Group) and for determining where development money should be spent. The review will also aim to define quality measures which can be used to monitor the quality of the register in future. The review will not be developing any new analyses of the register other than those needed for evaluating and measuring the quality of the IDBR and its processes. We will review whether the IDBR is fit for the purposes for which it is used, rather evaluating whether the uses made by customers are appropriate.

13 There are many processes associated with the register. We will review some of the processes involved in updating the IDBR from external and internal sources, sample selection, and quality control (including register proving and quality surveys) to establish the effect they have on the quality of the register. Assessment of quality of such processes can be against a number of other "best practice" benchmarks such as the Eurostat manual on business registers, documentation from the series of meetings known as the International Roundtable on Business Survey Frames, recommendations from internal audits (of BRU and the Comprehensive Business Directory), Kokic and Brewer's report to ONS entitled *Operational Aspects of the IDBR*, and the published literature (notably the publications from the International Conference on Establishment Surveys (ICES) and the forthcoming ICES II). For the purposes of the review we will be taking the present structure of the register database as given, and do not intend to actively consider any alternatives.

FORMAT OF THE PROJECT AND ANTICIPATED PRODUCTS

14 A list of subprojects has been identified. These are listed below along with a priority marking (A = essential and will be reviewed, B = will be reviewed if time allows and C = definitely won't be reviewed), and the approximate division of time into the various subprojects that will be tackled. A report for each subproject will constitute the product in each case. Two additional products are proposed that do not fall neatly within the main subprojects.

15 Following the description of the subprojects is a tentative outline timetable and indication of the task leader for each of the work packages. Note that this has been produced without full consultation with the whole project team, and is intended to be indicative. There are no clear dependencies between the various strands of work. It is expected that they will each proceed in parallel for the duration of the review period. A further more detailed product list along with detailed resource plans will be produced in due course.

Subproject 1 User requirements. Priority A. 15 per cent.

16 The purpose of this subproject is to establish the requirements of users and non-users. In particular, we will establish what quality improvements users would like to see from the IDBR, and what the benefits to those users of better quality would be. For non-users, we will establish what quality improvements are necessary for them to be able to use the IDBR. Within the banner of quality improvements, we will also address access restrictions, including legal and confidentiality issues.

Subproject 2 Annual Register Inquiry (ARI). Priority A. 35 per cent.

17 The most important part of the work will be to review the ARI (which includes the quarterly register proving inquiry) as the ARI is fundamental to the maintenance of the IDBR. The ARI is the main source of updates of business structures and auxiliary information on the IDBR. As such, the ARI has a large impact on the quality of the register. We need to establish how good the ARI is, and what may be done to improve the quality of the ARI. The main issue is the delineation of units (which relates to the work of the CBU), and the identification of new local units. We will consider the most appropriate ways to collect the data about local units, exploring the possibilities for using new technology and other data sources (for example, Trade Associations) where possible, and associated costs. We will also consider whether complete censuses of businesses are required, and whether there would be a net benefit in conducting such a census.

18 We also need to determine how we might use the ARI in future as a vehicle for measuring some key aspects of register quality - coverage, business structures, industrial classification and employment. This will necessitate a thorough review of the design and operations of the ARI.

Subproject 3 Coverage - small units and matching. Priority A. 5 per cent.

19 Undercoverage arises for various reasons. Of most importance is that due to units operating below the registration thresholds for the relevant administrative sources, which although believed to be a small proportion overall, can represent a much more significant chunk in some industries (for example, construction). Overcoverage can be caused by our not being able to find a match for units identified by both administrative sources. Consequently, we exclude certain units from the register whilst a match is found. This can result in further undercoverage. A large Eurostat-funded project has just been completed which has reviewed and attempted to improve the matching process. We will carry out an objective audit of the research work and consider the impact on quality, and identify the implications of various ways of treating duplicate units.

Subproject 4 Business structures. Priority A. 5 per cent.

20 An accurate local unit structure of businesses is important for small area estimates produced from the Annual Business Inquiry and the Short-Term Employment Surveys required by DfEE and others. The review will cover the quality of auxiliary information stored at local unit level, the interaction between local unit and reporting unit classifications, and the annual data confrontation exercise which aims to ensure coherence between local unit and reporting unit classifications. We should consider whether the kind of activity unit (KAU) structures we have at present meet the requirements of the European regulations, and whether the structures meet the needs of the NAW and SE for regional sampling and analysis.

Subproject 5 Complex businesses - profiling and sampling. Priority A. 10 per cent.

21 The Complex Business Unit and the Business Structures Team (part of BRU) have been running for several years. We should review the implementation in the light of the requirements of the Population Units paper and the developing needs of survey statisticians. Of particular importance are (a) the range of enterprises that are in scope for CBU treatment, (b) the way that the IDBR is able to delineate complex businesses from other enterprises for sampling purposes and to report this information to survey users. The way that specific surveys treat complex enterprises in sampling and estimation, and the data collection methods for such units are specifically excluded from the scope of this review.

22 Within this subproject we also propose to review inquiry specific reporting units. There are many such units and they require additional maintenance and cause extra complication in sampling and estimation. In addition, the compliance cost to individual enterprises can be high. We should review in general whether such structures are necessary.

Subproject 6 Industrial classification. Priority A. 20 per cent.

23 We propose to review three areas relating to industrial classification: rules, use and quality.

24 First, we will review the implementation of the NACE classification rules on the IDBR. This will incorporate a review of the rules used to prioritise updates from different sources and a review of the quality of data from each of the sources used. The review will cover the rôles of those sources that can classify units only in part of the economy, for example PRODCOM (a regular survey collecting information on PRODUcts in the European COMmunity) updates only production industries, which alone would lead to an outflow of units from those industries. PRODCOM has a different way of classifying businesses than other sources which leads to inconsistency. Similarly, DETR can classify only construction businesses. Again, this would result in a net outflow of business from that sector, and the different perceptions of the classification of businesses could lead to an inconsistency of treatment between surveys

25 The review will also cover the use of classifications in general by surveys, especially in areas where quality is poor, such as the miscellaneous categories, and the use of classifications at the finest level of detail. We will also consider whether the rules and processes involved in the maintenance of current and frozen fields which have been in place for several years remain appropriate (that is, whether they improve the quality of statistical outputs and improve the efficiency of statistical processes).

26 The third area for this subproject relates to quality. Work is currently being undertaken in BRU based on the Register Quality Survey and recent ARIs to evaluate the quality of classifications and the sensitivity of survey results to misclassification. We will build on this as appropriate.

27 Under the banner of quality, we will also be considering the quality of industry codes received from Inland Revenue and HM C&E.

28 In the case of VAT classifications, the Register Quality Survey conducted by ONS in 1997 found that about one-third of all classifications from HM C&E did not agree with up-to-date classifications collected by ONS. For PAYE, classifications are not aligned with the UK's Standard Industrial Classification (SIC92). Inland Revenue continues to use a 2-digit Summary Trade Classification (STC) or 4-digit Trade Classification Number (TCN). An SIC92 code is imputed from the Inland Revenue code for use in sampling and estimation. The industrial classifications of over 80 per cent of units representing over a third of employment are taken directly from one of the administrative sources. Department of Enterprise, Trade and Investment Northern Ireland (DETINI) in particular have found that the poor quality of this classification affects the quality of employment statistics relating to the start-up of businesses as the only classification available for these units is from the administrative sources at registration.

29 This subproject will also consider the use of new technology to classify businesses.

Subproject 7 Development of quality measures. Priority A. 5 per cent.

30 The aim of this task is to develop and specify (rather than calculate) a range of indicators that can be used to describe and monitor the quality of the IDBR. The development of quality measures will be based on the research in the other areas of the view in addition to reference to published literature.

Additional products

Subproject 8 Audit of the implementation of the recommendations from the Kokic/Brewer review. Priority A. <5 per cent.

31 Two recent documents have presented overviews of the implementation of the recommendations from the review. We will bring these together as a single product and identify a list of actions, decisions and research that need to be undertaken in order to sign off the review.

Subproject 9 Benchmark against other European registers. Priority A. <5 per cent.

32 This product will report the quality of the IDBR against other European business registers. The analysis will be based on the most recent questionnaire of current practice in member states.

TOPICS THAT WILL NOT BE ADDRESSED BY THE REVIEW

Geographic variables. Priority B.

33 The quality and level of geographic referencing information is important in the production of small area estimates (DfEE and others). The quality of the current geographical details via the postcode will be covered in subproject 1 on the ARI. Development of alternative referencing systems is being taken forward by the ONS Geographic Referencing Strategy.

Public/private sector (re)classification. Priority B.

34 Any classification discrepancy is particularly noticeable in the Average Earnings Index where public and private sector indices are both required. At present, a dedicated ONS team is responsible for public/private sector classifications. This issue will not be addressed by the review. Issues of continuity and the methodology to deal with changes in classification will be addressed in subproject 5 on industrial classification.

Coverage - industry. Priority B.

35 In a National Accounts context, the main area where miscoverage could occur is with agriculture. This is particularly likely with agriculture-related businesses such as retailers of agricultural produce etc. There are long-standing plans to merge information from agricultural census conducted by the Ministry of Agriculture Fisheries and Food (MAFF) with the IDBR. Better integration seems likely to lead to an improvement in the quality of statistical outputs. This issue can be taken forward outside the scope of this review.

Coverage - lags. Priority C.

36 A review has already been completed on the treatment of birth and death lags on the register. An important quality measure could be the level of undercoverage due to missing births or the responsiveness of the register to changes in the patterns of birth and death lags, in particular in rapidly growing or declining industries. The MQ report based on the recent research suggests a way that undercoverage can be modelled.

Quality of inputs and burdens on suppliers

37 The appropriateness and quality of inputs from IR and HM C&E will be reviewed. The proposed detail of the work has been described in subproject 6. In addition, the rôle of other register sources, such as Companies House and Dun and Bradstreet.

38 We will consider whether any improvements to our use are possible, and if so, how these can be made, and what the impact on users will be. We will focus our efforts on those areas where users have more scope to utilise administrative data direct.

39 In considering the requirements of the ARI as an input to the IDBR, we will need to consider the costs (both to ONS and to business) in relation to any possible benefits arising from the ARI.

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