

1. *Name of database*

CIS - The Community Innovation Survey

2. *Owner of data in database*

Statistics Denmark, Ministry of Industry (Erhvervsfremme Styrelsen), EUROSTAT

3. *DRUID contact*

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4. *Brief verbal description of database (app. 100 words)*

The background for the CIS project is a set of mostly independent surveys on innovation carried out in the 1980s. The experience from these surveys resulted in an OECD manual in 1992 (OECD Proposed Guidelines for collecting and interpreting data on technological innovation - the Oslo manual) which is intended to be a basis for more coherent future surveys. Eurostat and DG-XIII developed CIS in collaboration with independent experts and the OECD resulting in the final, harmonised questionnaire in June 1992.

CIS, or a closely similar approach, is also implemented in some non-member states. This goes for Canada, USA, Norway, Finland, Austria, Australia, South Africa.

The database contains a large variety of variables on innovation in 1990-92 in app. 40.000 EU- (+Norway) firms. The information collected in CIS is perhaps a bit biased towards product innovation, but some parts of the questionnaire include process innovation as well. In addition, it asks a set of questions on co-operation, use and exchange of information and barriers to innovation. In the annex is a list of the groups of variables in the questionnaire.

The questionnaire is aimed at enterprises within manufacturing and is generally sent to a stratified sample of enterprises with relatively low cut-off points. CIS is implemented for the first time in the autumn 1993. Use of the data for purposes of comparing across countries is still restricted to some of the countries due to differences in sample, questions and

implementation methods in the member states.¹

Implementation of CIS in Denmark

The survey in Denmark was implemented by Statistics Denmark and co-financed by the Government of Business Promotion. The questionnaire was sent to 1313 firms of which 674 responded. The sample was selected by stratified random sampling. All firms in the frame with more than 199 employees are in the sample. The respondents were either general manager, chief accountant or technology/R&D manager. Two reminders were sent and the total response rate was 51%. This rate differed according to size of firms. Thus, app. 63% of firms with 200 and more employees responded but only 48% in small firms. Non-response analysis was performed which showed that non-responding firms were approximately corresponding to responding firms. This non-response analysis had a response rate of 84%.

Table 1: Manufacturing firms in frame, sample, responding, distributed on size groups.

Employees	Frame	Sample	Responding
20 to 49	1786	385	176
50 to 99	626	320	154
100 to 199	368	298	149
200 and up	291	311	195
Total	3071	1314	674

Raising factors have been calculated taking into account both the distribution of answers on size groups and industries and the non-response analysis.

5. *Accessible on the internet? (no/yes (state URL))*

No. Access to these data is restricted because it is firm level data.

6. *Update planned?*

A second round of CIS was carried out in 1997-98. Results from this survey is expected to be available before the end of 1998.

¹ See the evaluation reports by Archibugi et.al. (1994) for an in-depth assessment of the data quality as well as the implementation in each member state.

7. References to publications where the database has been used

The Danish CIS data has been analysed in a project financed by The Government of Business Promotion. These analyses are published in two books by Jesper Lindgaard Christensen and Arne Kristensen in a series of books by The Agency of Business Promotion². A third book was published in another series of publications in the beginning of 1997.

Christensen, Jesper L. and Kristensen, Arne (1997) : "Et historisk og internationalt perspektiv på innovation i dansk industri", Erhvervsfremme Styrelsen.

Christensen, Jesper L. and Kristensen, Arne (1995) : "Innovation og erhvervsudvikling" ("Innovation and industrial development"), Erhvervsfremme Styrelsen (The Ministry of Industry).

Christensen, Jesper L. and Kristensen, Arne (1994) : "Innovation i danske industrivirksomheder" ("Innovation in Danish Industry"), Erhvervsfremme Styrelsen (The Ministry of Industry).

² "Innovation i danske industrivirksomheder", dec. 1994 and "Innovation og Erhvervsudvikling", maj 1995.