#### Members of the Peer review team:

Jan Matějček, Czech Statistical Office, chair Inger Öhman, Eurostat Paloma Seoane Spiegelberg, Instituto Nacional de Estadistica

# Peer review on the implementation of the European Statistics Code of Practice

# **Country visited: Denmark**

**Date:** 29 – 31 May 2007

# 26 September 2007

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# **1. EXECUTIVE SUMMARY**

**Main findings** (including an assessment of the co-ordination role of the National Statistical Institute):

Statistics Denmark is an independent institution within the Danish Ministry of Economic- and Business Affairs. Its functions are regulated in the Act on Statistics Denmark (No 599 of 2000). The Act prescribes that Statistics Denmark is an independent institution governed by a Board consisting of the National Statistician (Director General) as chairman and 6 other members with insight into social and economic conditions.

The Peer Review team has acquired a good impression of the excellent professional work of Statistics Denmark. This NSI seems to be one of Europe's leaders in efficiency and user friendliness. The performance is based on very good management, strong team spirit, exceptionally broad use of administrative data sources, modern statistical methods and high technology.

All discussions with both internal and external stakeholders were constructive and frank with a strong effort to analyse weaknesses and threats and to find improvement actions. The office engages in a continuous dialogue with other producers of state statistics, all types of user groups, respondents, statistical academic representatives and media.

The co-ordination role of Statistics Denmark is evident but not sufficiently distinctive. Statistics Denmark itself is responsible for the vast majority of European Statistics produced in Denmark. There are good links and division of work with the National Central Bank both in legislation and practice. Statistics Denmark's role to co-ordinate with the other institutions involved in the state statistical service seems to be only passive: the other institutions are obliged only to inform Statistics Denmark about their statistical activities and provide them with data and there is no legal mandate for Statistics Denmark to act as a co-ordinator.

Statistics Denmark is fully compliant with the majority of indicators in Principles 1-6 and 15 of the Code of Practice. In all other cases it is either largely compliant or, rarely, partly compliant. None of the principles or indicators was assessed as "not met". In all cases of "largely or partly met" improvement actions were proposed by the peer review team or the management of Statistics Denmark and this list of improvements was mutually approved.

The main proposed improvements are directed at a better legislative definition of professional independence, analyses of the adequacy of staff and financial resources, quality monitoring and documentation and further development of the metainformation system.

# 2. INTRODUCTION

With the adoption of the European Statistics Code of Practice, the Statistical Programme Committee (SPC) committed itself to adhering to its principles. At its meeting on 25 May 2005, the SPC endorsed a stepwise monitoring procedure for the implementation of the Code over three years during which countries' self-assessments should be combined with elements of peer review, benchmarking and monitoring on the basis of the explanatory indicators added to each principle of the Code.

During December 2005 / January 2006 the National Statistical Institutes and Eurostat have completed their self-assessments, the results have been summarised by Eurostat in a report submitted to the Economic and Financial Committee in May 2006 which has been published on the Eurostat website.

As a next step towards implementation of the Code, the European Statistical System is organising peer reviews to complement the self-assessments starting with 2006. They are considered a vital element for the implementation of the Code of Practice given their capacity to encourage the sharing of best practice and to contribute to transparency in what is, essentially, a self-regulatory approach. This approach is designed to enhance accountability and to help building trust in the integrity of the European Statistical System, its processes and outputs.

The Code of Practice peer reviews follow a common methodology focusing on the institutional environment and dissemination part of the Code comprising the following principles: (1) Professional independence, (2) Mandate for data collection, (3) Adequacy of resources, (4) Quality commitment, (5) Statistical confidentiality, (6) Impartiality and Objectivity and (15) Accessibility and Clarity. In principle, the peer review is limited to the National Statistical Institute and its co-ordination role within a dispersed national statistical system. A short document provided by the National Statistical Institute which summarises key aspects of the functioning of the national statistical system is published together with this report.

During a three days visit on-site and on the basis of information material provided by the National Statistical Institute and Eurostat prior to the review, peer reviews yield a report assessing compliance with the Code of Practice at indicator level and by principle following a four point assessment scale: Fully met, largely met, partly met, and not met. The report includes a refined set of improvement actions covering all principles of the Code which are being used to feed the monitoring process of the implementation of the Code in the European Statistical System.

While the peer reviewers will undertake to base their assessment to the extent possible on factual information, it is worth noting some of the limitations of the peer review process. For example, peer reviewers are dependent upon the resources made available to them (though experienced reviewers can be expected to identify where appropriate information is not forthcoming). In addition these reviews are conducted on a strategic, organisation-wide and system wide basis. Accordingly it is not straightforward to ascertain that certain practices or behaviours or systems operate in all statistical domains.

# 3. FINDINGS PER PRINCIPLE

## Principle 1: Professional Independence

The professional independence of statistical authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, ensures the credibility of European Statistics.

Overall assessment:

Statistics Denmark is in practice a professional, fully independent institution. This has been unequivocally confirmed by all stakeholders, everyday results, international prestige and many internal documented rules. Support for this principle through legislation is not so convincing, as the role of the Minister for Economic and Business Affairs is too strong.

Indicator 1.1: The independence of the statistical authority from political and other external interference in producing and disseminating official statistics is specified in law.

Assessment:

#### Largely met

Comments:

The independence is underlined in the Act on Statistics Denmark (Section 2 of the Act on Statistics Denmark in combination with Section 1 stipulates the independence of the institution in collecting, processing and publishing of statistical information) and is practised in reality. According to the Act the management of Statistics Denmark is divided among the Board, the Minister of Economic and Business Affairs and the National Statistician (Director General). The National Statistician is appointed by the Queen on recommendation of the same Minister and the other members of the Board are appointed directly by this Minister. There are no signs that this system has been abused so far but such a concentration of power in one pair of hands does not look like the best solution.

Indicator 1.2: The head of the statistical authority has sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies. He/She should be of the highest professional calibre.

Assessment:

#### **Fully met**

Comments:

The present National Statistician is indeed of the highest professional calibre. He and all earlier National Statisticians were appointed on the basis of an open job advertisement (it is again a traditional practice not included in the Act), where the applicant's qualifications form the basis for selection. The position of the National Statistician is according to the law a position of a permanent secretary. Indicator 1.3: The head of the statistical authority and, where appropriate, the heads of its statistical bodies have responsibility for ensuring that European Statistics are produced and disseminated in an independent manner.

Assessment:

#### **Fully met**

Comments:

Act on Statistics Denmark states that *the National Statistician* is the professional and administrative director of Statistics Denmark (Section 4 of the Act). This implies the responsibility for conducting the production and dissemination of statistics.

Indicator 1.4: The head of the statistical authority and, where appropriate, the heads of its statistical bodies have the sole responsibility for deciding on statistical methods, standards and procedures, and on the content and timing of statistical releases.

Assessment:

#### **Fully met**

Comments:

The choice of appropriate statistical methods, standards and procedures, together with any decisions on the content and timing of statistical releases, are fully on the National Statistician and the Board.

Indicator 1.5: The statistical work programmes are published and periodic reports describe progress made.

Assessment:

#### **Fully met**

Comments:

Statistics Denmark publishes its work programme annually and also a very detailed statistical programme. Progress is reported in annual reports and in the performance contracts with the ministry.

Indicator 1.6: Statistical releases are clearly distinguished and issued separately from political/policy statements.

Assessment:

#### **Fully met**

Comments:

It is the policy of Statistics Denmark not to include any political comments in their statistical releases. Press releases by Statistics Denmark are clearly labelled and not mixed with political statements. Statistics Denmark only holds a few press conferences during the year and they do not contain any political comments.

Indicator 1.7: The statistical authority, when appropriate, comments publicly on statistical issues, including criticisms and misuses of official statistics.

Assessment:

#### Fully met

Comments:

Comments on criticism, errors and misuse of the statistics are made according to the guidelines given in Statistics Denmark's Media Policy. The basic role is played by the Dissemination Department. Statistics Denmark's public interventions in case of substantial misuse or misinterpretations were confirmed by the representatives of the media.

## Principle 2: Mandate for Data Collection

Statistical authorities must have a clear legal mandate to collect information for European statistical purposes. Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for European statistical purposes at the request of statistical authorities.

Overall assessment:

The position regarding the mandate for data collection is exceptionally strong. Not only can Statistics Denmark collect statistical surveys from administrations, enterprises, households and individuals and use administrative data sources, but it has an important role in the establishment of central public registers. Statistics Denmark is a respected world leader in register-based statistics. Most countries are only now starting to use non-statistical registers, whereas Statistics Denmark has had almost 30 years of experience.

Indicator 2.1: The mandate to collect information for the production and dissemination of official statistics is specified in law.

Assessment:

**Fully met** 

Comments:

The Statistics Act provides Statistics Denmark with a very clear mandate for the collection of data. The detailed content of these data are defined in Sections 8 to 12 of the Act for different groups of respondents. It is very precise requesting specific items to be supplied by different types of businesses. The fact that the detailed specifications have been made directly in the law may be a little inflexible in cases of changing statistical demands. Indicator 2.2: The statistical authority is allowed by national legislation to use administrative records for statistical purposes.

Assessment:

#### **Fully met**

Comments:

The use of administrative records is not only allowed by national legislation but also very broadly practised. Statistics Denmark provided the first fully register-based census of population, households and housing in the world in 1981. Statistics Denmark's best practices are and should be spread to other NSIs and should also be analysed from the point of view of timeliness, quality and flexibility.

Indicator 2.3: On the basis of a legal act, the statistical authority may compel response to statistical surveys.

Assessment:

#### Largely met

Comments:

Statistics Denmark may compel response to statistical surveys from the business sector. The punishments are specified in Section 13 of the Statistics Act.

For individuals, Statistics Denmark may not compel response. Since 2001 it has been possible for private individuals also to generally opt out of participating in statistical surveys. The possibility to opt out is included in the form used when persons move from one address to another. Up to 2007, 12 per cent of the population has made use of this possibility.

#### Principle 3: Adequacy of Resources

The resources available to statistical authorities must be sufficient to meet European Statistics requirements.

Overall assessment:

Statistics Denmark considers adequacy of resources as a most important problem. Statistics Denmark has slimmed down in the past and now belongs to the smallest NSIs among comparable offices when measured by staff and finance and is subject to an annual cut of 2 % for rationalisation. The efficiency of Statistics Denmark is very high – the main reasons are broad sharing of administrative data sources and use of modern statistical methods. However, Statistics Denmark reported on several international benchmarking exercises that have shown that some consequent threats arise because of these limited resources: few development projects, higher risk of potential errors, dependence on several key persons, few international activities and limited quality management. The scope to fulfil local Danish statistical data needs is smaller because EU Statistics requirements consume the large majority of resources. Indicator 3.1: Staff, financial, and computing resources, adequate both in magnitude and in quality, are available to meet current European Statistics needs.

Assessment:

#### Partly met

Comments:

Total staff and budget per population are probably the lowest among similar developed countries. Although detailed comparisons and benchmarking are difficult, as the history and structure of NSIs are unique and data sources and methods are different, the main consequences may be serious and should be discussed with competent ministries.

Indicator 3.2: The scope, detail and cost of European Statistics are commensurate with needs.

For European level reply

Indicator 3.3: Procedures exist to assess and justify demands for new European Statistics against their cost.

For European level reply

Indicator 3.4: Procedures exist to assess the continuing need for all European Statistics, to see if any can be discontinued or curtailed to free up resources.

For European level reply

#### Principle 4: Quality commitment

All ESS members commit themselves to work and co-operate according to the principles fixed in the Quality Declaration of the European Statistical System.

Overall assessment:

Statistics Denmark reports on the quality of products according to the ESS quality components; nevertheless due to resource problems the share of output regularly monitored is very low.

Good practices are in place to monitor the quality of dissemination for all or most statistics. Nevertheless the quality of processes is not systematically monitored. The staff is well trained and further training is systematically provided. Users are, in general, satisfied with the work conducted by Statistics Denmark regarding quality. Even if there are no formally adopted overall procedures relating to quality, quality considerations are regularly dealt with.

Some key statistics are systematically reviewed.

Statistics Denmark is aware of the importance of quality and a lot of improvement actions will be implemented during the period to 2010.

Indicator 4.1 Product quality is regularly monitored according to the ESS quality components.

Assessment:

#### Partly met

Comments:

Statistics Denmark expresses quality in 8 dimensions (relevance, reliability, timeliness, punctuality, accessibility, documented, coherence and comparability).

An extensive quality assurance programme exists for the most important economic statistics but due to resource problems the share of output regularly monitored is less than 25%.

Results are analysed and the top management is informed in order to take improvement actions.

It was pointed out during the interview that variance estimates are not routinely produced and published.

Indicator 4.2 Processes are in place to monitor the quality of the collection, processing and dissemination of statistics.

Assessment:

#### Largely met

Comments:

Procedures are in place to monitor the quality of dissemination for most statistics but although there are a number of guidelines for the quality of collection and processing there is no fixed evaluation model. Assessments are not systematically applied to all statistics.

During the strategy period (Strategy 2010) some initiatives are being taken to improve the quality of collection and processing (a common electronic reporting system has been developed for business, which will be applied in managing all processes concerning sample selection, and sending out and receiving data from businesses. The efficiency of the data-editing processes will be enhanced by applying general error detection systems, and all questionnaires will be made suitable for scanning, etc).

Indicator 4.3 Processes are in place to deal with quality considerations, including trade-offs within quality, and to guide planning for existing and emerging surveys.

Assessment:

#### Largely met

Comments:

Even if there are no real procedures relating to quality, quality considerations are regularly dealt with. Pilot studies are not carried out on a systematic basis, but strategy 2010 states that new surveys or new collection methods will be tested by users.

Statistics Denmark is aware that the quality of statistics must continuously be improved and a lot of improvements have been proposed in Strategy 2010. A quality report on the implementation of objectives mentioned in the strategy for improving the statistical quality should be prepared on an annual basis from 2007 onwards.

Indicator 4.4 Quality guidelines are documented and staff are well trained. These guidelines are spelled out in writing and made known to the public.

Assessment:

#### Largely met

Comments:

The staff are well trained and further training is systematically conducted.

Junior staff are aware of the different dimensions of quality and they try to apply quality criteria in their work.

Internal documentation for some statistical production processes and products is available and improvements are set up in Strategy 2010.

A quality description is part of the dissemination policy and Statistics Denmark produces a "Declaration of Content" for all statistics available on the website.

Indicator 4.5 There is a regular and thorough review of the key statistical outputs using external experts where appropriate.

Assessment:

#### Largely met

Comments:

There is no regular or systematic review of the key statistics outputs. However some areas such as national accounts and indices are systematically reviewed.

Since 2005 Statistics Denmark has established a forum on short term indicators, comprising statistics producers for related statistical fields, in order to analyse them and to focus attention on the co-ordination of indicators.

## Principle 5: Statistical confidentiality

The privacy of data providers (households, enterprises, administrations and other respondents), the confidentiality of the information they provide and its use only for statistical purposes must be absolutely guaranteed.

Overall assessment:

Statistical confidentiality is guaranteed by law.

Members of Statistics Denmark's staff sign a contract on legal confidentiality, which also outlines commitments and criminal liability in relation to complying with confidentiality commitments. The researchers/ analysts are subject to the rules governing professional secrecy.

Breaches of statistical confidentiality are punishable. Guidelines exist for the production and dissemination processes and physical and technological provisions are being reviewed with international standards.

Strict protocols apply to external users accessing statistical microdata for research purposes. The rules governing the research and analytical environments are transparent and they are published on Statistics Denmark's website.

Indicator 5.1 Statistical confidentiality is guaranteed in law.

Assessment:

#### Fully met

Comments:

Legislation that ensures the confidentiality of statistical data (individuals and enterprises) can be found in the Act on Processing of Personal data, in the Danish Public Administration Act and in the Danish Criminal Code. These acts determine rules for the handling of information. The Danish Data Protection Agency ensures that these rules are upheld.

Statistics Denmark does not normally pass on confidential information even for statistical purposes or research use. However, there are four exceptions spelled out in writing: information on businesses is collected for statistical purposes and administrative use, by a particular authority which already has the right to collect this information; Statistics Denmark is working with another organisation on the production of specific statistics; the transmission of confidential data to Eurostat as required under EU legislation and the exchange of confidential information with another statistical institute.

Indicator 5.2 Statistical authority staff sign legal confidentiality commitments on appointment.

Assessment:

#### Fully met

Comments:

Members of Statistics Denmark's staff have to sign a contract on legal confidentiality, which also outlines commitments and criminal liability in relation to complying with confidentiality commitments.

Professional secrecy is guaranteed in Danish Law (The Danish Public Administration Act).

Indicator 5.3 Substantial penalties are prescribed for any wilful breaches of statistical confidentiality.

Assessment:

#### Fully met

Comments:

Breaches of statistical confidentiality are punishable. The staff and researchers/ analysts are subject to the rules governing professional secrecy.

The agreement authorising access to datasets states the rules in case of a breach of the provisions of the agreement: the researcher in breach will be excluded from using any Statistics Denmark research schemes permanently or for a period of not less than 3 years.

According to the interviewee no breaches of statistical confidentiality are known.

Indicator 5.4 Instructions and guidelines are provided on the protection of statistical confidentiality in the production and dissemination processes. These guidelines are spelled out in writing and made known to the public.

Assessment:

#### **Fully met**

Comments:

Instructions and guidelines exist for the protection of statistical confidentiality in the production and dissemination processes. These instructions are well-known by users, data providers and staff who have a clear view about the amount of risk (disclosure) they can accept in making statistics available.

Different initiatives are being taken to improve the knowledge of existing rules (by drawing attention the rules on the Statistics Denmark intranet).

A special unit (The Research Service Unit) was established in 2001 with a specific duty to improve researchers' access to microdata. This Unit checks the results from the researchers' computer work and if they find printouts with too detailed data they contact the researchers in order to agree on details of the level of output.

According to the interviews no breaches of statistical confidentiality are known.

# Indicator 5.5 Physical and technological provisions are in place to protect the security and integrity of statistical databases

Assessment:

#### **Fully met**

Comments:

Statistics Denmark places great importance on data security.

The existing IT security manual is currently being revised in accordance with the standards similar to ISO27001 (IT-management) and ISO 17799 (IT-technique).

Statistics Denmark makes use of common systems and mechanisms such as firewalls, restricted access, logging of access attempts and antivirus programs to ensure security. A recent external audit on risks has shown that these systems and mechanisms are adequate to protect statistical confidentiality.

Research and analytical environments authorized by the National Statistician can have access to microdata via the internet. However all data processing is done in Statistics Denmark and data cannot be transferred from Statistics Denmark to the researcher's computer. All results from the researcher's computer are stored in a special file and printouts are sent to the researchers by e-mail. To ensure that no user/researcher misuses his access rights every day a sample of e-mails is checked by the Research Service Unit. However, all sent e-mails are skimmed through for abnormal size, suspicious filenames, etc.

Indicator 5.6 Strict protocols apply to external users accessing statistical microdata for research purposes.

Assessment:

#### **Fully met**

Comments:

The Danish Act of Processing Personal Data that implements Directive 95/46/EC covers all types of processing of personal data, including registration, storage, disclosure, merging, changes, deletion, etc. This act introduced a duty of notification to the Danish Data Protection Agency.

Access to confidential microdata may be granted for purposes of research and analysis. Only the research and analytical environments authorized by the National Statistician may have access via the internet.

The Board of Statistics Denmark has laid down the rules governing the research and analytical environments that can be authorized and the microdata to which they can obtain access. These rules are transparent and they are published on Statistics Denmark's website.

Researchers and analysts who are not part of a research and analytical environment, and foreign researchers, may, subject to specific conditions, gain access to confidential microdata by working at the premises of Statistics Denmark.

According to the interviews, users evaluate positively the availability of microdata and they agree with the confidentiality rules applied by Statistics Denmark.

#### Principle 6: Impartiality and objectivity.

Statistical authorities must produce and disseminate European Statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

Overall assessment:

Statistics Denmark has a high reputation for its impartiality and objectivity. Their good performance in this respect is evident from the user survey and other documentation provided and was also recognized by all persons interviewed during the visit.

The dissemination policy treats everybody equally. Comments made to the statistics included in publications are objective.

Indicator 6.1: Statistics are compiled on an objective basis determined by statistical considerations.

Assessment:

#### **Fully met**

Comments:

All documentation shows that high attention is given at all levels in the organisation to issues relating to sound statistical methods. The management communicates clearly that methods and quality in statistics are key priorities. Methodological handbooks and quality projects show that statistical considerations guide the work.

Indicator 6.2: Choices of sources and statistical techniques are informed by statistical considerations.

Assessment:

#### Largely met

Comments:

As stated under indicator 6.1, sound statistical methods guide all statistical production. Statistics Denmark depends highly on administrative data sources. These sources have a very high data quality and the statistics from these sources are considered very reliable. There are supplementary surveys for aspects without coverage of administrative sources.

However, there is a risk – due to the restrictions in making separate statistical surveys - that the statistics will miss important aspects and thus lack certain relevance or that the ideal statistical solution cannot always be chosen.

Indicator 6.3: Errors discovered in published statistics are corrected at the earliest possible date and publicised.

Assessment:

#### **Fully met**

Comments:

The management has set out clear rules for actions to be taken if an error is identified. They are classified according to how severe they are: minor, small and serious. Different actions are to be put in place depending on the grouping. The rules in place mean that all serious errors are corrected and communicated immediately to the users. Also erroneous interpretation of the statistical results is commented upon.

The policy is clearly communicated to staff. It is encouraged to take action when errors occur.

The staff participating in the interviews clearly stated their full understanding of the actions to be taken when errors occur.

Indicator 6.4: Information on the methods and procedures used by the statistical authority are publicly available.

Assessment:

Largely met

Comments:

Methods for the data collection are described for most products. Metadata is available on the website and follows a standardised structure. However, the information is not yet fully complete.

In the user survey there was quite a high percentage of users (26 percent), which found it difficult to access information on sources, concepts, classifications and statistical practice. In particular the researchers found that the information provided was not detailed enough for a thorough understanding of the statistics. This weakness of

the metadata was confirmed in some of the interviews. However, it was also stated that the staff in Statistics Denmark was always very helpful in providing additional metainformation.

Indicator 6.5: Statistical release dates and times are pre -announced.

Assessment:

#### Fully met

Comments:

There is a release calendar with dates and times for releases which gives the timetable three months in advance. Changes are announced. The release calendar is available on the website of Statistics Denmark.

All users confirmed the good functioning of the release calendar and that changes occur very seldom.

Indicator 6.6: All users have equal access to statistical releases at the same time and any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements should be revised so as to ensure impartiality.

Assessment:

#### **Fully met**

Comments:

There is no pre-release of statistics to any user. Not even ministers are notified in advance. In exceptional cases, the National Statistician retains the right to decide that a certain publication may be released before its official publication time. This possibility has not been used in recent years.

Indicator 6.7: Statistical releases and statements made in Press Conferences are objective and non-partisan.

Assessment:

#### **Fully met**

Comments:

Statistics Denmark has very high standards for its objectivity in all dissemination. Staff are well trained in how to make good press-releases. There is a policy document addressed to all staff about basic principles and procedures in relation to the press.

Users confirmed in the interviews that press releases are objective and non-partisan.

#### Principle 15: Accessibility and clarity

European Statistics should be presented in a clear and understandable form, disseminated in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

Overall assessment:

Statistics Denmark's website is very user friendly. It contains all data produced by Statistics Denmark in the form of a database, (except the services tasks - see below), and all its publications and reasonably good meta-information. The database is free of charge. Publications are to be paid for both for paper publications and usually also if ordered in electronic form.

The website is also partly available in English.

Indicator 15.1: Statistics are presented in a form that facilitates proper interpretation and meaningful comparisons.

Assessment:

#### **Fully met**

Comments:

97 percent of the users think that statistics are presented in an easy-to-understand way, which is a high mark. The user-friendly presentation was confirmed in the interviews.

Indicator 15.2: Dissemination services use modern information and communication technology and, if appropriate, traditional hard copy.

Assessment:

#### **Fully met**

Comments:

Statistics Denmark's website is easy to use and to navigate. 92 % of the users were satisfied with the site in the user survey. Paper copies will become more and more limited, and replaced by electronic "publications". Paper copies and electronic copies can be ordered on-line.

*Indicator 15.3: Custom-designed analyses are provided when feasible and are made public.* 

Assessment:

#### Largely met

Comments:

Custom-designed analyses, called "service tasks", are made against payment. The Strategy document up to 2010 sets out a goal for an increase of income from service tasks of 20%. Custom-designed analyses are thus encouraged. The existence of this service is publicised on the website, including the pricing policy.

In most cases, the specific tabulations and analyses made against payment are not disseminated by Statistics Denmark because normally the customer will disseminate the results. However, the service contracts allow Statistics Denmark to publish the results – a clause that can be used if the user chooses not to publish the results. The clause is seldom used.

In cases where Statistics Denmark is doing special tabulations within its own budget, the results are disseminated.

Indicator 15.4: Access to microdata can be allowed for research purposes. This access is subject to strict protocols.

Assessment:

#### **Fully met**

Comments:

Researchers can access anonymised microdata for research purposes. There are rules and procedures in place for this access. All users we met in the interviews recognized the good functioning of the access procedures.

# Indicator 15.5: Metadata are documented according to standardised metadata systems.

Assessment:

# Largely met

Comments:

A standardised metadata system has been developed. It is almost completely implemented and made available to users through the Web site. However, some users in the user survey consider the meta information insufficient. Also in the interviews some weaknesses of the metadata were mentioned. Problems encountered with the metadata are for example the definitions of terms, information about quality and information about breaks in time series. Statistics Denmark has identified the weaknesses and has set out improvement actions in its document Strategy 2010, starting with improvements in the "Declarations of content" to be made by the end of 2007, followed by development of a general documentation system.

Indicator 15.6: Users are kept informed on the methodology of statistical processes and the quality of statistical outputs with respect to the ESS quality criteria.

Assessment:

#### Largely met

Comments:

The metadata gives relevant information on the methodology used for the processes. ESS quality criteria are used. The information is however insufficient for some users (see indicators 6.4. and 15.5.)

# 4. CO-ORDINATION ROLE OF THE NATIONAL STATISTICAL INSTITUTE

In accordance with section 1 of the Act on Statistics Denmark, Statistics Denmark is established as the central authority for Danish statistics. This implies that most statistics on social and economic trends in Danish society are produced by Statistics Demark. Statistics Denmark covers the large majority of the statistics defined in the Eurostat Statistical programme. However, there are some general statistics on economic and social trends, which in accordance with an agreement, due to other legislation, for historical reasons or as the result of Statistics Denmark's resource situation are carried out by the ministries and by the Danish Central Bank. They are

- Ministry of Employment
- Ministry of Interior and Health
- Ministry of Refugee, Immigration and Integration Affairs
- Ministry of Food, Agriculture and Fisheries
- Ministry of Science, Technology and Innovation
- Ministry of Economic and Business Affairs
- Ministry of Environment
- National Central Bank

There is a link on the Statistics Denmark website to other producers of statistics in Denmark. However, the links give addresses to the main site of the producer. It is not easy for users to access statistics from these sites.

The Act of Statistics Denmark attributes Statistics Denmark a certain role in coordinating the official statistics:

"If the collection and processing of statistical information is being contemplated by a public authority or institution, Statistics Denmark shall be informed with a view to negotiation on co-ordination (Section 1, subsection 3)"

The peer review team's conclusion is that the co-ordination role given to Statistics Denmark is quite weak. Nevertheless, very efficient co-operation has been established between Statistics Denmark and the Danish Central Bank, with clear division of responsibilities and at the same time maintaining a cooperative spirit, ensuring coherent output to users. In other areas, the co-operation is less successful and would probably benefit from a stronger co-ordination mandate for Statistics Denmark.

A first step for Statistics Denmark could be to establish common access for users to official statistics through co-ordination of the websites.

# 5. GOOD PRACTICES TO BE HIGHLIGHTED

#### Use of administrative data

Register based statistics are very advanced in Denmark. The first complete register based population and housing census was made in 1981, enabled by the Central Register of Buildings and Dwellings from 1977. The Act on the Central Business Register dates from 1976. The register based statistics has since then developed considerably. The development has been facilitated by the Act for Statistics Denmark obliging public authorities and institutions to submit on request the information they possess to Statistics Denmark.

During the interviews with users and producers, the high quality of register based statistics was widely recognized.

The use of administrative data has developed in the Nordic countries along similar lines. This development has been facilitated by a close Nordic co-operation, for example by organising joint seminars. In the recent seminar on register based statistics in May 2007, also other countries were invited, thus extending the exchange of experiences.

A joint Nordic paper "Register-based statistics in the Nordic countries – Review of best practices with focus on population and social statistics" will be published by UNECE in the near future.

#### Measurement of response burden for business statistics

Statistics Denmark measures annually the burden on businesses from statistics, according to a standardized model. The measurement is part of a total measurement on the administrative burden on businesses in Denmark.

The experiences gained in Denmark have contributed to the method that will be used all over Europe as part of the EU Action Plan on reduction of the administrative burden.

The administrative burden on businesses emanating from statistics is very low in Denmark. In 2005, it was just 0.5 percent of the total administrative burden. The extensive use of data from administrative sources is the reason for this low percentage.

Statistics Denmark makes an annual report on response burden, which includes the initiatives taken to limit the burden.

#### Micro data policy

Statistics Denmark is a pioneer in finding solutions to give better service to researchers' who need access to microdata for statistical purposes. In 2001 The Research Service Unit was created with the special duty to improve researchers' access to microdata.

Since 2001 researchers can process microdata sets from their own PC, connected via Internet to a server at Statistics Denmark. All data processing is done in Statistics Denmark and data cannot be transferred to the researcher's computer. The researchers can order the results to be promptly transferred to him via e-mail. E-mails are checked by the Research Service Unit to ensure that no user/researcher is misusing their access rights.

The access via internet is only granted to researcher and analytical environments authorized by the National Statistician. The rules governing the researcher and analytical environments than can be authorized as well as the microdata to which they can get access are accessible from Statistics Denmark's website.

The researchers/analysts are subject to the rules governing professional secrecy and breach of the duty of non-disclosure is punishable.

Confidentiality is also protected by the agreement signed between SD and researchers where it is mentioned researchers will be not able to use the researcher schemes of Statistics Denmark for a period of not less than 3 years or permanently, if they breach the confidentiality.

#### User-friendly website

Statbank Denmark (<u>www.statbank.dk</u>) is a very user-friendly data bank. Information on how to proceed to get information, contact persons for each subject and declaration of contents (metadata) are included on the website. It is easy to extract tables (graphics or maps), and numbers can be downloaded and saved in spreadsheets and other formats (PCAxis program is available). Users can get automatic updates of StatBank retrievals. SD bears in mind to international users and a complete version of StatBank Denmark is available in English.

# 6. **R**ECOMMENDATIONS OF THE PEER REVIEW TEAM

The recommendations of the peer review team relate to indicators that are not fully met.

- Although the full professional independence in practice was completely recognized by all parties, the procedures for appointing the Director General and the full Board is concentrated to one Minister. A change of the Statistical law should be considered.
- The co-ordinating role of Statistics Denmark is weak and could be strengthened in the interest of independence of official statistics and efficient use of resources.
- The possibility for individuals of opting out completely from responding to statistical surveys (which can be done when persons are changing address) leads to high level of non-response, partly unnecessary. Statistics Denmark should each year make an analysis describing the consequences of opting out from participating in statistical surveys. The effects on the quality of statistics should be clearly communicated to the responsible authority.
- Statistics Denmark can improve its systematic approach to quality work. This includes the following actions:

- A system should be put in place monitoring quality according to ESS quality components.
- A manual should be developed containing recommendations for new surveys or new data collection methods.
- A review of the key statistical outputs should be done on a regular basis.
- Proper choice of sources and statistical techniques may be hindered by two factors (i) Lack of resources and ii) the dependency of the administrative sources and pressure to avoid use of surveys directed to individuals or businesses. The dependency of administrative sources may lead to that relevant issues will not be covered by official statistics. We propose that Statistics Denmark communicates to the relevant authorities all cases where proper choice of sources and statistical techniques are hindered by such factors.
- Indicators under Impartiality and objectivity and Accessibility and clarity relating to meta-information show certain weaknesses of information available to users through the "Declaration of contents". Statistics Denmark should improve the meta-information on aspects like definition of terms, quality aspects and breaks in time series.
- The custom designed tasks ("services tasks") form an essential part of the work of Statistics Denmark and the service is available to all users under a clear pricing policy. As Statistics Denmark normally do not publish the statistical results from these tasks, although it formally has the right to do so, Statistics Denmark should make public its policy for dissemination of results from its services tasks.
- In its self-assessment before the peer review, Statistics Denmark identified a number of improvement actions, not only for the principles covered by the peer review but also for other principles. Section 7 includes a list of improvement actions proposed by the peer review team for the principles covered by the review as well as a list of improvement actions concerning principles 7-14 proposed by Statistics Denmark in its self-assessment and supported by the peer review team.

# 7. LIST OF IMPROVEMENT ACTIONS BY PRINCIPLE OF THE CODE

Principle 1: Professional Independence Improvement actions	Timetable
★ In future amendments in Statistical Law, procedures for appointing the Director General and the Board should be reconsidered to avoid political interference.	Dependent of political ini- tiative
<ul> <li>Principle 2: Mandate for Data Collection</li> <li>Improvement actions</li> <li>* Each year an analysis describing the consequences of individuals opting out from participating in statistical surveys should be prepared by Statistics Denmark. The effects on the quality of statistics should be clearly communicated to the responsible authority.</li> </ul>	<b>Timetable</b> From 2008
<ul> <li>Principle 3: Adequacy of Resources</li> <li>Improvement actions</li> <li>Statistics Denmark has fewer resources than comparable statistical offices. It has led to priority for EU requirements and specific national needs have not been fully taken into account. We recommend Statistics Denmark to make a full overview of needs that are not fulfilled and to use this overview in the dialogues about financing with the concerned ministers.</li> </ul>	<b>Timetable</b> 2008
<ul> <li>Principle 4: Quality commitment</li> <li>Improvement actions</li> <li>A system should be put in place monitoring quality according to ESS quality components.</li> </ul>	<b>Timetable</b> Dependent of available re- sources
★ A manual should be developed containing recommendations for new surveys or new data collection methods.	From 2008
$\bullet$ A review of the key statistical outputs should be done on a regular basis	From 2008
★ During the period until 2010, a number of statistics will be selected each year, where data- editing methods, seasonal adjustment and sample design will be reviewed.	On a yearly basis.
<ul> <li>New guidelines for seasonal adjustment will be prepared in 2007.</li> <li>Principle 6: Impartiality and objectivity</li> <li>Improvement actions</li> <li>Meta information for users should be improved including history of changes, definitions of terms and quality aspects.</li> </ul>	<b>Timetable</b> Dependent of resources
<ul> <li>SD should clearly communicate to the authorities if needed statistics cannot be produced due to constraints of collecting data directly from respondents or due to resource constraints.</li> <li>Principle 7: Sound Methodology</li> <li>Improvement actions</li> </ul>	2008 Timetable
★ Potential co-operation should be discussed by the Research Commit- tee, with the participation of universities and research institutions.	2008
<ul> <li>Principle 8: Appropriate Statistical Procedures</li> <li>Improvement actions</li> <li>Each year a number of statistics will be reviewed for the purpose of optimising the quality of the sample surveys by means of, e.g. registerbased information.</li> </ul>	<b>Timetable</b> On a yearly basis.

★ During the period until 2010 a range of statistics should be every year On a yearly basis. selected where the data-editing methods should be reviewed in order to improve efficiency and accuracy.

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<ul> <li>Principle 9: Non-Excessive burden on respondents</li> <li>Improvement actions</li> <li>A revised action plan on burden reduction until 2010 is to be implemented by Statistics Denmark.</li> <li>During the period until 2010, the following initiatives will be taken by Statistics Denmark to reduce the response burden: <ul> <li>Cooperation with suppliers of financial planning systems concerning electronic data interchange (EDI) solutions, so that data reports can be collected directly from the internal systems operated by the businesses.</li> <li>Development of user-friendly digital questionnaires for reporting data electronically, where the instructions are integrated in the questionnaires</li> </ul> </li> </ul>	<b>Timetable</b> On a yearly basis. Action initiated in 2007
<ul> <li>Principle 10: Cost Effectiveness</li> <li>Improvement actions</li> <li>An annual action plan should be prepared for establishing which surveys are suited for scanning.</li> </ul>	<b>Timetable</b> 2007-2008.
★ An annual action plan should be prepared for digital data reporting.	On a yearly basis.
<ul> <li>Principle 11: Relevance</li> <li>Improvement actions</li> <li>Annual user surveys of Stat Bank Denmark and the website should be conducted by Statistics Denmark</li> </ul>	<b>Timetable</b> On a yearly basis.
<ul> <li>Principle 12: Accuracy and Reliability</li> <li>Improvement actions</li> <li>Every year a range of statistics should be selected where the data- editing methods are reviewed in order to improve efficiency and accuracy. In this context, the level of detail at which the statistics can be published is decided.</li> </ul>	<b>Timetable</b> On a yearly basis.
<ul> <li>Principle 13: Timeliness and Punctuality</li> <li>Improvement actions</li> <li>★ During the period until 2010 the share of published statistics observing the maximum publication times should be gradually increased to 95 pct. The following special goals should be set for short-term indicators: The goal must for monthly statistics be observed 100 pct., while for quarterly statistics it must be increased to 95 pct.</li> </ul>	<b>Timetable</b> On a yearly basis.
★ Every year the average publication time for monthly statistics must not exceed 1 month (30.5 days). For quarterly statistics it must not ex- ceed 2 months (61 days) and for annual statistics not more than 7 months (214 days)	
★ During the period until 2010 the share of statistics published punctu- ally should be gradually increased to 90 pct. However, the punctuality must be increased to 95 pct. for short-term indicators.	
<ul> <li>At least 91.0 pct. of the dates of publication announced in advance must be observed in 2007.</li> <li>Principle 15: Accessibility and clarity</li> <li>Improvement actions</li> <li>Statistics Denmark should make public how it treats outputs from services tasks: what it publishes, what it does not publish.</li> </ul>	<b>Timetable</b> 2007

★ The content of StatBank Denmark should be extended, implying that 2008 all current statistics in the statistical programme can be extracted from

the data bank not later than the first quarter of 2008 – and, as a general rule, at a far more detailed level than other published data. Round-the– clock access to StatBank Denmark all year should be achieved.

★ A general documentation system at detailed level will be developed, From 2008. which can be used for all statistical systems. The system should be first established for the entire area of social statistics.

# 8. ANNEX A: PROGRAMME OF THE VISIT

# **Programme of the Peer Review at Statistics Denmark**

# Tuesday 29 May - Discussion with internal and external stakeholders

$09^{00}$ - $09^{15}$	Welcome and introduction of programme, organisational matters			
$09^{15}$ - $10^{30}$	Principles 1, 2, 3, 5, 6			
10 <sup>30</sup> -11 <sup>15</sup>	Principle 15 (+ 1, 2, 3, 5, 6, if possible)			
$11^{15}$ - $12^{30}$	Principles 1-6 + 15			
$12^{30}$ -13 <sup>30</sup>	Lunch			
13 <sup>30</sup> -14 <sup>30</sup>	Principle 4			
$14^{30}$ -15 <sup>00</sup>	Transportation to the Ministry of Economic and Business Affairs			
$15^{00}$ - $16^{30}$	Principles1-6, 15			
16 <sup>30</sup> -16 <sup>45</sup>	5 minutes walk to the Ministry of Finance			
16 <sup>45</sup> -17 <sup>45</sup>	Meeting with main users (Ministries, regional offices)			
19 <sup>00</sup>	Dinner hosted by Jan Plovsing, National Statistician			
Wednesday 30 May - Discussions with external stakeholders				
09 <sup>00</sup> -10 <sup>00</sup>	Principles 1-6, 15 - interview with a group of Statistics Denmark junior employees (2-5 years of experience)			
$10^{00}$ -11 $^{00}$	Meeting with the National Central Bank			
$11^{00}$ - $12^{00}$	Meeting with the National Board of Health			
12 <sup>00</sup> -13 <sup>00</sup>	Lunch			
13 <sup>00</sup> -13 <sup>45</sup>	Meeting with the former Research Director of the Rockwool Founda- tion			

- 13<sup>45</sup>-14<sup>30</sup> Meeting with the Research Director of the Danish National Institute of Social Research
- 14<sup>30</sup>-15<sup>30</sup> Meeting with the Confederation of Danish Industries
- $15^{30}$ - $17^{00}$  Meeting with the news media

## Thursday 31 May - Conclusions

$10^{00}$ -12 <sup>30</sup>	Meeting with management to sum up and detailed review of list of im- provement actions for all principles
$12^{30}$	Lunch

# 9. ANNEX B: LIST OF THE PARTICIPANTS

# Internal stakeholders

# **Statistics Denmark**

- Jan Plovsing, National Statistician
- Kirsten Wismer, Director for Social Statistics
- Karsten Stetkær, Director for Business Statistics
- Bent Thage, Director for Economic Statistics
- Karin Ravn, Director for User Services
- Kim Voldby Pedersen, Chief International Officer
- Leon Østergaard, Head of Division for the Dissemination Centre
- Finn Spieker, Head of Division for Databases
- Peter Linde, Head of Division for Methods
- Sven Egmose, Head of Division for Business Data Collection
- Maria Boye, Head of Section, Labour Market
- Thomas Danielewitz, Head of Section, Government Finances
- Stine Fangel, Chief Advisor, Methods
- Gitte Nielsen, Head of Section, Service Sector
- Rune Holm Stefansson, Head of Section, Dissemination Centre
- Thomas Jungløw Thessen, Chief Advisor, Service Sector
- Betina Tradsborg, Head of Section, Administration

# The Board of Statistics Denmark

- Kjeld Møller Pedersen, Member of the Board of Statistics Denmark

# External stakeholders

# **Department of the Ministry of Economic and Business Affairs**

- Ulrik Nødgaard, Deputy permanent secretary

## Ministry of Finance (Main users: Ministries, regional offices)

- Finn Jensen, Head of Division

## National Central Bank (Main users/other national data producers)

- Bent Christiansen, Head of Division, Statistical Department
- Niels Lynggård Hansen, Head of Division, Economic Department

## National Board of Health (Main users/other national data producers)

- Morten Hjulsager, Head of Division,
- Monika Madsen, Head of Section

#### **Rockwool Foundation** (Representatives from University or other)

- Gunnar Viby Mogensen, former Research Director

# **Danish National Institute of Social Research** (Representatives from University or other)

- Niels Ploug, Research Director

# **Confederations of Danish Industries** (Representatives of respondents and users)

- Richard B. Larsen, Deputy Director
- Klaus Rasmussen, Chief Economist

#### **Børsen** (Representative from the news media)

- Thomas Bernt Henriksen, Economics Editor

#### **Ritzau** (Representative from the news media)

- Henrik Røjgaard, Journalist