מדינת ישראל State of Israel



לשכת הסטטיסטיקן הלאומי Office of the National Statistician

# Response of Israel to the Self-assessment questionnaire on the implementation of the OECD Council Recommendation on Good Statistical Practice

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# **General Background**

## Legislative foundations for the Responsibilities of members of the Israeli Statistical System

The Central Bureau of Statistics of Israel (ICBS) is an independent unit within the Prime Minister's Office. Its legal authority, its responsibilities, and its central role in the national statistical system are established by the Statistics Ordinance (New Version), 5732 - 1972¹, which also establishes the responsibilities of the Public Council for Statistics (PCS). The Ordinance empowers the ICBS to collect and publish national statistics, to cooperate with state institutions in collecting and publishing statistics, and to prepare general plans for the statistical activities of state institutions together with the Public Council for Statistics. The Ordinance specifies the areas in which the ICBS is mandated to collect and publish statistics. These cover all major areas, including population, migration, health, education, housing and construction, prices, employment, wages and income, national and international trade, national accounts, environmental quality, transportation and communication, industry, commerce and agriculture, government and local government, and others. The Ordinance also assures the ICBS status as an apolitical, independent and professional body.

The PCS is instituted as an advisory and consultative body on national statistics both to the ICBS itself and to the Government in general. It is appointed by the Prime Minister, and its membership includes representatives of government agencies, institutions of higher education and research and other public bodies, as well as independent experts on society and the economy. Its duties are specified as: advising the Prime Minister and government on statistical activities conducted by state institutions, and the National Statistician on the activities of the ICBS; receiving the plans for undertaking statistical activities produced by state institutions and to advise them regarding coordination between these plans; and proposing measures to make statistical activities by state institutions more efficient.

As well as defining the tasks of the ICBS and the PCS, the Ordinance establishes the responsibilities of the National Statistician. In addition to serving as the Director of the ICBS, he is required "to guide the statistical system in governmental institutions" (article 2c), and to exercise his responsibilities according to scientific principles. In support of this role, the Ordinance states that governmental institutions must consult the National Statistician before conducting statistical surveys.

The Ordinance also establishes the powers of the Prime Minister to declare a census, the obligation of the public, businesses and government agencies to provide information to the CBS and the obligation of the CBS to safeguard the confidentiality of the information obtained.

#### **Current practice in the ISS**

The ICBS is the central agency in the Israeli statistical system (ISS). It produces the majority of the central statistical products concerning Israel's population and economy, often in cooperation with

<sup>&</sup>lt;sup>1</sup> <u>The Ordinance</u> has been revised by the Knesset in 1978, 2008, 2010 and 2017. The latest revision included changing the designation of the National Statistician from his previous title, Government Statistician.

other government agencies. Although these statistics are produced by the ICBS itself, these agencies supply administrative records, funding, and may be partners in planning production of national statistics. The list of subjects specified in the Statistics Ordinance does not exhaust the areas in which the ICBS publishes statistics, which include in addition central areas such as statistics of personal wellbeing and life satisfaction, criminal activity and victimization, and tourism.

In several areas, some of which the ICBS is required to address by the Ordinance, key official statistics are collected and published by other national authorities as well (ONAs). These include banking and financial statistics which are collected and published by the Bank of Israel, health statistics and health infrastructure and health services utilization statistics by the Ministry of Health, welfare statistics by the National Insurance Institute, transportation statistics published by the Ministry of Transport and bodies reporting to it, environmental statistics published by the Ministry of Environmental Protection, crime statistics published by the Israel Police, education statistics published by the Ministry of Education, and budget statistics published by the Finance Ministry. Thus a wide variety of government Ministries and agencies produce official statistics and as such are part of the ISS. At present there is no comprehensive inventory of the number of products and their subject matter produced by the ICBS and by ONAs. Developing a register of such products and monitoring it is one of the objectives of current efforts by the ICBS to improve coordination of the ISS, which will be described below.

The ICBS furthers its central role in the ISS through coordinating the transfer of statistics to international organisations and its strong relationships and active participation in their activities. These organizations include the International Monetary Fund (IMF), United Nations and its subsidiary bodies such as the UNESCO Institute for Statistics (UIS) and UN-ECE Conference of European Statisticians, the International Labour Organisation (ILO), the Organisation for Economic Co-operation and Development (OECD) and Eurostat.

The ICBS's commitment to the central tenets of independence, objectivity, professional rigour, responsiveness to public needs and protection of privacy, transparency and leadership of the ISS are presented in its <u>Vision Statement</u>.

## **Enhancing Coordination in the ISS**

Israeli legislation envisions a coherent ISS in which the National Statistician, the ICBS the Public Council for Statistics, and other National Authorities are allocated leading and complementary roles and responsibilities. However, in practice many of these functions have been exercised only partially. The legislation specifies the responsibility of the National Statistician for "guiding" the ISS and requires state agencies to consult him, but it does not provide for formal mechanisms through which this should be done. Although their professional competence and leading position is highly respected, currently the central roles of the National Statistician, the ICBS and the PCS in

coordinating the ISS and assuring the quality of official statistics are not formally acknowledged by other state institutions, and existing mechanisms of coordination and consultation are weak<sup>2</sup>.

Over the last few years the ICBS correcting and improving the status of coordination and quality assurance has become a central policy objective of the ICBS, which is being implemented through a number of channels and means:

- 1. The ICBS has signed bilateral MOUs with Bank of Israel and National Insurance Institute to regulate cooperation in statistical matters.
- 2. The ICBS has set up an internal steering committee to promote coordination activities and quality assurance according to international standards and recommendations. This steering committee is currently a partner in an EU-sponsored Twinning project with Statistics Denmark, one of the goals of which is the creation of a common framework for the actors of the NSS in Israel for assessing and reporting the quality of official statistics. Among the achievements of this project so far has been the translation into Hebrew of quality standards such as the European Code of Practice for Official Statistics (COP), the European Quality Assurance Framework (QAF), and the Generic Statistical Business Process Model (GSBPM). Staff members have taken part in international courses in quality assurance methods, and a number of internal projects have been launched.
- 3. Government agencies have been asked to appoint a liaison person to begin carrying out the functions of mapping and coordinating the statistical system. A meeting of all liaison representatives was held in November 2017 one of the results of which will be the establishment of a task force for formulating quality standards for the system adapted to conditions in Israel and mechanisms to coordinate it. A meeting formally launching the ISS is planned for mid-2018, at which the task force's recommendations will be presented for adoption.

<sup>2</sup> The lack of fulfillment of these obligations was addressed by the State Comptroller in his annual <u>Audit report for 2014 64c</u> (Hebrew Only). The Report found that the ICBS and the PCS had not carried out their coordination function sufficiently, had not assured standards of quality throughout the statistical system, and had not requesting and commenting on plans for statistical activities by state institutions; and it found that government Ministries had not consulted the ICBS and coordinated their statistical activities with it. The Report called for corrective actions on the

part of all actors within the statistical system.

**Recommendation 1**. Adherents put in place a clear **legal and institutional framework** for official statistics which should in particular provide:

- i) details as to the organisation of the NSS, the legal status and role of the NSO, as well as the legal status, functions, relationship, rights and responsibilities of other institutions within the NSS;
- ii) a clear mandate for institutions of the NSS to collect data for statistical purposes.

Good practice 1.1: Existence of a comprehensive and coherent statistical legislation periodically revised and amended. The statistical legislation defines the nature of official statistics; the legal framework for the compilation, production and dissemination of official statistics; the legal status, role in the system, functions, relationship, rights and responsibilities of institutions within the NSS; the mandate for data collection; the coverage of statistical activities; and the role, functions and composition of the Statistical Council. The statistical legislation also regulates the organisation of the NSS; the independence of the NSO and its head; the relationship between the producers of statistics and respondents; the access to administrative records and their use for statistical purposes; the dissemination policy; the legal infrastructure for ensuring the confidentiality and the penalties in case of breach of confidentiality; budget issues; the availability of sufficient resources for financing statistical programmes, the international statistical cooperation, and the co-ordination of statistical activities within the country's statistical system.

**Good practice 1.2**: Laws and regulations governing the collection, compilation and production of official statistics are consistent with the Fundamental Principles of Official Statistics of the United Nations.

**Good practice 1.3**: Statistical authorities have a clear mandate for data collection and the authority to compel respondents to comply with data requests (e.g. the Population and Housing Census, Agricultural Census, surveys, administrative sources, etc.). In the case of Population and Housing Census, the obligation for citizens to participate and to respond to the questionnaires is legally binding and established by law.

**Good practice 1.4**: Statistical authorities are required by law to conduct a Census of Population and Housing and a Census at of Agriculture at least every ten years.

**Good practice 1.5**: Statistical laws and regulations are publicly available.

#### **Response to Recommendation 1:**

[Good practice 1.1] – The Statistics Ordinance of Israel provides a comprehensive and coherent framework for official statistics. Soon after the establishment of the State of Israel, the ICBS was established as a department of the Prime Minister's office in order to prevent political interference by ministers of other government offices who might wish to influence national statistics, and to distance official statistics from the considerations of political careers. The Ordinance states that the National Statistician "shall carry out his duties in accordance with scientific principals" and thus independently of political considerations. While the National Statistician is appointed by the government – and thus in principle can be removed by the government – in practice the stipulations of his contract and the country's labour laws exclude this possibility (see below). The fact that there have been only 5 National Statisticians over the course of the last 69 years while there has been 20 Knesset Elections and 12 Prime Ministers points to the independence of the position.

However, several matters included in recommendation 1 are not covered by existing legislation.

The Statistics Ordinance does not address budgetary and financial aspects of official statistics, nor does it consider relations to international statistical agencies. It addresses the role of the National Statistician, the ICBS, and the PCS in themselves and in relation to other state institutions, but the rights and obligations of other members of the NSS are not stipulated by the Ordinance except in three respects: the National Statistician is instructed "to guide the statistical system in state institutions", these institutions are expected to provide their statistical plans to the PCS for comment, and they are expected to consult the National Statistician before undertaking statistical surveys. The role of the PCS is defined in the Ordinance as solely advisory.

The Ordinance does not address access to microdata by researchers. This topic is now undergoing active efforts at reform, promoted in part by the current European-sponsored Twinning program with Statistics Denmark, one of the components of which is supporting ICBS in improving its microdata services to the research community.

**[Good practice 1.2-1.3]** The Statistics Ordinance entrusts the ICBS with wide powers to collect and to access statistical information from the public, businesses and government agencies, powers which are balanced by strict guarantees of confidentiality which are imposed both on the ICBS as an institution and individually on its employees. The Ordinance guarantees that the actions of the ICBS should be guided by scientific considerations, and that the data it collects should be published. In all these respects the Ordinance is compliant with the Fundamental Principals of Official Statistics of the United Nations. However, although ONAs are subject to the strict confidentiality and privacy laws which apply generally to government agencies in Israel, the Ordinance itself does not regulate their statistical operations. The ICBS, together with the PCS, is working to bring the NSS under a coherent system of good practice. The ICBS has planned a series of meetings of ONAs with the ICBS in order to construct formal institutions for the ISS. Among other measures which will be proposed will be the formulation of a COP for Israeli official

statistics, following the COP of the EU, which ICBS has adopted, and OECD recommendations of good statistical practice, and in conformity with the mandate of the National Statistician to guide the ISS.

**[Good practice 1.4]** The Statistics Ordinance does not stipulate the periodicity for carrying out of any form of census. Although the Ordinance places the power to declare a census with the Prime Minister, it indicates that this should be exercised in consultation with the National Statistician and the PCS. The lack of a statutory period has had consequences: Population and Housing censuses have been conducted at longer intervals than ten years: in 1961, 1972, 1983, 1995, and 2008. The next census is planned for 2020. An Agricultural Census has not been conducted since 1983, but, after many delays, one is now in the planning stages.

**[Good practice 1.5]** Israel's only statistical law, the Statistics Ordinance, and its regulations, are publicly available, including on the ICBS web site.

**Recommendation 2**. Adherents ensure professional independence of National Statistical Authorities. To this end, Adherents should ensure that the National Statistical Authorities:

- i) are professionally independent from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, considering that professional independence of the producers of official statistics is essential for the production and the dissemination of objective statistics;
- ii) have the exclusive authority, as part of their professional independence, to decide on statistical methods and dissemination;
- iii) are protected, through the inclusion of explicit provisions in statistics legislation, from political and other interference in developing, compiling and disseminating official statistics.

**Good practice 2.1**: The professional independence of the Statistical Authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators in compiling and disseminating official statistics is explicitly guaranteed by law, and ensured in practice by all entities of the NSS.

Good practice 2.2 (adopted from the European Statistics Code of Practice): The Head of the NSO, and where appropriate, the heads of other National Statistical Authorities, have responsibility for ensuring that statistics are developed, produced and disseminated in an independent manner.

**Good practice 2.3 (adopted from the European Statistics Code of Practice):** The Head of the NSO, and where appropriate, the heads of other National Statistical Authorities, have the sole responsibility for deciding on statistical methods, standards and procedures, and on content and timing of statistical releases.

Good practice 2.4 (adopted from the European Statistics Code of Practice): The Head of the NSO, and where appropriate, the heads of other National Statistical Authorities, have sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies. They are of the highest professional calibre.

Good practice 2.5 (adopted from the European Statistics Code of Practice): The appointment of the Head of the NSO and, where appropriate, the heads of other National Statistical Authorities, is based on professional competences only. The reasons on the basis of which the incumbency can be terminated are specified in the legal framework. These cannot include reasons compromising professional or scientific independence.

**Good practice 2.6:** National legislation provides a clear and detailed description of the procedure for appointment and dismissal of the Head of NSO. A list of conditions under which the Head of NSO can be dismissed is provided for by law.

**Good practice 2.7:** A clear reporting system for the Head of NSO is provided by law in order to ensure and reinforce its technical independence.

**Good practice 2.8 (adopted from the European Statistics Code of Practice):** The statistical work programmes are published and periodic reports describe progress made.

**Good practice 2.9 (adopted from the European Statistics Code of Practice):** Statistical releases are clearly distinguished and issued separately from political/policy statements.

Good practice 2.10 (adopted from the European Statistics Code of Practice): The NSO, and where appropriate, other Statistical Authorities, comment publicly on statistical issues, including criticisms and misuses of statistics as far as considered suitable.

**Good practice 2.11:** Data collection, data production, and release of information are ensured without formal approval from third parties.

**Good practice 2.12:** A Statistical Council including external experts advises the Heads of National Statistical Authorities on strategic statistical issues. The nature of the Statistical Council and the reporting arrangements to government are provided for by law.

## Response to Recommendation 2:

**[Good practice 2.1-2.3]**: The Statistics Ordinance ensures the professional independence of the ICBS. Section 2 of the Statistics Ordinance states that the National Statistician shall head the ICBS, guide the statistical system in State agencies, and shall, in carrying out his functions, act on the basis of scientific considerations.

However, ONAs that produce official statistics do not have similar legislative safeguards. It should be pointed out that for ONAs the production of official national statistics is not a primary function. Departments within the agencies are responsible for the production of statistics on behalf of the agency, and the legislation which governs their functions does not address the professional independence of these agencies in the production of official statistics. There is one major exception to this: The Bank of Israel Law (2010), which regulates the Bank's activities, among them its powers to collect financial information and its duties to publish it. The law insures the autonomy of the Bank and the transparency of its operations.

**[Good practice 2.4-2.6]:** The Statistics Ordinance states that the National Statistician shall be appointed by the Government. In practice the process of locating a candidate and presenting the candidacy to the Government is in the hands of the Civil Service Administration and is governed by law and government decisions regarding the appointment of senior government officials. The National Statistician (who heads the ISS and the ICBS) is appointed by the Government for a set, non-renewable term of 8 years, upon the recommendation of a senior committee acting under the authority of the Civil Service Administration. Candidates are vetted according to their professional qualifications and standing. The laws regulating this appointment are generic to this category of senior civil servants. By Government decision, the terms of employment of the National Statistician are the same as those for a General Director of a government ministry.

The appointment has been based on outstanding professional competence in the field of statistics, mathematics or economics. However, emphasis is not placed on competence in managing a large government department (of over 1,000 employees), even though the National Statistician serves not only as head of the national statistical system but also as the general director of the ICBS. There is a natural strain between the scientific and administrative duties of the National Statistician which is not resolved by existing legislation which combines both responsibilities in one office.

The terms of service of the category of senior public servants to which the National Statistician belongs include the provision that they cannot be removed from office except upon the recommendation of the Civil Service Administration committee that recommended their appointment. Removal from office must be for cause, as stipulated in Government decisions or law, for example due to gross incompetence. The National Statistician may not be removed from office for reasons that compromise professional or scientific independence.

The procedure by which the National Statistician is appointed generally ensures sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies as regards matters of statistical policy. Five National Statisticians have served since the beginning of the State of Israel, each of them professors of high standing in the academic and international community: Prof. R. Bacci, Prof. M. Sikron, Prof. Y. Yahav, Prof. S. Yitzchaki, and currently Prof. D. Pfeffermann. The relative stability of the appointment serves to enhance their standing.

However, their informal authority does not necessarily translate into practical leverage in negotiations to assure the budget necessary for carrying out the ICBS mandate under law – both with regards to staffing of sufficient qualified employees and in assuring the funds for purchasing goods and services critical to the operation of the ICBS.

Nor does professional authority always hold sway with politicians, who have been known to regard the National Statistician as a public servant who must carry out their legislative goals. Recently legislation directed that the ICBS should create and produce certain indexes by a specified date (the methodology to be left to the ICBS). However, this was done without consulting the National Statistician or his representative regarding the methodological feasibility of producing the indexes, or the time-frame. When this was pointed out to the head of the Knesset (Parliament) committee which was drafting the legislation, he responded that if the ICBS doesn't produce the indexes on time he'd see to it that the "director" (the National Statistician) would be fired and replaced. Having said that, needless to point out that the scientific and professional independence of the National Statistician are the only decisive factors in any contact with government or the Knesset.

The heads of ONAs that produce national statistics are not trained statisticians, and the statistical departments within them do not currently have statutory independence. The status of these departments and their heads is partially a function of the status of the ministry itself and the importance the ministry attributes to the department. One of the goals of the ICBS current policy

of strengthening the ISS and developing its formal mechanisms is to strengthen the professional independence of statisticians within the ONAs.

**[Good practice 2.7]:** As stated above, the ICBS and the position of National Statistician was placed by the Statistics Ordinance in the Prime Minister's office in order to assure that national statistics and its requirements would be reported directly to the government as whole, without the filter of ministerial responsibility and to reinforce its technical independence.

**[Good practice 2.8]** ICBS reports to the PCS regarding the content and the progress of its statistical work programmes. It is also mandated by Government decision to maintain a work program, a summary of which is published along with those of other government departments as part of the budgetary process. ICBS Plans for 2017-2018 are available on the Israel government website, <a href="www.plans.gov.il">www.plans.gov.il</a>. A <a href="www.plans.gov.il">yearly report</a> according to the Freedom of Information Law details the activities and plans of the ICBS.

**[Good practice 2.9]** The ICBS does not release policy statements, except in regard to its own activities. Statistical releases by the ICBS are clearly denoted and are released on their own schedule and entirely independently of political, policy and programmatic statements of government departments. Research papers that can be found on the ICBS website which may contain recommendations or preferences are clearly marked as not being official ICBS documents and that they are the sole responsibility of the researchers who produced them.

**[Good practice 2.10]** The ICBS comments on misuse of its statistics when issues of national statistics are at stake and when this is considered appropriate. In practice this is done rarely and only when gross abuses are involved, or challenges to its integrity and independence.

**[Good practice 2.11]** The core statistics of the ICBS on the economy and society are prepared and released without any approval of third parties. However, in cases where the ICBS has contracted to produce surveys or other collections and analysis of administrative data on behalf of other government agencies, the methodology, the production system and the publication plan are agreed with the commissioning agency. Nevertheless the ICBS retains the right to refrain from publishing results of data collection and analysis projects which do not reach standards of sufficient statistical quality, and on the other hand, maintains its duty to publish results of sufficient quality whatever the findings and their implications may be.

**[Good practice 2.12]** The Statistics Ordinance delineates the functions and powers of the Public Council for Statistics (PCS). These include advising the National Statistician and the government as a whole on matters relating to the statistical activities of the ICBS. The Statistics Ordinance does not set out reporting arrangements to the government, but does state that one of the functions of the Council is to advise the Prime Minister and other Ministers on matters relating to the production of national statistics by the ICBS and other State agencies, and in particular, to receive and comment on the statistical plans of ONAs and to advise them regarding their coordination. In practice the PCS has not been very active in coordinating national statistical activities in the ISS as a whole, and promoting its role is one of the goals of the current efforts to enhance coordination in the ISS.

**Recommendation 3**. Adherents ensure adequacy of human, financial and technical resources available for the production and dissemination of official statistics. To this end, Adherents should ensure that resources are:

- i) sufficient to allow National Statistical Authorities to meet their commitment to quality, and to meet professional standards thereby fulfilling their role as providers of reliable, relevant and accessible data for national and international use:
- ii) adequate to produce a minimum core set of data, to be defined nationally or internationally, to monitor the economy, society and the environment.

**Good practice 3.1:** National Statistical Authorities have sufficient funding for statistical production and dissemination, to support staff training, to develop computing resources, and to implement innovation. Resources are adequate in magnitude and in quality to meet statistical needs.

**Good practice 3.2:** The adequacy of resources is regularly monitored.

Good practice 3.3 (adopted from the European Statistics Code of Practice): The scope, detail and costs of statistics are commensurate with needs.

**Good practice 3.4 (adopted from the European Statistics Code of Practice):** Procedures exist to assess and justify demands for new statistics against their cost.

Good practice 3.5 (adopted from the European Statistics Code of Practice): Procedures exist to assess the continuing need for all statistics, to see if any can be discontinued or curtailed to free up resources.

Good practice 3.6 (adopted from the European Statistics Code of Practice): National Statistical Authorities implement a policy of continuous vocational training for their staff.

#### **Response on Recommendation 3:**

#### [Good practice 3.1-3.6]

In 2017 the ICBS budget was 228 million (approximately \$63 million USD, given the average 2017 exchange rate). 8 million shekels were contributed by surveys conducted for external clients. This represents an increase over the previous year, most of which is explained by funding allocated to the pilot Census survey, part of planning for the next Census round. The overall budget includes 1.6 million shekels which are allocated to vocational training which includes both courses provided directly by the ICBS, support for courses provided by external contractors, and direct and indirect support for completion of academic degrees.

No estimates of the total expenditure on official statistics within the ISS as a whole (including outlays by ONAs) have been made. Therefore the present section will refer to the ICBS alone. As part of the plan to coordinate and map the production of official statistics throughout the ISS one of the goals will be developing annual reports that will identify statistical activities and aggregate their total costs and staffing. Although this is a worthwhile objective, it will take time to realise.

Over the past decade ICBS has witnessed considerable expansion of its routine statistical activities. This includes transition of the Labour Force Survey to a monthly rather than a quarterly basis, expansion of the sample frame of the Household Expenditure Survey, expansion of its business surveys, coordination of the SDG indicators, conduct of the PIACC survey, and testing of Census methodology. Much of this expansion has arisen to meet increased international demands for detailed and up-to-date data. All these activities have entailed budgetary growth, but an overall strategic framework for this growth has been lacking.

Although within its allotted budget the ICBS produces and disseminates a wide variety of fundamental official statistics of high quality, however it faces constant budgetary pressure both to maintain routine statistics and to develop new areas of measurement, new sources and innovative methods. A prominent example of the difficulties the ICBS faces in carrying out its mandate has been the long delay in financing an Agricultural census. Conducting routine agricultural censuses are specifically mentioned by the Statistics Ordnance as one of the ICBS responsibilities, and yet the last Census was held in the 1980s. Securing financing for a new census has been repeatedly delayed, although the need for one was widely acknowledged. The principal difficulty in securing funding lies in the requirement for the ICBS to secure the budgetary commitment of stakeholders for measurement projects which are external to their core activities. Although the need for high-quality data for long-term planning is widely acknowledged, no routine procedures exist to assess the cost and benefits of existing and desired statistical projects. Although the financing of the Agricultural census has now been secured, the need to provide a permanent procedure to secure long-term financing of a core set of fundamental national statistics has not been guaranteed.

The routine budgetary process in Israel involves constant demands by the Budgets Department of the Ministry of Finance to show efficiency gains while maintaining the overall budgetary deficit ceiling. Budgets for routine activities are regularly curtailed and subject to repeated government-wide budgetary cuts. Nevertheless, the principal challenge to the resources available to the ICBS is not through direct budget cuts but through overall civil-service wide staffing limits. Even when financing is available directly or through the budgets of interested Ministries, limits on staffing and overtime often make it impossible to utilise available budgets allocations. Budgets cannot be used without concomitant allocation of work hours and/or staffing tenures by the Finance Ministry or by the specific ministries who have partnered the statistical project, and obtaining such allocations is extremely difficult.

Budget allocation tends to favour financing of fixed- term projects that meet the government overall strategic policy objectives and do not expand permanent hiring. The consequence of this practice is that fixed-term projects are favoured over core routine activities which require routine renewal. In order to avoid staffing increases such projects often involve outsourcing. Moreover, statistical projects cannot easily advance without finding stake-holder partners among other government agencies, and these by their nature are short or medium term commitments and do not favour long-term strategic planning. Moreover, the ICBS competes with financing of statistical projects through outsourcing of statistical activities by government agencies to private contractors, without overall mechanisms which will assure that quality and professional standards are maintained along with lower costs.

At present the ICBS lacks a strategic budgetary process linked to a strategic planning process. It is hoped that such processes will be instituted within the newly-established Strategic Affairs,

Planning and budgeting Department. For instance, although ICBS policy encourages its professional department to review and assess the need continuing need for existing statistics, this is not done on a routine basis. One of the activities of the new department will be to institute such assessments.

ICBS provides extensive training to its workforce in areas of statistics, economics, technology and other areas connected to its work; in addition ICBS contributes in the form of funding higher education for employees. ICBS invites other members of ISS to participate in its training programs whenever possible and financially feasible.

**Recommendation 4**. Adherents protect the privacy of data providers (including individuals, households, enterprises, administrations and all levels of government) and guarantee by law the confidentiality of the individual information provided and its use for statistical purposes.

Good practice 4.1 (adopted from the European Statistics Code of Practice): Statistical confidentiality is guaranteed by law.

**Good practice 4.2:** Specific measures are in place to ensure the full protection of individual data from any potential disclosure without consent, with the aim to ensure the confidence of data providers in participating in statistical surveys: written instructions and internal guidelines are provided to statistical authority staff on the full protection of statistical confidentiality in the production and dissemination processes; appropriate penalties are prescribed for wilful breach of confidentiality and for any disclosure of individual data of a private nature that could infringe upon private life. These penalties are well-known to statistical staff and new employees sign legal confidentiality commitment upon appointment.

**Good practice 4.3 (adopted from the European Statistics Code of Practice):** The confidentiality policy is made known to the public.

Good practice 4.4 (adopted from the European Statistics Code of Practice): Physical, technological administrative and organisational provisions are in place to protect the security and integrity of statistical databases.

**Good practice 4.5:** Provisions are in place and internal guidelines are available to allow external users access to micro-data for statistical research purposes under strict protocols and only after anonymisation of the data.

**Good practice 4.6:** Privacy issues as regards the use of new data sources (e.g. social network data) are identified and procedures are implemented to guarantee statistical confidentiality.

#### **Response to Recommendation 4:**

**[Good Practice 4.1]** Statistical confidentiality of data collected and published by the ICBS is ensured by the Statistical Ordinance. This is in addition to the protection of privacy of natural persons, governed by the <u>Protection of Privacy Law 5741-1981</u>. ONAs are subject to this law, and may well be subject, in addition, to an obligation to preserve confidentiality under the law or laws that govern their activities. The Protection of Privacy Law also governs the transfer of identified and identifiable data between public bodies, including ONAs. A public body may not transfer data if forbidden to do so according to the law governing its activities. ICBS is prohibited from transferring identified or identifiable data to any other body, agency or person under the Ordinance. At the same time, it receives large bodies of data from other government agencies (including ONAs) in accordance with the Statistics Ordinance and the Protection of Privacy Law.

#### Section 17 of the Ordinance states:

- (a) No individual return, and no part of an individual return, made, and no answer to any question given, for the purposes of this Ordinance shall be published except for the purposes of a prosecution under this Ordinance.
- (b) No information collected for the purposes of this Ordinance and derived from an individual return or the answer to a question, or from records or documents as referred to in section 15, shall be so published as to enable the identification of the person to whom it relates.
- (c) No person other than an employee shall see any individual return made for the purposes of this Ordinance, or any part of such a return, except for the purposes of a prosecution under this Ordinance.

The Protection of Privacy Law states in its first paragraph the general directive that privacy may not be infringed without a person's consent; Chapter 2 Of the law regulates protection of privacy in databases, including, in paragraph 16, the guarantee of the confidentiality of personal information contained in public and private databases, as defined under the law.

**[Good Practice 4.2]** Statistical confidentiality and data protection are fundamental guiding principles at the ICBS. In general, the ICBS releases data only in aggregate form and after assuring that individual persons or firms cannot be identified. The Data Confidentiality Committee regulates all access to micro-data by external researchers and the Data Protection Committee deals with access by all employees outside the unit which is directly responsible for routine production of the specific data (in the latter case access to the data is controlled by the unit manager).

All requests for individual data from the public and researchers are examined by the Data Confidentiality Committee, and requests are decided according to three general criteria: 1. The likelihood of disclosing individual information from the data file; 2. the extent to which the specific data and its level of aggregation are required for carrying out the proposed analysis; 3.

the sensitivity of the data themselves, such as in the case of health data. In the case of Public Use Files (PUF) the likelihood of disclosure is determined statistically and the committee approves only those file where the likelihood is negligible.

The Data Protection Committee allows access to individual data to employees of the ICBS outside the unit responsible for the data only under strict "need to know" provisions. Only fields in the data file which are required for analysis are shared, and grants of access have to be renewed periodically.

Every employee of the ICBS and every researcher who has been granted access to the ICBS's research rooms must sign a declaration requiring non-disclosure, stipulated in the Statistics Ordinance. In addition they receive briefings and lectures concerning the importance of maintaining statistical confidentiality. The sanctions for breaches of confidentiality stipulated in the Ordinance are up to three years in prison or a substantial fine.

ONAs are defined as Public Bodies under the Protection of Privacy Law, and as such are required to register their identified databases with the Registrar, and to appoint a security officer who is responsible for maintaining confidentiality. The law also regulates all transfers of individual data between such databases in order to preserve confidentiality requirements. These regulations include the requirement that the data be used only for specific stated purposes, by named users, and subject to guarantees of computer security. All such transfers must be approved by a committee in each public body which is constituted under the law. The sanctions for breeches of confidentiality under the Protection of Privacy Law are up to 5 years imprisonment and a substantial fine.

**[Good Practice 4.3]** The Statistics Ordinance is available to the public on the ICBS website, as is the ICBS vision statement whose 10<sup>th</sup> and final paragraph states the ICBS commitment to protection of confidentiality. In addition, all respondents to surveys are informed of the ICBS's duty to protect privacy and confidentiality. Researchers who request access to microdata are both formally obligated and given thorough instructions in confidentiality requirements.

[Good Practice 4.4] The integrity and confidentiality of the ICBS's computer networks are secured so as to protect them against external threats and meet relevant standards. ICBS data security policy entails the following elements: physical security of equipment and premises, logical security of application software, security of record databases, personnel recruitment and training, security of applications in the development phase, and securing access and business interfaces. Work procedures reflecting these elements are in place to assure that the ICBS's databases are protected. The Information Security Manager, who reports to the Deputy National Statistician, is responsible for planning data security policy and overseeing its implementation, including staff training. A body within the IT department is responsible for implementing security of application software, records and computer systems, and for operating the security systems. The ICBS security officer is responsible for the physical aspects of security.

The ICBS has begun the process of acquiring certification to the ISO 27001 Information Security standard, which will cover all the subjects outlined here.

In addition, the ICBS and ONAs are subject to the supervision of the National Cyber Security Authority, which is responsible for protecting government agencies against cyber attacks.

**[Good Practice 4.5]** ICBS provides access to anonymized microdata files on which researchers can perform their own statistical analysis and research. This access is governed by strict rules and regulations. The ability of ONAs to provide access to microdata is governed by the Protection of Privacy Law and any law governing an ONA's operation

Public Use Files (PUF) (available in Hebrew only) are standard anonymized microdata products made available to the public at large subject to a standard CBS license. PUF files are also available to researchers via Israel Social Science Data Center (ISDC) at the Hebrew University. PUF files contain information that is detailed enough for basic research, but with a high degree of aggregation of data fields so that the possibility of identification of individuals is negligible.

Research Rooms on the premises of the CBS office in Jerusalem, Tel Aviv and Haifa are available to approved researchers from approved research institutions for approved research requiring detailed microdata. A remote access research facility at the Bank of Israel allows research of microdata to authorized Bank of Israel researchers. Two additional research room facilities are planned to open for the use of the Chief Economist and his unit in the Ministry of Finance, and at the Interdisciplinary Center in Herzliya for use of the academic community.

Use of the Research Room is restricted to academic researchers and researchers from research institutions and Ministries in Israel who have been recognised by the National Statistician and whose research proposal has been approved by the Deputy National Statistician of the CBS. ICBS microdata which has been linked to microdata of other public bodes requires the prior approval of the confidentiality committees of these bodies, under the Protection of Privacy law. Files prepared for Research Room use are de-identified.

The Research Rooms contain several secured computers on which the statistical analysis programs which the researcher will use and the files which have been prepared for him have been installed. No additional datasets can be introduced, nor can the researcher bring his own laptop or hand-held device or recording media into the research room. Only aggregated data, where no identification of persons or enterprises is possible, can be removed from the protected environment and only after approval by output inspector[s] at ICBS. Use of the Research Room is subject to the Research Room Guidelines (Hebrew), which require, inter alia, that researchers using the Research Room undergo a security check, become special sworn employees of the CBS and thus subject to the criminal sanctions for breach of confidentiality under the Statistics Ordinance, and publish their research results in a manner prescribed by the CBS. There is a charge for the files or services provided in accordance with CBS pricing policy.

As part of the current Twinning project with Statistics Denmark Research Room procedures are undergoing a thorough review, in order both to facilitate access to data by bona fide researchers and to strengthen the protection of confidentiality. Among other measures the Research room guidelines are being rewritten in order to cover explicitly the possibility of secondary disclosure, when output is combined with previously released output, and more detailed instructions to help the researcher in determining the possibility of disclosure.

**Recommendation 5**. Adherents ensure the right to access administrative sources to produce official statistics. To this end, Adherents should ensure that:

- i) National Statistical Authorities have the right to access administrative data for the regular production of official statistics and to use them in the interest of ensuring quality of official statistics, raising the analytical value of official statistics, reducing burden on survey respondents and reducing cost of statistical programmes;
- ii) National Statistical Authorities co-operate with owners of administrative records as regards their statistical quality and have authority to influence their design to ensure they are fit for statistical purposes.

**Good practice 5.1:** The Statistical Authorities are authorised by law to use administrative records for the regular production of official statistics.

**Good practice 5.2:** Administrative sources are used whenever possible and cost-effective to avoid duplicating request for information and reduce reliance on direct surveys.

**Good practice 5.3 (adopted from the European Statistics Code of Practice):** National Statistical Authorities are involved in the design of administrative data in order to make administrative data more suitable for statistical purposes.

**Good practice 5.4 (adopted from the European Statistics Code of Practice):** National Statistical Authorities co-operate with owners of administrative data in assuring data quality.

**Good practice 5.5 (adopted from the European Statistics Code of Practice):** Agreements are made with owners of administrative records which set out their shared commitment to the use of these data for statistical purposes.

**Good practice 5.6:** Recommended practices are available for the reporting and presentation of administrative data.

**Good practice 5.7:** Linking administrative data with survey data is encouraged by National Statistical Authorities with the aim of reducing the burden on respondents, reducing the costs in producing official statistics, and increasing the analytical value of official statistics.

## **Response on Recommendation 5:**

**[Good practice 5.1]** Articles 15 and 15a of the <u>Statistics Ordinance</u> establish the duty of all government agencies and local authorities to provide administrative records to the ICBS which may be required for the regular production of official statistics, notwithstanding other laws which may restrict access to such records. The procedures under which these records are transferred to the ICBS are governed by the Protection of Privacy Law and its regulations.

**[Good practice 5.2]** Principle 9 of the ICBS <u>vision</u> states that the ICBS: "Works toward reducing the public's response burden and achieving the cooperation of data providers", and that it "Strives to broaden the use of administrative files, in order to reduce the need for direct data collection". The ICBS uses a wide variety of administrative files from numerous sources in all statistical areas. The fundamental sources for the ISS are the three core registers established at the ICBS which are based on administrative records: the revised Population Register, the Business

Register and the Register of Buildings and Dwellings. These registers cover the domains of population, businesses and dwellings, and are updated on a daily or monthly or yearly basis. They are also used as sampling frames for surveys of individuals, households and businesses. The core registers are supplemented by other registers for such subjects as education, taxation, social welfare, local authorities and vital statistics. Many major statistical areas rely mainly on data from administrative files, such as education, crime, road accidents, social welfare recipients, and so on.

**[Good practice 5.3-5.6]** The ICBS has enjoyed close cooperation with a variety of state agencies and public institutions, both receiving administrative data files from them, and improving them: the data cleaning and validation processes which precede statistical production often uncovers systemic and specific problems in the sources, and these are communicated to the providers. Several state agencies rely on these processes to improve their own databases, and have willingly adjusted their procedures to assure statistical quality.

The ICBS has initiated the preparation and ratification of MoUs with state agencies in order to formalize their relationship with the ICBS. Currently two MoUs exist: with the <u>Bank of Israel</u>, and with the National Insurance Institute. They establish the basis for cooperation and allow the orderly transfer of data to the ICBS in accordance with its needs. Although many state agencies willingly share administrative records with the ICBS, in practice access to records from administrative files has proven difficult in certain cases, and it has been necessary to insist on the formal legal obligation in order to obtain them.

While many government agencies cooperate closely with the ICBS and inform it whenever they plan to make changes in their IT systems, their files or methodology, there is no legal requirement for them to do so. This aspect of access is not addressed by the Statistics Ordinance. In several cases the ICBS has not been notified in advance of critical changes in data fields and/or methodology, let alone consulted in the planning stage of important administrative databases.

The ICBS is addressing these challenges in three ways:

- 1. Extension of MoUs to other critical government agencies and review of existing agreements to ensure that they include provisions regarding advance notification of system changes and the possibility of ICBS involvement in the design of concepts and architecture of administrative data in order to assure that it is amenable to statistical use.
- 2. One of the goals of the activities that the ICBS has recently launched aimed at raising the level of coordination and quality assurance within the ISS is to increase the awareness of government agencies of the need to take statistical requirements into consideration when designing their administrative records so that they can be used as reliable data, and to assure access to them. In addition, once of the goals of the coordination program will be to develop quality and metadata standards for statistics based on administrative records which will cover the ISS as a whole.

3. In the longer term, revision of the Statistics Ordinance will be considered in order to provide the ICBS with the authority to be involved in the planning and quality assurance of administrative data for statistical purposes, in addition to having access to it.

[Good practice 5.7]: The ICBS links administrative and survey data whenever possible, in order to reduce costs and response burden and in order to enrich data. In doing so it is able to take advantage of the Personal Identity Number which is present in virtually all records for Israeli residents, and unique tax identification codes of businesses. For example, data on wages and education can be obtained in this fashion, subject to the strict confidentiality guarantees enforced within the ICBS. The 2008 "Integrated" Population Census was based on a unique and innovative methodology, which combined data from administrative sources with sample data gathered in surveys, both in order to reduce costs and respondent burden and in order to improve data quality. Future censuses will be based on developments of the same methodology.

The privilege of universal linkage is available to the ICBS alone and is not available to ONAs since they are not governed by the Statistics Ordinance, nor can the ICBS release identifiable microdata to other agencies once it has made such links. Linked data is available in aggregate form only, with the exception of microdata available to researchers, which is governed by strict confidentiality protocols.

**Recommendation 6.** Adherents ensure the impartiality, objectivity and transparency of official statistics, through the development, production and dissemination by the National Statistical Authorities of statistics respecting scientific independence put in place in an objective, professional and transparent manner in which all users are treated equitably. Equitable treatment implies in particular equal access to data by all users.

**Good practice 6.1:** Official statistics are collected, compiled and disseminated on an impartial and objective basis and determined by statistical considerations only.

**Good practice 6.2:** Equal access to official statistics for all users at the same time is guaranteed by law. If a public or private body has access to official statistics prior to their public release, this fact and subsequent arrangements are publicised and controlled. In the event that a leak occurs, pre-release arrangements are revised to as to ensure impartiality.

Good practice 6.3 (adopted from the European Statistics Code of Practice): Choices of data sources and statistical methods as well as decisions about the dissemination of statistics are informed by statistical considerations.

**Good practice 6.4 (adopted from the European Statistics Code of Practice):** Errors discovered in published statistics are corrected at the earliest possible date and publicised.

Good practice 6.5 (adopted from the European Statistics Code of Practice): Information on the methods and procedures used is publicly available.

**Good practice 6.6 (adopted from the European Statistics Code of Practice):** Statistical release and statements made in press conference are objective and non-partisan.

**Good practice 6.7:** Statistical release dates and times are announced in advance. A twelve-month-ahead advance release calendar is provided. Official statistics are released according to a standard daily time. Any divergence from the dissemination time schedule is publicised in advance, explained, and a new date is set.

**Good practice 6.8:** Any major revision or changes in methodologies are announced in advance.

**Good practice 6.9:** Internal guidelines are made available by statistical authorities to respond to erroneous interpretation and misuse of statistics. They are well-known by staff.

**Good practice 6.10:** Statistical plans and programmes, methodologies, processes and procedures quality assessments are made publicly available by the statistical authorities.

**Good practice 6.11:** Guidelines exist for the presentation of data, including the treatment of time series breaks, and seasonally adjusted data, with the aim to ensure that official statistical data and metadata are presented in a way that facilitates proper interpretation and meaningful comparisons.

#### Response on Recommendation 6:

[Good practice 6.1, 6.3, 6.6, 6.7, 6.10] Article 16 of the Statistics Ordinance instructs the National Statistician that the statistics he collects will be compiled and published according to his instructions, with or without comment. Since its inception the ICBS has prided itself on its commitment to objectivity, professionalism, and scientific integrity, striving to meet the highest

international standards. It alone decides on the sources and the methodology by which it compiles its statistics, following consultation with the PCS, its users and the professional and academic community, consultations which are designed to assure that the goals of the statistics are met.

To this end ICBS subscribed to the International Monetary Fund Special Data Dissemination Standards (SDDS)<sup>3</sup> on April 23<sup>rd</sup> 1996, and met all requirements on June 5<sup>th</sup> 2000. Since that date the ICBS has strived to enhance its observance of the SDDS requirements in order to guarantee that the methodology for its financial and economic data are transparent, comprehensive, and compiled on a sound internationally comparable basis. The principles of the SDDS standards regarding timeliness, periodicity, public access, transparency and quality are extended to other, non-economic statistical fields as well. As a member of the SDDS, ICBS satisfies a series of criteria, prominently among them an advanced media release calendar which is maintained at the ICBS website. Since 2016 the ICBS has decided to seek accreditation under the more exacting SDDSplus requirements, and is currently revising and updating its procedures in order to meet these requirements.

Decisions to disseminate data are based solely on statistical considerations, and decisions about the timing, media, and other aspects of dissemination are based on professional considerations only. ICBS publications are clearly distinguished and issued separately from political and policy statements. The ICBS <u>publication policy</u> is available to the public on its website.

In order to strengthen its reputation for objectivity and neutrality in policy debates, and in accordance with international standards, ICBS decisions regarding the timing of media releases are made at least four months in advance. Regular publication dates are announced in a yearly, 4 month, and weekly advance release calendar. Key statistical data of general interest are announced in press briefings (about 10-20 events yearly). The CBS publishes approximately 350 media releases per year. Its media releases are made without deference to or approval from any political or policy-related authority. ICBS guidelines instruct the professional staff, as well as the dissemination and communication team, to prepare and disseminate information in an impartial and objective manner. This holds for all other publications as well.

All media releases are published in Jerusalem at 1:00p.m. with the exception of price statistics which are published at 6:30p.m. They are disseminated to users on the CBS website, and by email.

In addition, the ICBS manages a Facebook Page and Youtube Channel which provide information to the public in a user-friendly manner, including videos, photographs, and charts.

<sup>&</sup>lt;sup>3</sup> See "The Special Data Dissemination Standard: Guide for Subscribers and Users" http://www.imf.org/external/pubs/ft/sdds/guide/2007/eng/sddsguide.pdf.

Lastly, under the Freedom of Information Act (1998) all member of the public are able to receive information from government agencies, the ICBS among them. Under the auspices of the act the ICBS publishes a comprehensive <u>Annual Report</u> which is available (In Hebrew) on its website, which outlines to the public the ICBS organizational structure, its ethical standards and quality policy, the topics on which it provides statistics and the form in which they are published and the means by which they can be accessed, and is information sources.

ICBS plans for 2017-2018 are available (In Hebrew) on the Israel government website, www.plans.gov.il.

[Good practice 6.2 ] Although provision of equal access is not determined by law, this has been the explicit policy of the ICBS as specified in paragraph 2.3 of its Vision statement. The CBS normally does not provide data to any external person or institution before it officially releases the data. The sole exception to this is that access to National Accounts and government finance statistics are given on the day of publication to the Finance Minister and a small number of staff at the Bank of Israel and at the Prime Minister's office, a few hours before official release and under strict embargo. These exceptions are provided to the public on the ICBS website. In the past, when a breach of this embargo occurred, the ICBS has suspended advanced access.

In addition, the ICBS website is being adapted so as to be thoroughly accessible by persons with disabilities, as outlined in the accessibility policy outlined on the ICBS website.

The ICBS website is undergoing a thorough redesign. A new website will be launched in early 2018. One of the principal policy goals of the new website is to enhance access to data by clarifying its classification into subject fields and enhancing metadata. The ICBS is aware of lack of public satisfaction with the accessibility and clarity of its current website, and the redesign is meant to address these issues. Plans are in place to monitor user satisfaction with the new site and to adapt it when this is feasible.

**[Good practice 6.4, 6.8] The** ICBS makes <u>its revisions policy</u> available to the public. It provides guiding principles for dealing with major and minor revisions. The policy also sets procedures for dealing with mistakes found in media releases, which should be corrected immediately and communicated to users. An errata-corrigenda statement, containing details of the mistake and the correction, and the relevant time and day is also issued on the website. All corrected data and/or revised data are clearly indicated as such.

**[Good practice 6.5]** Statistical methodology is made available for all subject fields through several means: in the annual publications by subject matter (such as the <u>Annual Publication</u> of the Labour Force Survey), as well as in the explanatory notes which accompany the annual data series available on the ICBS website, and in the website subject matter pages (eg. the explanation references for <u>Population</u>). These notes may include references to special publications and publically available background papers. In the redesigned website, which will be launched in early

2018, methodological explanations and definitions will be available in a uniform and clearly labeled manner at a "Definitions, Classifications, and Methods" tab.

**[Good practice 6.9]** It is ICBS policy to respond to major instances of misuse or misinterpretation of its statistics, but it refrains from doing so in all instances. A standard and uniform internal policy on response to errors does not exist at present, but will be considered as part of the ICBS emerging policy on quality management.

**[Good practice 6.10]** ICBS internal guidelines, supervised by a high-level Publications and Products internal committee, provides professional instruction on the presentation of data in tables and charts, and firm instructions are available for the presentation and documentation of time series breaks, seasonal adjustment and revision. These guidelines are in conformity with the IMF Data Quality Assessment Framework (DQAF) standards.

**Recommendation 7**. Adherents employ sound methodology and commit to professional standards used in the production of official statistics. To this end, Adherents should:

- i) apply appropriate statistical procedures and methods, including a stated revisions policy;
- ii) strive to adhere to international norms and standards, such as methodological manuals developed by the United Nations Statistical Commission or by the OECD, and international classifications in the statistics collected by the OECD.

**Good practice 7.1:** Official statistics are produced according to strictly professional considerations, including scientific principles and professional ethics with regard to methods and procedures used for the collection, processing, storage and dissemination of statistical data.

Good practice 7.2 (adopted from the European Statistics Code of Practice): Sound statistical methodology requiring adequate tools and procedures and expertise is implemented and guaranteed by the national statistics law.

**Good practice 7.3:** International statistical standards, guidelines and good practices are applied in the National Statistical System as appropriate.

**Good practice 7.4:** National statistical classifications developed by statistical authorities are consistent with international classifications. Detailed concordance exists between national classifications and the corresponding international classification.

**Good practice 7.5 (adopted from the European Statistics Code of Practice):** Procedures are in place to ensure that standard concepts, definitions and classifications are consistently applied throughout the National Statistical Authorities

**Good practice 7.6:** Subject matter advisory committees made up of external experts advise on relevant statistical matters.

**Good practice 7.7 (adopted from the European Statistics Code of Practice):** Graduates in the relevant academic disciplines are recruited.

**Good practice 7.8:** Co-operation with the scientific community, academic institutions and international organisations is organises to improve methodology and the effectiveness of the methods implemented, and to improve methodological ant technical skills of staff.

**Good practice 7.9:** Strategies for recruitment, as well as processes for technical and managerial development and training of existing staff, are established, implemented, and revised as required.

**Good practice 7.10:** In the case of statistical surveys, questionnaires and systems for production are systematically tested prior to the data collection.

**Good practice 7.11:** Parallel runs are undertaken when systems or questionnaires are redesigned in any significant way.

Good practice 7.12 (adopted from the European Statistics Code of Practice): Survey designs, sample selections and estimation methods are well based on regularly reviewed and revised as required.

**Good practice 7.13 (adopted from the European Statistics Code of Practice):** The business register and the frame for population surveys are regularly evaluated and adjusted if necessary in order to ensure high quality.

**Good practice 7.14 (adopted from the European Statistics Code of Practice):** Data collection, data entry, and coding are routinely monitored and revised as required.

**Good practice 7.15 (adopted from the European Statistics Code of Practice):** Appropriate editing and imputation methods are used and regularly reviewed, revised or updated as required.

**Good practice 7.16 (adopted from the European Statistics Code of Practice):** Revisions follow standard, well-established and transparent procedures.

**Good practice 7.17:** A revision schedule is published by the producers of official statistics.

**Good practice 7.18:** The design of statistical questionnaires used in survey-based data collection processes is regularly reviewed.

# **Response on Recommendation 7:**

**[Good Practice 7.1-7.6, 7.8]** As a professional organization responsible for the production of official statistics, the ICBS is committed to basing its actions on scientific principles and the <u>ICBS</u> Rules of <u>Professional Ethics</u> (which are available on its website). The decisions relating to the scientific methods and procedures used at each stage of production (collection, processing, analysis, storage and dissemination of statistical data) are aimed at ensuring that the professional quality of its statistical data comply with the best internationally recognized statistical practices and standards.

The Statistics Ordinance entrusts the National Statistician with the responsibility for implementing sound statistical methodology by employing appropriate scientific tools, procedures and expertise within the ICBS, and in the ISS generally. ICBS professional decisions and activities are subject to the scrutiny of the PCS. Sub-committees of the Council made up of subject matter experts external to the Bureau (from academia or other professional organizations) advise the Bureau on relevant statistical matters and follow up its activities.

Other Israeli government agencies that produce national statistics have a parallel commitment to international norms and standards for good statistical practice through their membership in international organizations such as the OECD, the IMF, the UN and its subsidiary bodies such as the WHO. However until now there have been no formal mechanisms to ensure that other members of the ISS observe the explicit commitments to international norms and standards which guides the ICBS in its activities, and which are encompassed in the National Statistician's responsibilities. Establishing such mechanisms is one of the tasks the ICBS has undertaken as part of its new efforts to coordinate the ISS and establish uniform quality standards within it.

In general, international statistical standards, guidelines and good statistical practices are implemented in all the fields that the ICBS is responsible for. As an ongoing process the ICBS strives to keep up with all new standards and guidelines. In this respect, it is in constant touch with other national statistical institutions (such as the ONS in the UK, BLS in the USA and Statistics

Canada) and international organizations (Eurostat, IMF), and ICBS staff participate in international forums, working groups and training programs. For instance, the current Twinning with the Statistics Denmark contains activities that are meant to further develop ICBS capacity in agricultural statistics and survey field methodology. Lately, the Bureau has applied for consultations under the Technical Assistance and Information Exchange instrument of the European Commission (TAIEX) to improve the current practices and learn more about some methodological issues.

The general practice in the Bureau is to adopt the international concepts and classifications as is. There are minor national adjustments in these systems and they are completely consistent with the international definitions, concepts and classifications.

[Good Practice 7.7. 7.9] Although the Bureau works within an effective social, professional and academic network, the Bureau faces great difficulties in recruiting adequate staff in most fields and especially in statistics. A number of internal programs are implemented to recruit and retain appropriately trained graduates. The ICBS supports graduate studies in relevant fields for employees both with tuition subsidies and with paid leave. In 2003, the Hebrew University of Jerusalem launched a platform for MA students to specialise and receive a Diploma in Official Statistics. This program was initiated and partially funded by the Bureau. The program allows the students to work and gain experience in official statistics while still studying, and facilitates the process of searching and recruiting staff to the Bureau.

Emphasis is also put on-the-job training and many courses, seminars and lectures delivered by internal and external scientific experts are available to all personnel (both in subject-matter units and in the methodology department) to improve both methodological and technical skills. Courses in statistics, demography, econometrics and public administration at the Hebrew University are open to all personnel. In recent years participation has been particularly frequent by statisticians in the methodology department. Professional staff participate in international training programs, many of which are offered by Eurostat and other international organizations.

The ICBS has a program of promotion of professional staff based on peer-reviewed professional projects. This program has furthered the development of professional skills by rewarding professional achievement rather than administrative competence.

[Good Practice 7.10-7.15, 7.18] In the case of statistical surveys, the survey questionnaires and the production systems are tested in by a small pilot (pretest) prior to actual data collection. When major changes especially significant technological enhancements are introduced into the system, a larger scale pretest is carried out in order to examine all aspects of the change and the extra technological burden. In these cases, parallel runs are undertaken for a period of time, a quarter or a year, to estimate the effect of the changes (breaks) introduced into the estimates. A steering committee consisting of representatives of the subject-matter unit, the data collection unit, the survey methodology unit and the IT unit accompanies all major surveys, regularly reviewing questionnaire content and practical aspects of survey implementation.

The methodology for population and household surveys is well based and developed and implemented by skilled and experienced staff. The Population Register is the sampling frame for population surveys and is regularly updated and enriched with external administrative files. In addition, algorithms, such as geocoding and removing those living permanently outside Israel have been developed and are tested on an ongoing basis. The sampling frame for household surveys is the Register of Buildings and Dwellings which is based on municipal tax files. Although a great deal of effort has been put into geocoding, standardization, and inclusion of all localities in the register, it is still under construction and other frames such as lists from small localities and Israel Electric Company files are used to supplement it. The sampling design is complex (a stratified two-stage or three stage sampling) and serves to produce accurate desired estimates. The design is revised to keep up with users' demands and to produce more efficient estimates. Data collection is monitored on a daily basis and weekly reports are produced for all concerned parties. Although some logical editing is built into the data collection phase, nevertheless postcollection editing and imputation is performed when necessary. The estimation methods are well accepted procedures in the scientific community and calibration or post-stratification is applied to produce the final estimates. In each survey, sampling errors are computed and the nonresponse is explored. There are strict rules for dissemination based on the reliability of estimators as well as confidentiality restrictions.

The Business Register is updated regularly from two fundamental administrative sources obtained from the National Insurance Institute and the Israel Tax Authority (the VAT files). The information on industry and the number of employees is continually checked and revised as they are used for stratification. One of the weaknesses of the Business Register is that it lacks geographical information, especially on the branch level.

Since Israel joined the OECD in 2010, the number of business surveys has increased immensely requiring a re-organization of all concerned parties. Both the subject matter units and the methodology department are still coping with this burden today. All the surveys are managed separately and the policies for each survey differ. Although the frame for all is derived from the Business Register some surveys use external files (e.g. files from the Bank of Israel) to complement the frame and enhance the information in it. The basic sampling design consists of stratification by industry and size (either by number of employees or revenue), drawing a simple random sample without replacement in each stratum. Some of the algorithms used such as determining the sample size in each stratum were developed in Statistics Canada. In general, a supplementary sample is selected bimonthly covering new businesses, and in each year the sample is allocated anew, preserving as much as possible the old sample (by use of PRN) but reflecting changes that occurred in the past year. Data collection is well monitored and some editing and imputation procedures are applied to make up for the non-response by small businesses. Horowitz-Thompson estimators and the sampling errors are computed although not all sampling errors are published. The revisions follow standard well established procedures as described in the metadata accompanying the surveys.

X-12-ARIMA is the main Seasonal Adjustment Procedure used in the Bureau. In addition, a special program developed by the Bureau is implemented to estimate simultaneously the effects of the moving Jewish holidays and the trading days. Trend estimation is based on an improved methodology that reduces the revisions. In some cases, Basic Structural Models are applied to take into account sampling error behaviour (eg. in the Job Seekers Survey).

The Statistical Methodology Sector of Business Surveys is now under reorganization to tackle all the required methodological issues: harmonization and coordination of business surveys, managing sampling frames within the register, reduction of the response burden, building up generic and user-friendly systems for the calculation of the estimates and the reliability of the estimates, completion of metadata, etc. Some new staff recruited for this purpose are undergoing strict professional training in all methodological aspects of business surveys. The changes envisioned will require changes in the subject-matter divisions and the Field Surveys (data collection) divisions well.

**[Good practice 7.16-7.17]** Revision procedures are governed by the ICBS <u>revision policy</u>. In addition, all revisions in major economic data are subject to the provisions of the SDDS standard of the IMF, and published and reviewed according to its criteria.

**Recommendation 8**. Adherents commit to quality of statistical products and processes, in particular to key quality dimensions as defined in national and international quality assessment frameworks, for instance in the *Quality Framework and Guidelines for OECD Statistical Activities*: timeliness and punctuality (statistics are released in a timely and punctual manner); relevance (statistics meet the needs of users); accuracy (statistics accurately and reliably portray reality); credibility (confidence is placed by users in statistics products); coherence and comparability (statistics are consistent internally, over time and in space and it is possible to combine and make joint use of related data from different sources); and interpretability and accessibility (see Recommendation 9).

## Quality management, monitoring, evaluation plans and reports

**Good practice 8.1**: A quality policy ensures that the producers of official statistics systematically assess the quality of official statistics. Quality policy is publicly available through guidelines, frameworks, reports, etc. and staff members receive appropriate training for their application.

**Good practice 8.2:** An efficient, and possibly independent, quality management system exists. It includes an appropriate organisational structure; quality indicators and other tools and processes for the planning, implementation, and monitoring of the quality of source data; and the collection, processing, and dissemination of official statistics.

**Good practice 8.3:** The national quality management systems are based on recognised models for quality frameworks, such as the IMF Data Quality Assessment Framework (DQAF), the European Foundation for Quality Management, European Code of Practice, the European Statistical System Quality Assurance Framework, Total Quality Management and ISO EN 9001, etc.

Good practice 8.4 (adopted from the European Statistics Code of Practice): There are regular and thorough reviews of key statistical outputs involving external experts where appropriate (ECoP).

**Good practice 8.5**: Quality assessment and certification processes guarantee the official nature of statistics produced in various parts of the NSS.

**Good practice 8.6:** The organisational structure of the entities belonging to the NSS and governance arrangements are appropriate and regularly reviewed to assess and justify new statistical demands and related costs.

**Good practice 8.7:** Information and communication technologies are regularly monitored and assessed for use in data collection, data processing and data dissemination.

#### **Accuracy**

Good practice 8.8 (adopted from the European Statistics Code of Practice): Source data, intermediate results and statistical outputs are regularly assessed and validated (ECoP).

**Good practice 8.9:** National Statistical Authorities put in place processes to ensure that sampling and non-sampling errors are measured, systematically documented, and that information is made available to users.

**Good practice 8.10:** Studies and analysis of revisions are regularly conducted according to transparent procedures and the results are made available to users.

#### Timeliness and punctuality

Good practice 8.11: Timeliness meets international statistical release standards.

**Good practice 8.12 (adopted from the European Statistics Code of Practice):** The periodicity of statistics takes into account user requirements as much as possible (ECOP).

**Good practice 8.13 (adopted from the European Statistics Code of Practice):** A standard day time for the release of statistics is made public. (ECoP)

Good practice 8.14 (adopted from the European Statistics Code of Practice): Preliminary results of acceptable aggregate accuracy are released when considered useful. (ECoP)

#### Coherence and comparability

**Good practice 8.15:** Official statistics are consistent within datasets (i.e. elementary data are based on comparable concepts, definitions and classifications and can be meaningfully combined), across datasets (i.e. data are based on common concepts, units, definitions and classifications, or that any differences are explained and can be allowed for) and over time (i.e. data are based on common concepts, definitions, units, classifications, and methodology over time, or that any differences are explained and can be allowed for).

Good practice 8.16 (adopted from the European Statistics Code of Practice): Statistics from the different sources and of different periodicity are compared and reconciled (ECoP).

Good practice 8.17 (adopted from the European Statistics Code of Practice): Statistics are compiled according to common standards with respect to scope, definitions, classifications, and units in the different surveys and sources. (ECOP)

## **Relevance**

Good practice 8.18 (adopted from the European Statistics Code of Practice): Processes are in place to consult users, monitor the relevance and utility of existing statistics in meeting their needs, and consider their emerging needs and priorities. (ECoP)

**Good practice 8.19**: User satisfaction surveys are undertaken on a regular basis. The results are publicly released and considered as an input for decisions about plans and priorities and they are reflected in the statistical work programmes.

# **Response to Recommendation 8:**

Quality management, monitoring, evaluation plans and reports

[Good Practice 8.1, 8.3] The ICBS does not have a single overarching formulation of its quality policy, however a number of major publically available documents state the Bureau's commitment to quality principles, building on the quality standards which have characterised the Bureau since its beginnings. The ICBS Vision document of 2011, which is available to the public on its website, clearly states among its guiding principles the Bureau's commitment to producing statistics according to all of the internationally accepted quality dimensions while striving to improve the quality of its statistical products and their production process. In May 2014 the management of the ICBS adopted the European Code of Practice as the set of standards to guide its quality policy (now amended as Statistics Code of Practice for the European Neighbourhood South countries). In addition, the ICBS subscribes to the IMF's Special Data Dissemination

Standard (SDDS) for economic and financial data, and has met all the specifications of the standard since June 2000.

[Good Practice 8.2, 8.3] The ICBS is in the process of developing an integrated quality management system, based on the quality frameworks it has adopted and on international models. The establishment of an organizational system responsible for quality management of official statistics in the ICBS specifically and the NSS as a whole is one of the components of an ongoing EU Twinning Project with Statistics Denmark, which began in 2016 and will continue until 2018.

The project is addressing all the elements in a quality management system: the overall quality framework and its principles, quality reports, training, quality indicators, documentation and metadata infrastructure, and regular quality reviews. In 2016 a Statistical Quality Management Department was established within the National Statisticians Office, to coordinate the organisation and implementation of these efforts. It is working together with the ICBS Department of International Relations and Statistical Coordination to implement measures of quality assurance and management not only within the ICBS but within the Israeli NSS as a whole. Plans are in place to introduce ONAs to international quality management principles and practices so that an NSS-wide integrated system of quality management can be developed.

## Accuracy, timeliness and punctuality, coherence and comparability

[Good Practice 8.7 - 8.17] The integrated system will build on existing foundations of quality activities and practices within the ICBS which are carried out routinely albeit not within a formal quality management framework. Among these are the regular documentation and publication of sampling errors and the investigation of non-sampling errors and non-response bias. Key classifications are regularly revised and aligned with international standards. A senior committee regularly reviews the consistent application of concepts definitions and classifications in key publications and oversees the dictionary of standard definitions which is published on the website. Coherence and comparability of statistics both nationally and internationally is addressed both within the subject matter units and by routine organization-wide activities. Dissemination policy includes a calendar on the website specifying release dates and time of day (1 PM, for all releases except the CPI). Preliminary results of key economic statistics are released when accuracy is deemed acceptable, and revisions are regularly analysed. The ICBS deploys advanced information and communication technology tools which are regularly assessed and updated, within the limits of budgetary constraints. The website, its technology and its delivery system are being rebuilt in response to such monitoring. Current efforts to build an integrated quality management system will also build on pilot projects using EFQM methods to improve work processes, which were introduced within the CPI, Macroeconomics and Infrastructures statistics over a decade ago.

#### Relevance

**[Good Practice 8.18]**External reviews have been conducted at the ICBS periodically, but not on a regular basis. Introducing a program of regular external reviews will be considered as part of the future integrated quality management system. Among the major reviews which have been done was a Report on the Observance of Standards and Codes (ROSC) Data Module published by the IMF in 2006, which reviewed Israel's macroeconomic statistics and data quality, and a review of the ICBS's Labour Force Survey carried out by Eurostat in 2015.

[Good Practice 8.19] Formal user consultation at the ICBS is carried out through standing consultative committees composed of external experts and users for major social and economic surveys (such as the Household Expenditure Survey, the Social Survey, or the Business Trends Survey), and for major statistical products (such as the Consumer Price Index, the Socio-economic Index for Localities, or Long-term Population Projections). Currently a major review of housing statistics is being undertaken by such a consultative committee. Some of these committees are convened under the auspices of the Public Council for Statistics. While user-satisfaction surveys have not been undertaken on a regular basis, recently user surveys have been undertaken to assess satisfaction with the website and with the new format of the Statistical Yearbook. Review of the format in which user consultation is carried out at the ICBS is part of the process of creating an integrated quality management system.

**[Good Practice 8.5 8.6]** Extending the ICBS internal quality frameworks and models to the NSS as a whole is a central objective of current policy. Plans to widen and deepen our quality management activities to the NSS are being pursued within the activities of the Public Council on Statistics, the Twinning project and independently. Although these plans do not include reviewing the organisational structure of other members of the NSS, we hope that in future coordination of statistical activities within the NSS will cover assessment of the value of new and existing statistical demands and costs, within overall plans for statistics in the ISS.

**Recommendation 9.** Adherents ensure user-friendly data access and dissemination, so that statistics are presented in a clear and understandable form, released in a suitable and convenient manner, including in machine-readable form ('open data'), can be found easily and are available and accessible on an impartial basis with supporting metadata and guidance. This also entails a commitment to respond to major misinterpretations of data by users.

**Good practice 9.1:** Statistical information is available through different dissemination tools, including media channels, Internet, online database and paper publications and easily downloadable in different formats.

**Good practice 9.2:** A dissemination policy ensures the free dissemination of official statistics.

**Good practice 9.3:** In order to ensure equal access to national statistics for international users, English-language statistical information (data and metadata) is available on websites of National Statistical Authorities.

**Good practice 9.4:** A corporate strategy and appropriate guidelines are in place for the preparation of statistical publications (paper and electronic).

**Good practice 9.5:** A corporate database and glossaries promote the use of standard statistical concepts and definitions.

**Good practice 9.6 (adopted from the European Statistics Code of Practice):** Users are kept informed about the methodology of statistical processes including the use of administrative data.

Good practice 9.7 (adopted from the European Statistics Code of Practice): Metadata are documented according to standardised metadata systems.

**Good practice 9.8**: A corporate strategy and appropriate guidelines are in place for the preparation and dissemination of metadata on concepts, scope, classifications, basis of recording, data sources, statistical techniques, differences from internationally accepted standards, annotation of good practices, geographical coverage, etc.

**Good practice 9.9**: Processes ensure that sampling and non-sampling errors are measured and systematically documented and that information is made available to users for all key statistical outputs.

**Good practice 9.10**: Internal guidelines are available in statistical agencies on responding to erroneous comments. These guidelines are well known by staff.

**Good practice 9.11 (adopted from the European Statistics Code of Practice):** Access to microdata is allowed for research purposes and is subject to specific rules or protocols.

**Good practice 9.12**: Where a pricing policy exists for specific services or custom-designed products, conditions of sale are clearly communicated.

**Good practice 9.13**: Educational material is developed with the aim to enhance the use of official statistics and to avoid their misuse and misinterpretation.

**Good practice 9.14**: Official statistics are released in machine-readable form ('open data') that encourage reuse and analyses.

## **Response on Recommendation 9:**

[Good Practice 9.1 - 9.5, 9.12-9.14 ] Statistical information from the ICBS is available through numerous dissemination tools, including paper publications, an active website, as well as new-media channels such as <u>Facebook</u>, <u>Youtube</u> and <u>Twitter</u> (in Hebrew). Contact can be made with the dissemination services through email (<u>info@cbs.gov.il</u>) and a telephone hot-line (+972-2-5669245).

The website (<a href="www.cbs.gov.il">www.cbs.gov.il</a>), includes statistical tables and indicators, analytic publications, online databases and table generators in specific subject matter areas, and access to Public Use Files (PUF). All materials are downloadable in various formats. The website provides a <a href="database">database</a> and <a href="glossaries">glossaries</a> to promote the use of standard statistical concepts and definitions. The <a href="online">online</a> <a href="catalogue">catalogue</a> of CBS publications is updated continuously. Almost all information is available under an <a href="open license">open license</a>. <a href="Stastilite">Stastilite</a> pamphlets on a wide variety of topics are prepared in Hebrew, in English and in Arabic and disseminated widely both in paper and electronic form, in order to introduce the public to the statistical topics on which information is available.

Although key statistics and publications are available in English as well, one of the ongoing challenges of the ICBS is the provision of statistics, metadata and publications in English and Arabic, in a timely manner and to high professional standards. One of the on-going ICBS projects is translating all the information available through new-media channels into English and Arabic.

Macroeconomic, financial and business statistical information and their accompanying metadata, press releases and publications, in Hebrew and in English, are also available on the Bank of Israel website and in the SDDS data page on the IMF website. Other government agencies that produce statistics provide them on their websites as well, however at present there are no country-wide standards for dissemination of official statistics and supporting metadata. This issue will be discussed in the future within ongoing efforts to coordinate the ISS.

The ICBS was an early innovator in providing web access to current and archived products. It has made continuous efforts to embrace innovation in digital publishing and other tools such as new media channels. However our current website is in urgent need of upgrading. It is hoped that a new website that has been in planning and testing for several years will soon be launched. The new website is designed to be clearer and better organized, and equipped with advanced search options as well as direct electronic access to data and metadata user-implemented analytic tools, and enhanced access to open data. At the moment the unified statistical database contains a limited number of time-series, but there are plans to expand this considerably in the future. In the new website, metadata such as glossaries, definitions and quality indicators will be presented in a more accessible and practical format.

Most of the data and information are available for download and printing from the website at no charge. There is a symbolic charge for Public Use Microdata files, which also require a signature on a license of use. Tailor made micro data for research purposes are priced on a cost-recovery basis, and the pricing policy, as well as the charges for use of the research room facilities is clearly

stated in the <u>Research Room guidelines</u>. Some detailed historic data is still on paper or CD only, and these are available at the central ICBS library in Jerusalem, which contain old publications, reference books and periodicals, as well in subsidiary research rooms in Tel-Aviv and Haifa.

The Public Relations unit also prepares informational materials including presentations and lesson plans aimed at teachers and students, in Hebrew and Arabic and actively promotes the use of <u>the</u> ICBS website in educational settings.

[Good Practice 9.7-9.8] Over the past two years the ICBS has conducted a pilot project to develop the tools necessary to introduce a standardized metadata system based on version 2 of the Standard Integrated Metadata Structure (SIMS). Hitherto, although organization-wide metadata was available on concepts, classifications, and statistical techniques, it was not developed and stored with international standards in mind. Although economic data was provided in the format prescribed by the IMFs Data Quality Assurance Framework (DQAF) and the Special Data Dissemination Standards (SDDS) has been implemented since the year 2000, standardization of metadata frameworks had not been extended to all subject matters at the ICBS. The aim of the current project is to develop user-oriented metadata in a standardized way that will allow re-use of metadata over all purposes, including documentation of data transfers, website use, and other forms of dissemination. Data documentation on the new website will conform to SIMS structures and concepts. Implementation of the metadata project will begin in 2018, although some elements have yet to be developed, including the architecture for storage and reuse of metadata.

The ISS coordination policy promoted by the ICBS will seek to widen standardized metadata to the rest of the national statistical system.

**[Good Practice 9,6, 9.9]** All data published by the ICBS is accompanied by full methodological documentation. Traditionally this was available in methodological introductions to annual publications and the Statistical Abstract and in technical publications. Today equivalent documentation is available on the website.

This is generally true of national statistics published by other government agencies, although the format and comprehensiveness of methodological documentation is not consistent between agencies. The goal of promoting consistent and coherent standards full methodological documentation across the ISS is one of the goals of the current coordination policy.

**[Good Practice 9.10]** It is ICBS policy to respond to major erroneous or misleading comments on its published statistics. When it is deemed necessary a response is issued by the Public Relations Department, the subject matter unit, or even by the National Statistician in person. There are no firm standardized guidelines on this matter, and judgement is exercised as to the manner and medium in which to respond.

**Recommendation 10**. Adherents establish responsibilities for co-ordination of statistical activities within the National Statistical System. To this end, Adherents should ensure that:

- i) the co-ordination of statistical activities among statistical producers is done through the use of standard concepts and classifications and avoids the duplication of effort;
- ii) responsibilities for such co-ordination function are clearly laid out and anchored in statistical legislation.

**Good practice 10.1:** The role and responsibilities of all producers of statistics are clearly determined by law. A co-ordinator of the National Statistical System, such as the NSO, is also designated by law.

**Good practice 10.2:** The designated co-ordinator has responsibility to co-ordinate the statistical activities of official producers in the NSS and to represent the NSS as a whole. This concerns in particular the use of appropriate statistical concepts and procedures, the implementation of international standards and efforts to minimise duplications in data collection, production and dissemination of official statistics.

**Good practice 10.3**: Procedures, mechanisms, tools, guidelines, or agreements are in place to ensure effective co-ordination within the NSS. Procedures include: establishment of a national statistics plan; co-ordinated data dissemination, e.g. through a single data portal; assistance with implementation of international standards and classification; and common quality management processes.

**Good practice 10.4**: Exchange of statistical information between statistical agencies is actively undertaken.

# **Response on Recommendation 10:**

**[Good Practice 10.1-10.4]** The ICBS is the major producer of Official statistics in Israel, but in several subject matter areas official statistics are produced by other ministries and national institutions which together form the Israeli Statistical System (ISS). Although there is no other government agency besides the ICBS which produces official statistics as its primary responsibility, in several Ministries and government agencies considerable resources are devoted to the production and dissemination of statistics (including administrative data-based and sample survey based statistics), whereas in others it is a by-product of their administrative functions. In some cases these statistics adhere to international standards and are supplied to international bodies such as the UN and its agencies and the OECD, whereas in others the statistics are produced without explicit reference to accepted standards.

Legislation provides for the coordination of the ISS. The Statistics Ordinance sets out the National Statistician role to "direct" the statistical activities in government agencies, and it is incumbent on these agencies to consult him before conducting surveys. This is further underlined by the Financial and Economic Regulations of the State of Israel (Hebrew Only) administered by the General Accountant of the Finance Ministry, which instructs government institutions to consult the National Statistician in statistical matters which require government financing. Furthermore, the Statistics Ordinance states that the PCS should review statistical plans by all government agencies, including the ICBS, and comment on their integration.

The coordinating role of the ICBS is supported by practice as well. The ICBS has had longstanding exchanges of information with other agencies producing official statistics, some of which were republished in the annual Statistical Abstract and on the ICBS website. Over the past decade bilateral agreements formalized in Memoranda of Understanding (MOU) were made between the ICBS and Bank of Israel and the National Insurance Institute. These formalized agreements built on long-standing practices. However the challenge is to move beyond bilateral agreements to a multilateral system with mutual commitment to common principles and practices, and functioning monitoring institutions.

The coordinating role of the ICBS was enhanced as part of the process of accession to the OECD, where the ICBS led in coordinating and promoting international standards for concepts, procedures and data transmission processes. These efforts are led by the ICBS Department of International Relations and Statistical Coordination. Nevertheless, at present there are no formal mechanisms for setting or enforcing common standards and coordination mechanisms within the ISS.

The lack of fulfilment of these goals and statutory obligations was addressed by the State Comptroller in his <u>annual report for 2013</u>. He reprimanded the ICBS and the PCS for not carrying out their coordination function, for not assuring standards of quality throughout the statistical system, for not requesting and commenting on plans for statistical activities by state institutions; and equally, he reprimanded government Ministries for not consulting the ICBS and not coordinating their statistical activities with it.

This criticism was welcomed by the ICBS, and the report encouraged and justified its intensifying efforts and plans to coordinate the statistical system, activities which had begun before publication of the report.

Since the report the ICBS has sought to reform and enhance its coordination role, addressing this subject within the successive <u>Twinning projects with Statistics Denmark</u> under European Community Auspices, and launching a number of national initiatives.

Within this context, a conference of ONAs to consolidate the ISS was held in November 2017. The goals of creating common standards, coordination and enhancing statistical skills were presented and discussed, and a dialogue was established between the ONAs and the ICBS. Further meetings and activities are planned, including courses in statistical methods and quality assurance tools. One of the primary objectives of the conference was to establish a steering committee which would help develop and consolidate the professional and organizational infrastructure for creating and promoting common standards and ensuring coordinated production of Official Statistics. In these activities ICBS has been guided by the international experience that has accumulated over the past decade.

A concrete example of coordination is the ICBS responsibility for coordinating all reporting of Sustainable Development Goals (SDG) indices to international bodies, for assembling all national level indicators for the government ministries and for monitoring the achievement of the goals. The knowledge and data required to report many of the indices are not available at the CBS, but rather in the agencies who are responsible for the domains covered by the targets. As the agency responsible for coordinating the annual SDG report, the ICBS has initiated processes designed to create a common platform for all the bodies involved, so that the appropriate criteria, indices and reporting mechanism will be defined for all.

Creating coordination standards, mechanisms and responsibilities will be a long tern process. Establishment of a national statistics plan, providing a common portal to national official statistics, avoiding duplication and encouraging and even enforcing adherence to international quality standards is a long-term goal which, it is hoped, will be progressively realized.

**Recommendation 11**. Adherents commit to international co-operation. To this end, Adherents should:

- i) encourage statistical producers to achieve common goals in statistics jointly with the statistical producers in other countries and with international organisations, with a view to developing internationally comparable statistics, to designing international standards and to exchanging information on good practice;
- ii) provide the necessary data for the OECD's reporting system and analytical work, in compliance with international statistical standards as recognised by the OECD and preferably using the Statistical Data and Metadata eXchange method/standard in particular for domains with internationally agreed Data Structure Definitions (DSDs).

**Good practice 11.1**: National statisticians participate actively and regularly in international expert groups, conferences and workshops.

**Good practice 11.2:** National Statistical Authorities participate in joint projects with other countries to share development burden.

Good practice 11.3: Heads of NSOs or their staff chair international statistical bodies.

**Good practice 11.4:** National Statistical Authorities participate in the main international statistical fora to exchange on their statistical practices, to participate in research and conceptual work and to contribute actively to the definition and design of international norms and statistical standards.

**Good practice 11.5**: Access to micro-data by international organisations is explored as a means to reduce the burden of countries responding to questionnaires.

**Good practice 11.6:** National Statistical Authorities provide complete and timely answers to the questionnaires of international organisations.

**Good practice 11.7:** Producers of official statistics use modern statistical and IT tools, such as SDMX for the regular transmission of data and metadata to international organisations, notably the OECD.

#### **Response on Recommendation 11:**

[Good Practice 11.1-11.7] Virtually all statistical activities of the ICBS are influenced by the products and by-products of international cooperation: through participation in conferences, international surveys, working groups, joint projects, consultations and study visits, testing international methodologies and more. The ICBS actively pursues a policy of strengthening its activities and skills through international cooperation, of encouraging participation by its staff in international statistical fora and projects, and of leading Israel's presence in international statistical organizations. It is highly active in the UN-ECE, the EU Medstat program for the EU-ENP South countries, and in OECD projects. This policy is implemented by its Department of International Relations and Statistical Coordination, which is a legacy of the central role which ICBS held in Israel's accession to the OECD. This department is also responsible for coordinating ICBS responses to questionnaires and data queries from International Organizations, and monitoring their prompt delivery.

ICBS continues to see itself as the leader in promoting international statistical standards throughout the ISS. It does so through bilateral dialogue with ONAs, and intends to do so more generally through its current ISS coordination policy. A concrete example of this is ICBS's role in coordinating SDG reporting by Israel, where it is necessary to enhance the international comparability of statistics and at the same time transmit methodologies and reporting standards to all Israeli partners.

ICBS staffs are active in a number of international workgroups which promote international standards and methodologies. These include working groups on labour statistics, national account methodology, environmental statistics, census methods, and statistical confidentiality. Altogether, in 2016 95 members of the ICBS staff took part in 105 international activities, and this increased in 2017 to 124 members of the ICBS staff who took part in 140 international activities. In principal ICBS would welcome greater involvement in international projects and for a, and such cooperation is limited chiefly by budgetary constraints.

Prominent among them international cooperation projects the SDMX Technology Working Group. Currently ICBS uses the SDMX tools for the regular transmission of data and meta-data to the OECD for the following statistics: STES – Short Term economics statistics and FDI - Foreign Direct Investment. ICBS is preparing to transmit data and metadata using SDMX in the following domains: NA – National accounts, to ESTAT; Infra-annual Labour Market Statistics, to OECD; BOP - Balance of Payments, to IMF – as part the planned adoption of SDDS Plus by 2019; IMTS - International Merchandise trade statistics, to IMF - as part the planned adoption of SDDS Plus by 2019 SDGs -Sustainable Development Goals, to the UNSD.

Within the context of Medstat ICBS regularly participates in the development of statistics and in the exchange of best practices with its neighbors in the following statistical domains:

- 1. Energy
- 2. Transport
- 3. Labour Statistics
- 4. Balance of Payments
- 5. Migration statistics
- 6. Quality management
- 7. Geographic Information System

In recent years, two joint EU-Israel Twinning projects have assisted ICBS in the development and improvement of its official statistics, with the purpose to align its statistical production to the EU and other international organizations standards, guidelines and best practices.

More precisely, the goals of the first Twinning project (2013-2014) were:

- 1. To align National Accounts, Educations Statistics and Survey Methodology to the EU and other international standards and guidelines.
- 2. To better coordinate the National Statistical System and prepare a strategic plan for official statistics, including a dissemination and communication strategy.
- 3. To improve the redesign of the ICBS website and better meet users' needs.

The goals of the second Twinning project (2016-2018) were:

- 1. To set up an organisational unit responsible for quality management as an overarching process toward the production of statistics in the National Statistics System (NSS), and capacity building of the staff;
- 2. To improve ICBS Micro data services to the research community;

- 3. To establish infrastructures suitable for the production of agricultural statistics;
- 4. To develop a methodology based on an extensive use of geo-spatial tools in survey management.

Other types of international cooperation project, involve provision of Israel micro-data: provision of Israel Labour Force micro-data to the European Union and provision of census micro-data to the University of Minnesota, in the framework of the IPUNS international project on collecting and distributing census data from around the world. Although at present there are no plans to extend access by international organizations to non-confidential microdata, this may be considered in future.

ICBS contributes to international statistical development efforts by regularly and actively providing comments and answers to international consultations.

A recent example is ICBS staff participation in the work of the Workgroup on the Modernisation Maturity Model and Roadmap for Implementing Modernstats Standards (workgroup of the UNECE Modernisation Committee on Standards).

In addition, ICBS professional staff is encouraged to present research results in international professional conferences, where discussion and peer-review spread their results more widely.

**Recommendation 12.** Adherents encourage exploring innovative methods as well as new and alternative data sources as inputs for official statistics, and in particular encourage statistical agencies to actively explore possibilities to use new data sources (including large datasets owned by the private sector), or to combine existing and new data sources as input for official statistics. At the same time, these opportunities are weighted against the limits of using modern information technologies and the need to maintain the quality of official statistics.

**Good practice 12.1:** National Statistical Authorities actively encourage and undertake research on new sources and new methods for official statistics, including in the private sector and through combination of existing sources.

**Good practice 12.2**: National Statistical Authorities develop methodological work and IT structure to ensure the quality of official statistics when new and alternative data sources are used as input.

**Good practice 12.3:** An explicit policy is formulated towards the use of "Big Data" and private data that considers legal, technical and methodological implications.

**Good practice 12.4:** Implications for statistical infrastructure, statistical methods, and analytical tools are systematically assessed.

**Good practice 12.5:** There are explicit agreements between producers of official statistics and owners of private data; and legislation which regulate access to this information and deal with privacy issues.

**Good practice 12.6:** National Statistical Authorities participate in the development of capabilities to process geospatial data.

## **Response on Recommendation 12:**

[Good Practice 12.1-12.6] Like other statistical agencies throughout the world, the ICBS is always on the lookout for new data sources and new methods to access them. In some case these sources augment existing methodologies, such as the use of computerized sale and price data from the big supermarket chains to help in calculation of the CPI, and in others they create new data, such as combining administrative registers with the use of remote sensing methods to develop geospatial land use data.

The centrality of research and development into data sources and methods is reflected in the ICBS's Working Paper and Technical Paper series which are accessible on its website, both of which reflect and display the products of data source and methodological developments. Among them: linking survey and population register data to obtain female fertility data by religiosity; linking administrative and geospatial data to develop hedonic models of housing prices; forecasting the industrial production index based on expectations from the business tendency survey, and others. The ICBS methodology department (7% of the total ICBS work force) explores new methods of sampling and estimation. (A recent concrete example is Cohen, N., Ben-Hur, D. and Burck, L. 2017. Variance estimation in multi-phase calibration. Survey Methodology, Vol. 43, No. 1). Other examples of research can be found in links provided by the ICBS website to articles published in peer-reviewed journals. One of the leading examples of ICBS innovation was in its census methodology. The 2008 Census was an "integrated" census, in which data from the National Population register combined with other administrative data sources was corrected by estimates obtained from two coverage samples for each statistical area: an area sample of

addresses for estimating the register undercount- people living in the area who are not registered in that area, and a telephone sample of people registered in the area for estimating the register overcount- people registered falsely as living in the area ( Details of this methodology can be found in Nirel, R. and Glickman, H. (2009). *Sample surveys and censuses*. In: Handbook of Statistics 29A. Sample Surveys: Design, Methods and Application Eds., D. Pfeffermann and C.R. Rao. Amsterdam: North Holland, pp. 539-565). Present census development plans will further develop this methodology, while at the same time the feasibility of conducting a "rolling census" is being tested.

The challenges and opportunities faced by NSIs in general and by the ICBS in particular in developing new data sources and methodologies were reviewed by the National Statistician, Prof. Danny Pfeffermann in the 24<sup>th</sup> Annual Morris Hansen Lecture given to the Washington Statistical Society: "Methodological Issues and Challenges in the Production of Official Statistics." In his lecture Prof. Pfeffermann addresses, among other themes: the collection and management of big data for official statistics, the financial and organizational challenges in terms of computing resources which the use of such data will pose for NSIs, the increasing challenges that privacy and confidentiality issues pose to data accessibility, the possible use of internet web panels for collecting official statistics, the statistical problems posed by mixed-mode surveys, new census methodologies and small area estimation, and the integration of geospatial information into official statistics. The range covered by this lecture and the examples provided from the ICBS itself demonstrate that these innovative issues are on the ICBSs agenda.

The ICBS is a senior partner in government-wide GIS initiatives. ICBS has an innovative GIS department which provides many of the basic layers for country-wide GIS projects, most of which are available to the public. Plans are in place to integrate GIS tools more closely into sampling and survey-planning and execution. One of the activities of the current Twinning project with Statistics Denmark is to advance the use of geo-spatial tools for improving the quality and efficiency of field surveys.

Nevertheless the mundane realization of the challenges posed by new data sources requires staff, resources and organizational infrastructure which are not always available. For example: although in principal the powers granted by the Statistics Ordinance should give the ICBS wide and unimpeded access to new datasets even when these are in the private sector, in practice legal disputes, price and confidentiality barriers impede access. Long-standing disputes with cellphone companies are an instance of this. Regularly updated cellphone data linking residents and cellphone numbers which can be readily linked to other ICBS databases is an essential tool of sampling and survey work, but are not easily obtained. Or another example: the use of new and innovative data sources increases the data protection challenges the ICBS faces. The investment in ICT resources which are necessary merely to protect the security of the data held by the ICBS poses a severe budgetary constraint which limits the resources available for ICT development. And finally, the discovery and the exploitation of new data sources requires allocation of staff to research and development, and creating the conditions which will enable the retention of creative and innovative personnel. Budgetary and civil-service wide constraints on recruitment do not facilitate this strategic goal.