

Official Statistics, Core Statistics and the National Statistical System

Yoel Finkel

Israel Central Bureau of Statistics

April 14, 2016

Purpose of presentation

- To define “official statistics”
- To define “National Statistics System”
- To describe the participants in the NSS
- To outline factors leading to growth in production and use of official statistics.
- To describe two development activities in the CBS/NSS: development of the coordination function in Israeli Official Statistics and defining and outlining and ranking and distinguishing between “official statistics” and core statistics. More specifically:
 - To define the coordination function; to summarize how the responsibility of coordination is viewed by the Israel Statistics ordinance; to provide international examples of coordination ; to outline the present state in Israel and development for the future.
 - To outline the terms of reference of a CBS senior level committee appointed to examine the CBS program of statistics and to distinguish between “official statistics” and “core statistics”; to describe similar processes that other countries have applied; to report on the status of the Committees work.

What are official statistics

- Definitions:
 - Official statistics are statistics published by government agencies or other public bodies such as international organizations.(Wikipedia)
 - Statistical information produced, collated, and disseminated by national governments, their agencies, and the international bodies which link them. (web Dictionary of Sociology)
 - Official statistics are statistics disseminated by the national statistical system, excepting those that are explicitly stated not to be official. (OECD)
 - Official statistics are all statistics produced by government departments and specified crown entities .(Statistics New Zealand)
- Above definitions are producer based. One might think of definitions which are user-based/ content based, etc.

Topics of Israeli Official Statistics

- Many Many
- Just looking in the statistical digest....
 - Population
 - Immigration
 - Households and families
 - Health
 - Society and welfare
 - Education
 - Labour and wages
 - Prices
 - National Accounts
 - Imports and Exports
 - Business
 - Agriculture
 - Manufacturing
 - Environment
 - Energy and water
 - Tourism
 - Transport and Communications
 - Construction
 - Banking

National Statistics System

- Consists of Producers and Users of Official Statistics

Who are the producers of official statistics?

- ICBS (producer, compiler and user)
- Virtually all Ministries and Agencies of the National government such as:
 - Bank of Israel
 - Ministry of Finance
 - Ministry of the Economy
 - Ministry of Education
 - Ministry of the Environment
 - The National Insurance Institute
- Cities and local authorities
- Universities and colleges

Categories of Users of Official Statistics

- Internet Users
- Government Ministries and Organizations
- Researchers Academics and students
- International organizations
- Press and other media
- Commercial Companies/Enterprises
- Other users
- ICBS

Factors Leading to the Growth in Production and Use of Official statistics

- Increasing Demand
- Technological Development

Increasing Demand

- Just like most countries in the world, Israel finds itself in an era of "Big Data" . If we compare the country to the way it was during the time of the founding of the State, the volume of information being published, being transmitted, being broadcast, being downloaded, being uploaded, being written, being read has increased by gargantuan proportions.
- Globalization, the technological revolution, the growth in government services, the increases in the volume of research, development and analysis, the existence of the Internet have all led to a huge increase in the demand for and supply of information and with that, statistics.

Impact of New Technology on the Future of Official Statistics

- Technology affects:
 - Collection
 - Production
 - Analysis
 - Storing
 - Data retrieval
 - Dissemination, accessibility, timeliness
- The new technology makes it easier for more producers to participate
- The new technology necessitates better overseeing, coordination and quality control

Technology and Official Statistics: Dissemination

- The internet as the main vehicle for statistics dissemination
- Linking of official statistics producers sites;
 - single site as a gateway to all other sites
 - Or one site as the sole repository for all official statistics
- Wide and open dissemination with controls on quality and confidentiality
- Use of the technology to allow for on-line interactive statistical manipulation and analysis.

The NSS Coordination Function

- National statistics agencies around the world serve to coordinate the production of official statistics by all government Ministries and agencies in a particular country.
- In Israel the Statistical Ordinance (Israel's statistical legislation) legally puts the responsibility of coordination and overseeing of official statistics activity in the hands of the Government Statistician. To quote the Ordinance:

The Statistician shall head the Bureau and shall guide the statistical apparatus of the State agencies.

Coordination

- The Statistical Ordinance also provides for coordination as a function of the CBS:
- - to cooperate with State agencies in performing statistical acts and publishing their results;
 - to prepare, in consultation with the Public Council for Statistics, multi-annual general schemes for the statistical acts of State agencies;
 - to prescribe, in consultation with the Public Council for Statistics and the agencies concerned, uniform statistical classifications for the use of Government agencies;
 - to assemble and publish information on statistical acts which are performed or planned by or for the Bureau of State agencies.

Coordination and the Public Council for Statistics

- The Ordinance also provides for a Public Council for Statistics. Among its responsibilities are:

- (1) to advise the Prime Minister and other Ministers on matters relating to the statistical acts of State agencies;
- (2) to advise the Statistician on matters relating to statistical acts which are performed by the Bureau; for this purpose, the Council may inspect questionnaires addressed to the public;
- (3) to receive from State agencies their schemes for the performance of statistical acts and to give an opinion as to coordination between such agencies in respect of such schemes;
- (4) to make proposals for rendering more efficient and developing statistical acts of State agencies.

Coordination Activity To Date

- To date coordination in Israel has been via formal as well as informal means. In 2009 the ICBS signed an MOU with the Bank of Israel that cemented relations between the two organizations and outlines responsibilities of each organization to the other and areas and committees of joint activity.
- Under the auspices of the Public Council for Statistics there are a large number program oriented advisory committees and steering committees as well as joint statistical programs. There also considerable informal means including consultations and discussions of statistical issues

New and Planned Coordination Activity

- Under the auspices of the Twinning program efforts have begun toward the signing of MOUs with the Ministry of Finance and the National Insurance Institute
- Under similar auspices inventories of statistics producer/suppliers and their products have been assembled and a full day conference was held of statistics producers in the NSS
- Plans are under weigh for focus groups with users.
- Consideration is being given to more activities and functions in the area of coordination.

International Experience in the area of coordination of the NSS

- We are learning from international examples in this area. The following slides summarize the experience of some countries.

The UK Statistics Authority

- two main functions: oversight of the ONS and independent scrutiny (monitoring and assessment) of all official statistics in the UK.
- UK Statistics Authority has taken over the powers to produce statistics, provide statistical services and promote statistical research

The UK Statistics Authority

- Among the responsibilities of the National Statistician:
 - Lead the planning of the development of statistics across the government
 - Provide advice to ministers, the Cabinet Secretary and other senior officials on the production, dissemination and use of statistics across government.
 - As Head of the Government Statistical Service, provide professional leadership to all statisticians within government, and to other producers of official statistics

The UK Statistics Authority

- Monitoring Function:
 - monitors the production and publication of official statistics across the UK by all producers through all steps from collection through dissemination
- Assessment Function
 - has the responsibility to prepare, adopt and publish a Code of Practice for Statistics which sets out standards that official statistics are expected to meet.
 - Designate official statistics in compliance with code as “National Statistics
 - The Authority oversees and assesses more than 150 producers of official statistics and assesses their statistics products

Portugal

- The Portuguese Statistics Law provides for:
 - A National Statistical Council to provide overall guidance for the Statistical System
 - Statistics Portugal to be the central entity for the production and dissemination of official statistics
 - Statistics Portugal to delegate statistical activities to other government agencies by means of entering into a Protocol for Delegating statistical functions. Statistical Portugal maintains the powers of supervision and coordination.
 - Statistics Portugal to use its annual working Program as a key instrument of coordination.

France / Insee

- Strong coordination through the National Council for Statistical Information (CNIS) (Insee the Secretariat of the CNIS):
 - Technical Coordination: manages registers, defines classifications and determines accounting and conceptual frameworks
 - Coordination through people: Insee administer the “civil-service statistician” category within itself and within all government ministries and is thereby responsible for the training of all government statisticians
 - Functional Decentralization and Coordination: various specialized offices produce statistical products according to their expertise under the overseeing of the CNIS

Sweden: Decentralized but Centralized

- In 1994 authority for statistics for specific fields of authority were transferred from Statistics Sweden to the relevant ministries and offices.
- In 2002 in recognition of a need for further coordination, the Council for Official Statistics was established. The Director General of Statistics Sweden is the chairman and six other DGs from other authorities are members.
- Coordination by Statistics Sweden is “soft “ coordination, i.e discussion and consensus before regulation.
- Coordination includes dialogue, working groups, annual conference, seminars, courses ,common study groups
- But Coordination also includes the regulation of of quality, setting common standards including classification and nomenclature standards as well as uniformity of methods, definitions, metadata etc.

The CBS Committee on Official and Core Statistics

- In 2013 the Government Statistician appointed a high level committee whose responsibility was to determine which of all the official statistics activities of the CBS could be considered “Core statistics”

Terms of Reference of CBS

Committee on Official and Core Statistics

- To define "official statistics" and "core statistics"
- To recommend criteria by which elements of the statistics program can be examined and classified as core or not
- Outline a program or process by which statistical series can regularly be evaluated as core or otherwise and to recommend the frequency of the program
- To test out the program initially and to propose among the CBS statistical activities which are core statistics and which are not.

Activities of the Committee

- Consider approaches to defining official and core statistics.
- Review experience in other countries
- Pilot :Using Australian criteria assess Israeli CBS statistical activities as core or not.
- Presentation to the Public Advisory council on Statistics
- Next steps:
 - Ranking of Statistical products
 - Inclusion of statistical products of the entire NSS
 - Recommendations to the Public Advisory Council

International Experience

- The following are some approaches to official statistics and core statistics among different countries which were useful to the committee and probably of interest to you as well.

UK Statistics Authority

Criteria for classifying statistics as Official Statistics
and the UK Statistics Authority Subject Areas

Criteria for identifying Official Statistics

4. A dataset or quantitative product should be considered a strong candidate for treatment as an 'official statistic' if it meets the five criteria below. For an ad-hoc release of statistics or statistical analysis, it is understood that it may not be possible to meet the first criteria when it is not known whether it will be repeated. Even where this is the case, meeting the other four criteria would make an ad-hoc release a likely candidate for categorisation as an official statistic.

i. Collection

The process of collecting the raw data used to compile the product is conducted on either a regular or recurring basis, or there is an intention or strong probability for that to be the case.

ii. Methodology

The raw data are collected, and the results are compiled, using widely accepted statistical methods. This equally applies to administrative data even where the statistical methods are straightforward.

iii. Coverage

The information compiled from the raw data is complete in the sense that it is representative of the total population of entities that it embraces.

iv. Subject matter

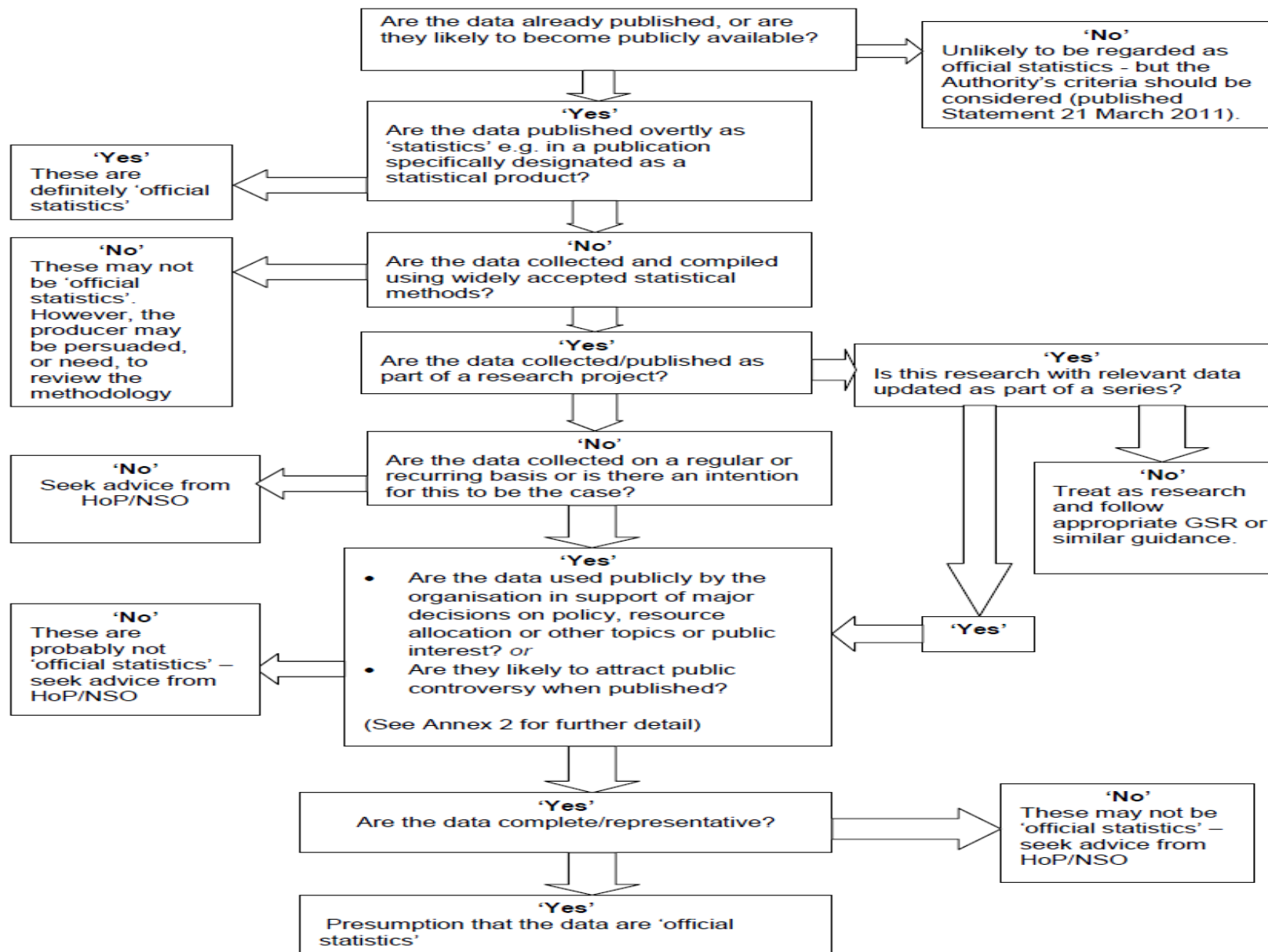
The subject-matter covered by the product includes one or more of the following categories of information:

- used to monitor or measure the government's performance or delivery (either generally, or against formal targets);
- has the potential to impinge substantially on the formulation, implementation, evaluation, or monitoring of public policy;
- has the potential to inform, or impact on, decisions about the management of government services, or the allocation of public funds or resources;
- provides a window on the work of government by, for example, allowing citizens to assess the impact of public policies and actions;
- can serve the 'public good' by meeting the needs of business, academia, etc;
- has had a high public profile in the past (i.e. regularly generated column inches in the print media or regularly attracted the attention of the broadcast media) or is likely to generate significant public interest, and perhaps even controversy, in the future;
- information which is market-sensitive (likely to have a significant effect on the value or traded volume of any investment).

v. Accessibility

The information derived from the raw data is placed in the public domain by a producer, a person on their behalf or a third party. It does not matter whether the information is published as a statistical release, as part of an answer to a Parliamentary Question or Freedom of Information request or as evidence to a Select Committee, it is the characteristics of the information that are paramount.

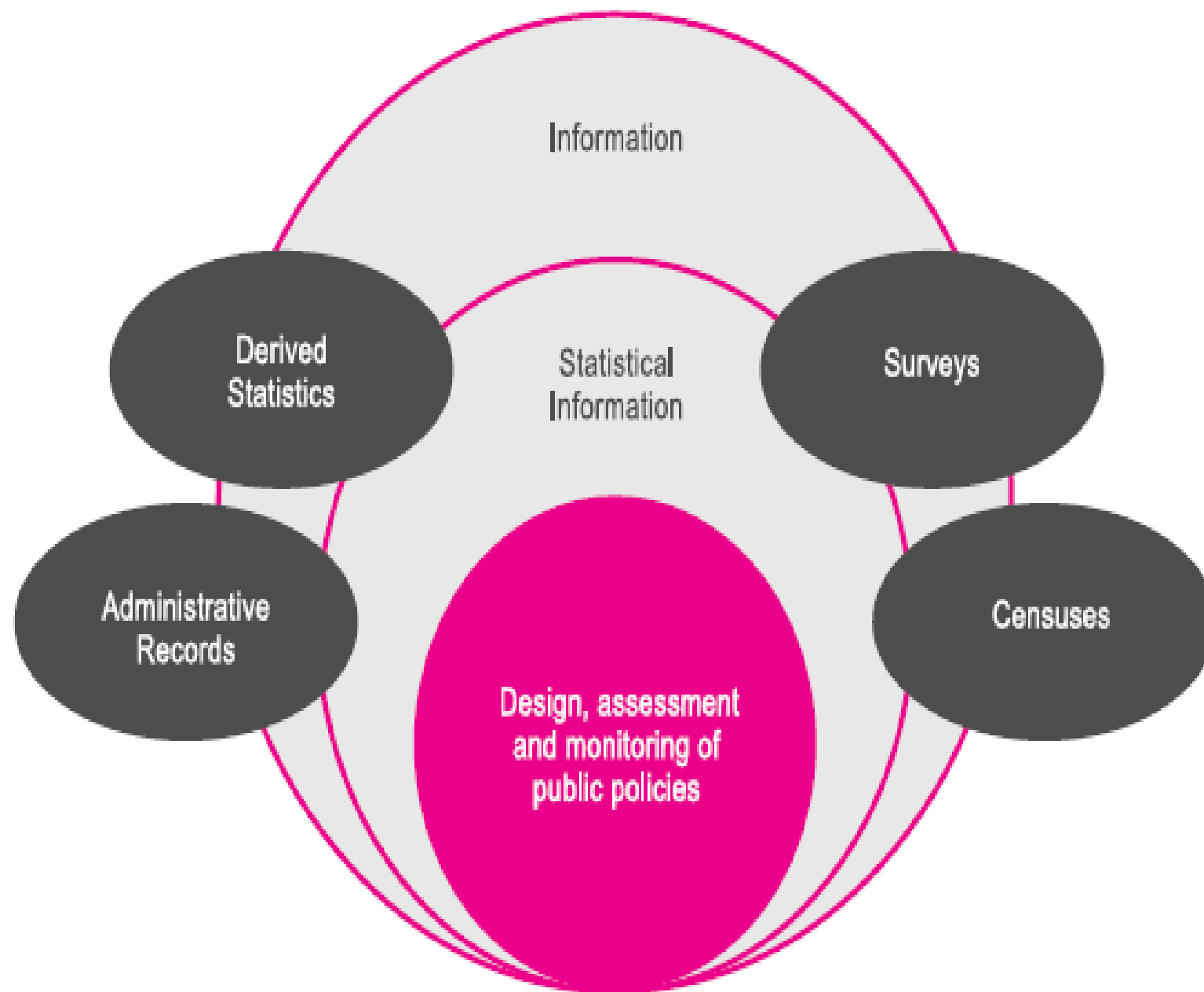
ARE THE DATA OFFICIAL STATISTICS?



Colombia

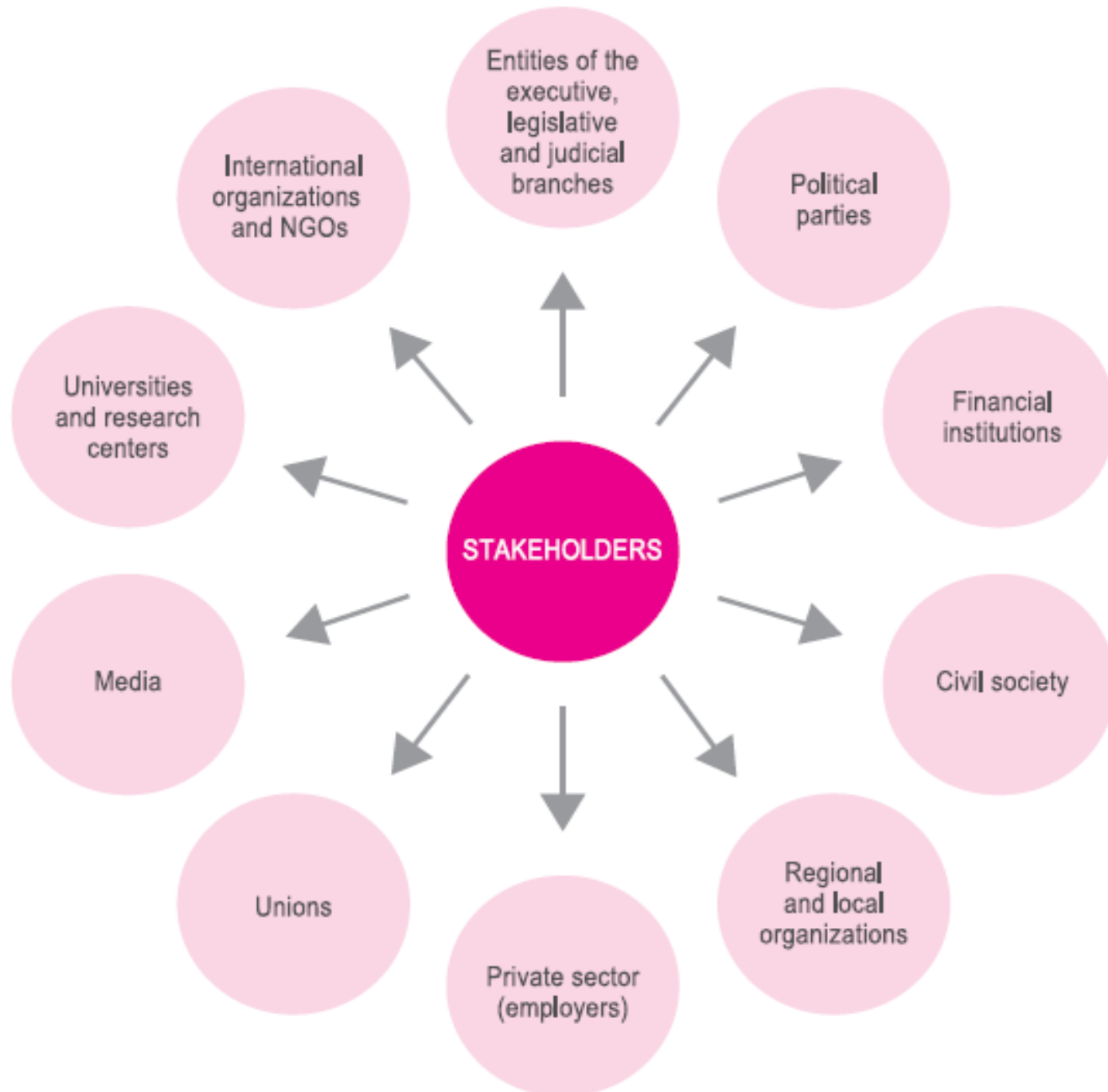
Methodology for the Formulation of the National Statistics Plan

Diagram 1. Statistical information



Source: DANE

Diagram 3. Types of stakeholders



CLASSIFICATION OF THE STATISTICAL OPERATIONS COMPRISED IN THE PEN

Thematic areas

ECONOMIC

SOCIAL

ENVIRONMENTAL

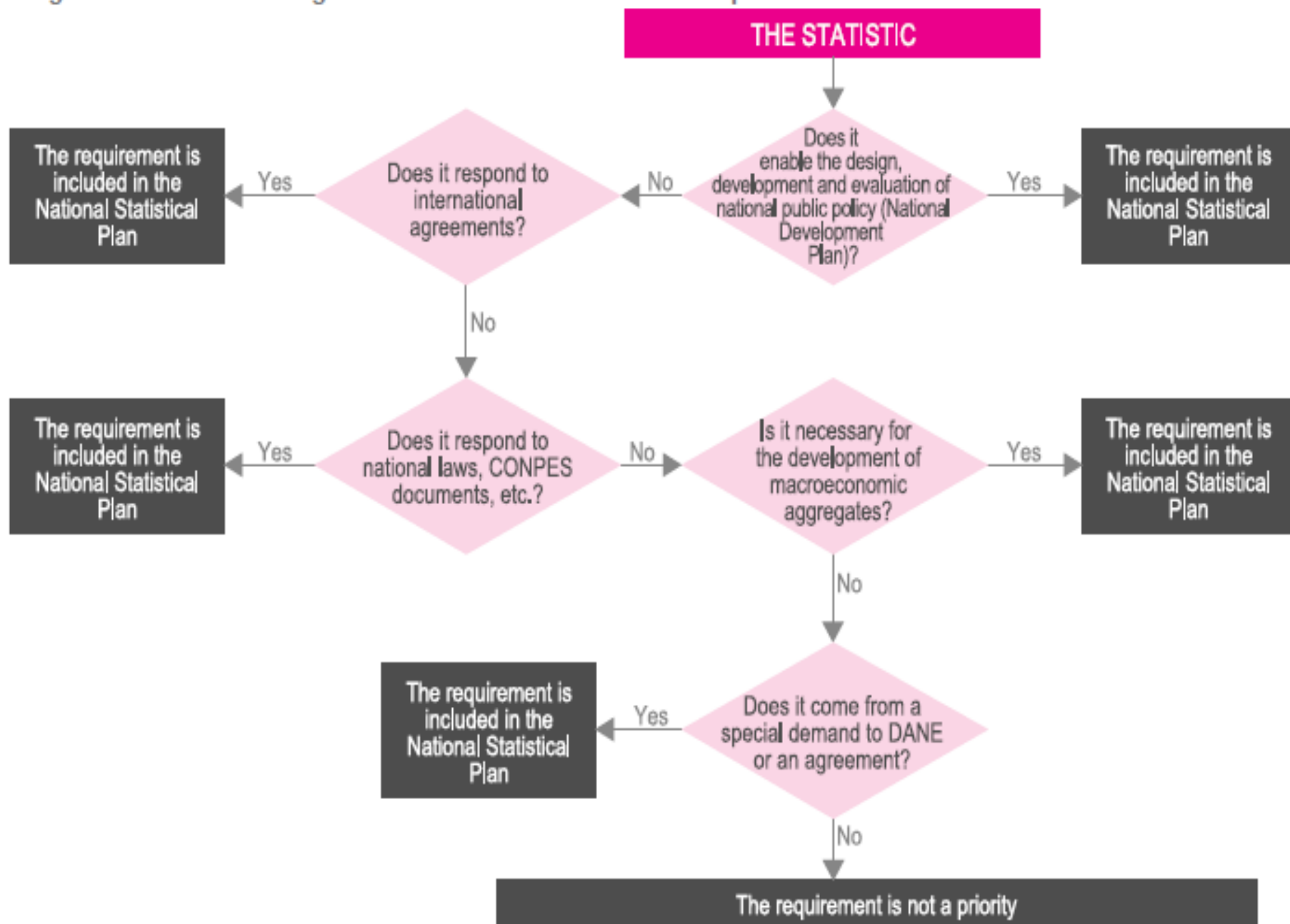
Topics

- Agriculture, livestock and fisheries
- Trade
- Industry
- Services (tourism, hotels and restaurants among others)
- Construction
- Mining and energy
- Information and communications technology
- Transportation
- Currency, banking and finance
- Public finance and fiscal statistics
- Economic accounts
- Cost and price indices

- Demography and population
- Living standards, quality and conditions
- Public utilities
- Labor market and social security
- Education, science and technology
- Culture, sports and recreation
- Health
- Public administration
- Political and associational activity
- Justice
- Security and defense

- Natural resources
- Environmental management
- Natural events
- Waste

Diagram 8. Prioritization algorithm for statistical information requirements



Terms of Reference

"The ABS should set out to identify, in a highly consultative way, the key national datasets that are the essential indicators of the state of the nation, regardless of which organisations produce them."

Objectives of the ESA for Australia initiative

The purpose of the ESA for Australia initiative is to allow for effective prioritisation of investment, focus and effort within the NSS, by identifying those essential statistical assets which are critical to decision-making in a complex and sometimes fragmented information environment across Australia.

Developing a list of agreed essential statistical assets will enable the Australian Government, in partnership with state and territory governments, to pursue the following objectives:

1. Identification of critical information gaps, so that these can be addressed,
2. Ensuring that the critically important information (statistics/data) are of sufficient quality, and
3. More efficient use of government resources by identifying areas of duplication and underutilisation.

Ultimately, the pursuit of these objectives through the ESA for Australia initiative aims to enhance the quality and value of the Australian statistical system to ensure providers and users of statistics have the confidence to trust the statistics produced within it.

What are essential statistical assets?

Statistical assets are the statistics, as well as the datasets that they are drawn from (where they exist).

Essential statistical assets are defined as a small, core subset of official statistical assets that, due to their application and importance, should be given priority in order to provide a high quality and trusted statistical service. Recognizing those statistics considered to be most critical to Australia will help ensure their level of quality is maintained and enhanced over time.

Criteria used to determine the 2013 list of ESA for Australia

To determine the 2013 list of ESA for Australia, the following criteria were used (in order of importance):

- i. Application in public policy and service delivery**
Relied upon to support enduring public policies and service delivery.
- ii. Importance to key national progress measurement**
Used to illustrate progress in Australian economic performance, environmental sustainability and social wellbeing.
- iii. Domestic legislative requirement**
Australian Government and/or majority of state and territory legislation identifies requirement for production of statistical information.
- iv. International reporting obligation and/or critical for international comparability**
Includes mandatory reporting obligations to IMF, OECD, UN and key internationally comparable indicators.

Figure 3. ESA for Australia organising framework

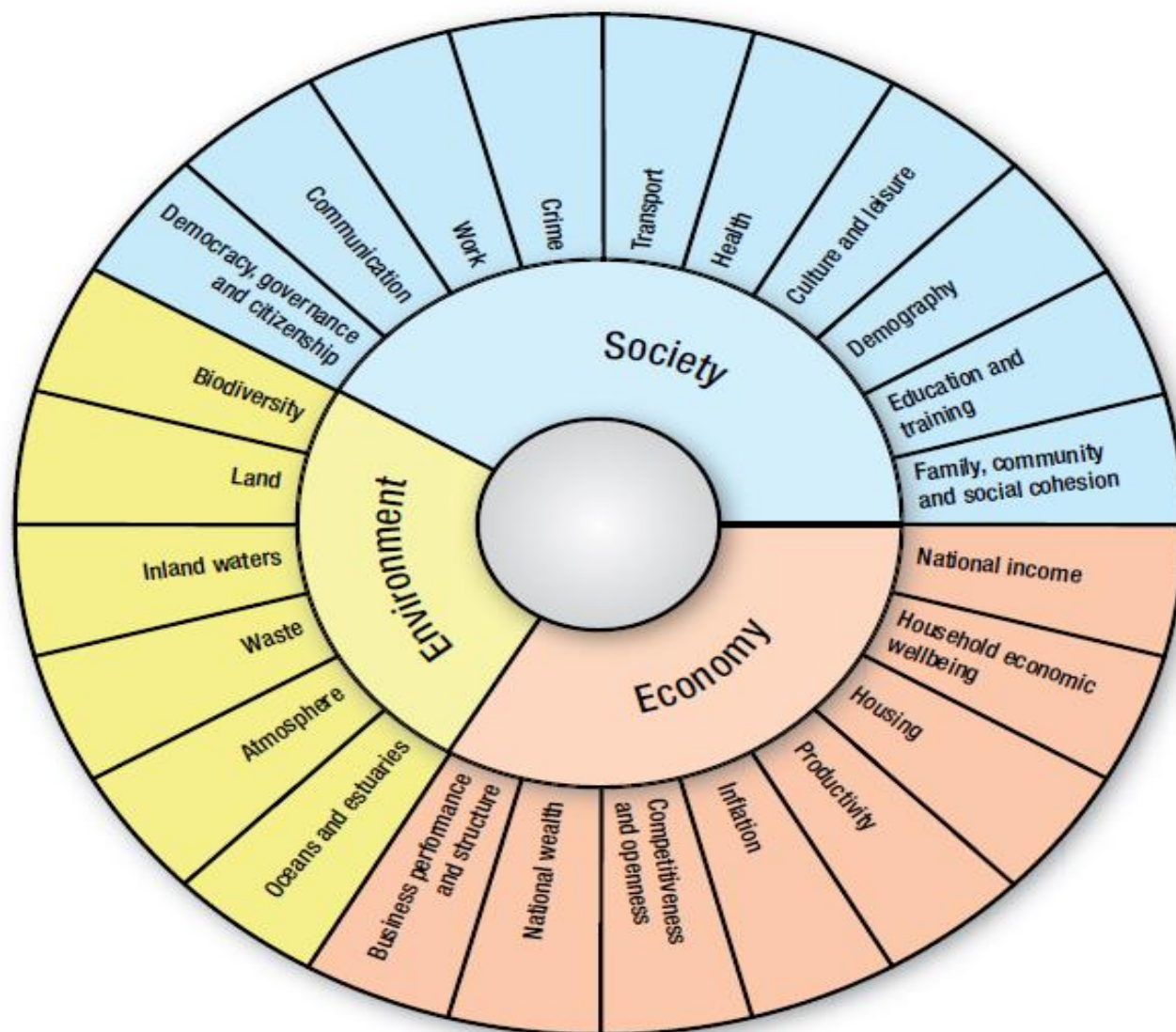


Table 1. Summary of the 2013 list of ESA for Australia, against each dimension and pillar

ECONOMY PILLAR			
Business performance and structure	Competitiveness and openness	Household economic wellbeing	Housing
<ul style="list-style-type: none"> • Business demography • Business performance indicators • Energy supply and use • Freight movement statistics* • IT use and innovation by businesses* • Job vacancies* 	<ul style="list-style-type: none"> • Balance of payments and international investment position* • Exports and imports of goods and services* • International trade inflation and terms of trade • Productivity statistics* 	<ul style="list-style-type: none"> • Employee earnings and hours worked • Employment arrangements, superannuation and retirement incomes* • Household income, wealth and expenditure statistics* • Housing affordability* • Income, labour and family dynamics* • Labour market statistics* 	<ul style="list-style-type: none"> • Access to suitable and safe housing* • Household income, wealth and expenditure statistics* • Housing activity indicators • Housing affordability* • Housing utilisation

* Denotes statistics which inform multiple dimensions and/or pillars

ECONOMY PILLAR cont'd

Inflation	National income	National wealth	Productivity
<ul style="list-style-type: none"> • Consumer inflation • Housing affordability* • Household income, wealth and expenditure statistics* • International trade inflation and terms of trade • Producer inflation • Wage inflation 	<ul style="list-style-type: none"> • Agricultural, forestry and fisheries statistics* • Balance of payments and international investment position* • Capital formation indicators • Exports and imports of goods and services* • Financial flow statistics • Financial price indicators • Gross domestic product and component statistics • Gross state product and component statistics • Input - output tables • Motor vehicle statistics* • Retail trade statistics • Taxation revenue and transfers 	<ul style="list-style-type: none"> • Central bank financial information • Government sector financial information • Land statistics * • National balance sheet • Petroleum and mineral resources statistics* • Water supply and use* 	<ul style="list-style-type: none"> • Expenditure on research and development • IT use and innovation by businesses* • Labour market statistics* • Productivity statistics*

ENVIRONMENT PILLAR			
Atmosphere	Biodiversity	Inland waters	Land
<ul style="list-style-type: none"> Ambient air quality Climate statistics Greenhouse gas emissions 	<ul style="list-style-type: none"> Biodiversity and ecosystem health 	<ul style="list-style-type: none"> Agricultural, forestry and fisheries statistics* Water quality of natural systems Water supply and use* 	<ul style="list-style-type: none"> Agricultural, forestry and fisheries statistics* Land statistics * Petroleum and mineral resources statistics* Size of protected terrestrial and marine parks
Oceans and estuaries	Waste		
<ul style="list-style-type: none"> Agricultural, forestry and fisheries statistics* Water quality of natural systems Water supply and use* 	<ul style="list-style-type: none"> Pollution, and accumulation of waste 		

SOCIETY PILLAR			
Communication	Crime	Culture and leisure	Democracy, governance and citizenship
<ul style="list-style-type: none"> Personal internet access and usage 	<ul style="list-style-type: none"> Crime incidence rates Personal experiences of violence Recorded criminal offender rates 	<ul style="list-style-type: none"> Cultural and sport participation and attendance 	<p><i>There are currently no statistics informing this dimension on the list.</i></p>
Demography	Education and training	Family, community and social cohesion	Health
<ul style="list-style-type: none"> Birth statistics Migrant statistics Mortality and life expectancy statistics* Population counts Population structure and household composition 	<ul style="list-style-type: none"> Early childhood development* Education outcomes and the transition to work Enrolment and attainment in tertiary and vocational education and training Literacy and numeracy Participation and attainment in schooling (primary and secondary) 	<ul style="list-style-type: none"> Aboriginal and Torres Strait Islander social statistics Access to essential social services Access to suitable and safe housing* Disability related statistics Early childhood development* Employment arrangements, superannuation and retirement incomes* Income, labour and family dynamics* Multidimensional social disadvantage Volunteering data 	<ul style="list-style-type: none"> Ageing and aged care statistics Disease prevalence Early childhood development* Health risk factor statistics Hospital services statistics Mortality and life expectancy statistics* Preventative health statistics Primary health care services and performance
Transport	Work		
<ul style="list-style-type: none"> Freight movement statistics* Household travel (time, distance and mode) Motor vehicle statistics* Transport related crashes and fatalities 	<ul style="list-style-type: none"> Employment arrangements, superannuation and retirement incomes* Income, labour and family dynamics* Job vacancies* Labour market statistics* 		

ID #	Pillar	Dimension	Essential statistics	Description	Datasets and Data custodians	Justification	Critical frequency	Critical spatial	Critical disaggregation
ESAS-088	Economy; Society	Housing; Family, community and social cohesion	Access to suitable and safe housing	Includes indicators of access to housing for all Australians. It includes a specific focus on the demand and supply for housing assistance, facilities to support disadvantaged sub-population groups and indicators relating to the population of homeless Australians.	<ul style="list-style-type: none"> • Australian Government Housing dataset (AIHW) • Census of Population and Housing (ABS) • National Housing Assistance Data Repository (AIHW) • Specialist Homeless Services Collection (AIHW) • Survey of Income and Housing (ABS) 	These statistics are critical for supporting public policy and service delivery models that aim to help disadvantaged people secure a place of residence, be it providing low cost social housing, assisting first home buyers to purchase a dwelling, assisting households with rent payments, or providing funding to support groups involved in providing long term community housing or crisis accommodation for people at risk of homelessness. They provide important measures of societal progress. They are used in Measures of Australia's Progress and in National Agreement / Partnerships on Housing Affordability and Homelessness, as well as in the Social Inclusion Board's "How Australia is Faring" and in the Report on Government Services. Monitoring progress in tackling homelessness is critical because of the impact of homelessness on a range of outcomes— including health, education and employment.	Annually	National, state/ territory, SA4, SA2	Household composition, program type, disability status, income source, Indigenous status, accommodation type
ESAS-983	Economy; Environment	National income; Inland waters; Land; Oceans and estuaries	Agricultural, forestry and fisheries statistics	Includes both physical and value-based estimates for bio-physical assets within Australian territorial borders. This encompasses production and stock estimates of naturally occurring and man-managed resources.	<ul style="list-style-type: none"> • Agricultural Census and Intercensal survey (ABS) • Agriculture Commodity Survey (ABS) • Agricultural Resource Management Survey (ABS) • Agricultural Water and Land Ownership Survey (ABS) • Australian Farm Surveys (ABARES) • Australian Fisheries Statistics database (ABARES) • Australian Fisheries Survey (ABARES) • Australian Forest and Wood Products Statistics (ABARES) • Fishery Status Reports (ABARES) • National Forest Inventory, including the National Plantation Inventory (ABARES) • Value of Agricultural Commodities Produced collection (ABARES) 	Agricultural commodity, land and water management statistics inform decision-making by government, industry bodies and agricultural businesses regarding agriculture production and associated environmental and social issues. They are critical in understanding and monitoring the sustainability of fishing stocks, in policy development for fishing restrictions and are required for international reporting purposes. They are also used in measuring development and performance of key national strategies such as the National Forests policy Statement and National Plantations Strategy – Vision 2020, and to support monitoring, reporting and compliance under legislation currently going through Parliament such as the Illegal Logging Prohibition Act 2012 to assess whether the legislation is meeting its policy objectives. They support national reporting criteria under the agreed national forest monitoring reporting framework that is used to provide sustainability reporting on Australia's forests. They underpin state/territory and Australian Government bilateral agreements and legislation, including the Regional Forests Agreements Act. They are reported to international bodies including the UNFAO; and are published in accordance with United Nations Framework Convention on Climate Change and national environmental accounts and SEEA reporting.	Annually	National, state/ territory, regional (NRM), fishery, agricultural region, FMA, LGA	Industry, commodity, species, gear type, plantation type

New Activities Underway in Official Statistics

- Quality of Official Statistics; Acceptance and Adoption of the European Code of Practice
- Development of a single integrated metadata system.

Summary

- This presentation has been the basis for a discussion of issues related to official statistics, core statistics and the National Statistics System
- We have raised questions, summarized the current status in Israel and plans for the future. We have also seen examples from other countries.
- Hopefully this will prove useful for you in your work in your country.
- Thank you for your attention.