Statistical production infrastructure, data sources, information technology, dissemination and user support

Session 1: Supporting the transformation of statistical production processes from the data collection to dissemination in the context of the digital and technological revolution

CAPACITY DEVELOPMENT

The presentation will outline the content of 5 chapters:

- **VIII "Data sources, collection and processing"** *(drafted)*
- **X "Dissemination and user communications"** *(drafted)*
- **XI "Common statistical infrastructure"** *(drafted)*
- **XIII "Data, information and knowledge management"** *(drafted)*
- **XIV "Information technology management"** *(drafted)*

Advance drafts can be found here:

https://unstats.un.org/wiki/display/HSO/Handbook+Statistical+Organization

CAPACITY DEVELOPMENT

i.   **VIII "Data sources, collection and processing"**
This chapter covers the collection and processing of data from various types of sources, including secondary and non-traditional. The following topics:

Provides guidance on the choice of appropriate collection mode and an overview of survey functions, survey types, survey design, respondent relations, survey processing, survey staff training and expertise.

Describes statistical processes that are used to turn inputs into statistical products (*editing, coding, outlier detection and treatment, imputation, macro-editing, estimation confidentiality preservation, seasonal adjustment....***) mapped according to the General Statistical Business Process Model (GSBPM).**

Reviews data sources: Surveys and censuses, Administrative sources, Geospatial data, Big data Non-traditional data sources.

CAPACITY DEVELOPMENT

X "Dissemination and user communications"

Chapter X: *covers all aspects of data dissemination and user communication are reviewed. The chapter also covers dissemination policy, data types, dissemination platforms and recovering the costs of dissemination.*

CAPACITY DEVELOPMENT

X "Dissemination and user communications"

i. Dissemination and communications strategies
ii. Providing information on the properties of statistical data (metadata)
iii. Different data types for dissemination
iv. Dissemination methods
v. Recovering dissemination costs
vi. User relations
vii. Other dissemination issues
viii. Statistical literacy

CAPACITY DEVELOPMENT

XIII "Data, information and knowledge management"

Chapter XIII: covers the ownership and custody of records, documents, data, information and other intellectual assets held by the national statistical office, and the policies, guidelines and standards for their collection, storage, maintenance, retrieval, dissemination and destruction.

CAPACITY DEVELOPMENT

XIII "Data, information and knowledge management"

i.   General information management concepts, principles and policies. Managing statistical data, information and knowledge is at the heart of an NSOs work and is of critical importance to the functioning of an NSO.

ii.   Managing statistical data and metadata. Statistical metadata are needed for, and describe the processes and tools used in the proper production and usage of statistical data.

iii.   Managing other information and knowledge. Data is transformed into information, and then into knowledge, which subsequently has to be made available to both internal and external users. A knowledge management can reduce the time needed to find information, prevents the loss of knowledge and allows people to work faster in a more efficient and agile manner and make an NSO more effective.

iv.   Managing microdata

CAPACITY DEVELOPMENT

XIV "Information technology management"

Chapter XIV: covers IT management and recent advances in technology.

CAPACITY DEVELOPMENT

XIV "Information technology management"

i.   Review of changes since previous edition, current trends. Since the publication of the last handbook in 2003 the IT landscape has changed almost beyond recognition with the growth of personal computers, distributed databases the explosion of the internet, smart phones and tablets, cloud technology and new data sources.

ii.   Models of information technology management – in-house, out-sourced, hybrid, collaborative

iii.   Use of standards and generic models – GSBPM, GAMSO, GSIM, CSPA, SDMX….

iv.   Statistical software

CAPACITY DEVELOPMENT

XI "Common statistical infrastructure"

Chapter XI: *covers the statistical infrastructure required to support the statistical production programme.*

CAPACITY DEVELOPMENT

XI "Common statistical infrastructure"

i. Statistical business register

ii. Statistical farm register

iii. Household address register

iv. Questionnaire design

v. Sample design and estimation

vi. Editing, imputation and outlier determination

vii. Seasonal adjustment and time series analysis

viii. Statistical policies, standards and guidelines

ix. Statistical policies

x. Standard concepts, variables and classifications

xi. Statistical guidelines

xii. Application to other producers of official statistics

CAPACITY DEVELOPMENT

Issues for discussion

Your input required !

CAPACITY DEVELOPMENT

Issues for discussion

- Have we missed any issues you would like to see covered?

- Can you provide us with any relevant success stories, new initiatives or best practices?

CAPACITY DEVELOPMENT