## Integrated Statistical Systems: Data collection, Processing and Dissemination of Integrated Statistics

An Integrated Statistics Approach

Arab Conference
Transformative Agenda for Official Statistics
5-7 April, Ankara Turkey

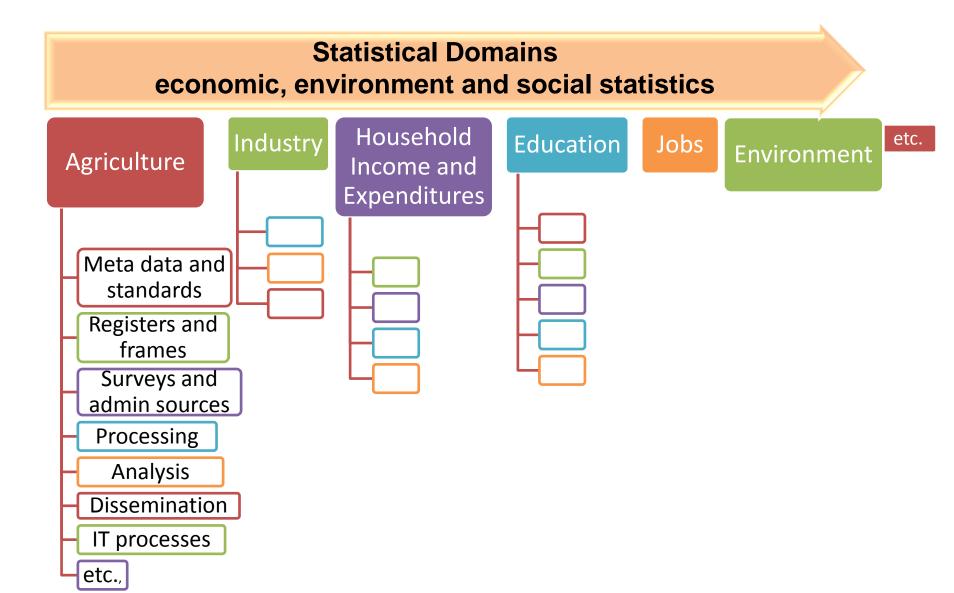
#### Challenges

- Fast technological developments
- Sharp increase in rate of data availability
- Greater demand for more (& quicker) information
- Decreasing budgets and improving cost efficiency
- Demands to decrease response burden

#### Responds to challenges

- Through modernization programmes for integrated statistics.
- Characterized by:
  - technical and managerial specializations of staff
  - modernization of the IT-environment
  - harmonization/centralization of statistical production processes GSBPM
  - repositioning the legal and regulatory environment of the statistical organizations.
- Business as usual will not be enough.

#### **Traditional approach**



#### New Approach

#### Integrated statistics programme

Integrated business and international trade statistics programme (IBIS)

Integrated household and social statistics programme (IHSP)

Economic dimensions

Environment dimensions

Social dimensions

Economic dimensions

Environment dimensions

Social dimensions

#### Integrated Statistics Programme

- Meta data driven statistical production process
- Meta data catalogue of variables
- Survey repository
- Guidelines
  - GSBPM based register based survey design
  - Multi source and multi mode collections
  - Micro data linking
  - Dissemination and visualisation
- Software (micro data cataloguing, disclosure control

Integrated statistics approach

**Dissemination** Macroeconomic Outputs, accounts Household and **Economic &** demographic environmental **Statistical** statistics statistics operations Data integration nputs Data processing Data collection Registers and frames Surveys/Admin data Statistical Standards and methods infrastructure

Institutional setting

Information, Communication Technology (ICT)

Management and internal policy

Institutional arrangements

#### Benefits of integrated systems

- Statistical business and information architecture governs common statistical production process and centralized statistical services over time and across countries.
- Corporate, centralized services allow for statistical professionalization, project management and coordination.
- Meet policy demands: covering business and household statistics, labor statistics, short term statistics, national accounts and international statistics.
- Cost effectiveness.
- Improved quality: coordinated output; reduction of human factor; improved reproducibility.
- Reduction of response burden on business and household respondents.
- Offer collaboration in the development and application of common methods and IT tools.
- Robust and flexible and a stable platform for facing new developments.

#### **Cost/Investments**

- Expertise (subject-matter specialists, projectmanagers, methodologists, IT specialists)
- Training (new) personnel in change/project management and integration methods and process management
- IT-environment using standards-based modules and dissemination platforms
- Reorganisations

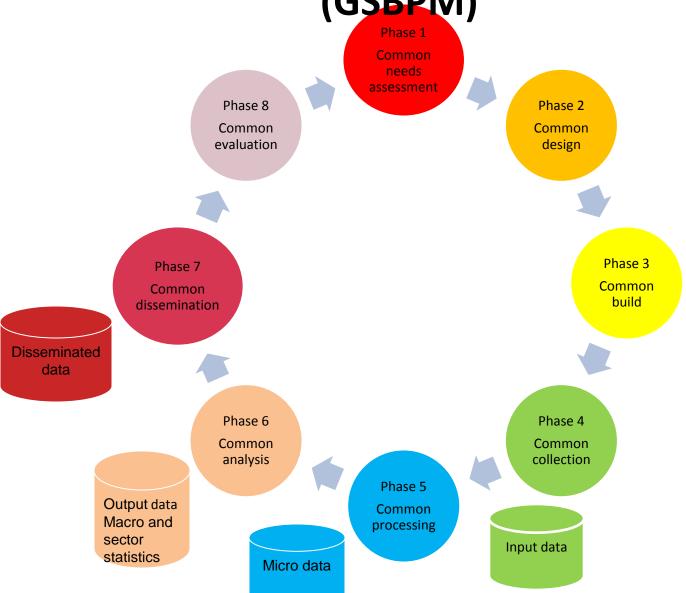
#### **General Organizational Principles**

- Use corporate business and information architecture—blue print for process development
- Adopt legal mandates based on fundamental principles for official statistics
- 3. Mainstream standards and metadata
- 4. Optimize use of administrative data
- 5. Maximize multi-use of data

#### **General Organizational Principles (2)**

- 6. Top down editing and imputation
- 7. Develop modular IT applications across statistical domains
- 8. Initiate methodological innovation and modernization
- 9. Establish quality culture
- 10. Manage development and change
  - Project portfolio and portfolio management
  - II. Planning and prioritisation
  - III. Centralization and chain management

### Total Cycle of Official Statistics Production (GSBPM)



#### **Corporate services**

6. Project management

5. IT-services

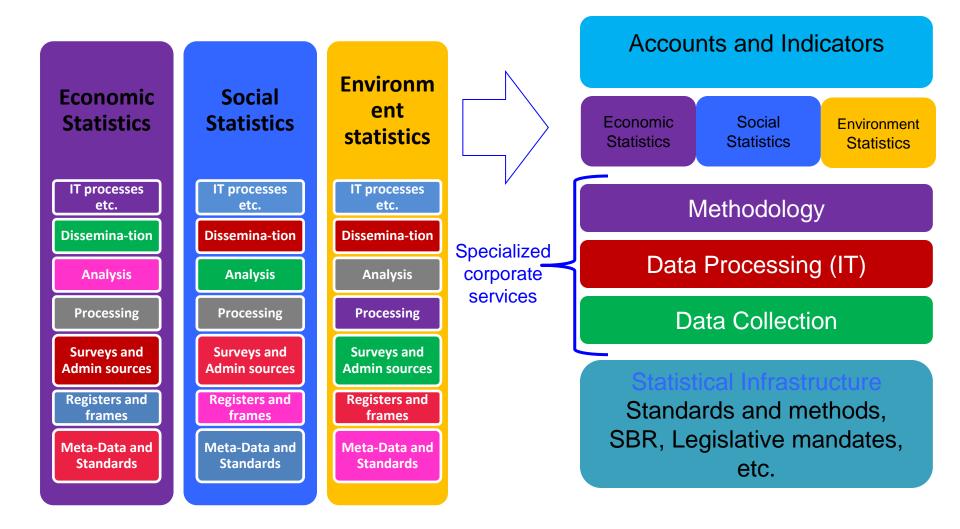
4. Methodology and process development

1. Population and business registers and frames

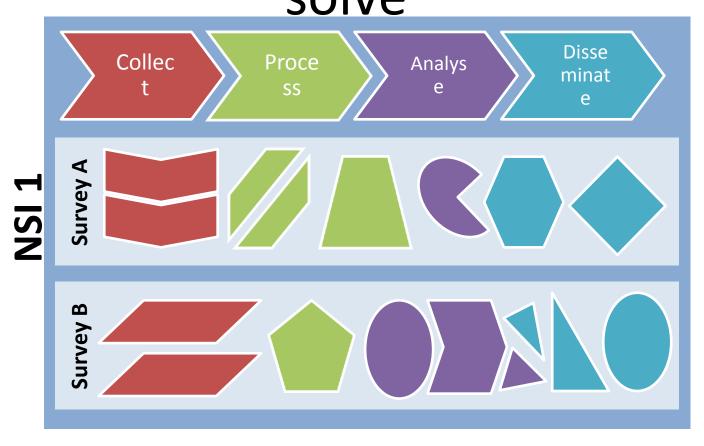
Datacollection and processing

3. Dissemination

#### Integrated Statistics Architecture



### The problem we are trying to solve

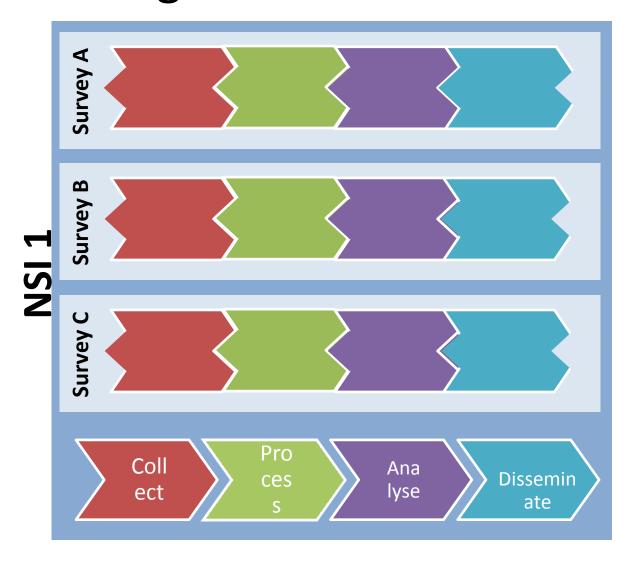


Historically statistical organisations have produced specialised business processes and IT systems

#### How does Architecture help?

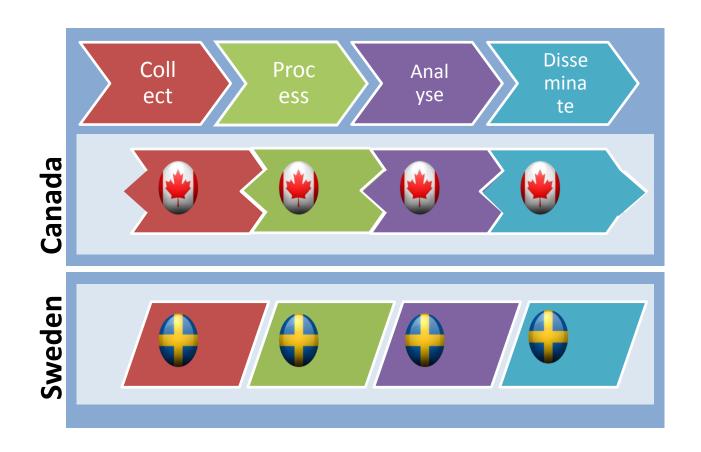
- Many statistical organisations are modernising and transforming using Enterprise Architecture
- Enterprise Architecture shows what the business needs are and where the organisation wants to be, then aligns efforts accordingly
- It can help to remove silos and improve collaboration across an organisation

### Enterprise Architecture helps you get to this

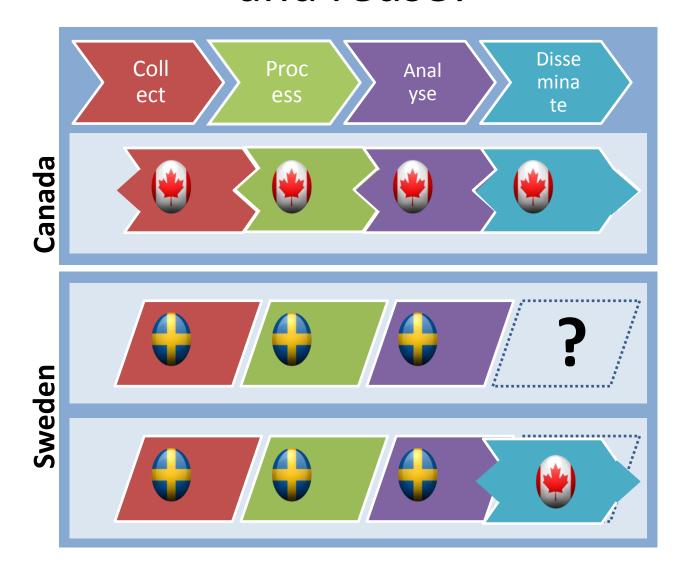


## ...but if each statistical organisation works by themselves.....

#### ...we get this....



### This makes it hard to share and reuse!



# ...but if statistical organisations work together?

### This makes it easier to share and reuse!

