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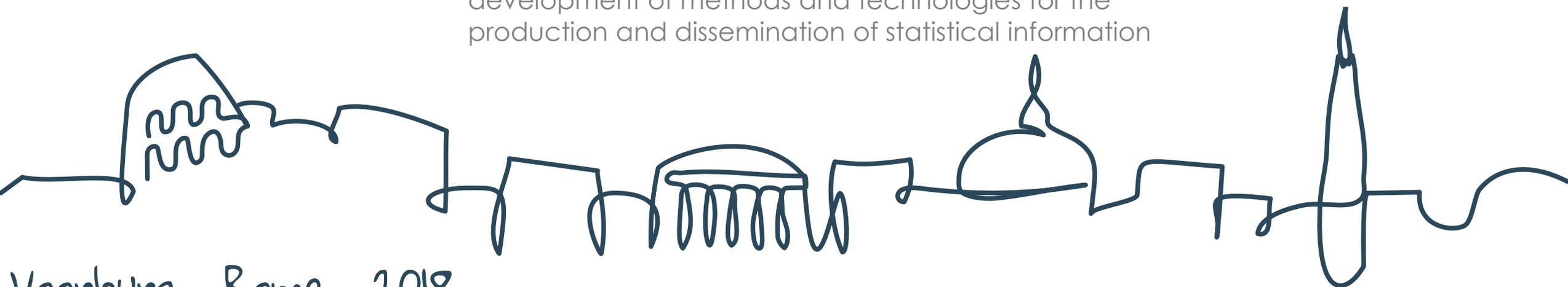
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Modernisation at Istat: an operational model for both production process and organisational aspects

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Outline

- ① Background
- ② Drivers of Istat's Modernisation Programme
- ③ Objectives and instruments of the Modernisation Programme
- ④ Focus on the main instruments
- ⑤ Istat's new organisation
- ⑥ Concluding remarks



Background

- In the last decade, official statistics has undergone a **dramatic shift**, both in the **production model** and in its **output**
- The **traditional chain**, based on the **vertical integration of different survey-specific tasks** carried out to collect, process, analyse and disseminate statistical data, **has become outdated**
- Since the **second half of 2014 Istat** has implemented its internal **Modernisation Programme**, in accordance with both some actions supported by **UNECE - High-level Group on the Modernisation of Official Statistics** and the **European Statistical System** commitment to **Vision 2020**
- Istat's **Modernisation Programme** was officially approved by the **Governing Board** on **January 28th, 2016**



Drivers of Istat's Modernisation Programme: External environment

- International **best practices**
- Changes in the **demand** for statistical information
- Wealth of information, including **unstructured information** (innovative sources, e.g. **Big Data**)
- Presence of **competitors**
- Availability of **new** methodological and technological **tools**
- Drawbacks of **traditional data collection systems** (high costs, response burden, lower response rates)

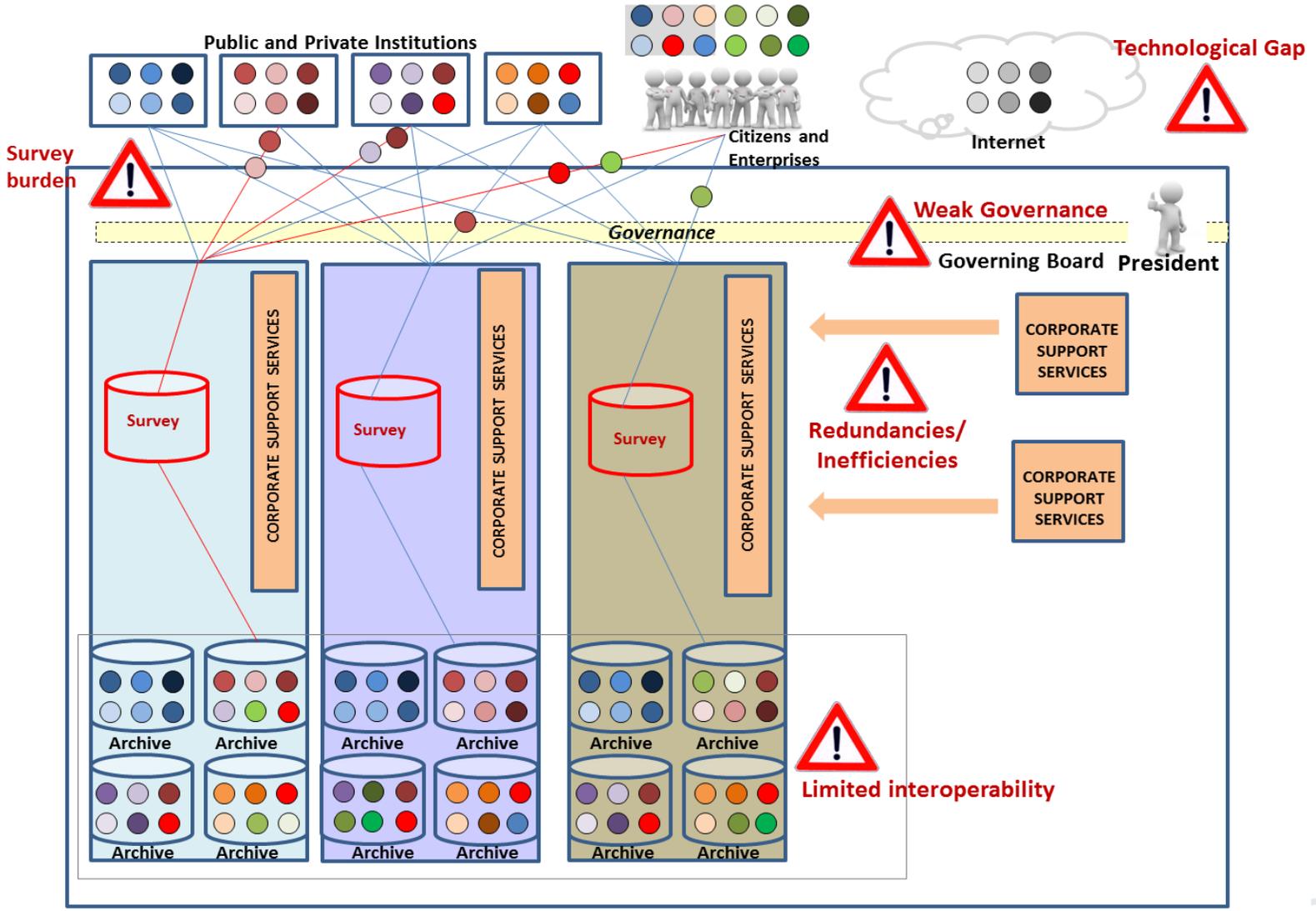


Drivers of Istat's Modernisation Programme: Internal environment

- Organisational silos:
 - ✓ Local or vertical *know-hows* which do not promote **reuse**;
 - ✓ Duplication and lack of **consistency of solutions**;
 - ✓ Limited **interoperability**;
 - ✓ Limited capacity to exploit methodological and technological **opportunities**;
 - ✓ Research and innovation at departmental rather than **corporate level**.
- Segmentation
- Weak governance system:
 - ✓ Difficult access to already available **general services**;
 - ✓ Huge efforts to obtain services at the local level, generating **redundancies and inefficiencies**.

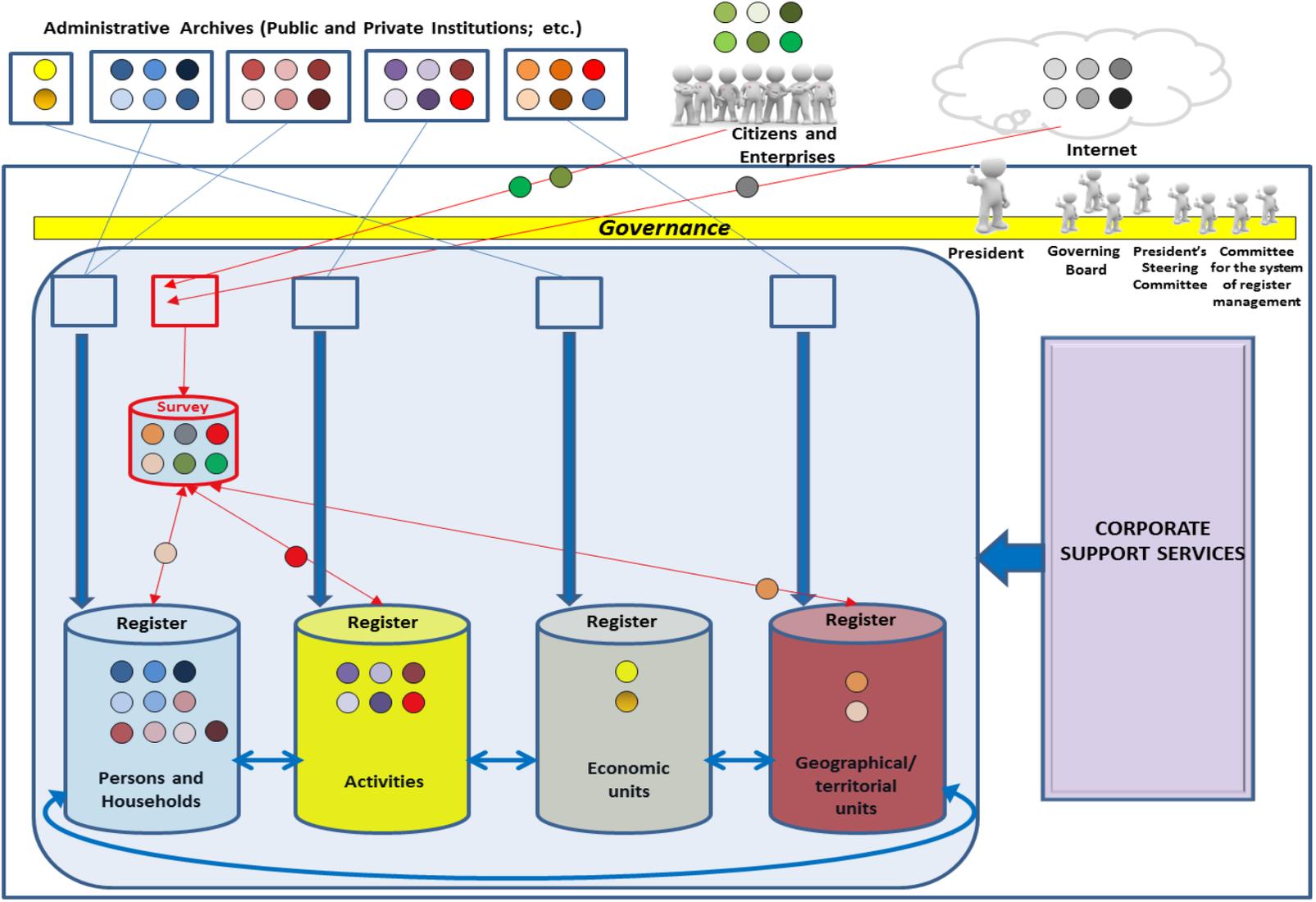


From the *as is* situation...





...to the *to be* situation





Objectives of the Modernisation Programme

Main Objectives

1. To enrich the **supply** and **quality** of **statistical information** and **services**
1. To develop a specific policy on **Corporate Social Responsibility**

Industrialisation
Standardisation
Modernisation
Innovation
SOA
Harmonisation

Intermediate Objectives

- To encourage the **development** and **exploitation** of methodological, technological, and organisational **innovation**
- To increase and reorient the **skills** of **human resources**
- To reduce **respondent burdens**
- To further improve the **efficiency** and **quality** of **production processes**, while taking into account **budget constraints**



Convergences/divergences between objectives

Objectives	Intermediate objectives			
	To encourage the development and exploitation of methodological, technological, and organisational innovation	To increase and reorient the skills of human resources	To reduce respondent burdens	To further improve the efficiency and quality of production processes, while taking into account budget constraints
Main objectives				
To enrich the supply and quality of statistical information and services	+	+	-	-
To develop a specific policy on Corporate Social Responsibility	+	+		
Intermediate Objectives				
To encourage the development and exploitation of methodological, technological, and organisational innovation		+	+	+
To increase and reorient the skills of human resources			+	+
To reduce respondent burdens				+
To further improve the efficiency and quality of production processes, while taking into account budget constraints				



Main instruments of the Modernisation Programme

▪ The Foundations: The *Business Architecture Model*

- ✓ It is an **integrated model representing processes and activities**, which constitutes a common framework necessary for undertaking consistent, shared paths of innovation;
- ✓ It covers both **statistical activities** and **strategic organisational tasks and capabilities**;
- ✓ It is composed by a generic **Activity Model**, a **BA process flow**, a set of **Principles** and **common and shared Infrastructures**.

▪ Three main Pillars:

Design of production processes through the System of Registers

Centralised Corporate Support Services (separated from production)

Sound and structured Governance



Additional instruments

- Design and development of an **integrated system** for managing **human resource skills and expertise**
- Redesign of the Institute's organisation, in order to **reduce internal fragmentation**
- Systematisation of the specific actions on **Corporate Social Responsibility**
- Construction of a **single office building** so as to accommodate all Istat's employees



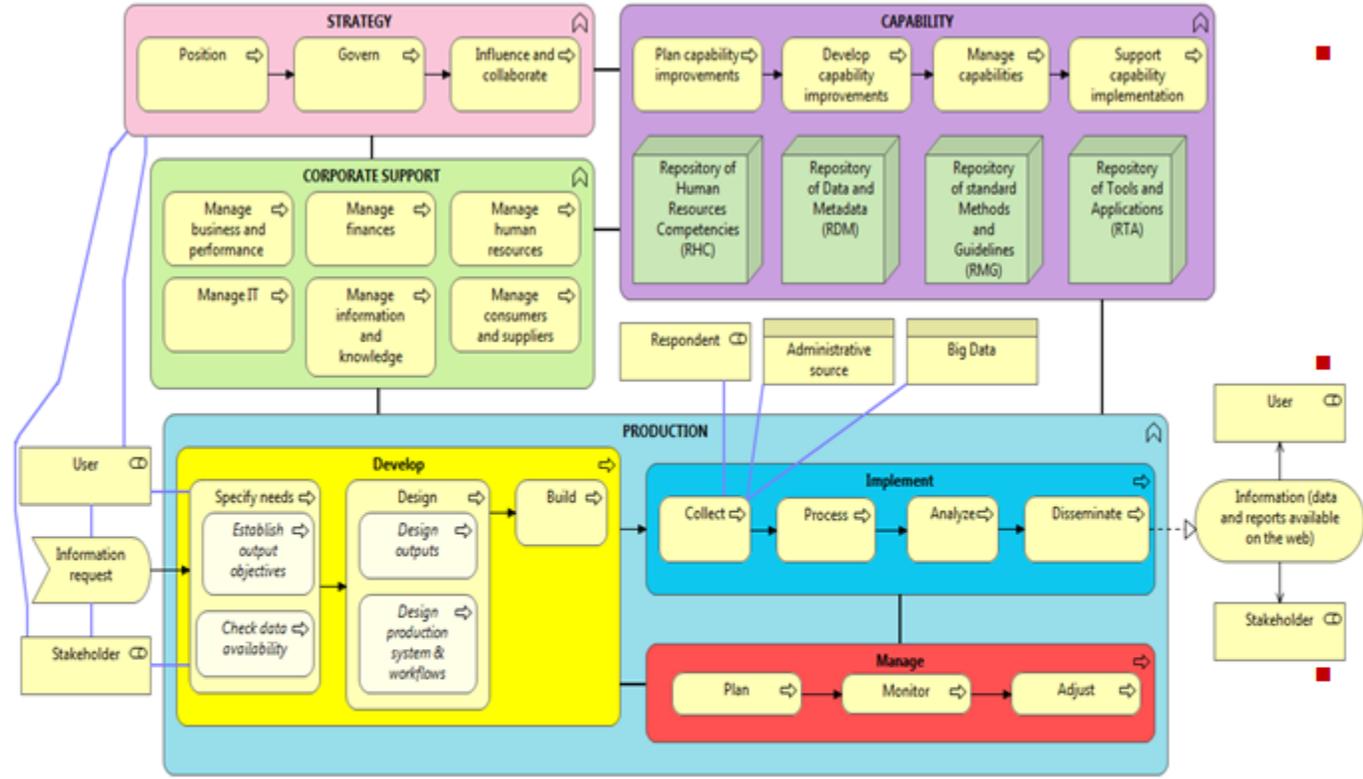


Relevance of the instruments

OBJECTIVES INSTRUMENTS	Main objectives		Intermediate objectives			
	To enrich the supply and quality of statistical information and services	To develop a specific policy on Corporate Social Responsibility	To encourage the development and exploitation of methodological, technological, and organisational innovation	To increase and reorient the skills of human resources	To reduce respondent burdens	To further improve the efficiency and quality of production processes, while taking into account budget constraints
Implementation of the Business Architecture Model	● ● ●	● ● ●	● ● ●	● ●	● ● ●	● ● ●
Design of production processes through the System of Registers	● ● ●		● ● ●	● ● ●	● ● ●	△
Centralised Corporate Support Services	● ●		● ● ●	● ● ●	● ●	● ● ●
Sound and structured Governance	● ● ●	△	● ● ●	△	● ● ●	● ● ●
Design and development of an integrated system for managing human resource skills and expertise	●	● ●	● ● ●	● ● ●		● ● ●
Redesign of the Institute's organisation, in order to reduce internal fragmentation	●		● ● ●	● ●		● ● ●
Systematisation of the specific actions on Corporate Social Responsibility		● ● ●		●		△
Construction of a single office building so as to accommodate all Istat's employees		● ● ●	● ● ●	●		● ● ●



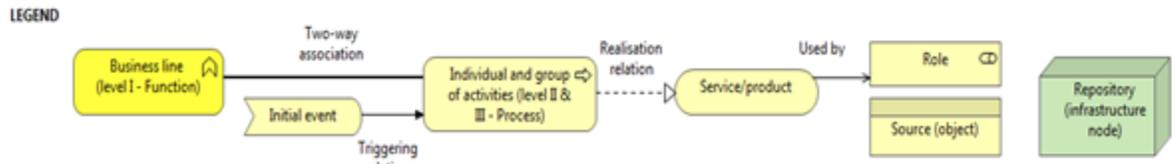
The Business Architecture Process Flow



- Each **BA activity** leads to **Modernisation and Standardisation**, both from an organisational and a production-related point of view

- Each **BA activity** naturally points to standards which should be used to **facilitate** the process of **transition to Modernisation**

- Analyses of each BA activity** are strongly recommended and should represent the basis to **identify standards** (existing ones and areas where **new standards** need to be developed)





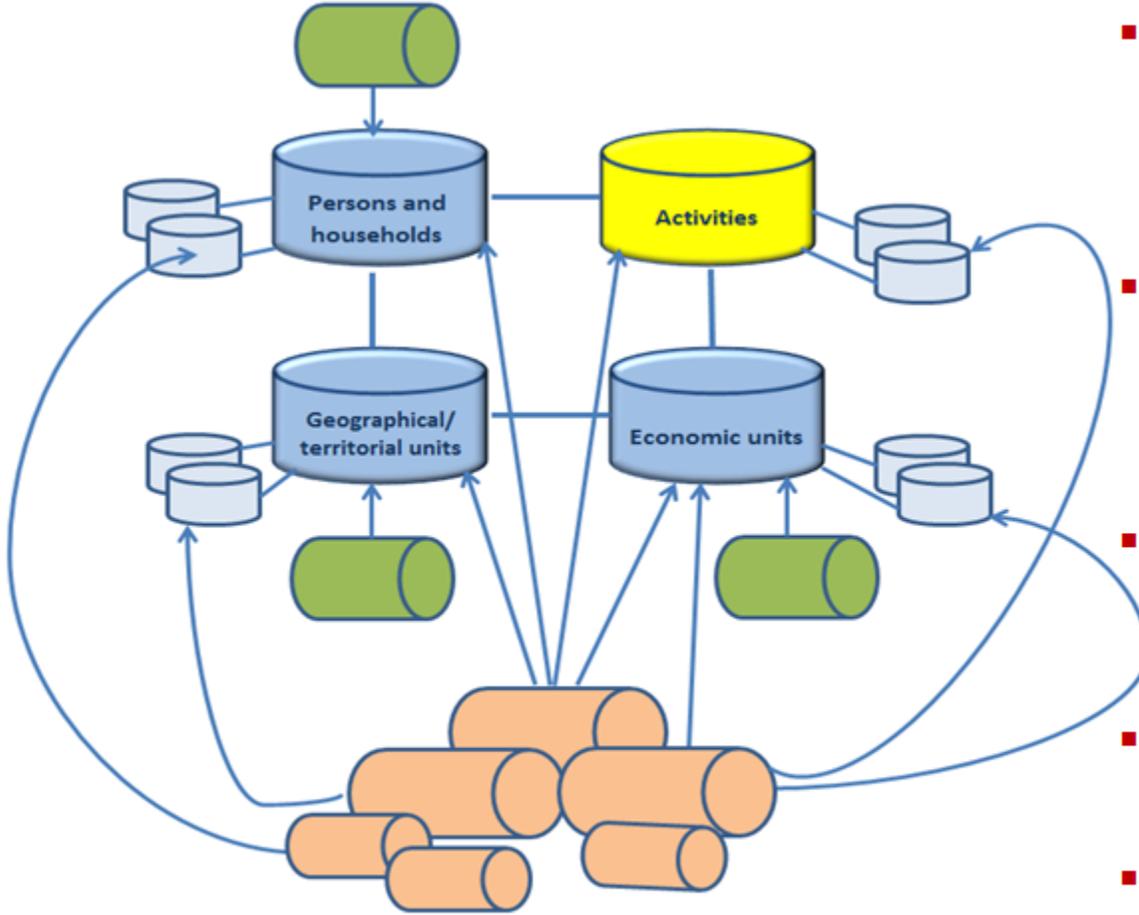
The Business Architecture Principles

- **Decision principles** to guide the activities of strategic planning (**Portfolio** and **Project Management**)
- **Design principles** to guide the design of production processes
- Particularly important aspects:
 - ✓ **Output** and **metadata** drive the entire process that is defined starting from the required product and goes backwards;
 - ✓ **Reuse** of data, metadata, methods, tools and applications. Interoperability and *Service Oriented Architecture – SOA*;
 - ✓ **Industrialisation of statistical processes** ensures independence between design and implementation.

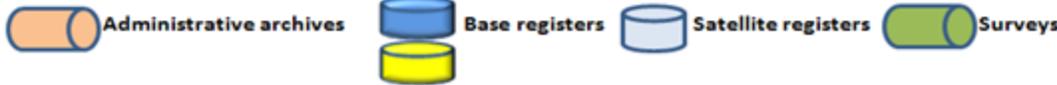
Modernisation
Harmonisation
Standardisation
Industrialisation
Innovation
Soa



The System of Registers



Legend:



- Notable advantage in terms of **reduced costs and response burden**, while ensuring quality, timeliness and completeness
- Large potential because **different registers can be linked together** on the basis of clearly defined keys
- Organised **governance mechanism** to define clearly responsible persons
- **Base registers** contain the identifier of the statistical unit
- **Satellite registers** contain thematic variables derived from administrative sources or surveys



The Integrated System of Statistical Registers



For each statistical unit **different registers can be linked together** not only across domains but also **over time** on the basis of identification keys

The identification of the unit over time is easy for **elementary** statistical units, but can be more complex for **composite** units (family, enterprise, enterprise group...)

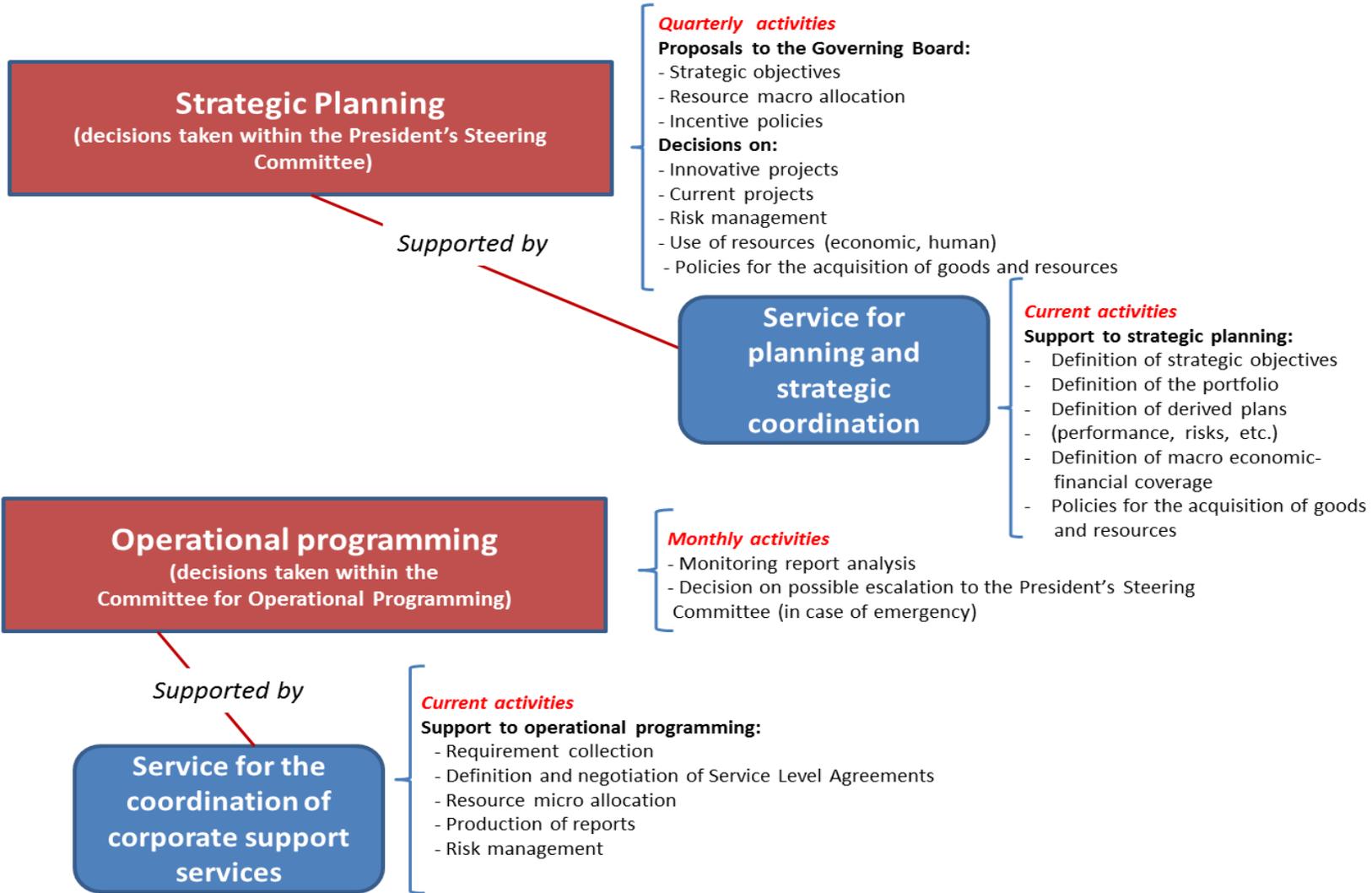
Centralised Corporate Support Services

- Consolidation of the Institute's **cross-cutting Support Services** (*technical, scientific and administrative - methodology, information technology, data collection and dissemination, human resources, legal affairs, asset management, accounting*) to enhance:
 - ✓ effectiveness/quality, as a result of a **standardisation of processes and solutions**;
 - ✓ efficiency, as an effect of **overcoming stovepipes in conducting processes**, so as to facilitate reuse
 - ✓ productivity;
 - ✓ the integrated **System of Statistical Registers** enriched with single, controlled, and standardised information;
 - ✓ innovative activities with the **saving of resources** obtained.



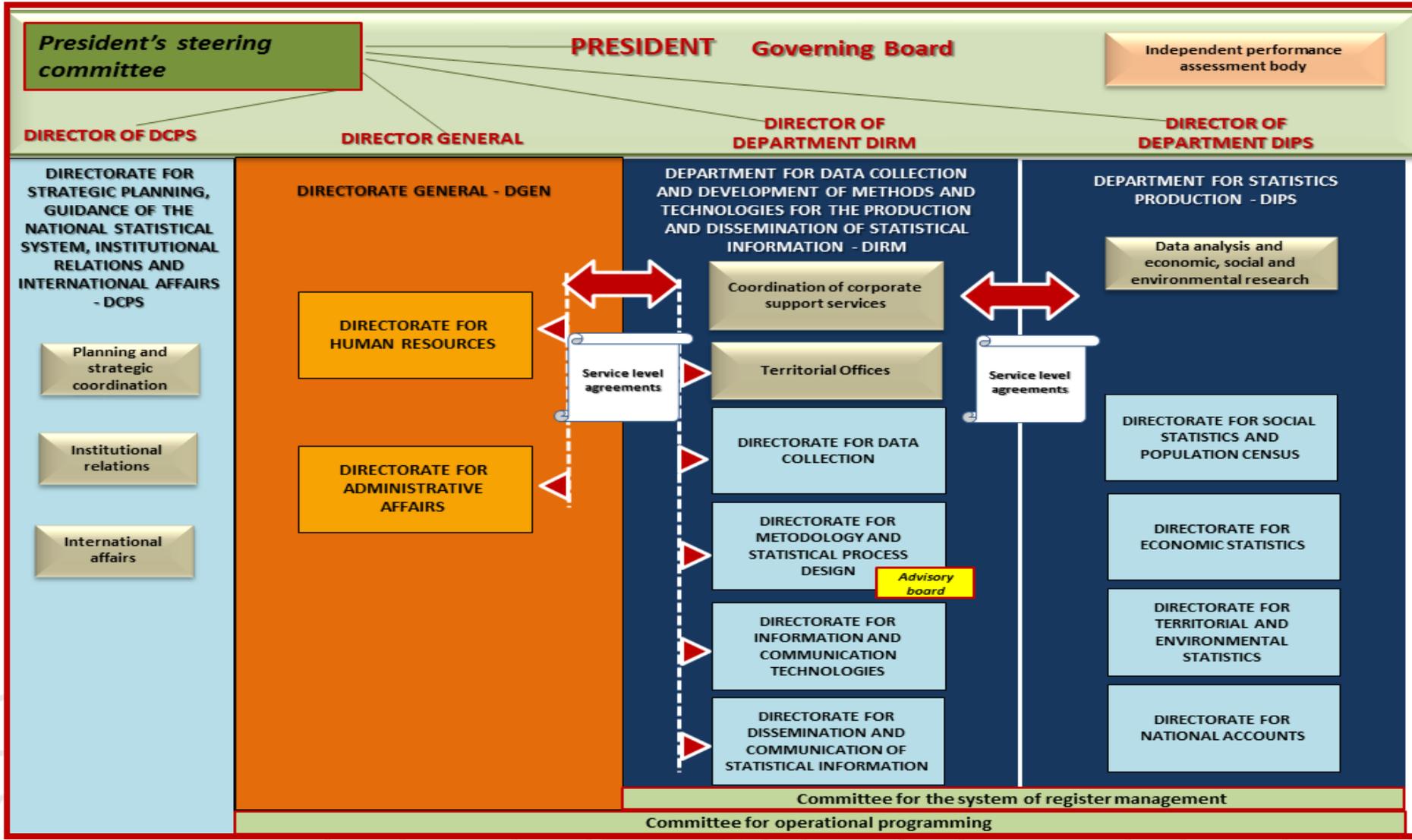


Sound and structured Governance





Istat's new organisation



Concluding remarks



Stay on Track with the Modernisation Process!

- Modernisation is an **ineluctable process**: it needs a **holistic view**, a **strong internal consensus** and a **change management** to facilitate the transition steps
- It is necessary to continue ensuring **high data quality** together with integrity and suitability of statistical methods, while **investing in human resources**
- A good **staff training** is one of the most relevant factor to put in place **Modernisation Programmes** and should build **human resources and strategy managers together**
- A **cultural change** is also a crucial point



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Thank you

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