CSPA

Introduction*

* an ESS point of view

Jean-Marc Museux and Pierre Peyronnel

Eurostat

Objectives of the presentation

- Review achievements of CSPA
- Current challenges and opportunities
- Reflect and open discussion on future challenge and opportunities

Background

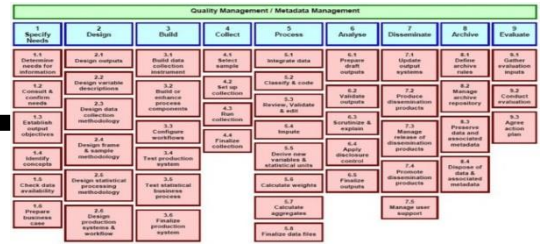
- Eurostat engaged in promoting the development of CSPA since the beginning as an extension of the seminal work of ESSnets CORA / CORE
- CSPA was deeply rooted in the ESS vision 2020, an ambitious programme aiming at the modernisation of the production and dissemination of EU statistics involving actively Eurostat and 28 EU NSIs
- The SERV project and the two supporting ESSnets (Sharing Common Functionalities and Implementing Shared Statistical Services) aimed to developed shared services for the ESS
- The ESS EA Reference Framework and the ESS SPRA built on CSPA (specialisation in the context of the ESS Vision 2020)

What is CSPA?

- CSPA provides a template architecture for official statistics, describing:
  - What the official statistical industry wants to achieve
  - How the industry can achieve this, i.e. principles that guide how statistics are produced
  - What the industry will have to do, adhering to the CSPA standard

modernstats

Business Architecture



Information Architecture

Application Architecture

Technology Architecture

<Neutral>

modernistats

Curse toward implementation

Level of Detail

Conceptual	User view, Independent of physical implementation	GSIM
Logical	Meets requirements of CSPA Services	CSPA Logical Information Model
Physical	Implemented in CSPA Services	<ddi> Metadata powered by DDI; sdmx Statistical Data and Metadata eXchange

Human Oriented

Computer Oriented

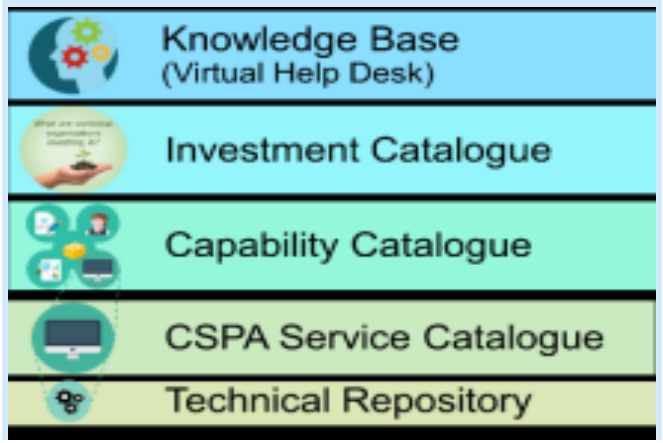
modernstats

CSPA Assets

CSPA Community

collaboration and sharing

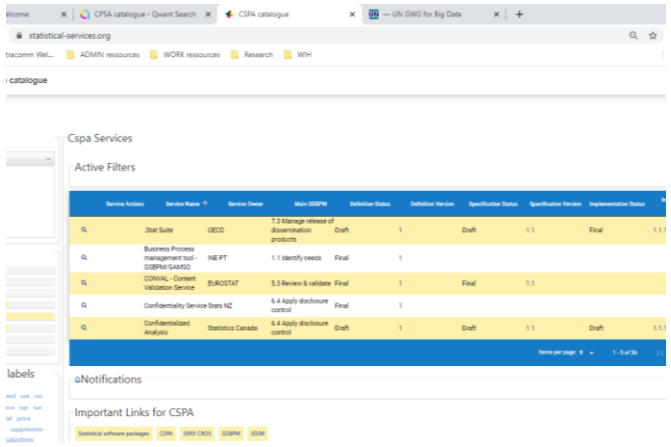
Global, open and inclusive



CSPA catalogues

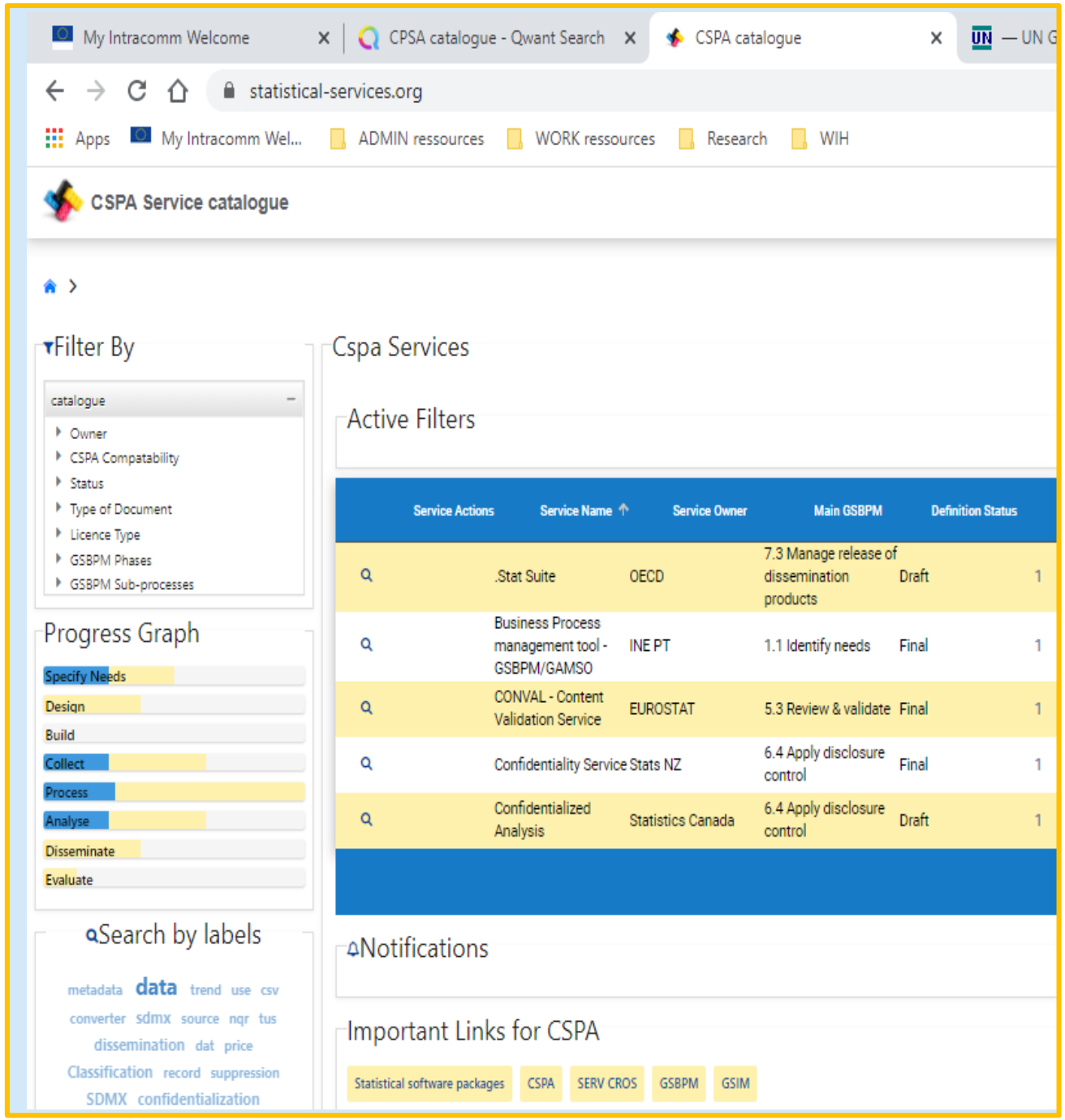
Communication

Common semantic



https://www.statistical-services.org/

European Commission

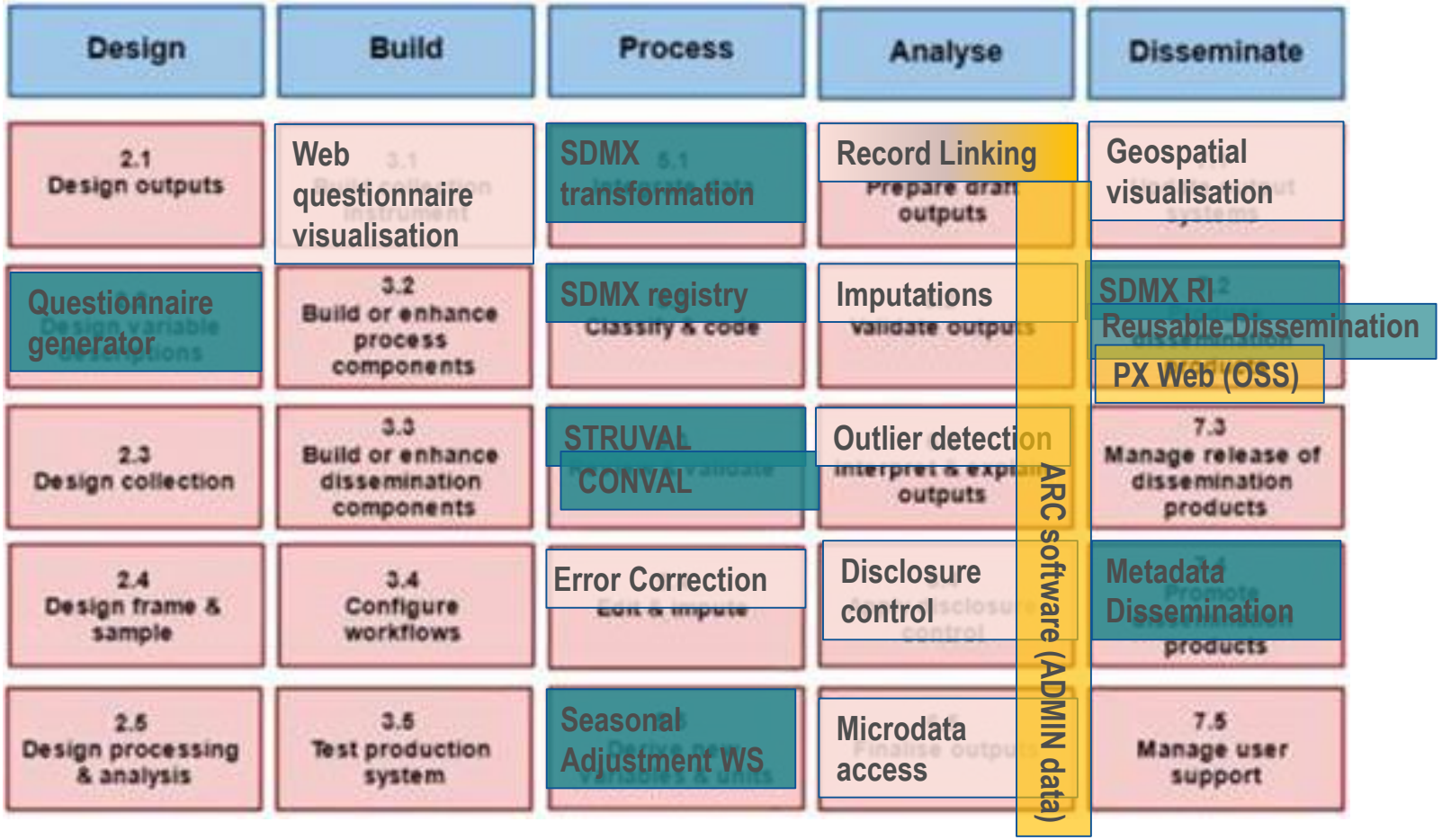


CSPA Service Catalogue

- Contains 35 services in different states of completion
- Landing page => opportunity for collaboration
- Recent update
  - RobotTool / NL / automated web scraping tool
  - Confidentiality Service / NZ / confidentialising microdata analysis
  - PXWeb / SE / Dissemination
  - BPM tool – GSBPM/GAMSO / IL / (to be verified)
  - Reclin / IT / Record linkage
  - Pogues / FR / Data Collection questionnaire designer
  - java-vtl / NO / VTL 1.1 engine

European Commission

Services delivered by SERV



European Commission

CSPA strengths and weaknesses

Drivers

- Modernisation
- Efficiency / reuse (plug and play)
- Collaboration

Strengths

- Comprehensive
- Strong coherence (GSBPM, GSIM, CSDA)
- Consensus based
- Light governance

Weaknesses

- Few business realization
- Time to Market >< pace of change
- Lead by IT/tech roles
- Sourcing

CSPA opportunities

Drivers

- Modernisation
- Efficiency / reuse (plug and play)
- Collaboration

Opportunities

- Infrastructure as a code – infrastructure (cloud) services
- Container Technology
- Cloud Native Computing Foundation – Mesh architecture (API mediation)
- Core business logic / adaptors paradigm

ESS continued effort

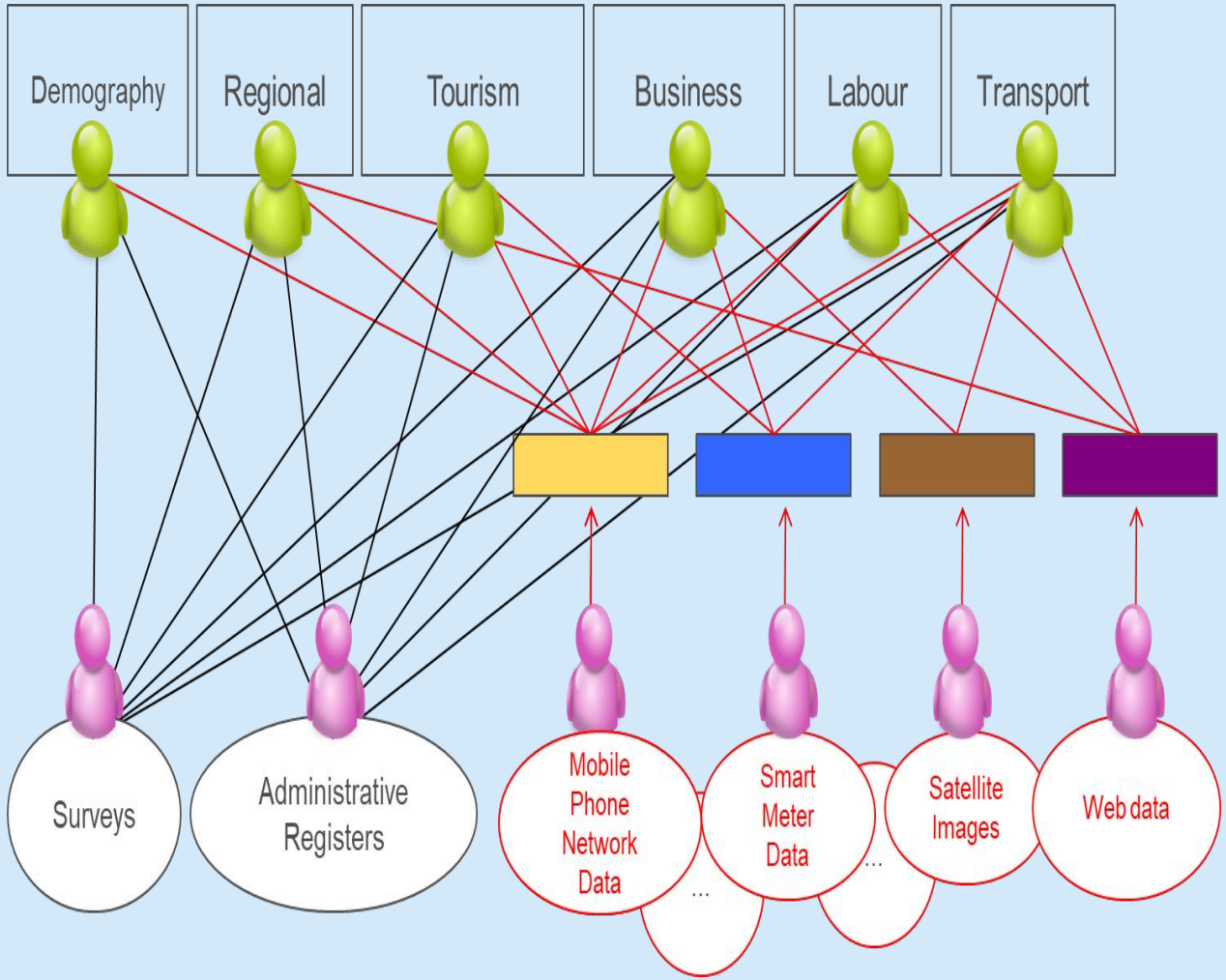
Expected Outcomes of the **ESSnet I3S**

- **Implement new services - Feed/populate the CSPA Service Catalogue**
- **Reality check of the guidelines with respect to implementation -> cook book**
- **Realize co-development and reuse**

Keep fostering collaboration and the community in the ESS by:

- **Continued use of the CSPA Service Catalogue as a convergence point**
- **Set up an ESS Expert Group on sharing tools**

Future challenges

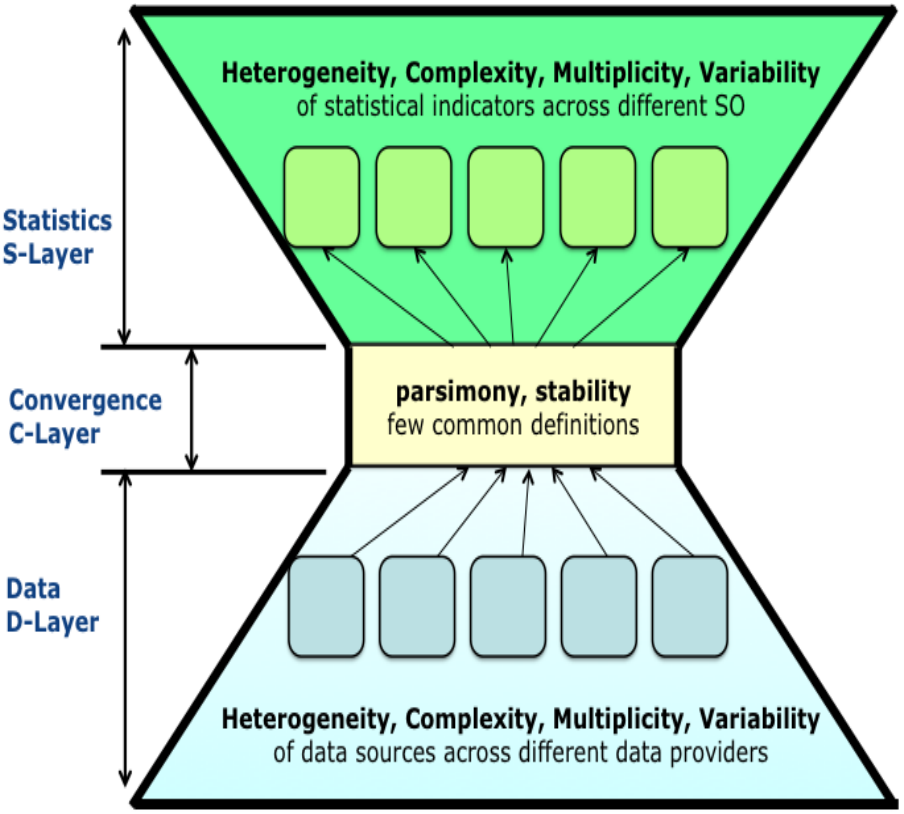


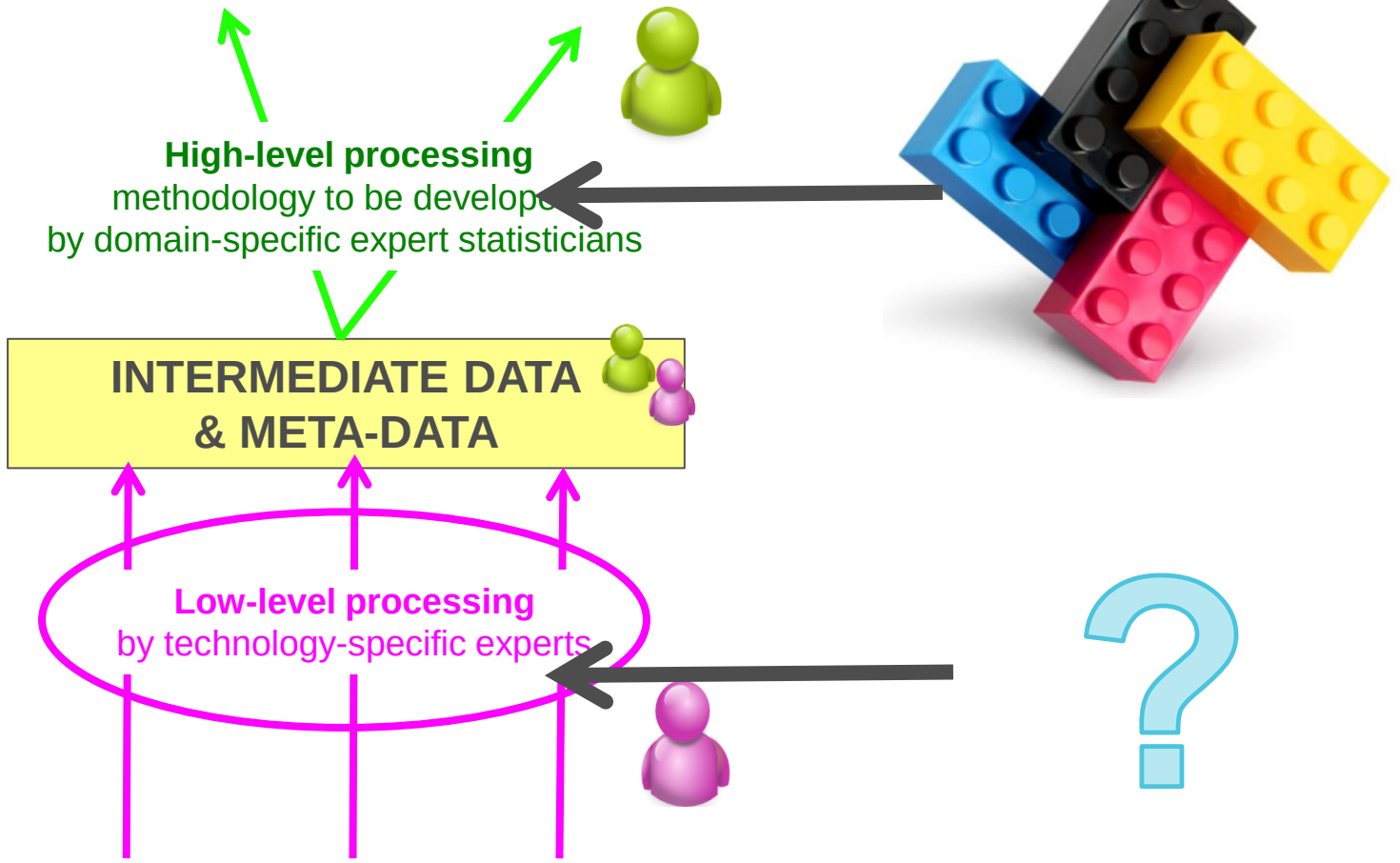
Trusted Smart Statistics

- Need for agility – adapt to the change in data ecosystem
- Transparency and reproducibility
- Technology disrupting the data gathering phase
- New methodological paradigm
- Interdisciplinary

European Commission

Hourglass model





Current trends

Distributed computing

- Pushing computation out (at the edge)
- Security and privacy preserving paradigm
- Micro services and CI/CD

Development of shared platform

- ESS web intelligence HUB
- UN Global Platform

Thank you

Slide 4-7: source: UNECE ;

European Commission