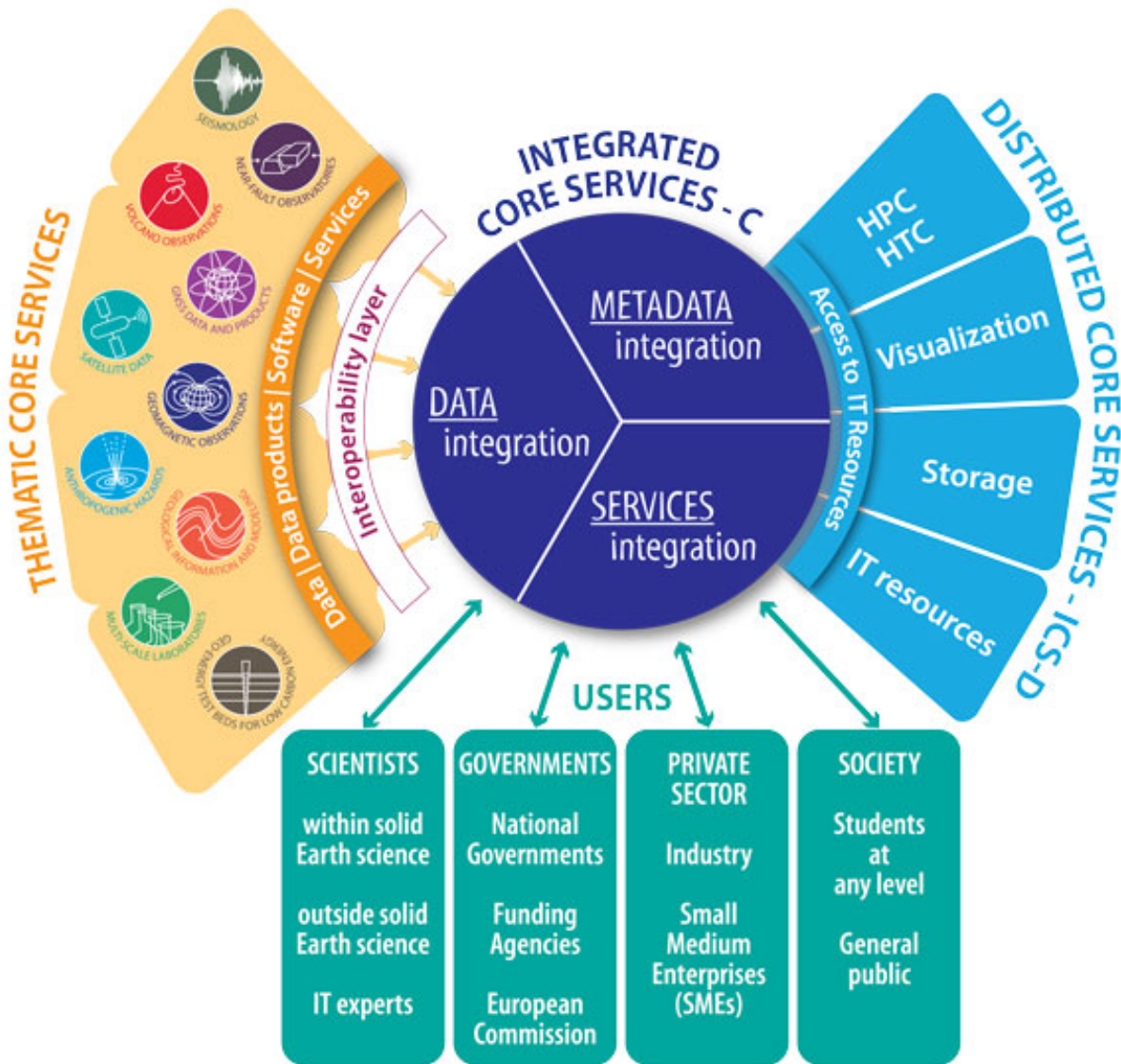


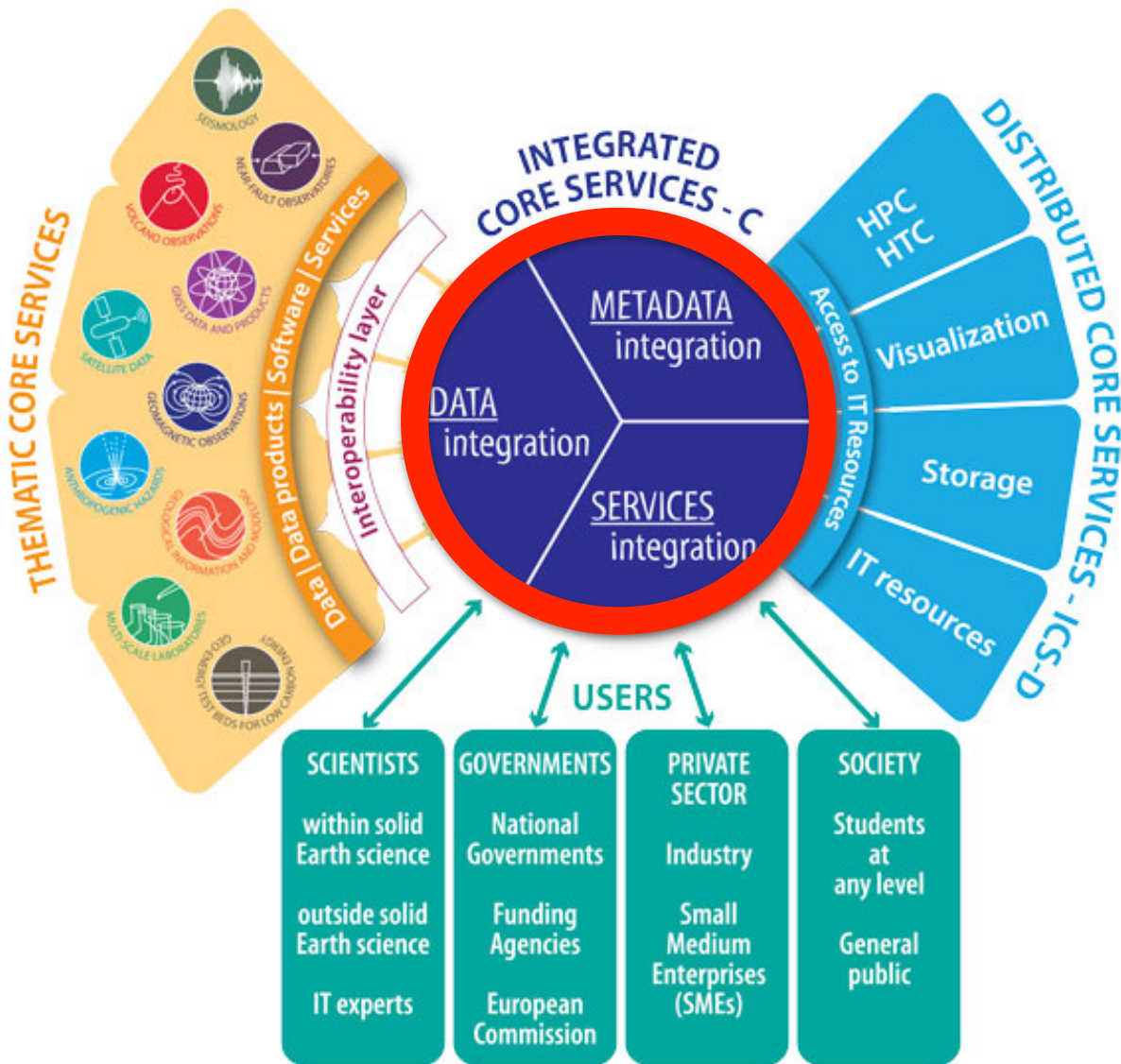
# A viewpoint on EPOS ICS

Luca Trani

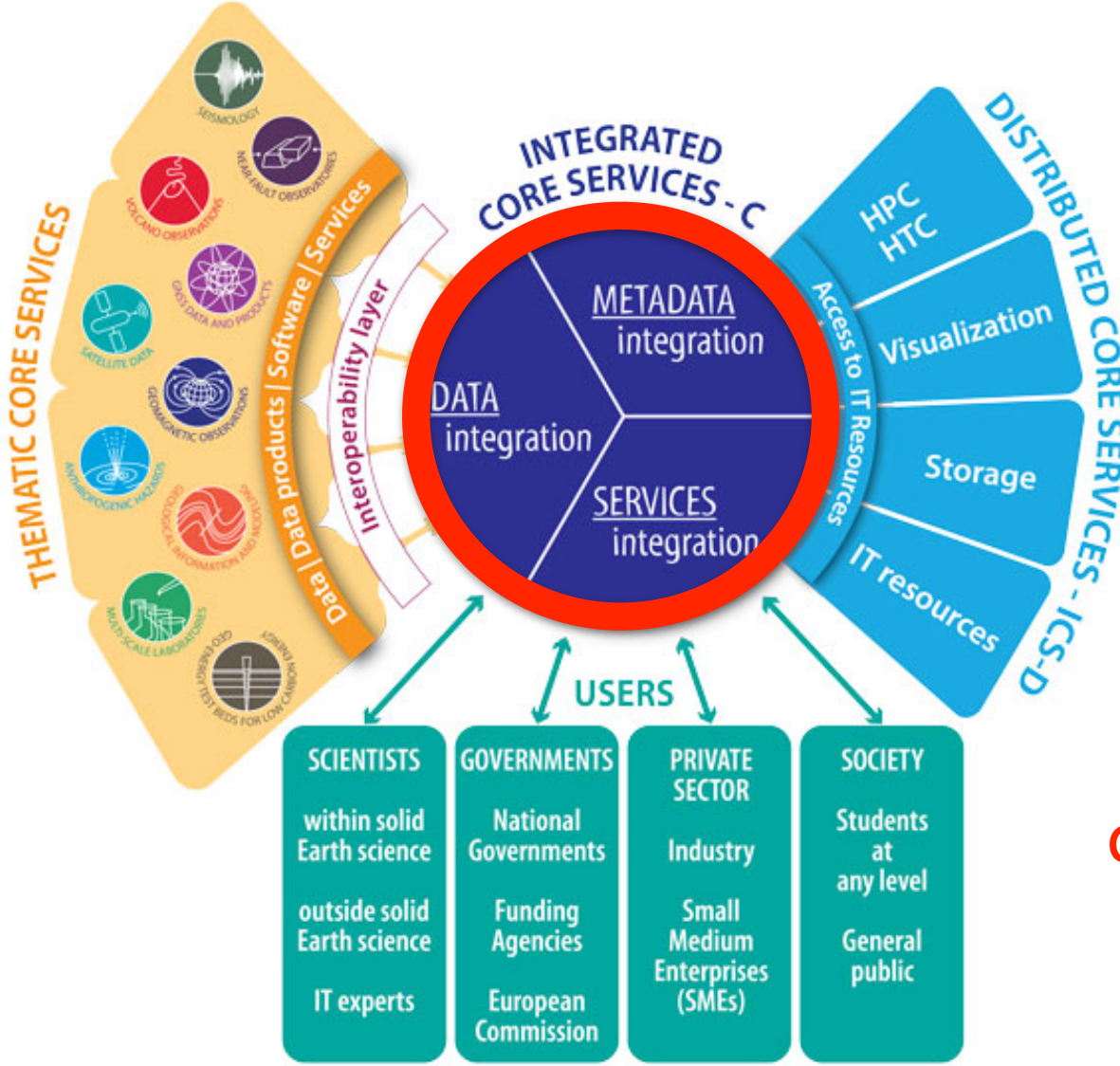
ORFEUS-EPOS Seismology Workshop

Lisbon 25-27 October 2017





# Data Discovery, Access and Use



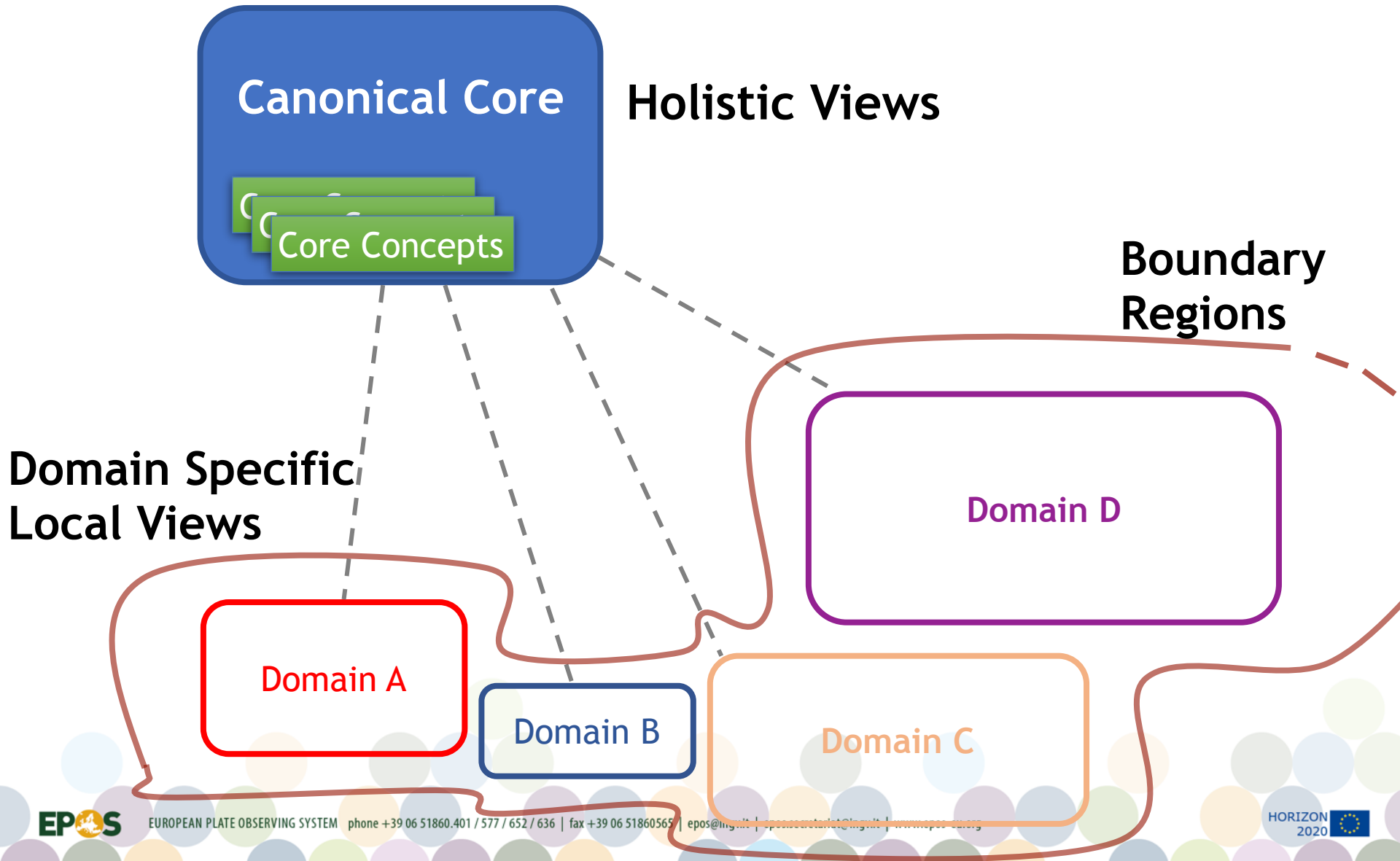
Scientific Methods and Workflows

Harmonisation

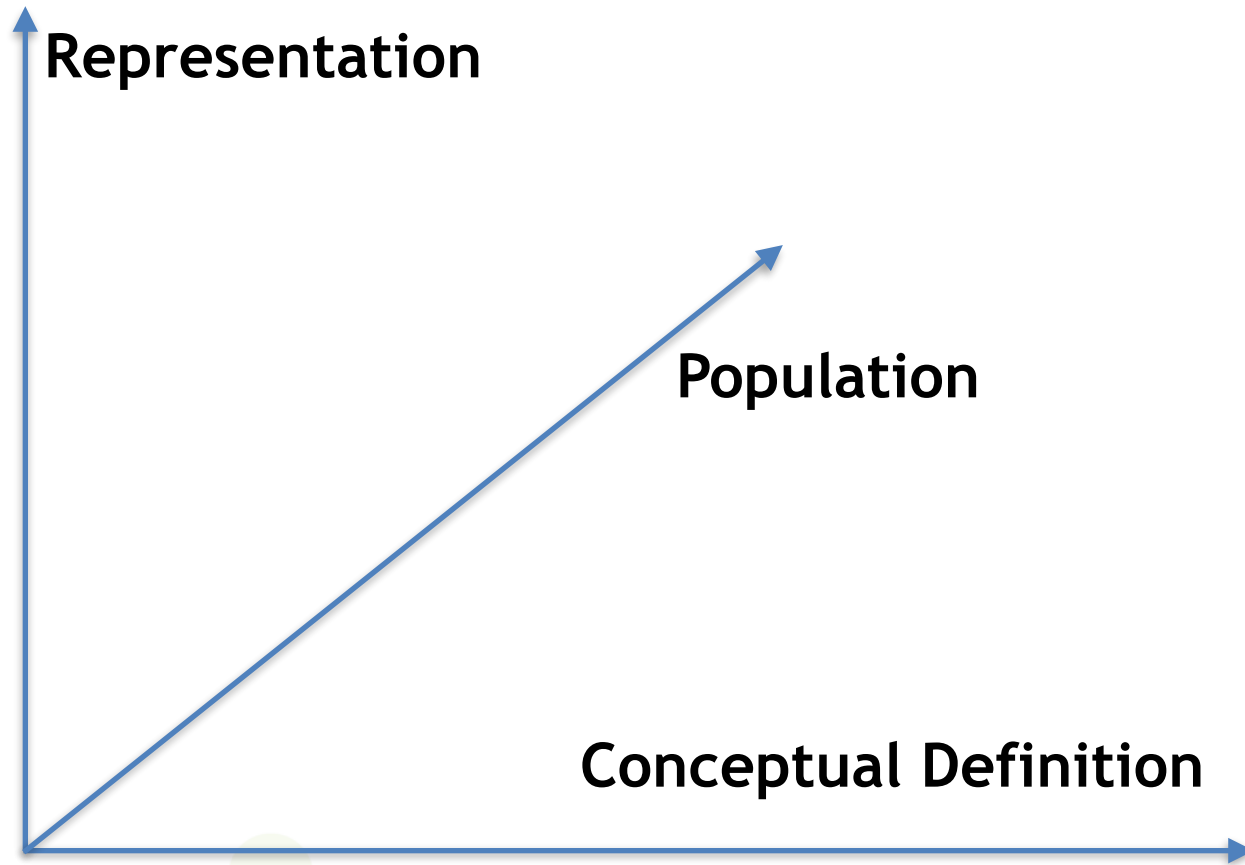
Pooling of Knowledge

Cross-Boundary Innovation

# A Shared Information Space



# Three Aspects of the Canonical Core



# Conceptual definition

- What goes inside the CC, i.e. **Core Concepts for Collaboration**
- Balancing completeness vs manageability
  - importing
  - accommodating to extensions
- Driven by requirements and use cases
- Main Core Concepts of the EPOS CC:  
Organisation, Person, Webservice, Service,  
Dataset, Publication, Facility,  
Equipment, Software

# Representation

- How to model the Core Concepts and their relationships
- Key requirements: extensibility, modularity, machine-processability
- Different representations possible depending on the purpose. E.g.:
  - CERIF Metadata Catalogue
  - EPOS-DCAT-AP exchange with communities



# Population

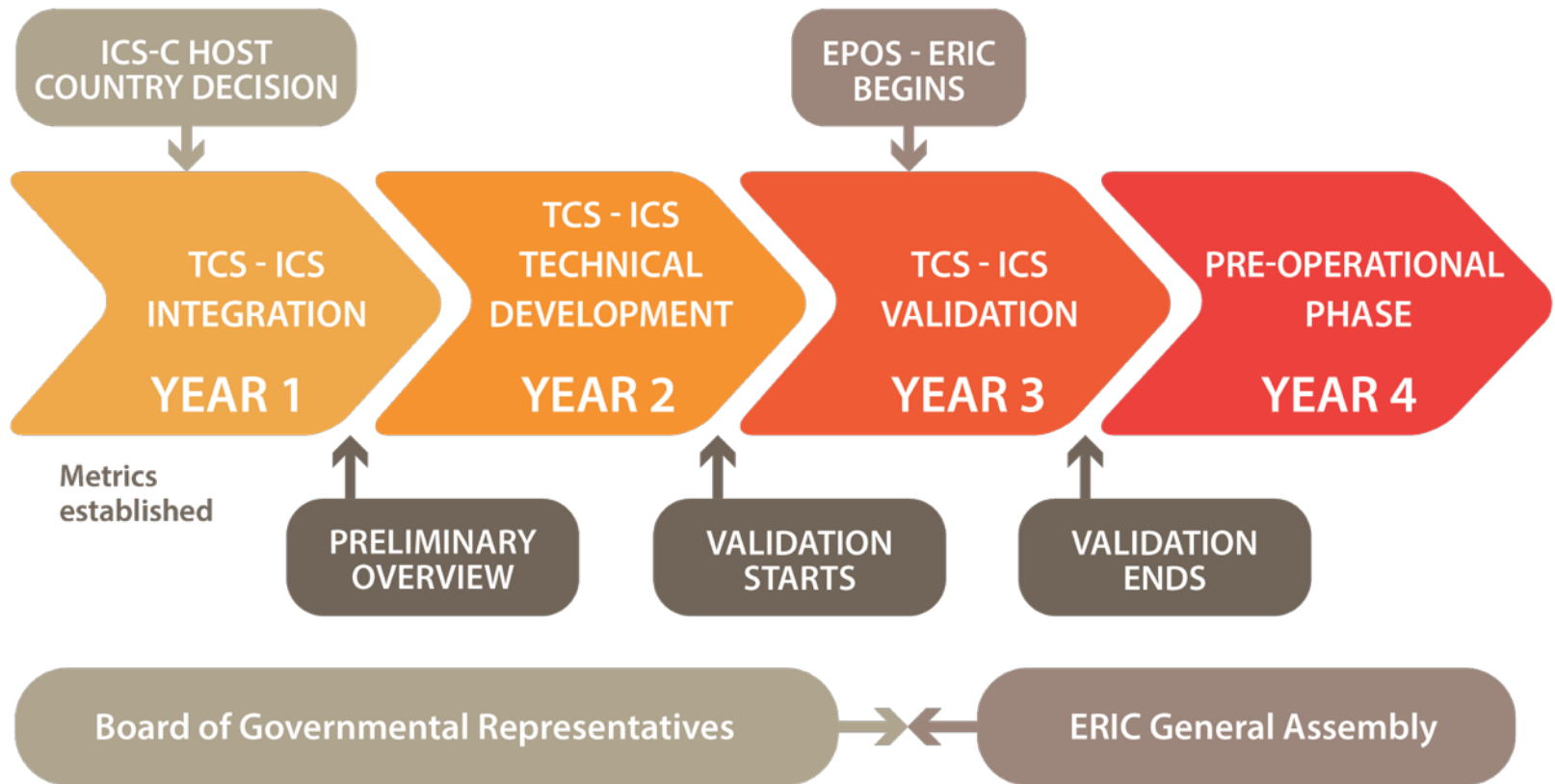
- How the Canonical Core is constructed with concrete instances of community information bundles
  - Select, ingest and maintain
- Strategies: brokering, harvesting
- Mapping Data and Resources (DDSS) into the EPOS Metadata Catalogue

# EPOS Canonical Core

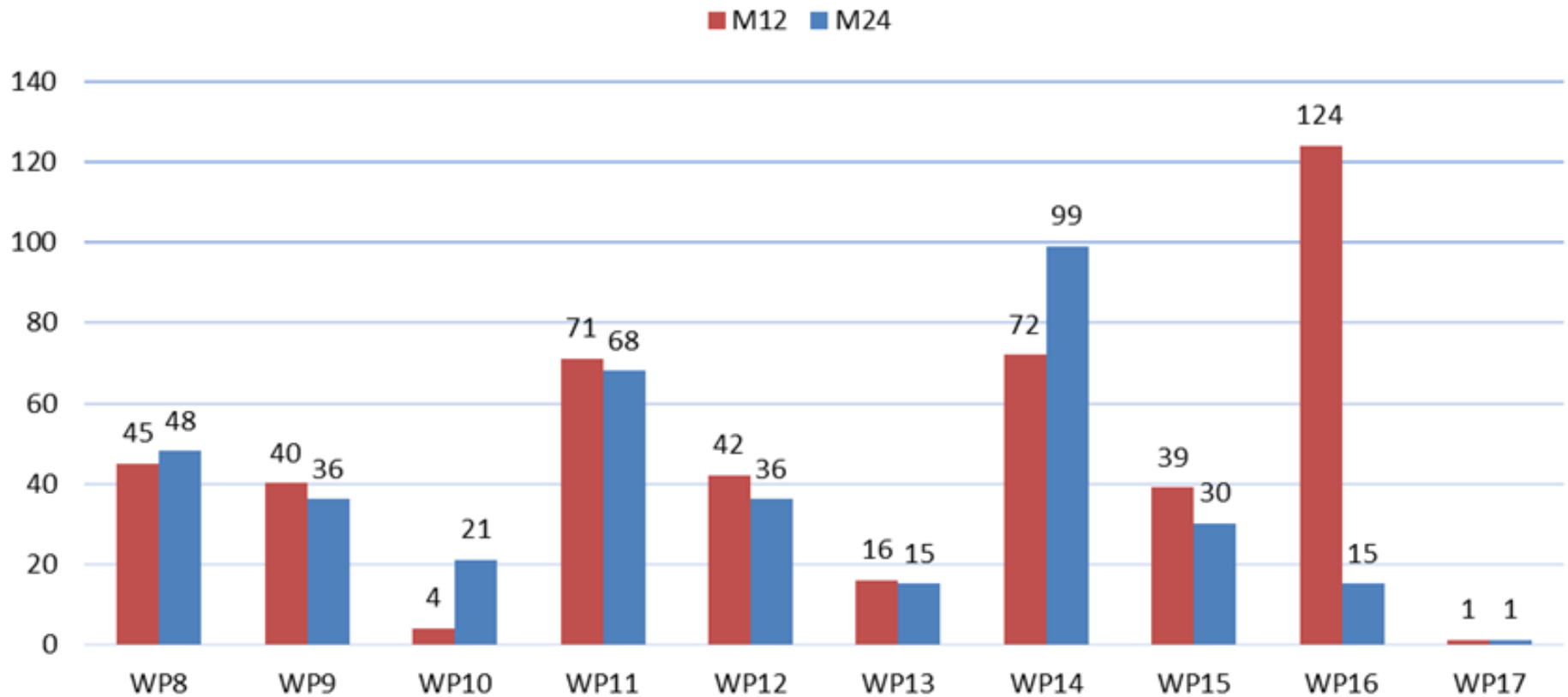
- Conceptual definition
- Representation
- Population



# EPOS-IP Timeline



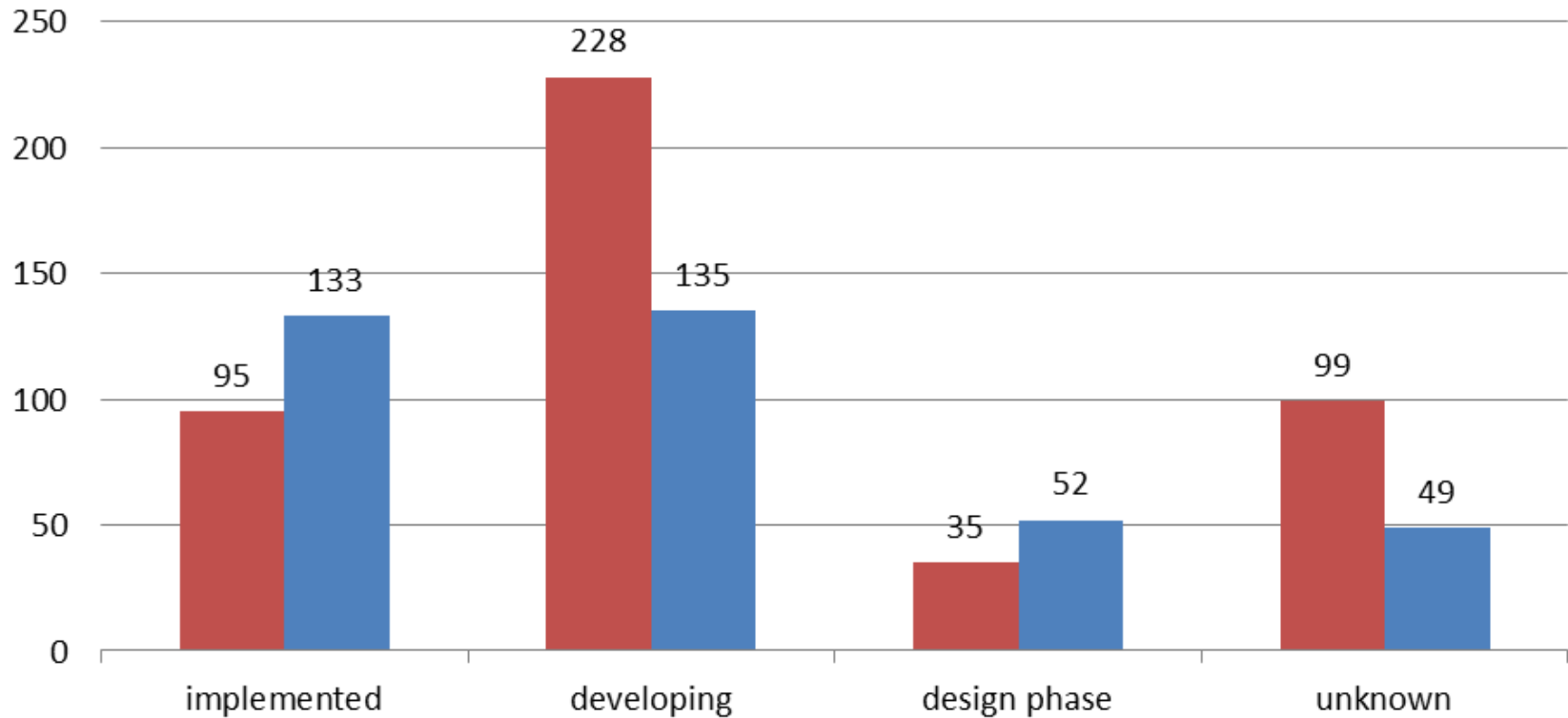
## Number of DDSS elements in TCS WPs



In total there are **368** DDSS elements included in the Master Table.

# Level of maturity of DDSS elements for implementation by M24

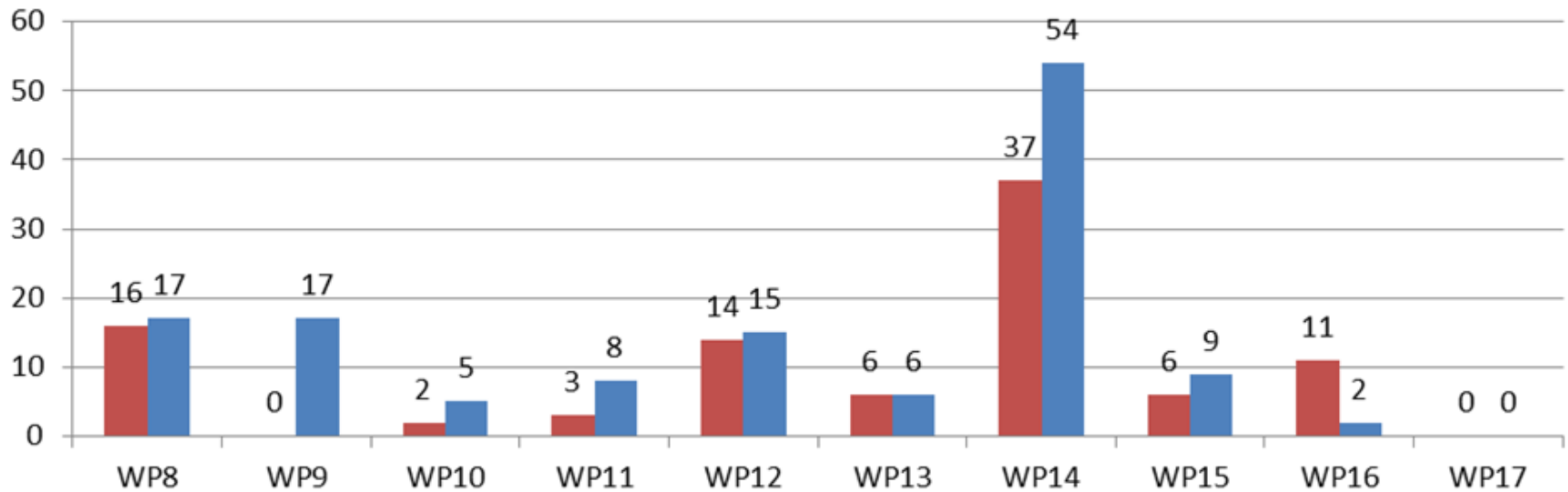
■ M12 ■ M24



All numbers are as declared by TCS.

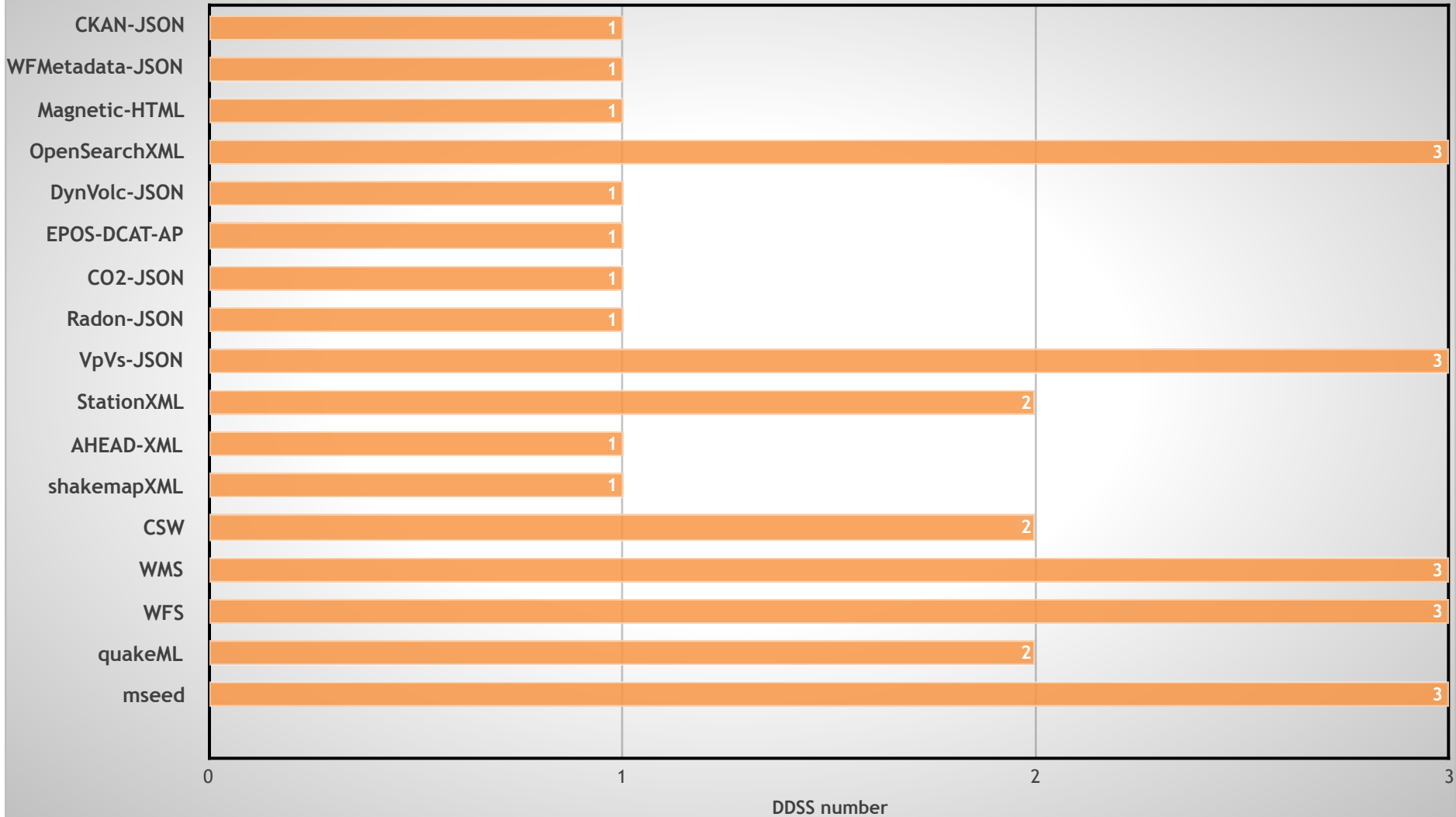
## Distribution of mature DDSS elements by WPs ready for implementation by M24

■ M12 ■ M24

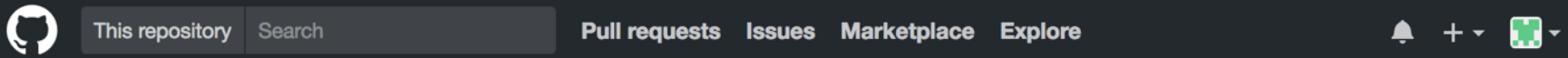


In total there are **133** mature DDSS elements that are declared by TCS WPs.

## Examples of DDSS Format Types



# Collaborative Approach



epos-eu / **EPOS-DCAT-AP**

Watch 14 Star 1 Fork 37

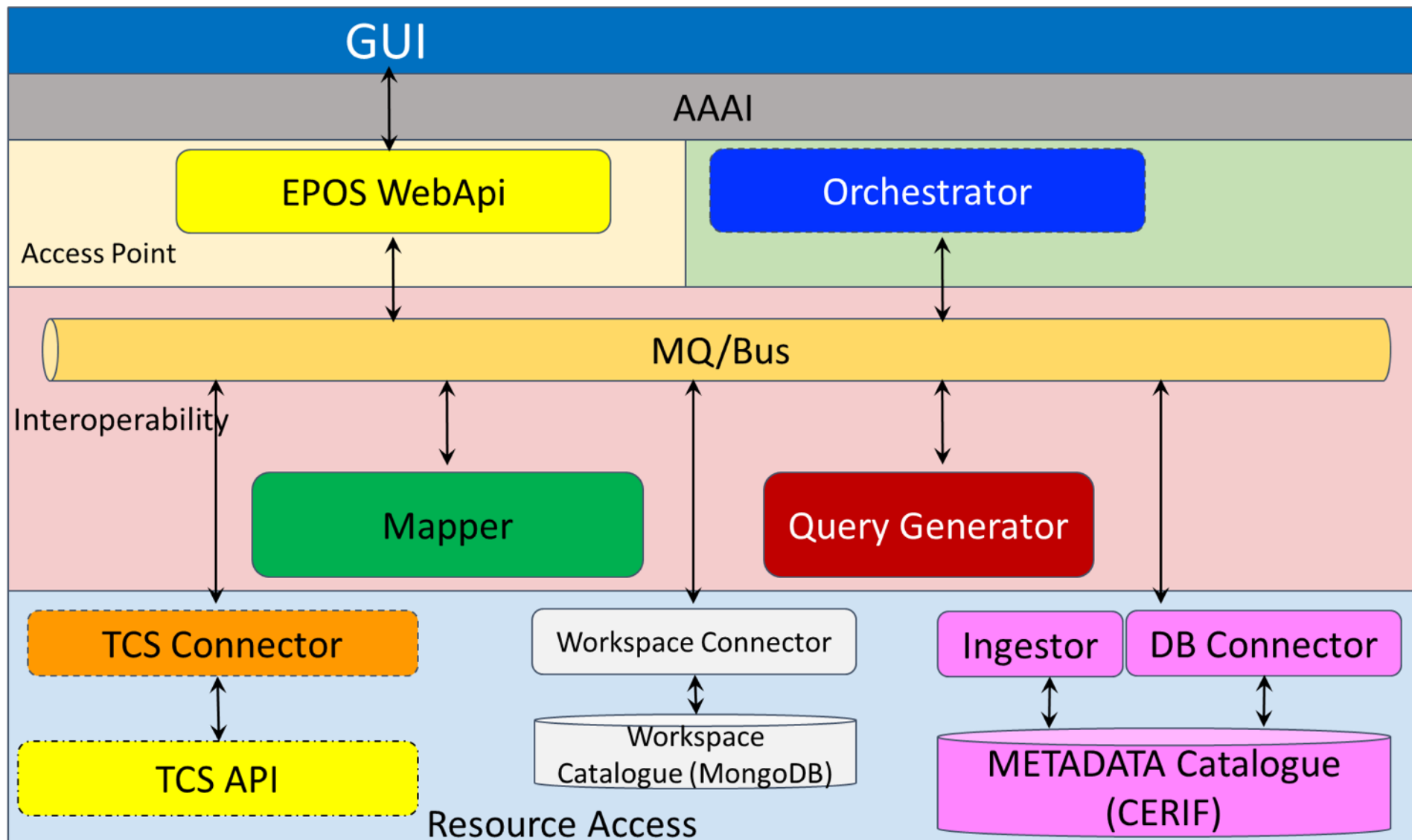
Code Issues 66 Pull requests 6 Projects 0 Wiki Insights

Branch: master EPOS-DCAT-AP / examples / Create new file Upload files Find file History

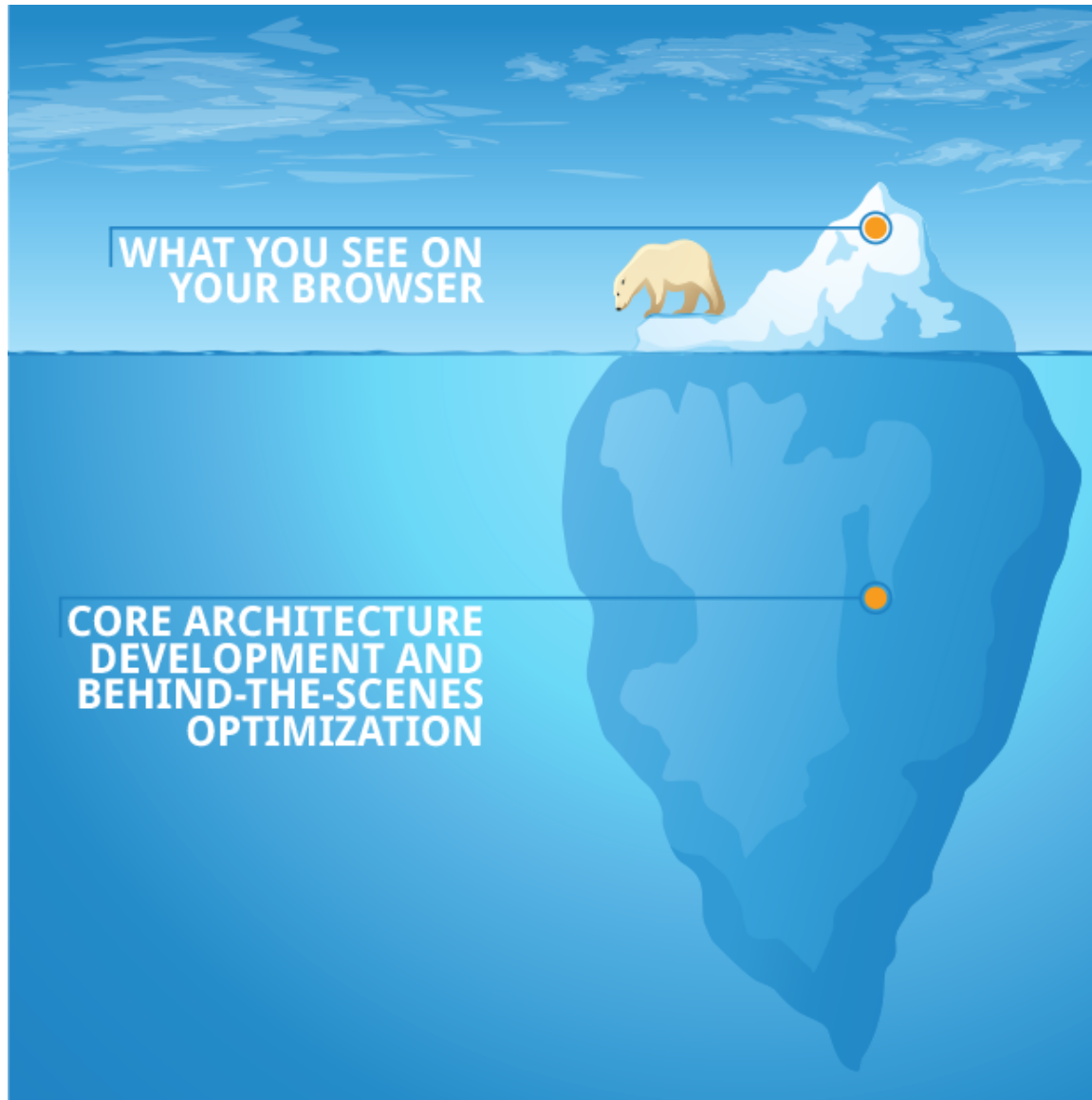
manuelasbarra Update WP11_DDSS-036_Bulk_Rock_Analysis		Latest commit 11f30fe 17 days ago
..		
WP08	Update EPOS-DCAT-AP_WP08_NOA.xml	20 days ago
WP09	Update EPOS-DCAT-AP_WP09_CRL_DATASELECT_STATIONS.xml	17 days ago
WP10	Update EPOS-DCAT-AP_WP10.xml	23 days ago
WP11	Update WP11_DDSS-036_Bulk_Rock_Analysis	17 days ago
WP12	Update EPOS-DCAT-AP_WP12.xml	21 days ago
WP13	Update EPOS-DCAT-AP_wp13_WorldMagneticModel.xml	17 days ago
WP14	Update WP14-DDSS-003-1-7_GROSS_SCHOENEBECK.xml	20 days ago
WP15	Update BoreholeDataIndex_WFS-EPOS-DCAT-AP.xml	a month ago
WP16	Update EPOS-DCAT-AP_WP16.xml	21 days ago
EPOS-DCAT-AP_example.xml	Update EPOS-DCAT-AP_example.xml	3 months ago



# ICS-C Architecture







WHAT YOU SEE ON  
YOUR BROWSER

CORE ARCHITECTURE  
DEVELOPMENT AND  
BEHIND-THE-SCENES  
OPTIMIZATION

Acknowledgments to Kuvvet Akatan and Daniele Bailo who provided material for this presentation