EPOS-ORFEUS Competence Centre

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and the EPOS-ORFEUS CC Team

EOSC-hub kick-off meeting
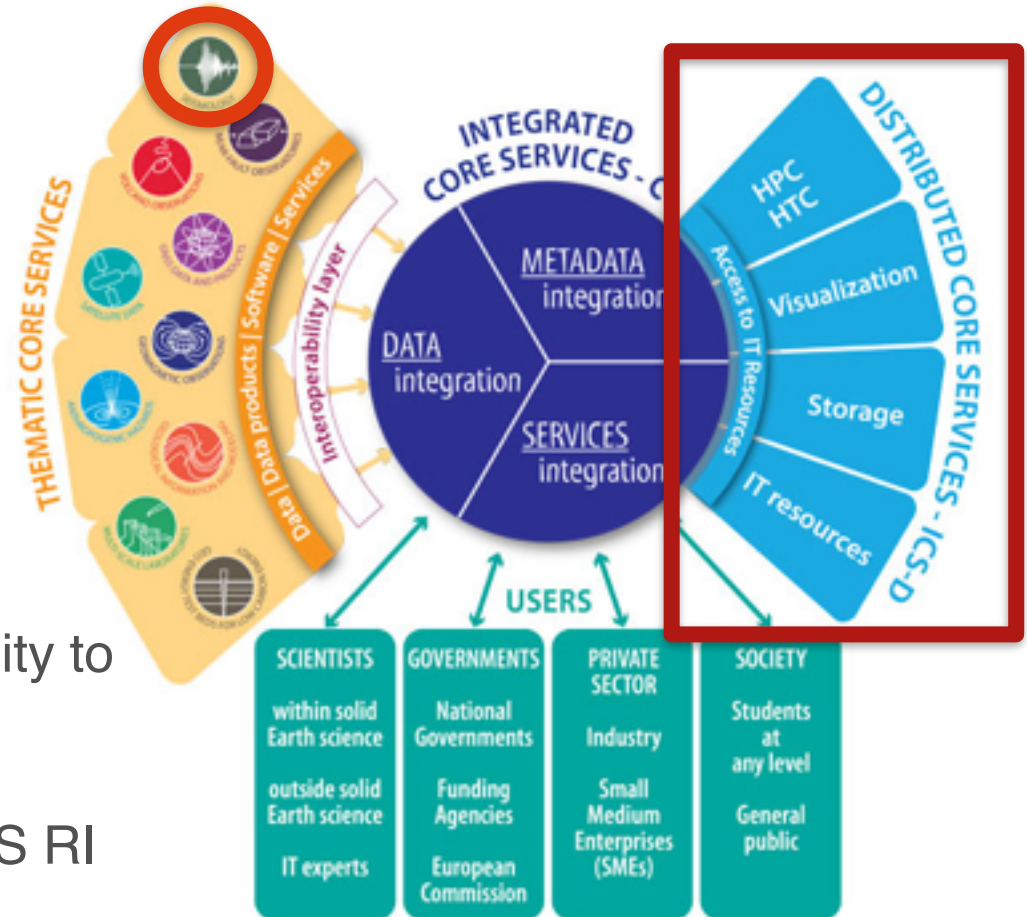
Amsterdam, 8-12 Jan 2018

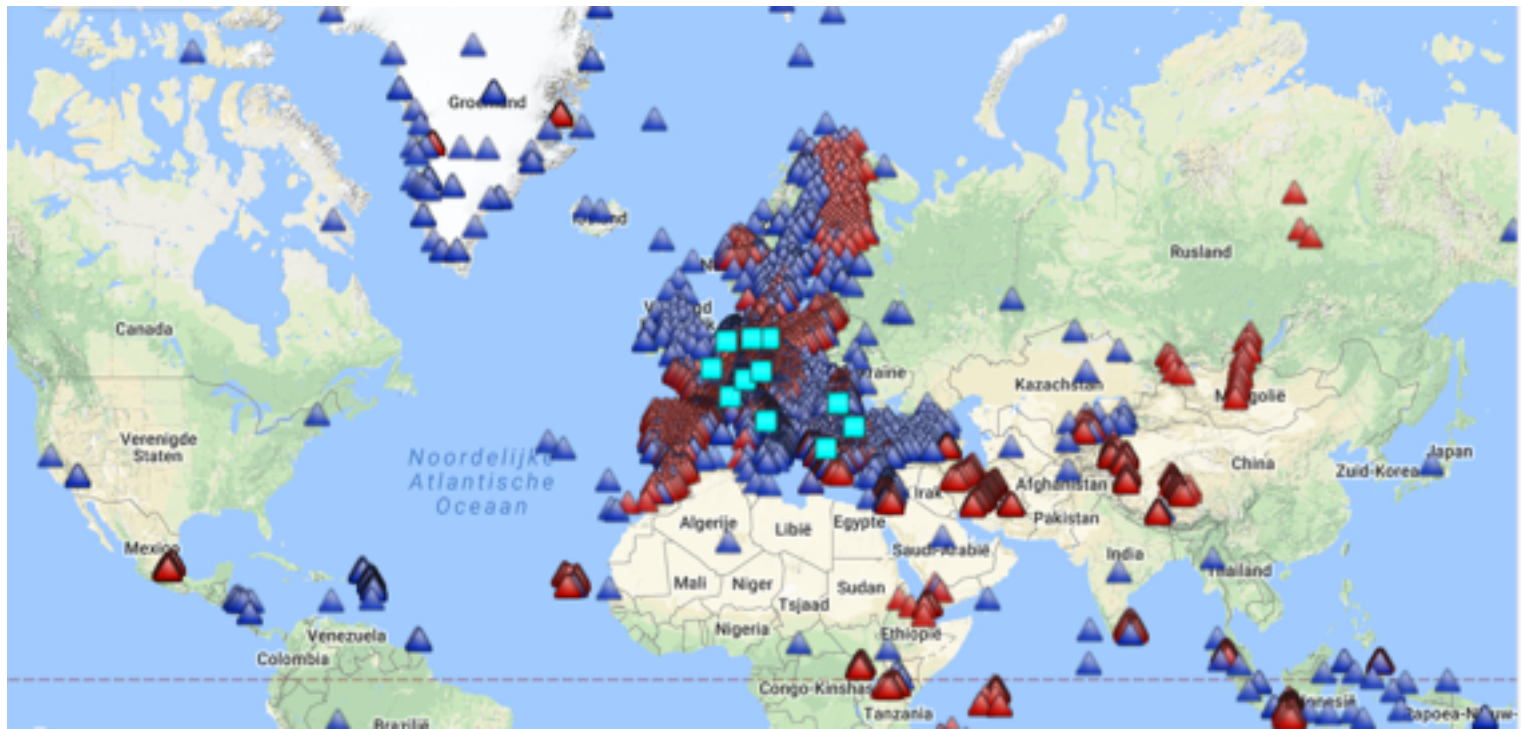# Community background and maturity — EPOS

- RI for solid-Earth sciences
- 10 Scientific Communities
- 25 Countries
- 5 International organisations
- 256 National RIs
- Several thousands of sensors
- Hundreds of facilities
- Several PB of data
- Thousands of users

EOSC-hub is a great opportunity to establish **technical** and **organisational** collaboration frameworks between the EPOS RI and e-infrastructure providers (including added value services, tools, policies and best practices)

ORFEUS - European Integrated Data Archive

- Well-established and mature community

- Pillar of the EPOS-Seismology Thematic Service

- 10 Datacentres (more coming)

- 200+ Seismic Networks, 10K+ Seismic Stations

- 400TB+ Seismic Waveform Data

- 1900+ Unique Users p/y

What we want to setup, test, demonstrate

- Design and setup of a service platform to:
    - Offer reliable **Federated AAI** (FedAAI)
    - Provide effective mechanisms for large **data** movement and **staging** (DaSta)
    - Harmonise policies for data lifecycle and support **data management** pipelines (FeDaLi)
    - Enable generation of **user-defined** products (UGeP)
- Build on the results of EUDAT and EGI-Engage projects
- Promote and leverage the **FAIR** principles
- Consolidate the existing infrastructure
- Foster new application scenarios
- Engage a broader user community

Members, roles, effort, external partnerships

Member acronym	Role in the CC	Effort
KNMI-ODC	CC coordination and service development, support	20
NOA	service development, support	17
INGV	service development, support	14
GFZ	service development, support	13

External partner	Type of partnership
EPOS-IP project	Provider of scientific use cases and requirements

Required 'common' and 'federation' services

- Federated services required
  - AAI (WP5.1)
- Possibly also:
  - Monitoring Service (WP5.4)
  - Operational support (WP5.3)
  - Service Catalogue (WP5.6)
- Common services required
  - Federated Computing (WP6.2)
  - Preservation (WP6.5)
  - Discovery and Access (WP6.1)
- External providers:
  - SURFsara, KIT, CINECA, GRNET

Expected CC outputs first year

Service Name	Planned activities	Milestones
FedAAI (GFZ)	Requirements collection Definition of attributes and roles Selection of candidate technologies Prototype design and development Validation and assessment criteria	M6
DaSta (INGV - NOA)	Requirements collection Selection of candidate technologies Prototype design and development Validation and assessment criteria	M12
FeDaLi (NOA - GFZ)	Requirements collection Definition of data lifecycle stages Selection of candidate technologies Prototype design and development Validation and assessment criteria	M12
UGeP (KNMI)	Requirements collection Definition of preliminary products Selection of candidate technologies Prototype design and development Validation and assessment criteria	M12

Open questions

- Service component dependencies and accounting model
- Sustainability beyond the project lifetime

Thank you for your attention!