



Linda Baldewein
Carsten Schirnack
Angela Schäfer
Sylvia Reißmann
Marc Adolf
Ulrike Kleeberg

SOOP – Shaping an Ocean Of Possibilities

for science-industry collaboration

The data management behind an
innovation platform



Challenges in today's ocean observation

Not sufficient:

- Ocean Observing Systems
- Information for society
- Non-scientific actors

1

Sensors not interoperable

2

No standardized interfaces

3

Development stop for prototypes

4

Complex & cost-intensive handling

SOOP Goals

Data & Knowledge

Gaining awareness and harness the curiosity of industry and society to create new wealth and benefits by providing ocean information

Insight & Decision

Generate new insights and establish new formats for science-based decision and supporting the New Blue Economy

Innovation & Change

Providing access to research facilities and linking industry networks to cross-sector synergies

SOOP in a nutshell



building an innovation platform for more ocean observation and technologies

Mar 2023 – Dec 2025



3 Helmholtz research institutions:
GEOMAR, AWI, Hereon

Funded in the Helmholtz funding line 'Innovation platforms as sustainable and structure-building measures to strengthen transfer and innovation' by the German Federal Ministry of Education and Research



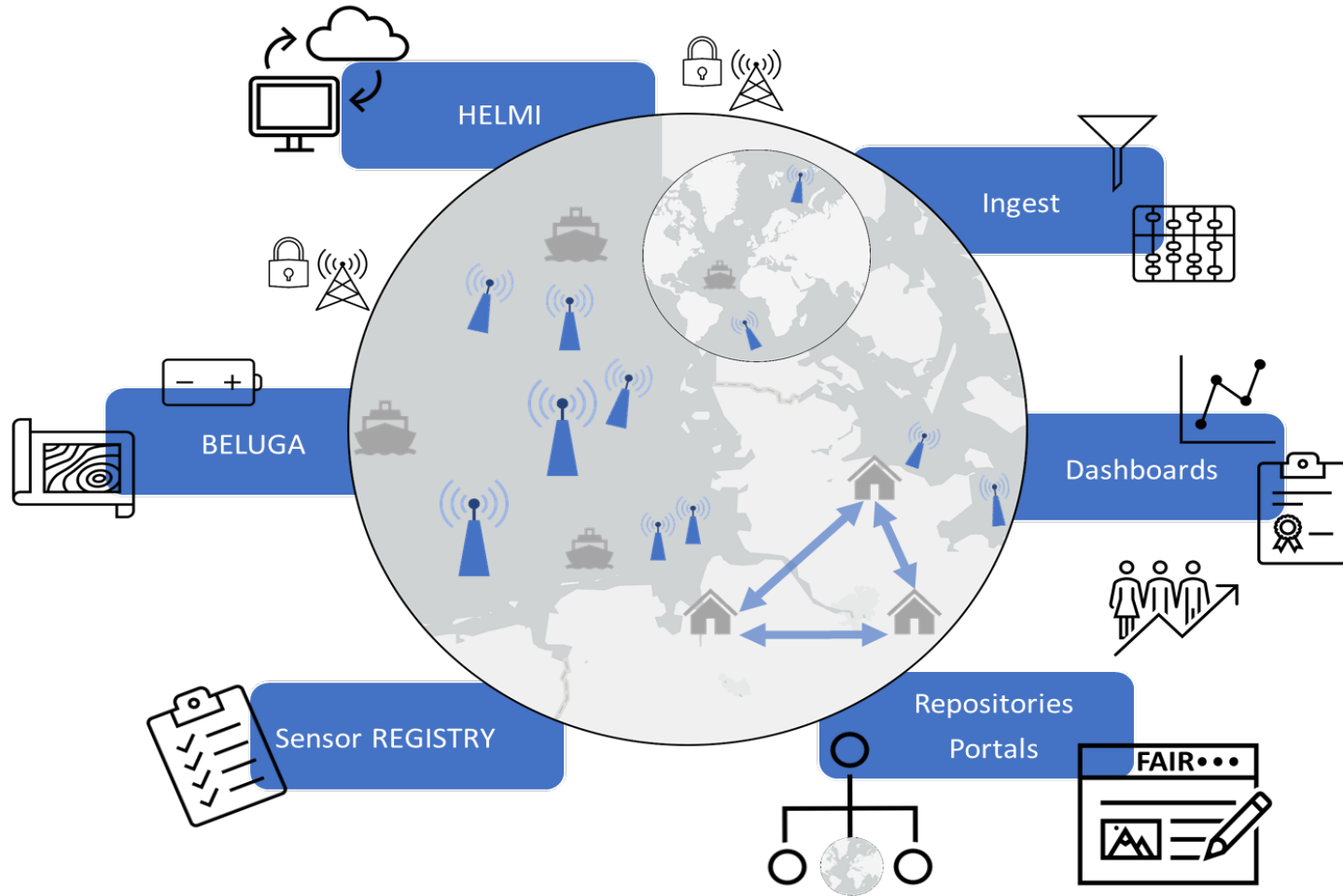


Data management

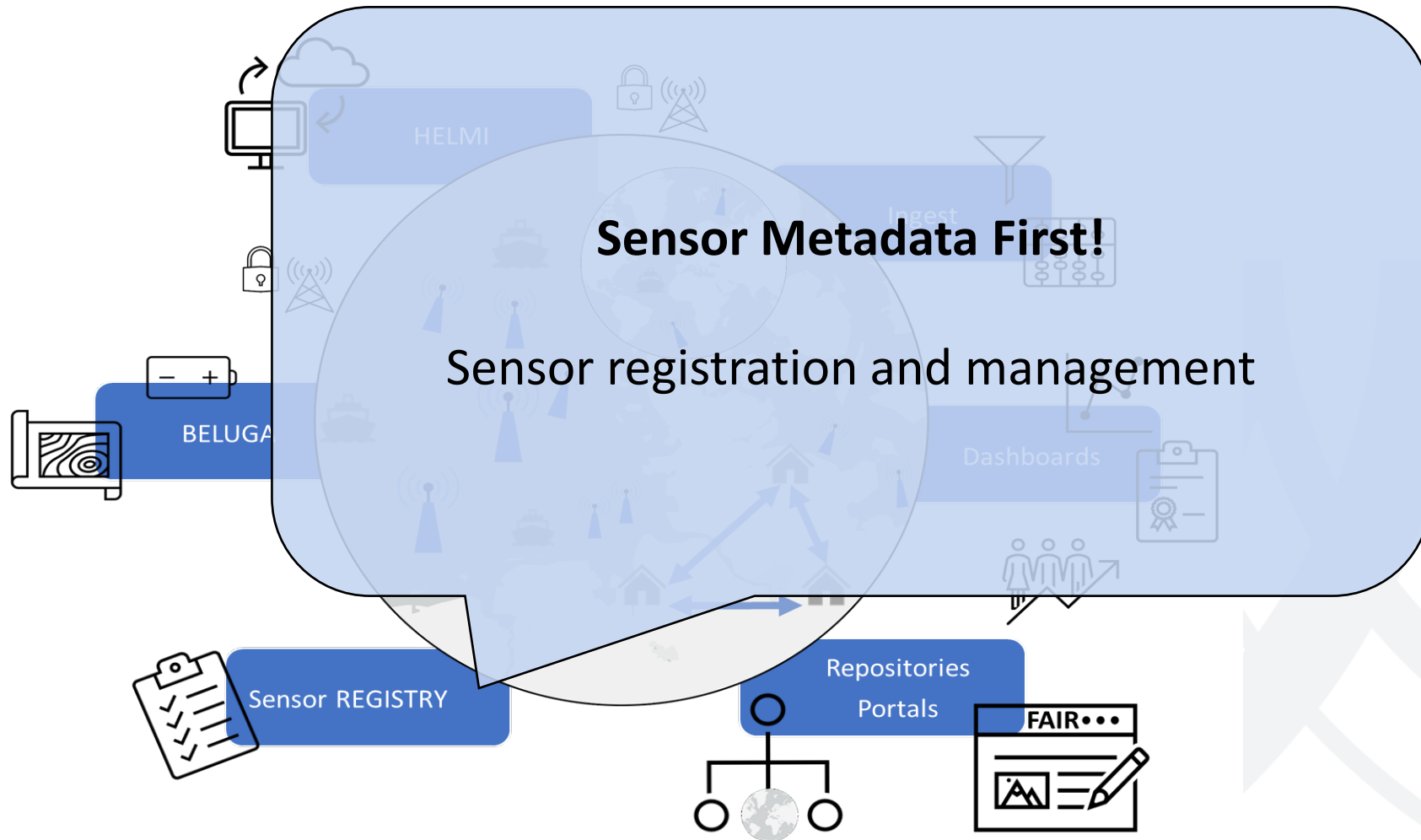
Data Management – Key points

- 🌊 **Simplicity**
Out of the box sensor registration and data flow
- 🌊 **Scalability**
Automatic workflows useable on commercial scales
- 🌊 **Security**
Secure data transfer from various data providers
- 🌊 **Interoperability**
Data access via OGC SensorThings API

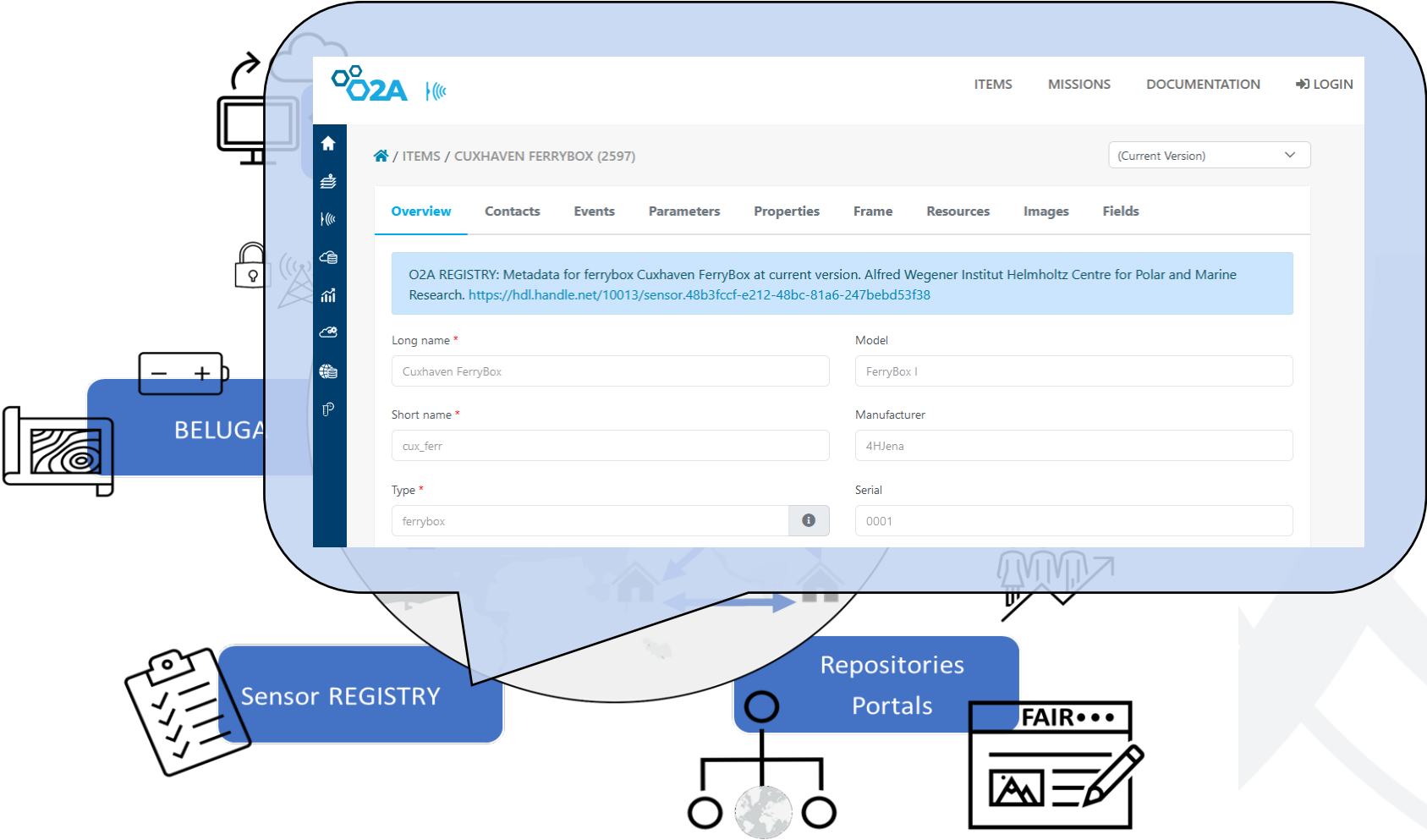
Data Management and Data Services



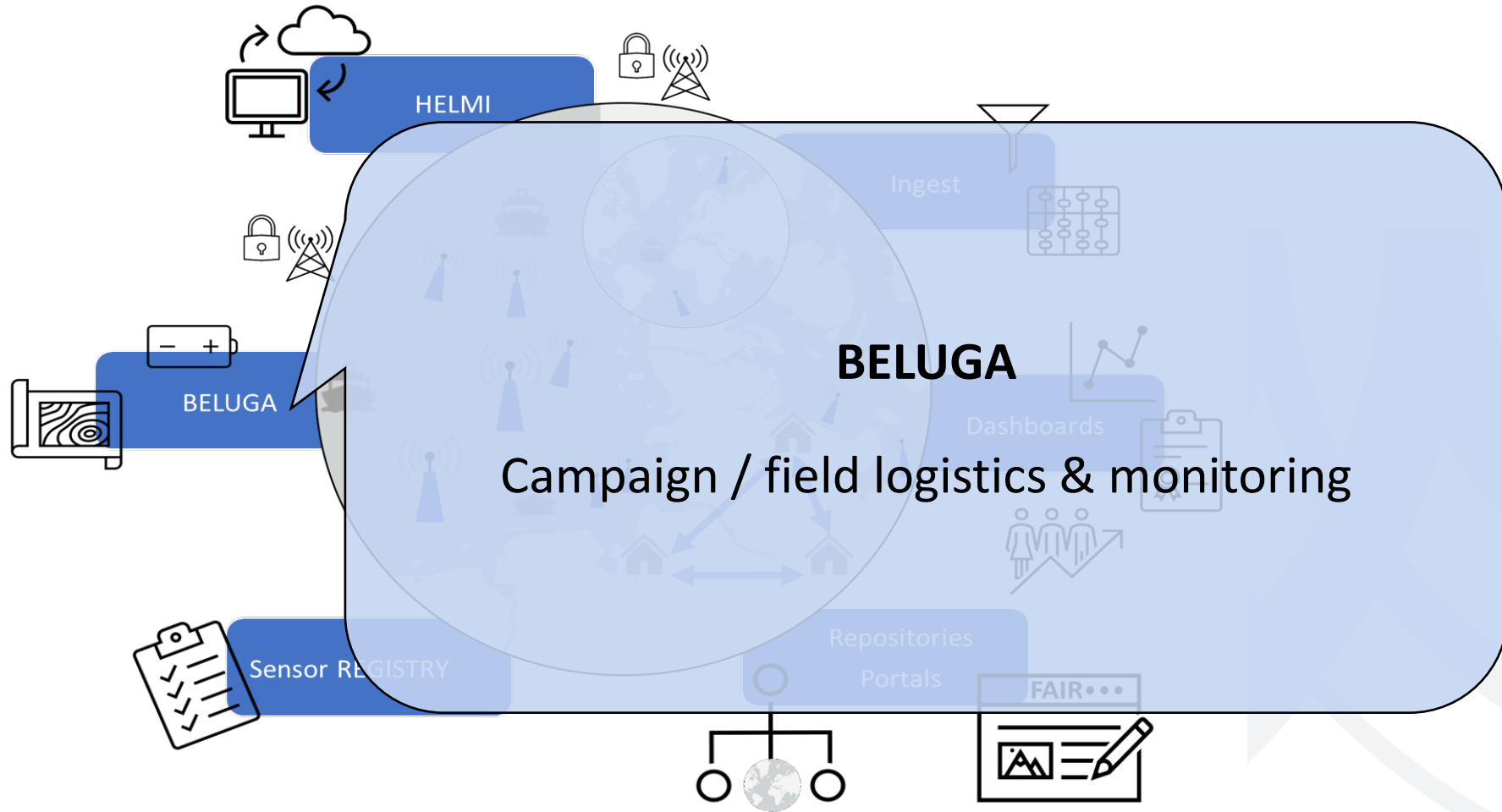
Data Management and Data Services



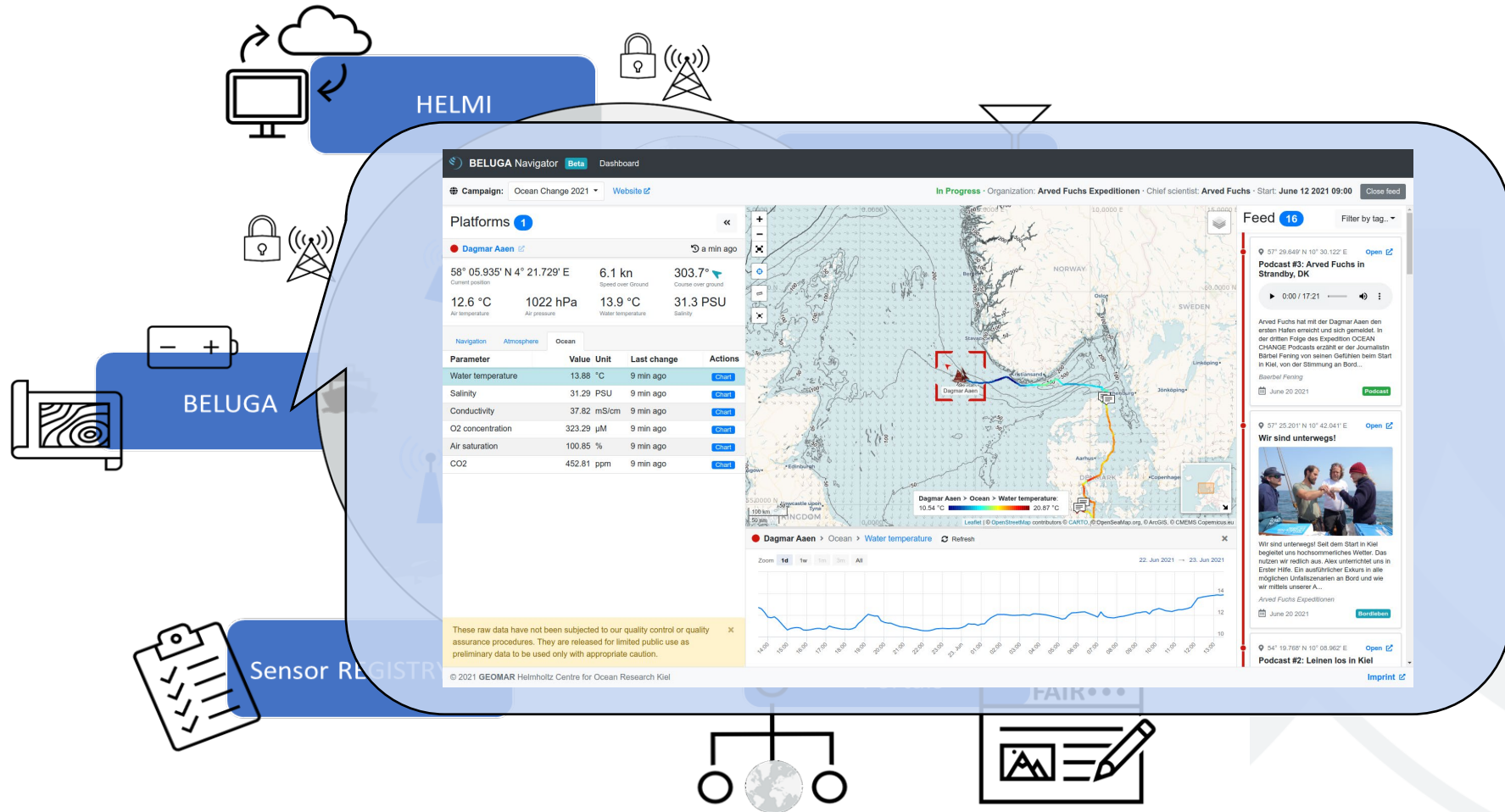
Data Management and Data Services



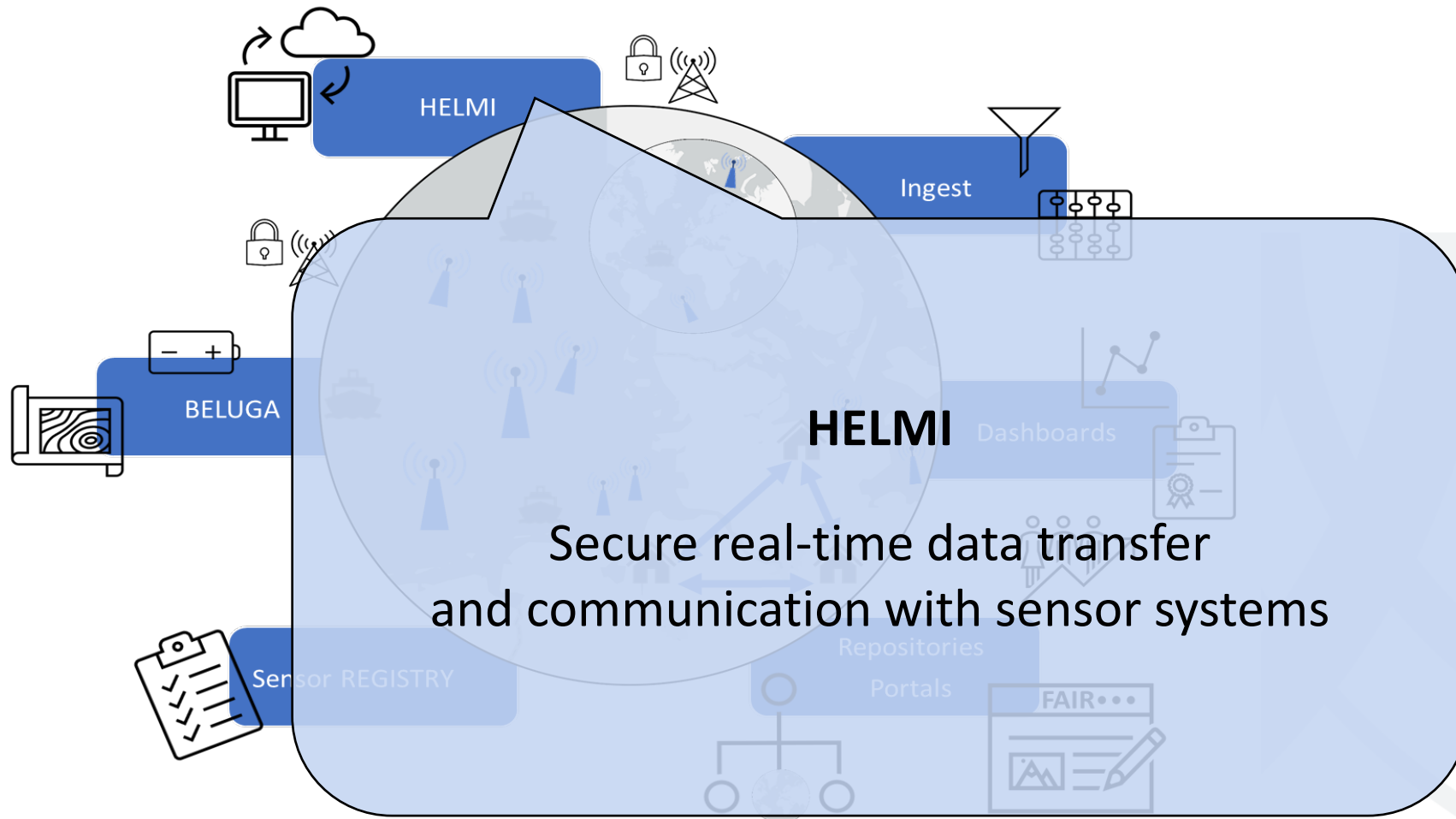
Data Management and Data Services



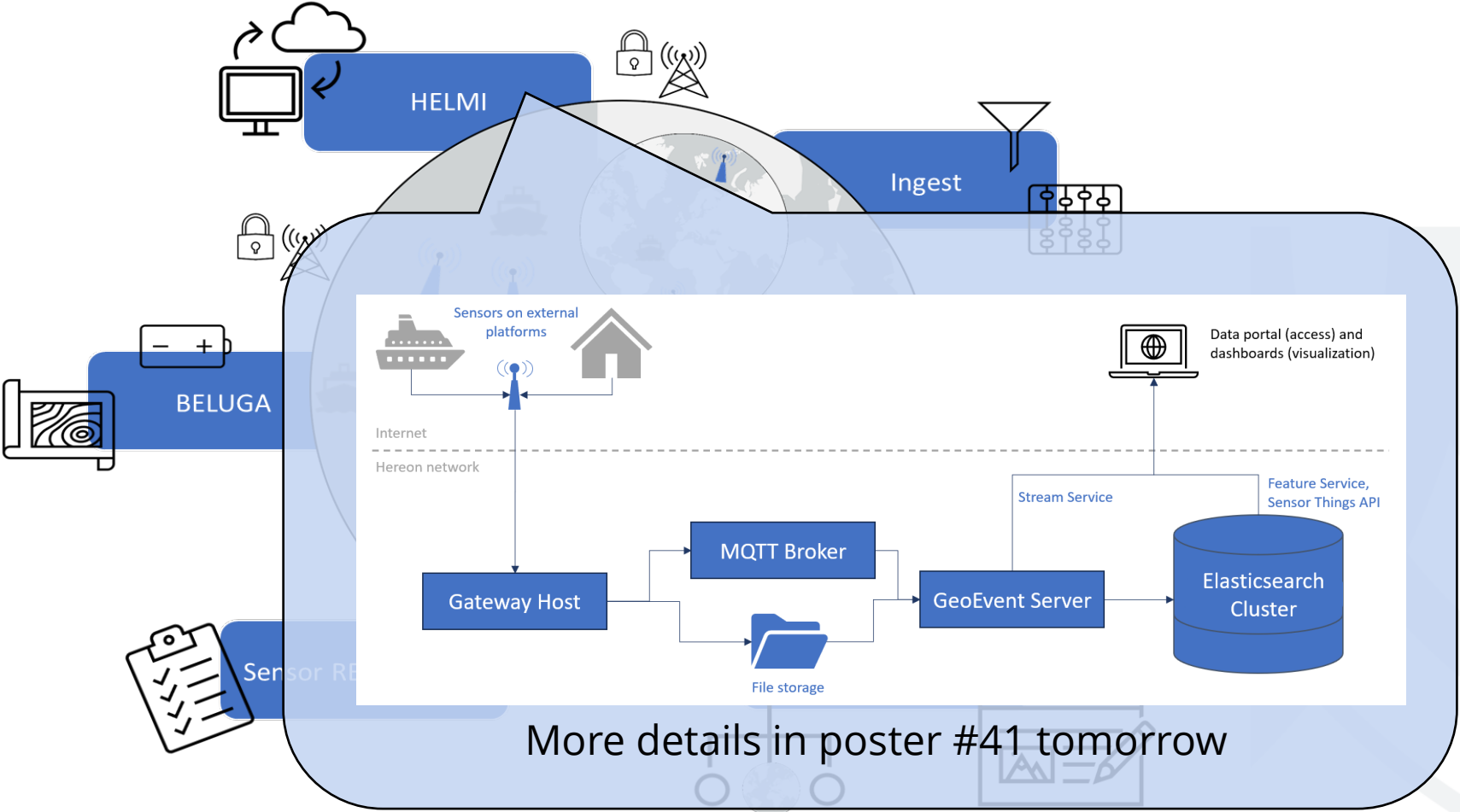
Data Management and Data Services



Data Management and Data Services

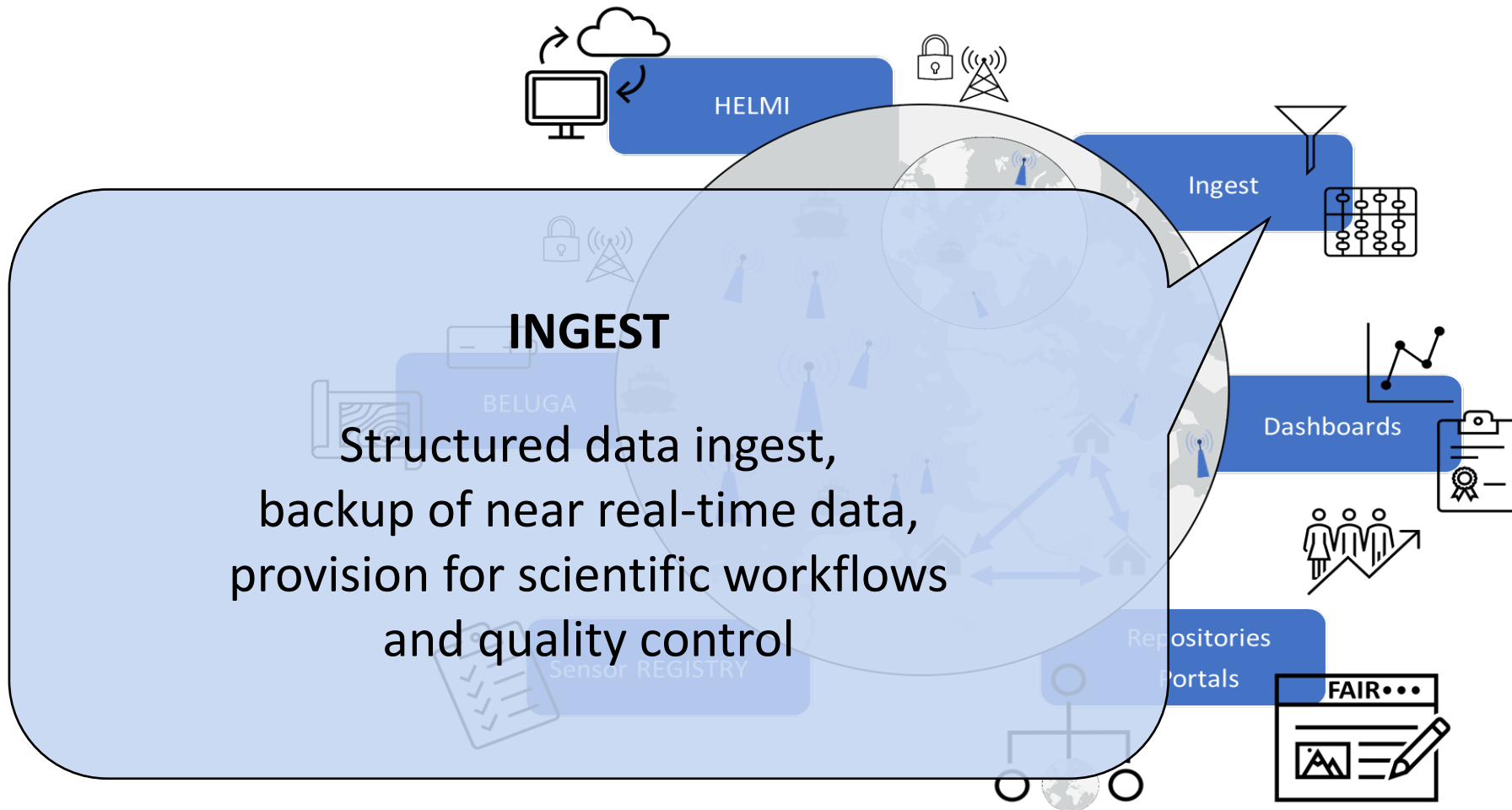


Data Management and Data Services

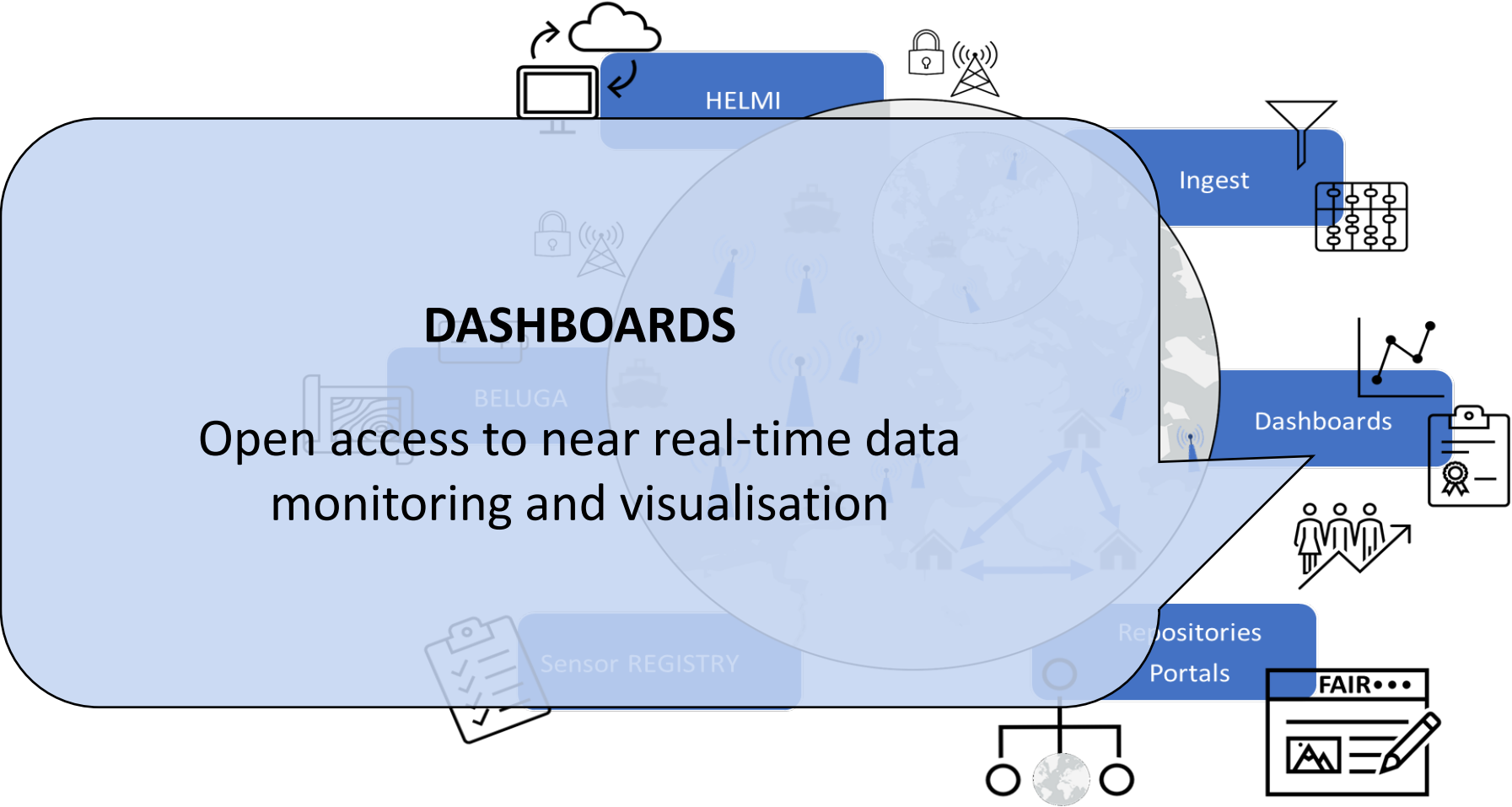


More details in poster #41 tomorrow

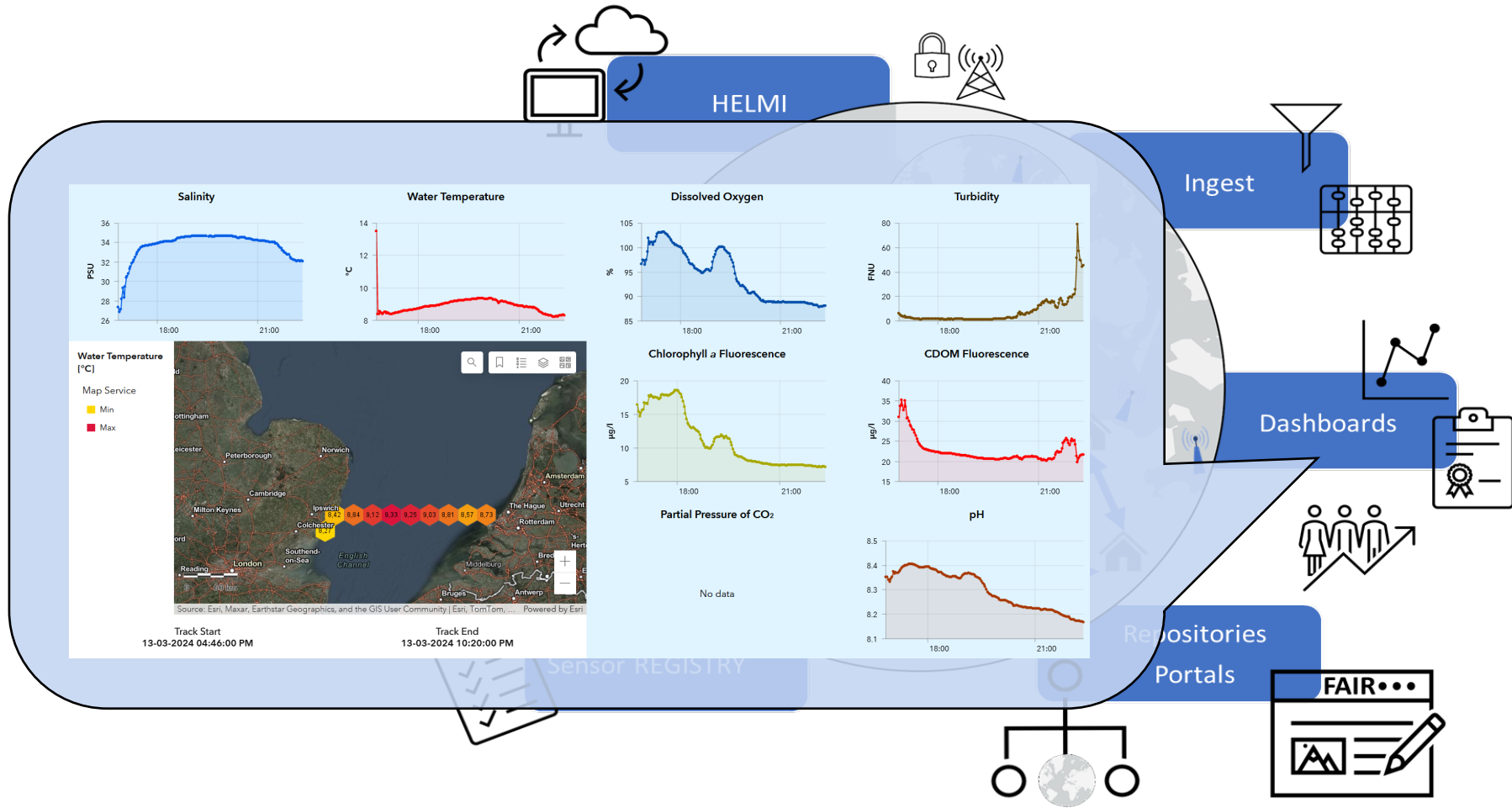
Data Management and Data Services



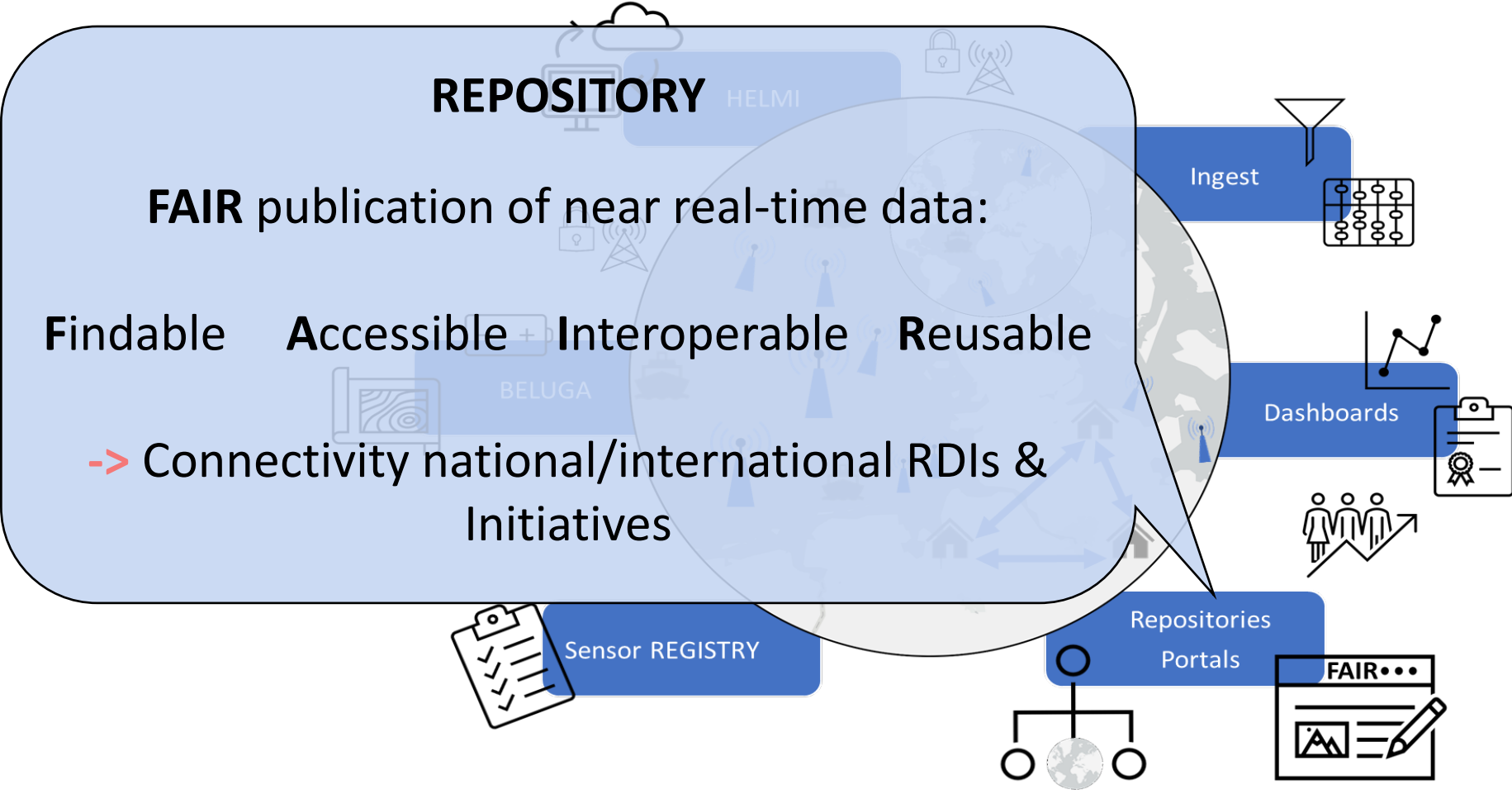
Data Management and Data Services



Data Management and Data Services



Data Management and Data Services





Linda Baldewein
Helmholtz-Zentrum Hereon

Email: linda.baldewein@hereon.de

www.soop-platform.earth

