

Multi-Community, Multi-Sensor Maritime Earth Observation DC

How do you eat the elephant?

Gianluca Luraschi

EO Project Manager and Application Architect

Gianluca.luraschi@emsa.europa.eu



Background:

Post *Erika* (2002: EMSA established, set-up started 2003)

Legal basis: Regulation 1406/2002/EC

Regulatory Agency of the European Community

Own legal identity

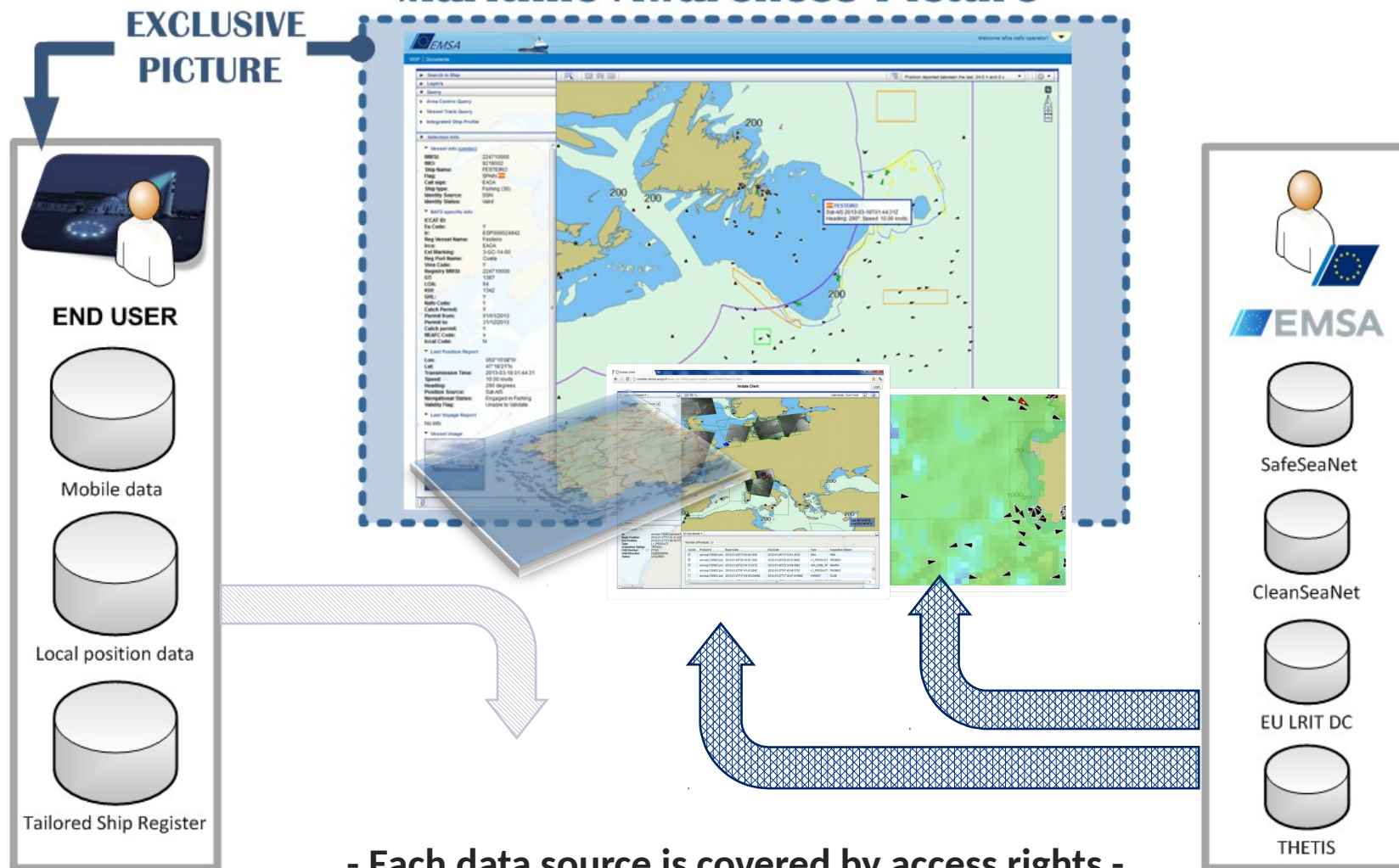
Technical and operational support to EC and MS

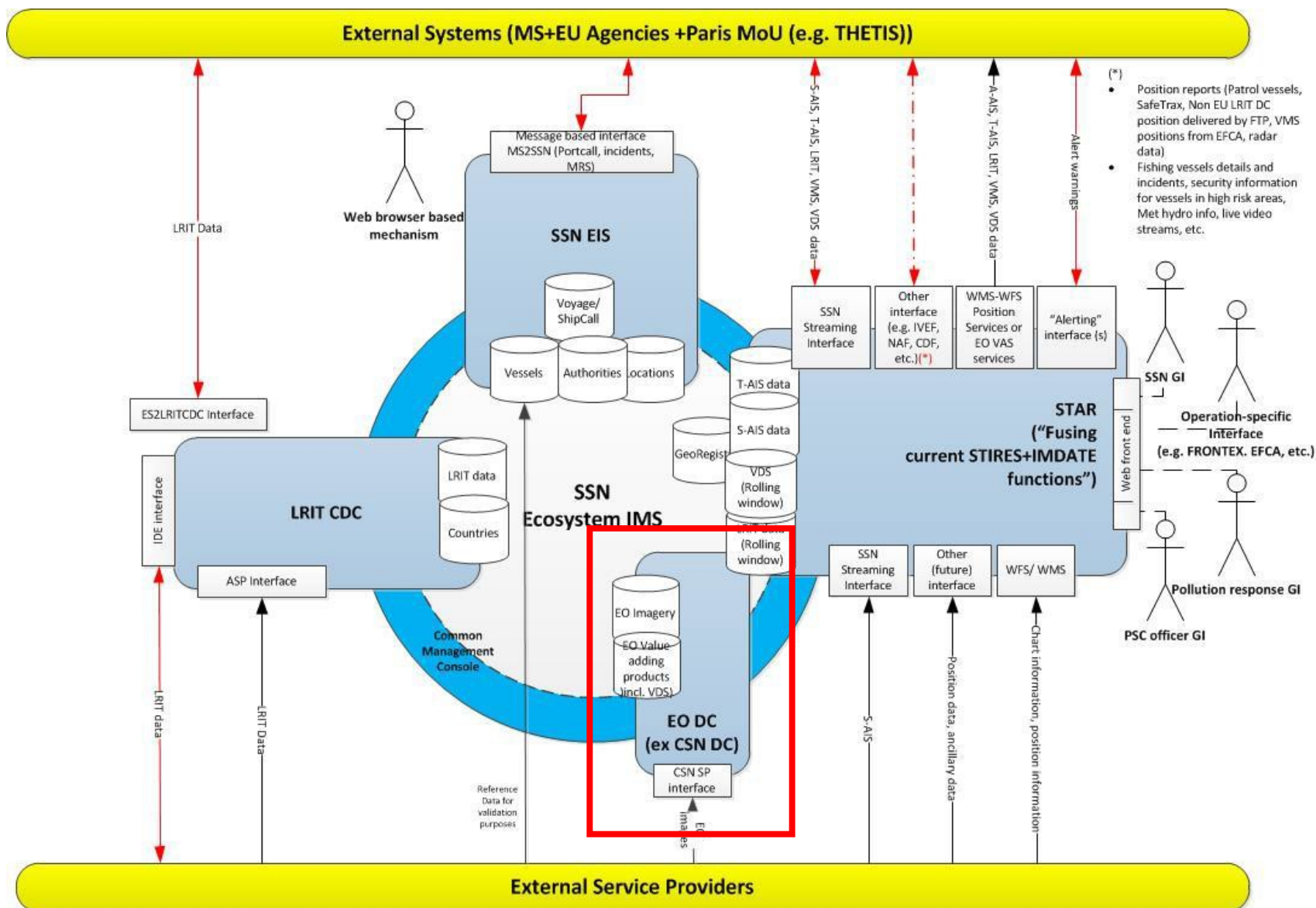
Approximate 200 staff

Annual budget about 50 MEURO

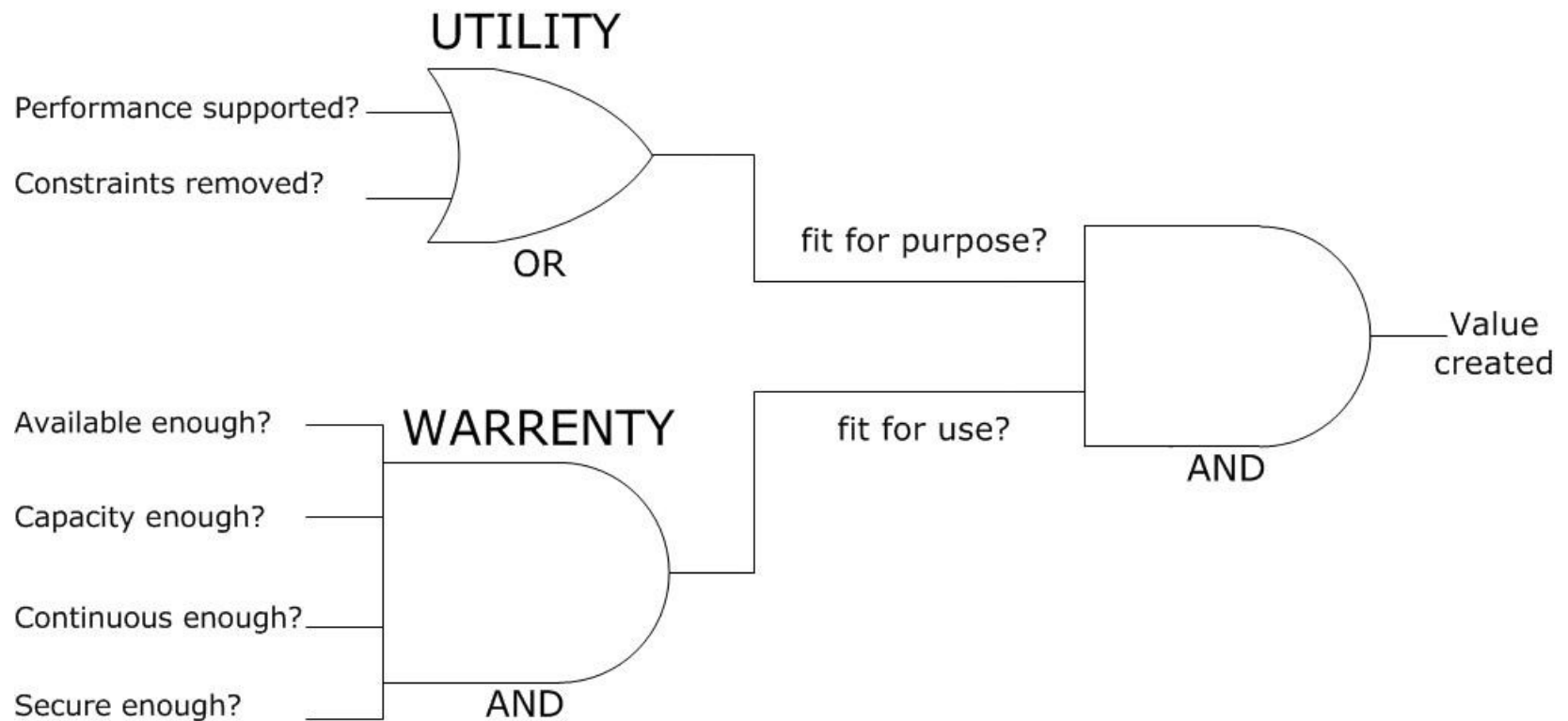


Tailor-made Integrated Maritime Awareness Picture





A SERVICE is a mean of delivering value to customers by facilitating outcomes customers without the ownership of specific costs and risks (ITIL)



EOS aims: Interoperability and Quality of Service

Improve the capability to seamless acquire new EO sensors - Establishing a multi-sensors acquisition platform (Sensor Web Enablement).

Address the variety of the communities relying on the EO data - Enabling a community based mechanism (tagging based) for the acquisition.

Increase the performance of processing rate - Benchmarked against the current CSNDC performance.

Improve the data consistency, integrity and accuracy – Improving data quality checks during the ingestion process.

Harmonization and rationalization of EMSA technologies - sharing geospatial technologies among different stems.

Increase the capacity - Designing a system that enables the acquisition of TBs/year of EO data.

Improve performance monitoring capabilities - systematically assess the performance of the system.

Decrease the total cost of ownership - adopting standards solutions to reduce the effort in terms of maintenance and testing.



Interoperability: EIF

Cooperating partners with compatible visions, aligned priorities, and focused objectives

Political Context

Aligned legislation so that exchanged data is accorded proper legal weight

Legal Interoperability

Legislative Alignment

Coordinated processes in which different organisations achieve a previously agreed and mutually beneficial goal

Organisational Interoperability

Organisation and Process Alignment

Precise meaning of exchanged information which is preserved and understood by all parties

Semantic Interoperability

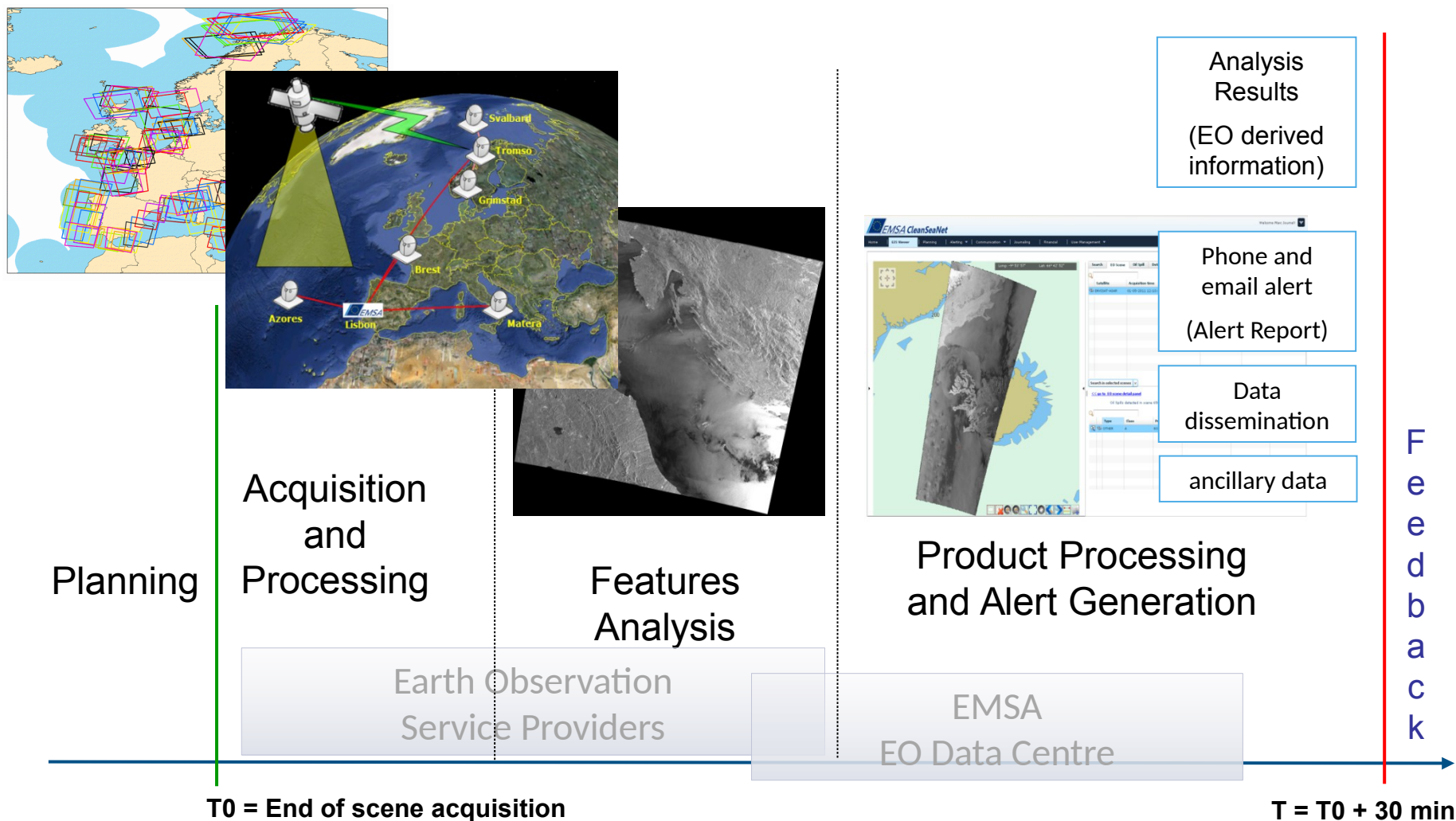
Semantic Alignment

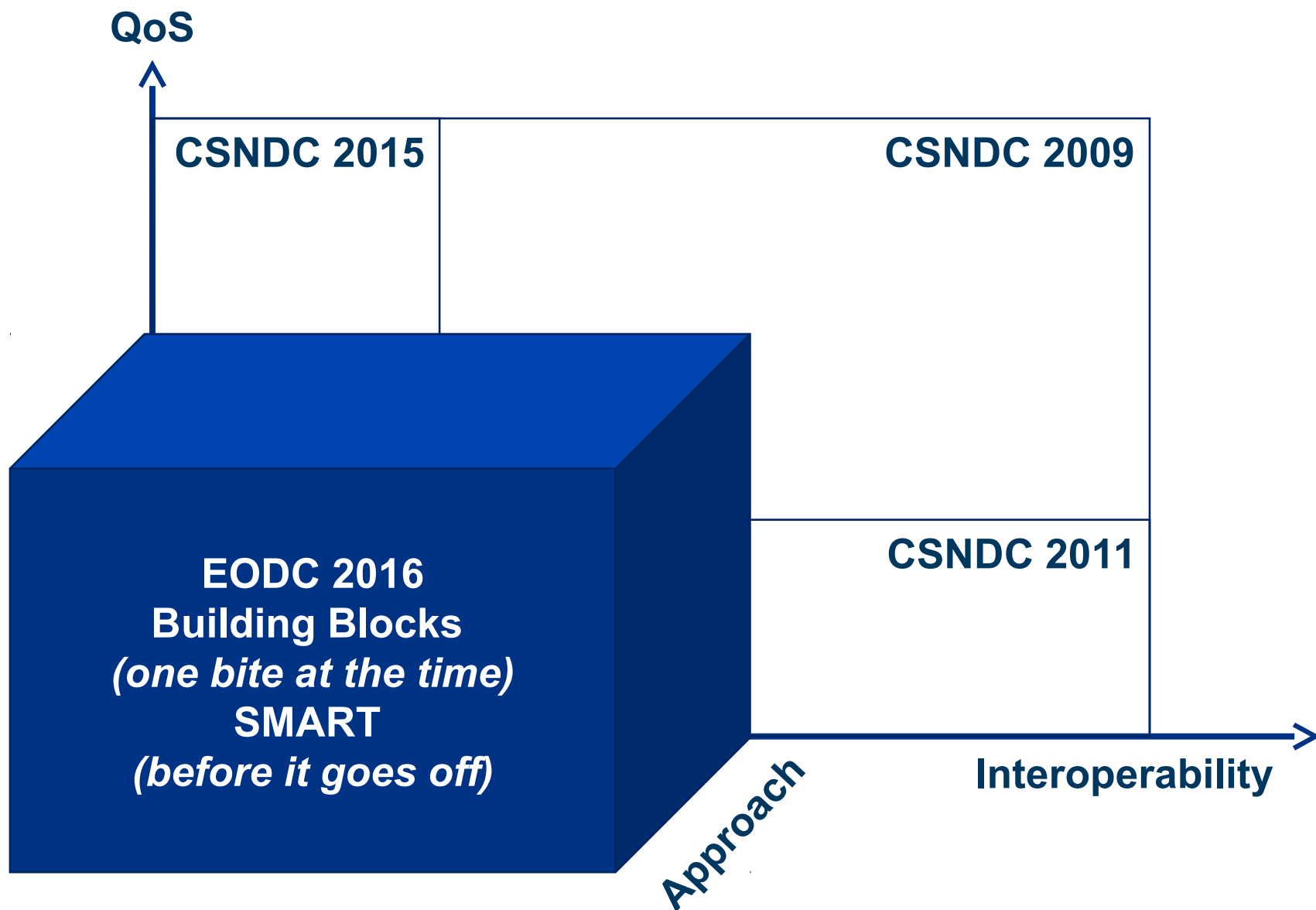
Planning of technical issues involved in linking computer systems and services

Technical Interoperability

Interaction & Transport

QoS: Near real time

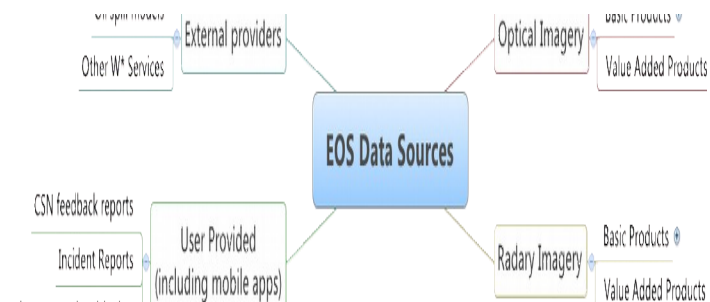




Over the last years the Agency's services relying on EO information have expanded beyond the original CleanSeaNet Service use case.

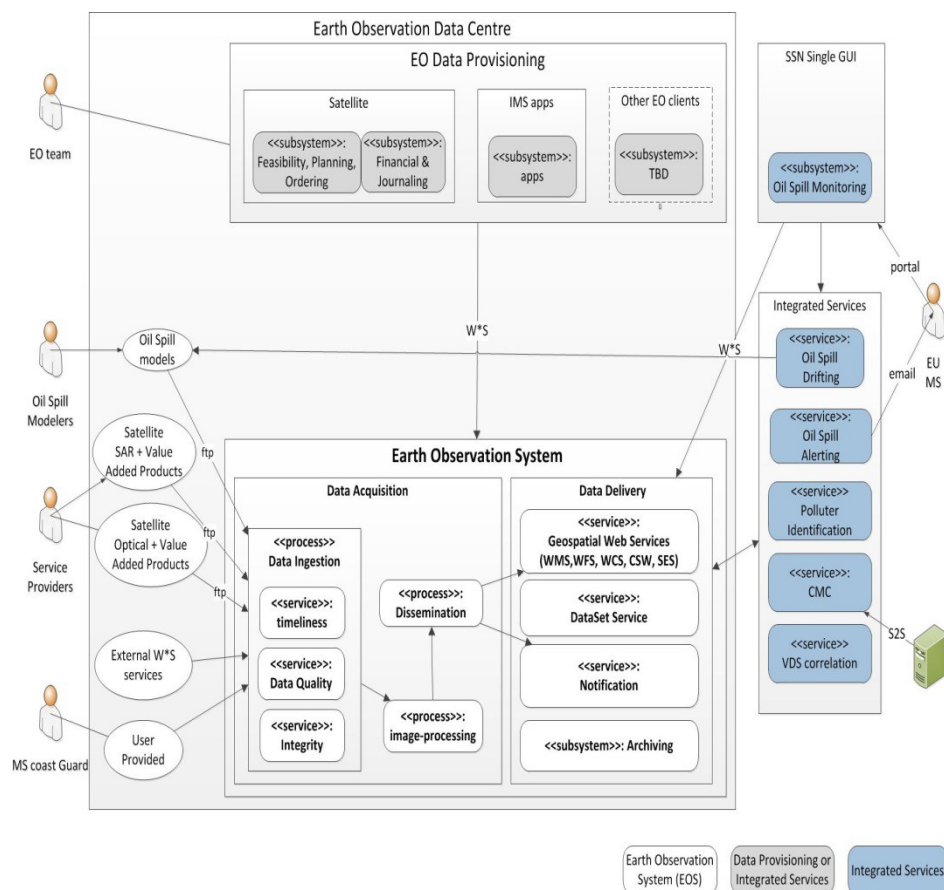


Multi-Community: CleanSeaNet (oil spill monitoring), FRONTEX (surveillance), MARSURV-3 (fishery control), and the upcoming Copernicus Services.



Multi-Sensors: several EO Missions, different EO Sensors, and User Provided Data.

Earth Observation Data Centre “building blocks”:



ing. Planning

acquire EO products);
e EO product

Earth Observation System

on. Once

be ingested into an EO

Once ingested,

catalogued and

ent services that will make

gh

geospatial

How do you eat the elephant? One bite at a time, but before it goes off

Multi Community and Sensors Earth Observation Data Centre

Gianluca Luraschi

EO Project Manager and Application Architect

Gianluca.luraschi@emsa.europa.eu

 twitter.com/emsa_lisbon

 facebook.com/emsa.lisbon

