

Exploiting Oceans of Data for Maritime Applications



BIG DATA OCEAN

EXPLOITING OCEANS OF DATA FOR MARITIME APPLICATIONS

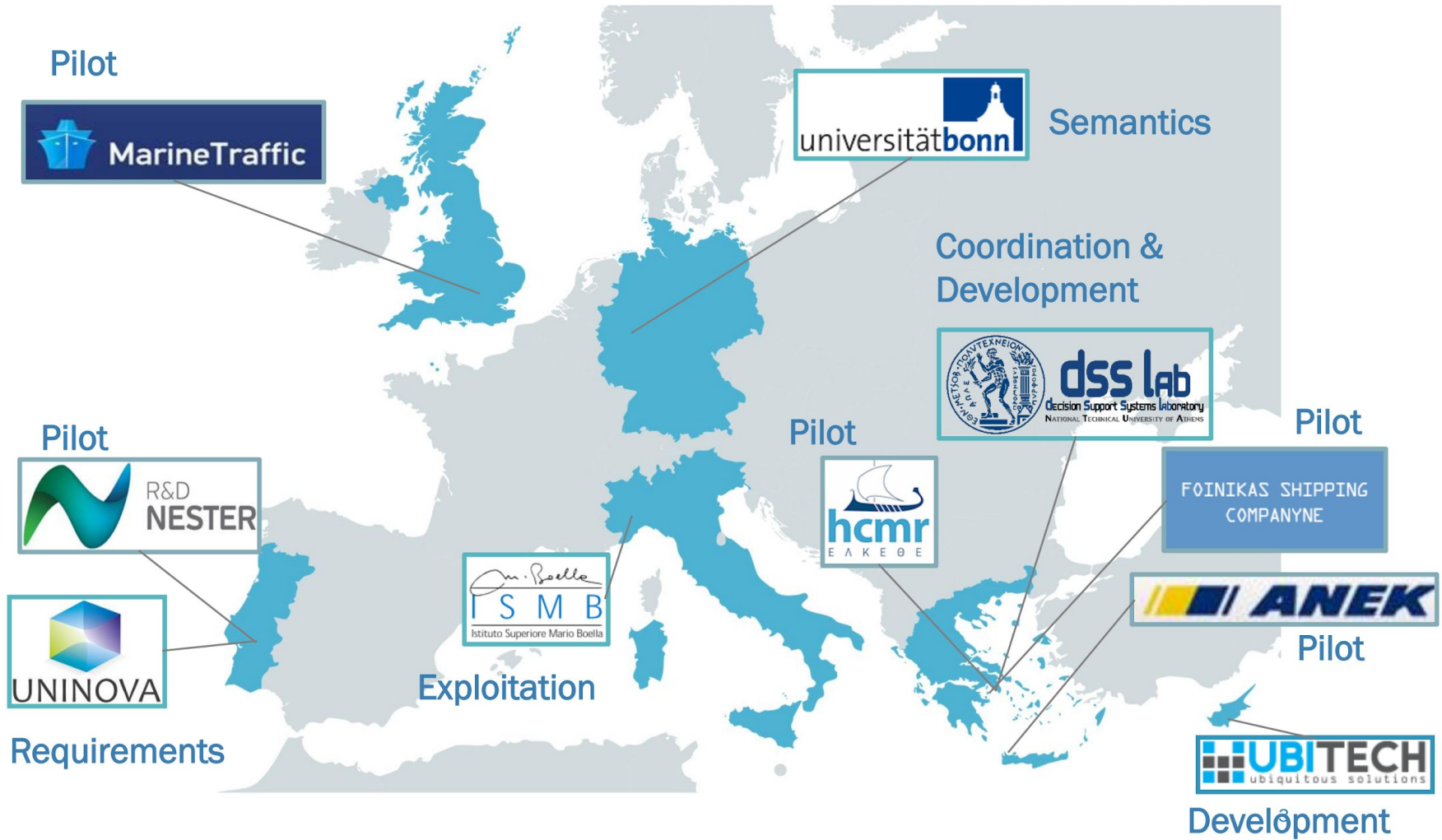
Ioanna Lytra (University of Bonn)

EU Project Networking @ESWC 2018
Heraklion, 6/6/2018

BigDataOcean Fact Sheet

BigDataOcean	Exploiting Oceans of Data for Maritime Applications
Project Number	732310
Starting Date	01/01/2017
Project Duration	30 months
Call (part) Identifier	H2020-ICT-2016-1
Topic	ICT-14-2016-2017 Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation

BigDataOcean Consortium

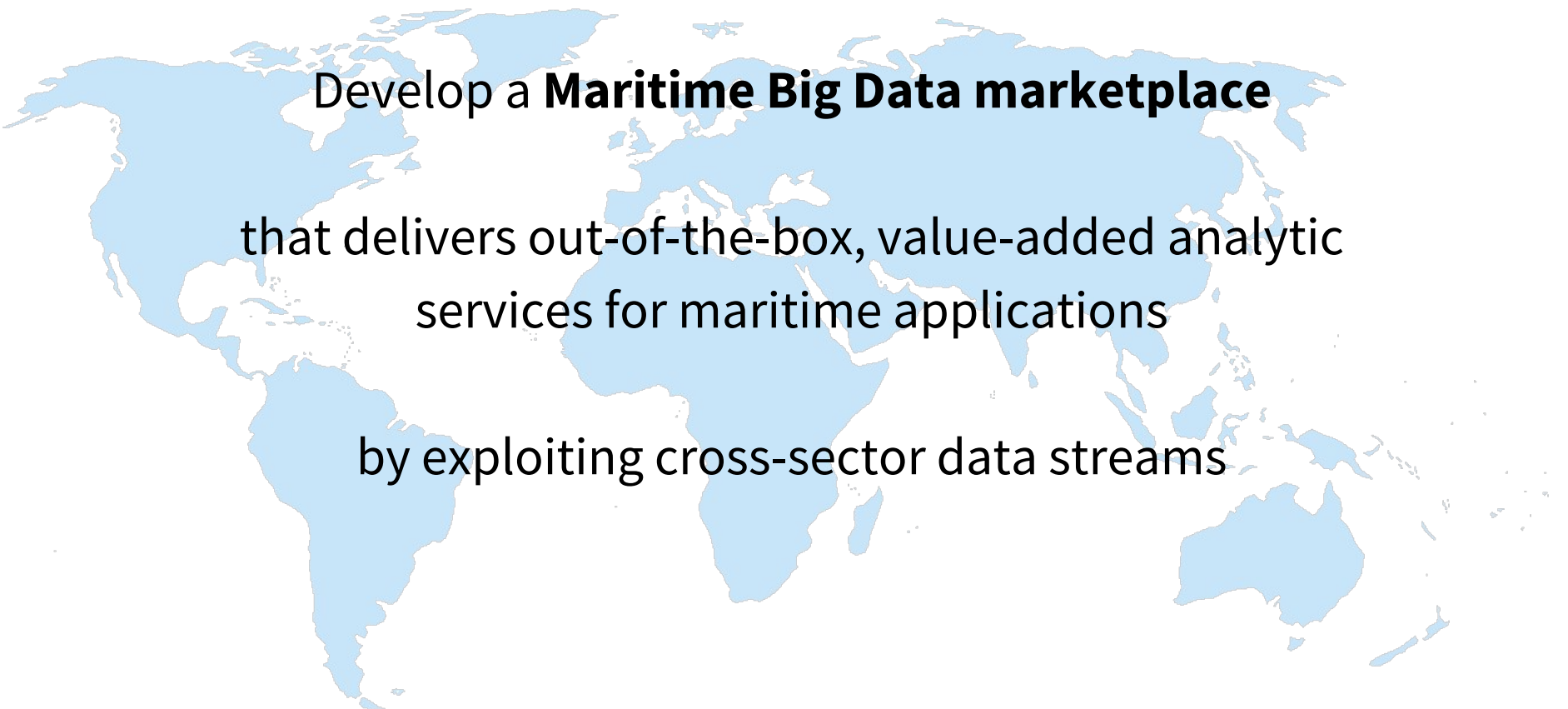


Around 80% of global trade by volume is carried by sea



....and around 70% of global trade by value

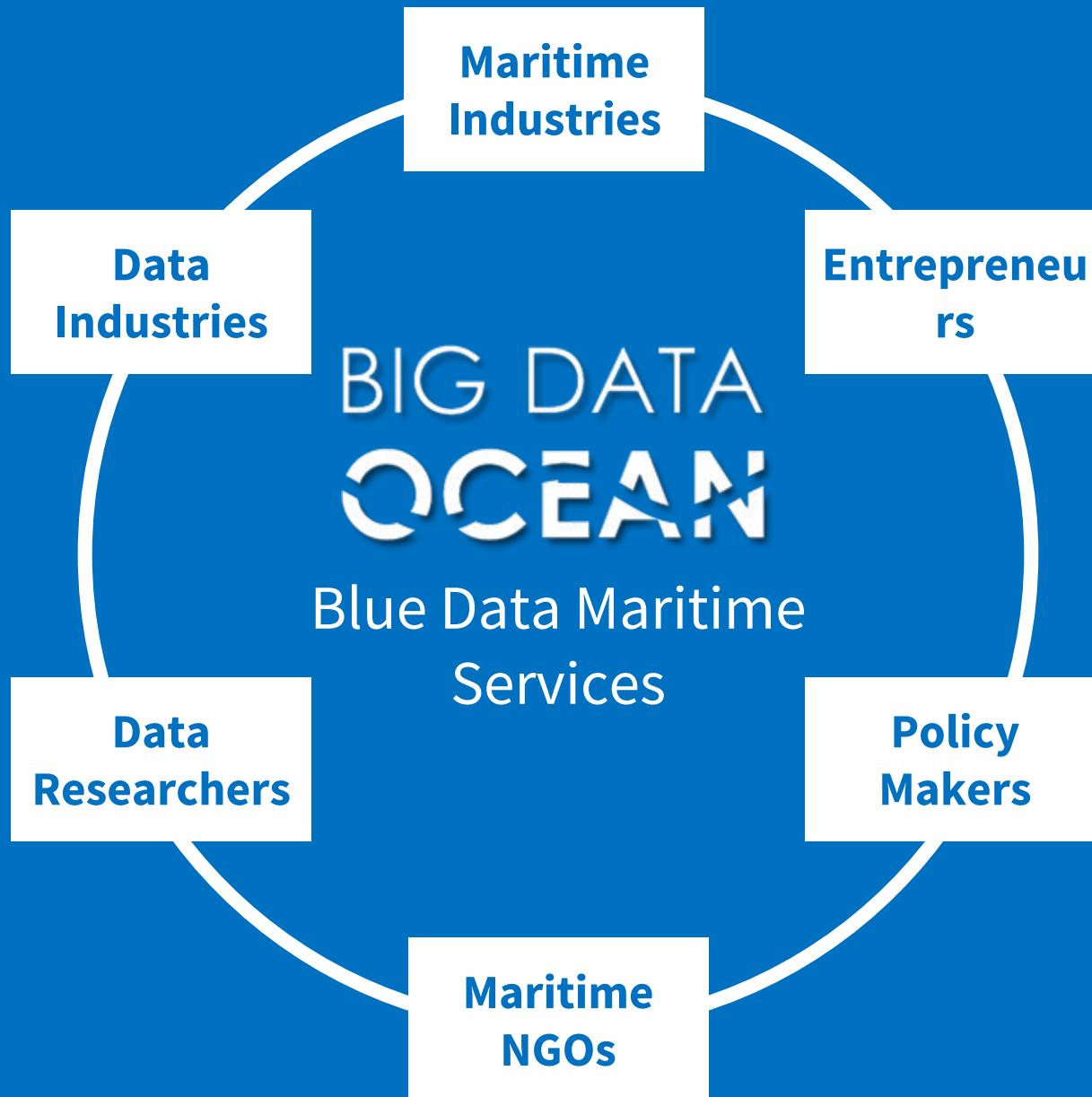
Objective



Develop a **Maritime Big Data marketplace**
that delivers out-of-the-box, value-added analytic
services for maritime applications
by exploiting cross-sector data streams

Challenges

- Undeveloped Blue Data sharing and linking between enterprises and entities of the maritime domain and other domains
- Isolated maritime applications and services (vendor-lock-ins)
- Different standards and formats
- Huge potential from cross-sectorial blue data applications – still unexploited
- Access to out-of-the-box Big Data services, advanced queries and analytics





New business services
Cross-domain knowledge
sharing



Evidence-based analytics
Decision support models

BigDataOcean Pilots



1

Fault Prediction &
Proactive
Maintenance



3

Wave Power as Clean
Energy Source



2

Mare Protection



4

Maritime Security &
Anomaly Detection

BIG DATA
OCEAN

BigDataOcean Services



Find Maritime Data & Services



Query / Interlink Datasets



Visualize Datasets



Analyze Datasets



Create (real-time)
dashboards / Reports



Service Composition



Templated Service
Parameterization

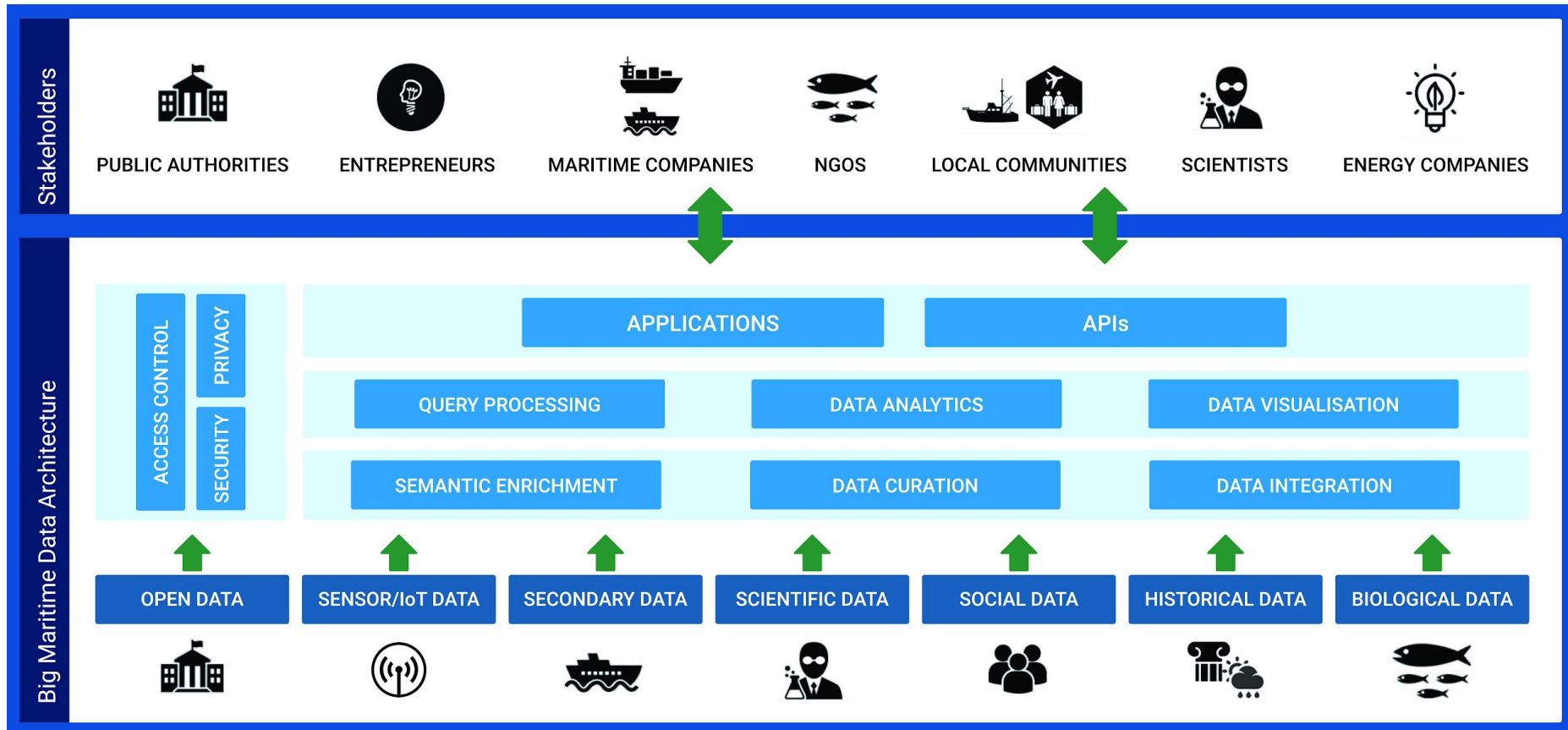


On - demand Services

BigDataOcean Unique Offering

- BigDataOcean Maritime Services Marketplace
- Re-use of “blue” data and queries coming from different sources and stakeholders
- Mashup of maritime industry data and oceanographic data
- Creation and re-use of Maritime Services and visualizations
- Out-of-the-box big data processing framework
- Out-of-the-box analytic and visualisation tools
- On-demand Maritime Big Data Services

BigDataOcean Architecture



BigDataOcean Tools & Resources



[BigDataOcean platform first major release](#)



Collection of Big Maritime Data



Four Pilots led by maritime industry and research

CONTACT



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