Trends in policy relevant European environmental information systems
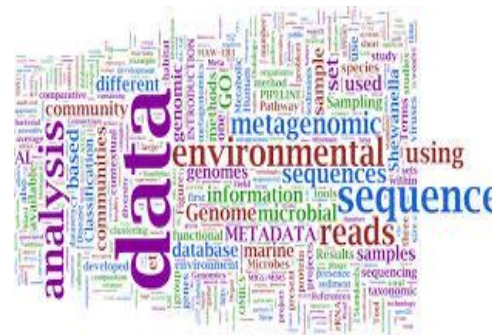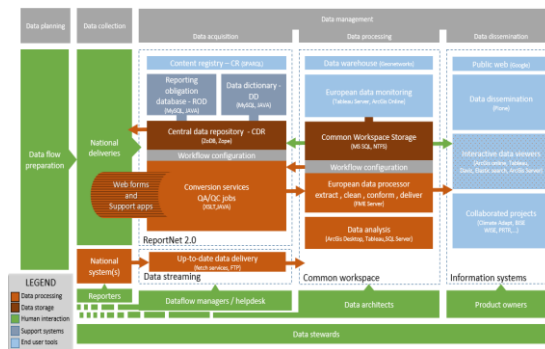
Shared Environmental Information System (SEIS)

Open Data

Copernicus

Active dissemination

FP5,6,7
Horizon 2020

The „*envrionmental aquis*"

Fitness for purpose
eReporting

INSPIRE

SDGs

Aarhus convention

European Environment Agency

In-situ monitoring, surveys, satellite observations

(M) Monitoring

Local, National, European, Global, statistics

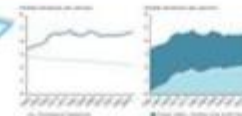**(D) Data**

Indicators, environmental accounting, information

(I) Indicators

Integrated assessments across scales

(A) Assessments

Communities and academies

(K) Knowledge, understanding, action

Structure

Interpret

Integrate

Reflect & act

European Environment Agency

Evolution of environmental monitoring, data and indicators – *some keywords*

MDIAK **From monitoring to knowledge**

DPSIR **Drivers – Pressures – State – Impact - Response**

Eionet **EEA European network of 39 Member Countries**

Copernicus **paradigm shift in data availability**

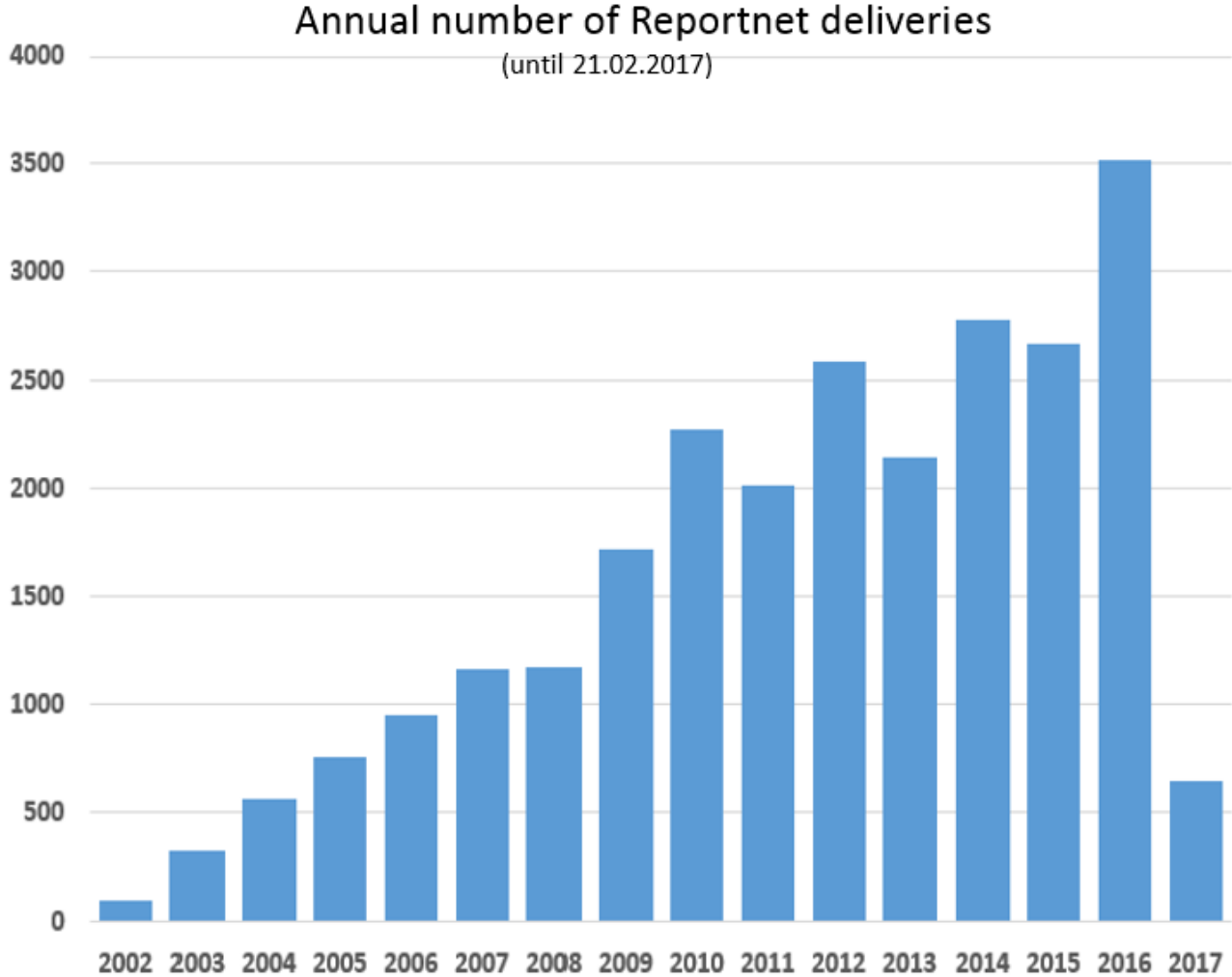**large amounts fo data** **how to stay policy relevant**

Open data, INSPIRE ... **New infrastructures for data**

Reportnet **systematic data collections**

Indicators **one bridge from data to knowledge**

Sustainable development Goals **Todays new policy driver**
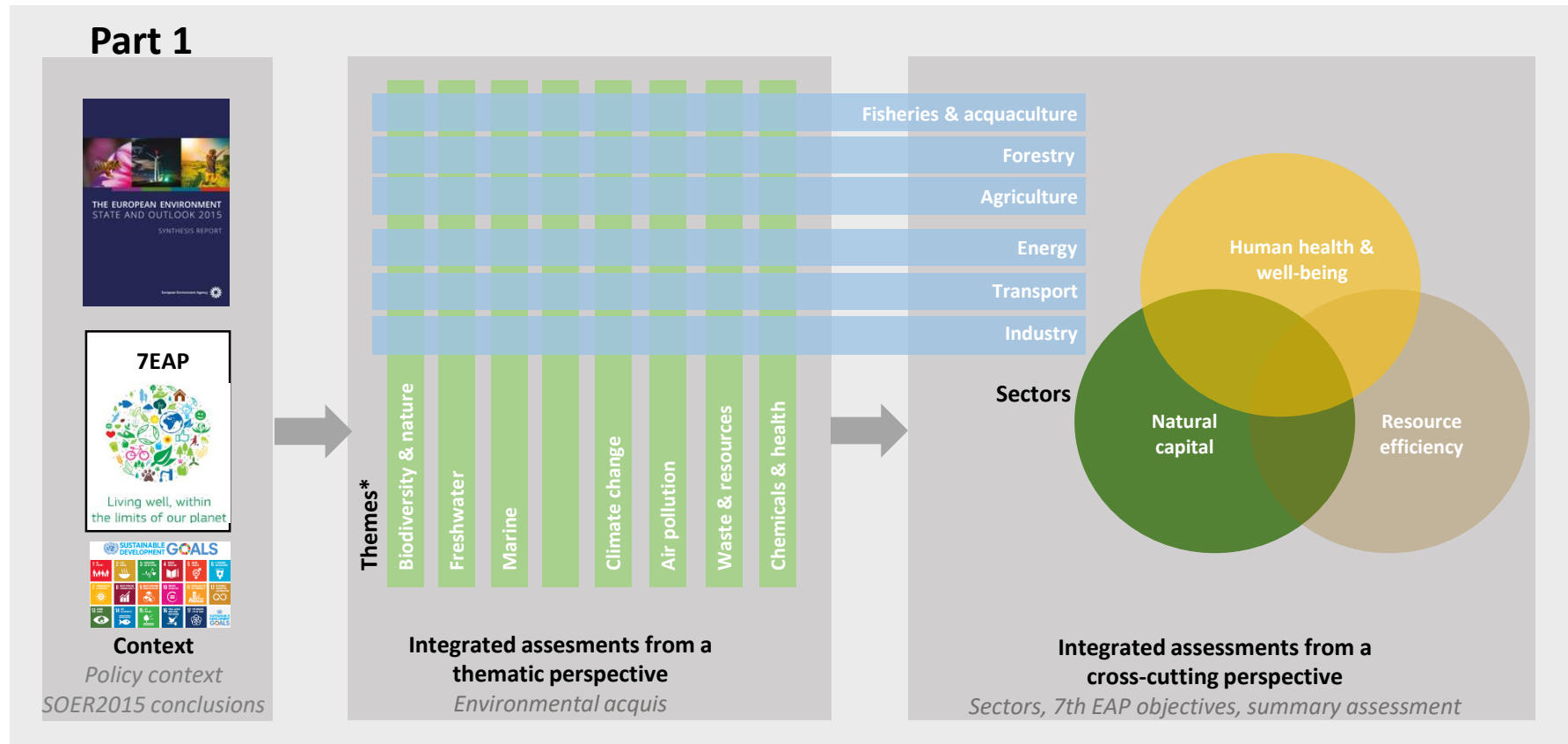
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Growth in reporting environmental data

Annual number of Reportnet deliveries
(until 21.02.2017)

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EEA's core set of indicators

Focus / Type	Driving forces	Pressure	State	Impact	Response	Total
A – Descriptive indicators	17	22	19	34	7	99
B – Performance indicators	1	5	3	0	3	12
C – Efficiency indicators	2	5	0	0	3	10
D – Policy effectiveness ind.	1	2	1	0	4	8
E = Total welfare indicators	0	0	0	0	0	0
Total	21	34	23	34	17	129

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Systemic assessment and an extended knowledge approach

Systemic analysis further enhanced in SOER 2020

Broaden the base of stakeholder and partners

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Side story: Assessment logic across SOER 2020 Part 1 and Part 2

Part 1

Context
Policy context
SOER2015 conclusions

THE EUROPEAN ENVIRONMENT STATE AND OUTLOOK 2015 SYNTHESIS REPORT

7EAP
Living well, within the limits of our planet

SUSTAINABLE DEVELOPMENT GOALS

Themes*
Biodiversity & nature
Freshwater
Marine
Climate change
Air pollution
Waste & resources
Chemicals & health

Fisheries & acquaculture
Forestry
Agriculture
Energy
Transport
Industry

Sectors

Integrated assesments from a thematic perspective
Environmental acquis

Human health & well-being
Natural capital
Resource efficiency

Integrated assessments from a cross-cutting perspective
Sectors, 7th EAP objectives, summary assessment

* Alternative option: replace Land & soil with two themes: agri-ecosystems, and forest-ecosystems

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Part 2

**Context: Europe's sustainability goals
and long-term challenges e.g.**
7EAP, SDGs
Global megatrends
Planetary boundaries

Food system
Energy system
Mobility system
Housing system

Fiscal
Finance

**Integrated assessment of priority
production-consumption systems**
Resource flows and impacts
Actors and economic dimensions

Global & European ecosystems
Food
Transport
Human well-being
Housing
Energy

**Integrated assessment from a cross-
cutting systems perspective**
Interactions of systems and GMTs
Resource nexus
Governance/knowledge for transitions

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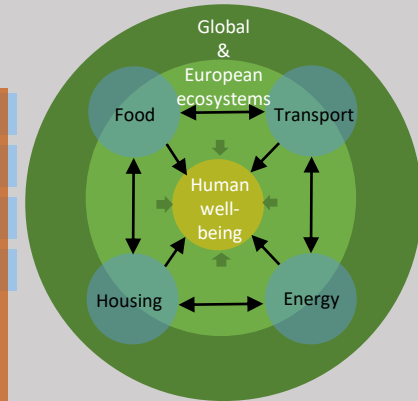
The evolution of the EU institutional structure towards a knowledge approach

European Environment Agency
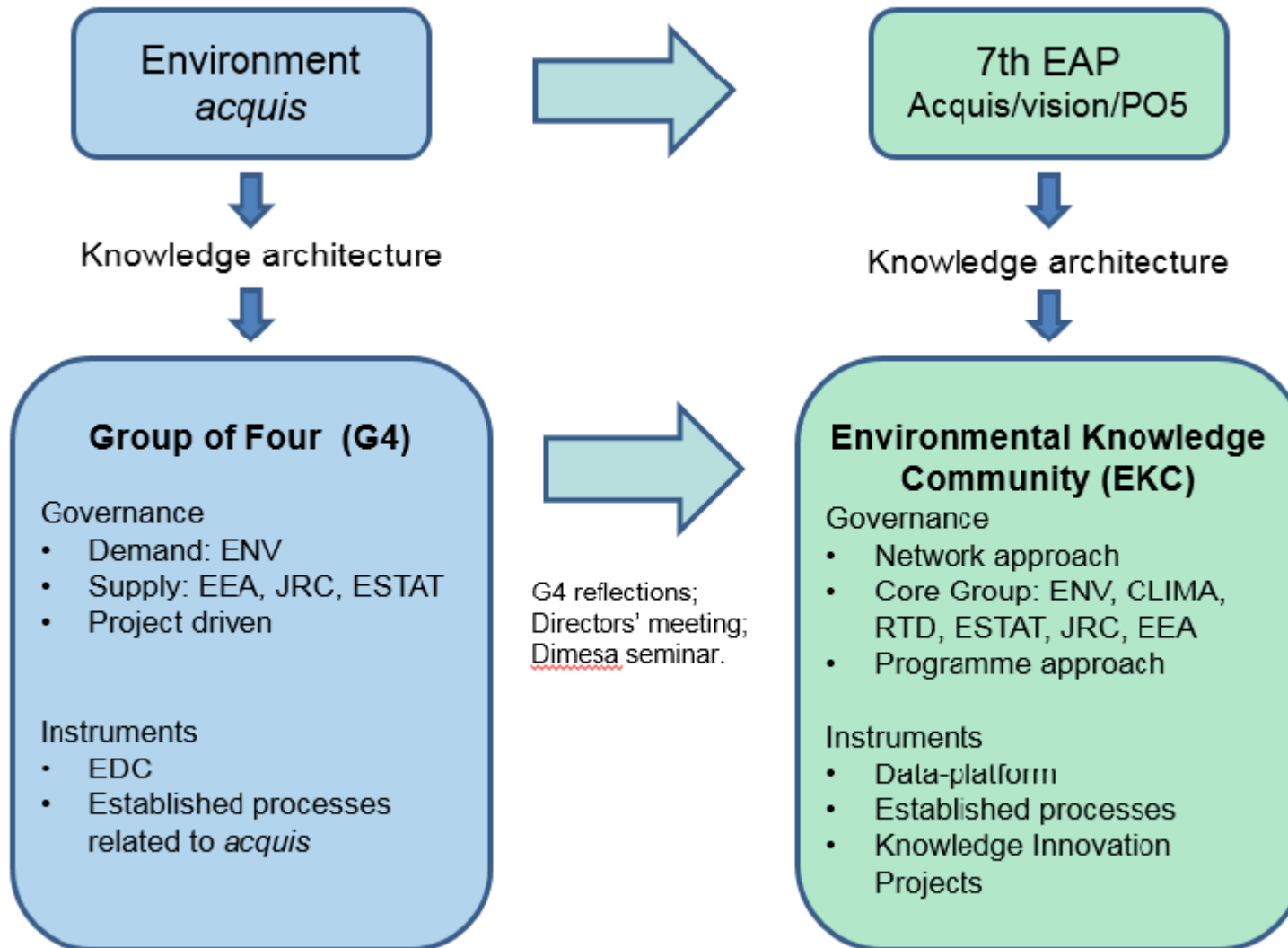
The EEA functional system and beyond

The growing role of „big data"

Changing role of data centres

European Environment Agency

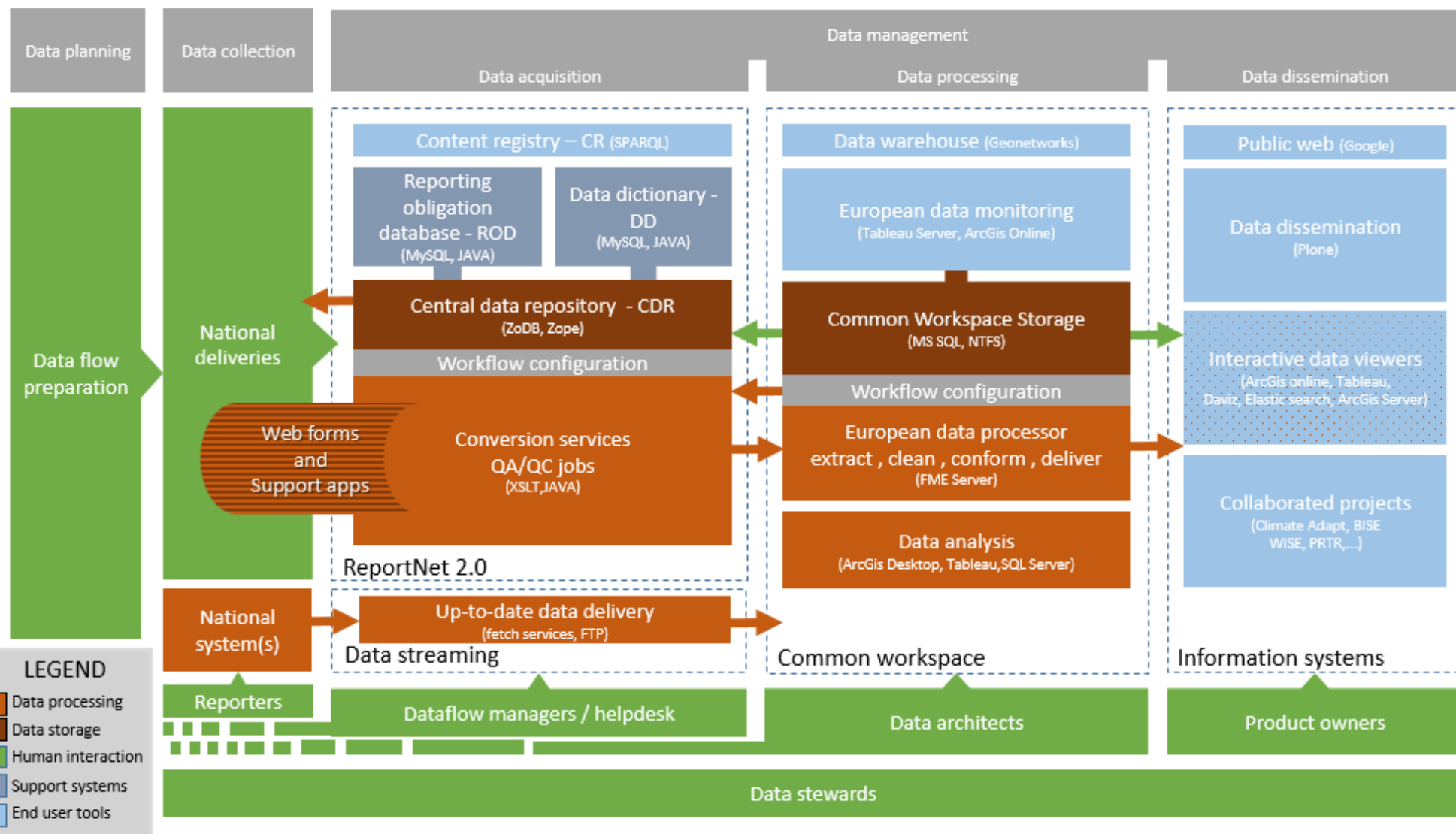# Highlighted components for management of multi-source data flows in EEA
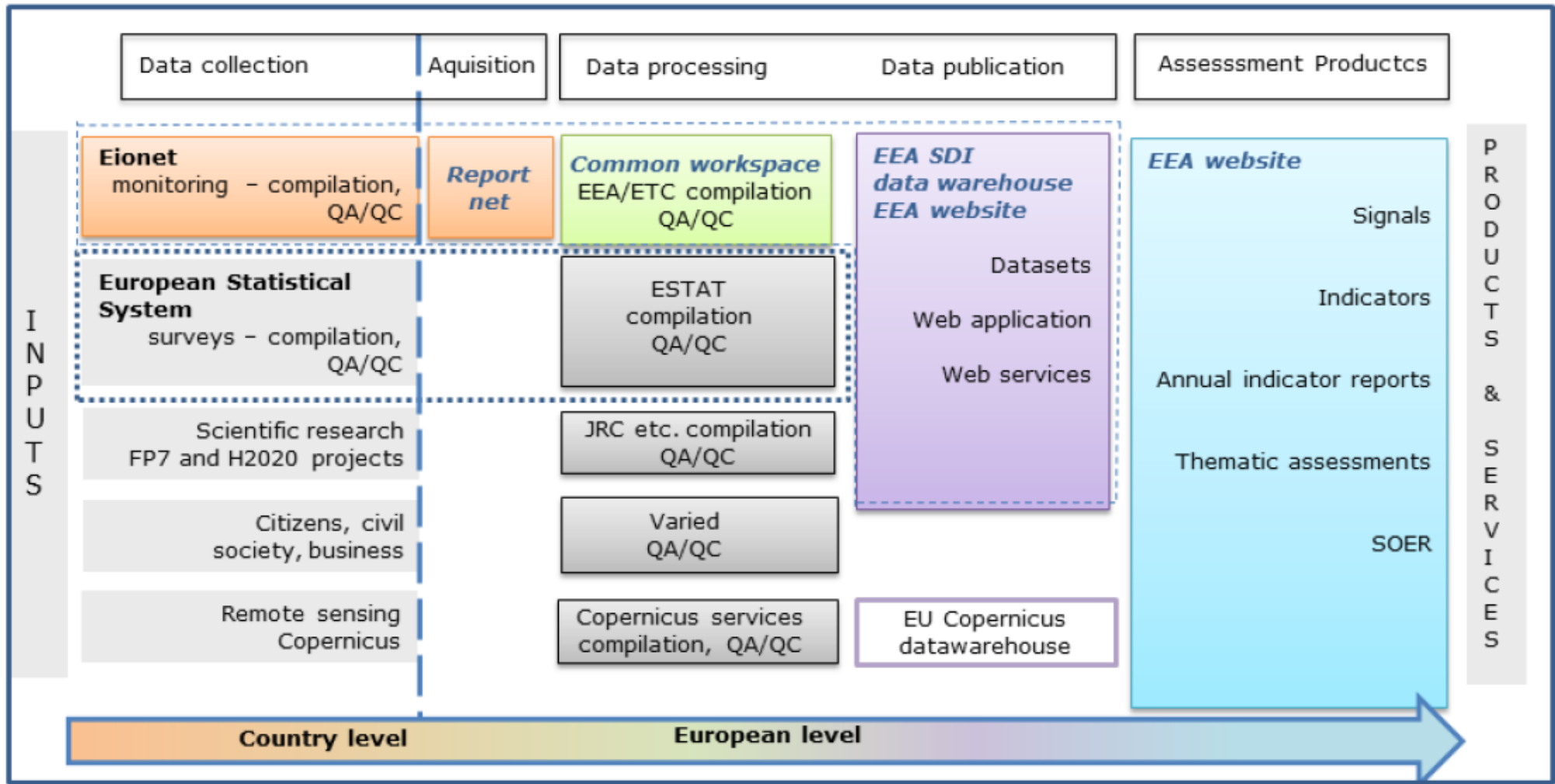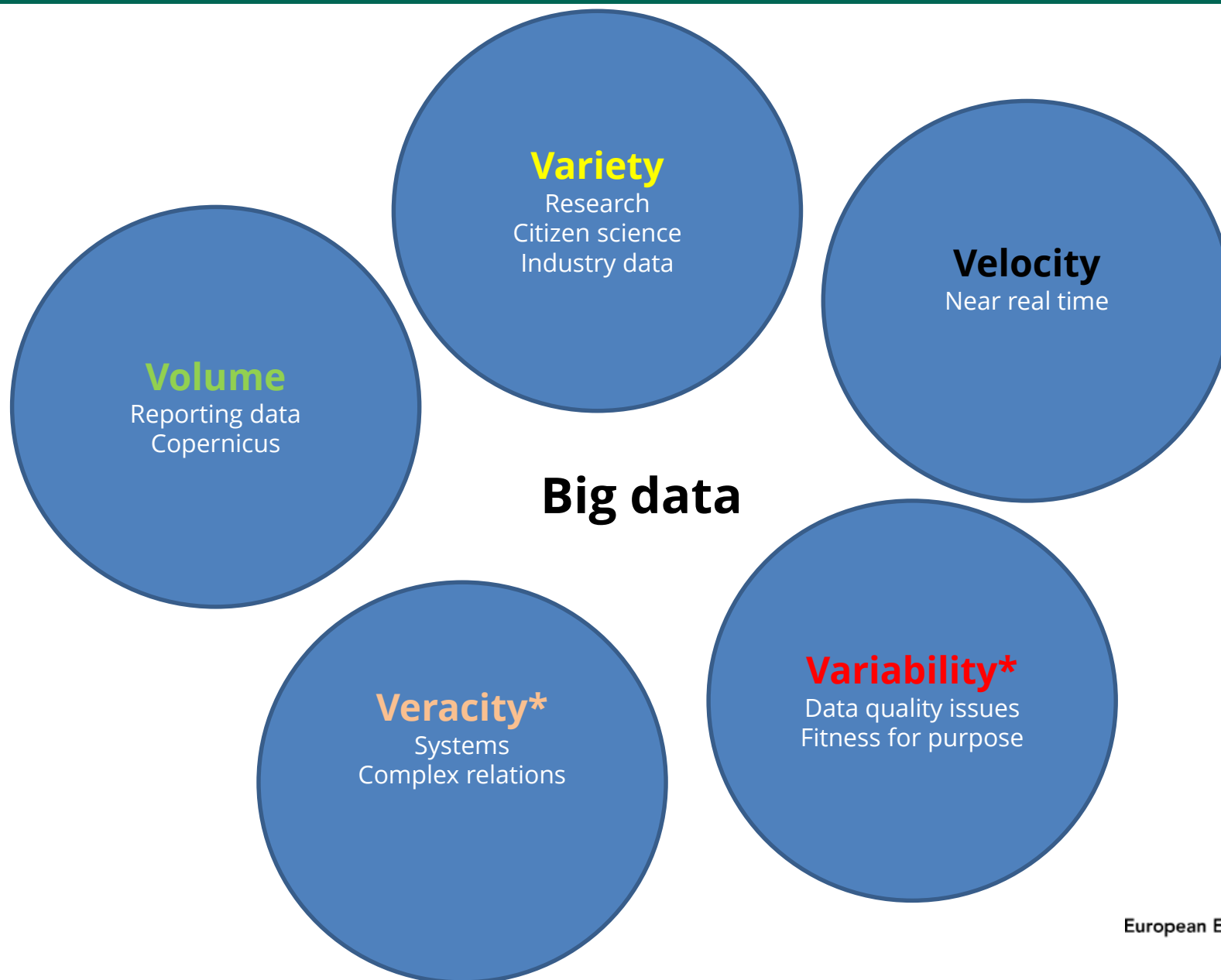
A flexible and integrated system of software components

Software as a service

Cloud storage and processing

The ICT security challenge

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Tools used in the EEA management of reported data

Summary of key trends and responses

Significant data evolution

More systematic analysis and key integrative projects

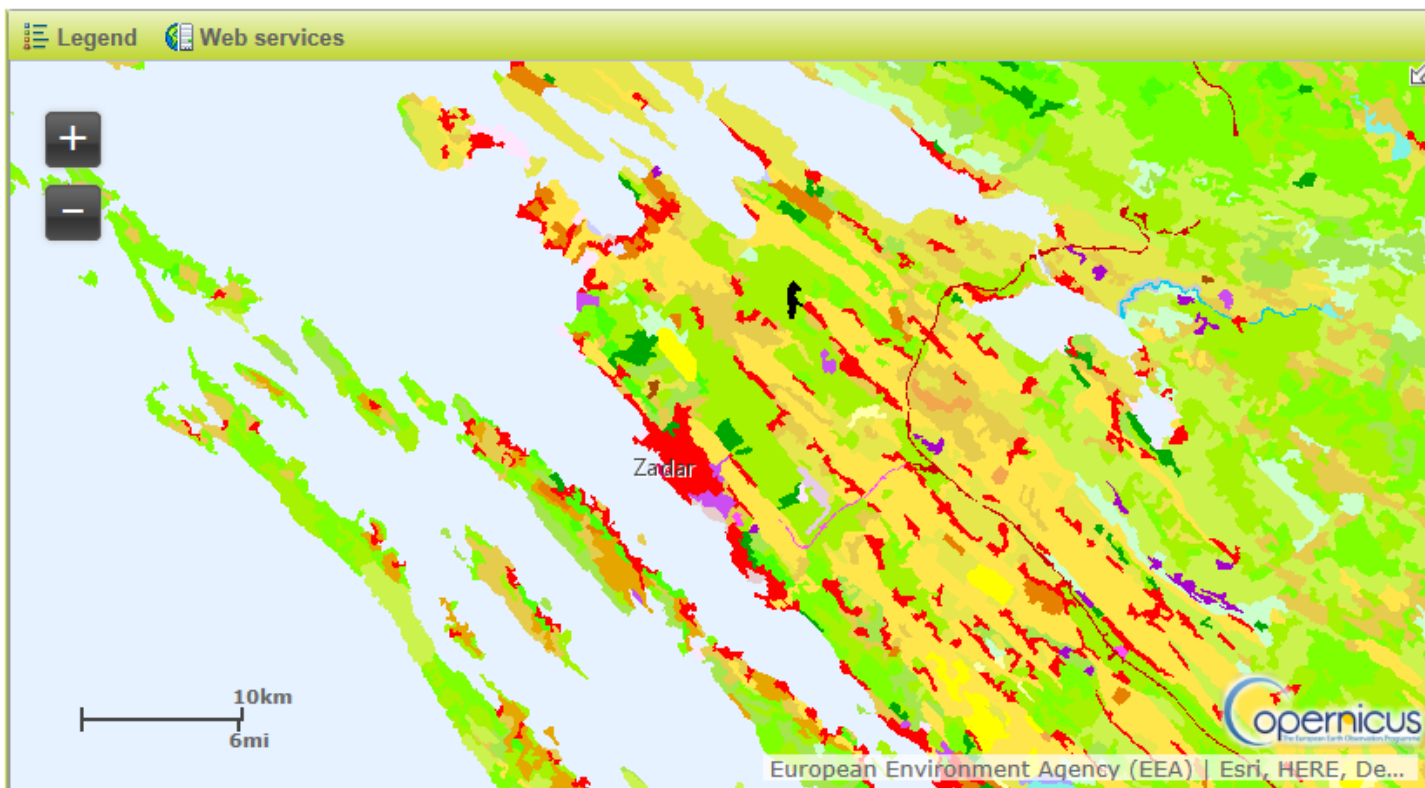**Deeper integration between EU level information systems**

Stronger emphasis on data management (at EEA)

More modular software solutions (at EEA)

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Thank You and Enjoy Zadar!

for further questions: stefan.jensen@eea.europe.eu

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