



# European Commission Knowledge Centre on Earth Observation

Mark Dowell ([mark.dowell@ec.europa.eu](mailto:mark.dowell@ec.europa.eu))



PROGRAMME OF THE  
EUROPEAN UNION



# Space Strategy

**Space strategy for Europe COM(2016) 705** mandates the Commission to encourage the uptake the use of Earth Observation, the KCEO aims to address this for EU Policy:

*“The Commission will thus encourage the use of space services, data and applications in EU policies whenever they provide effective solutions...”*

*“The Commission will promote the uptake of Copernicus, EGNOS and Galileo solutions in EU policies where justified and beneficial”*



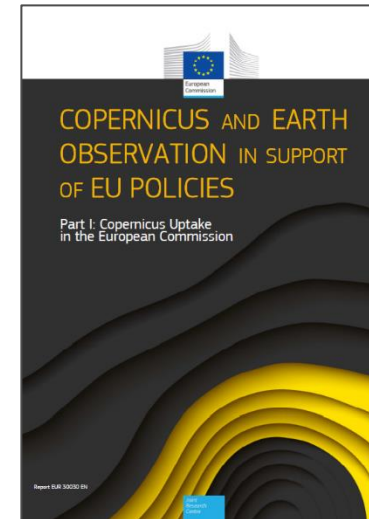
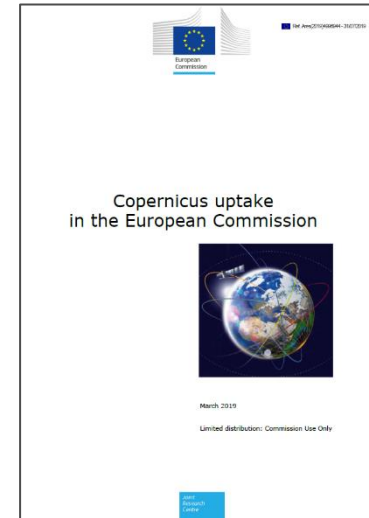
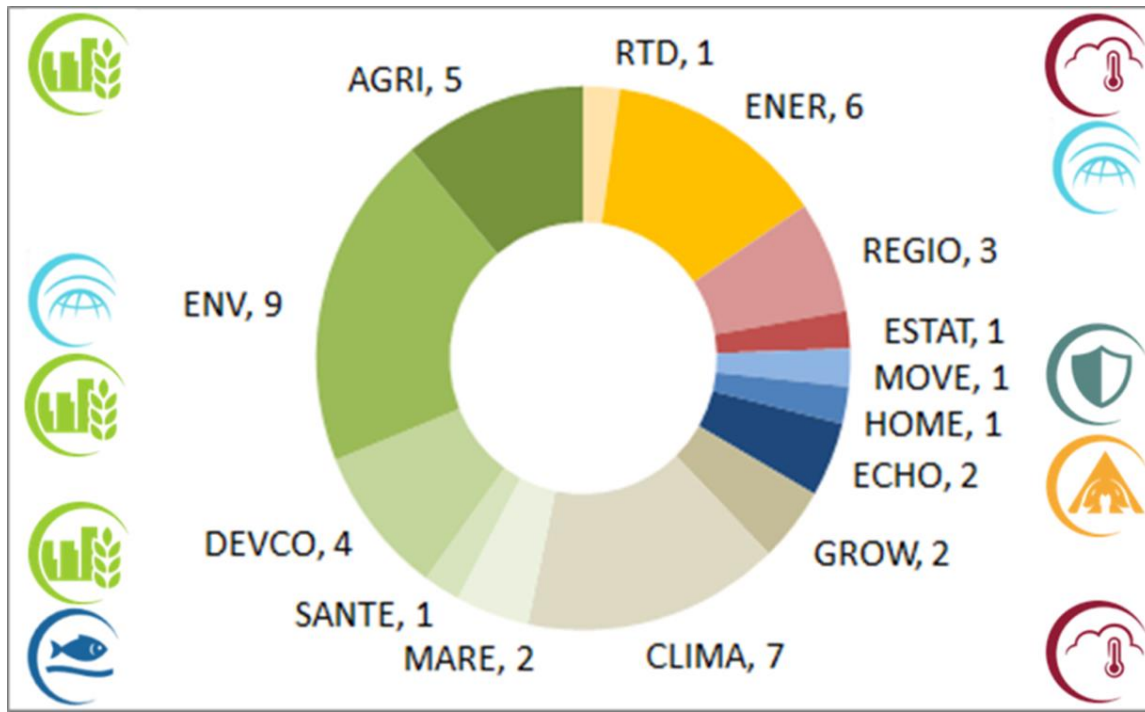
# The Copernicus for EC - C4EC study

## Background: Space strategy for Europe COM(2016) 705

- The Commission will encourage use of space services, data & applications in EU policies
- The Commission will promote the uptake of Copernicus, EGNOS and Galileo solutions in EU

## Objectives: Analyse current/potential use of EO/Copernicus in EC

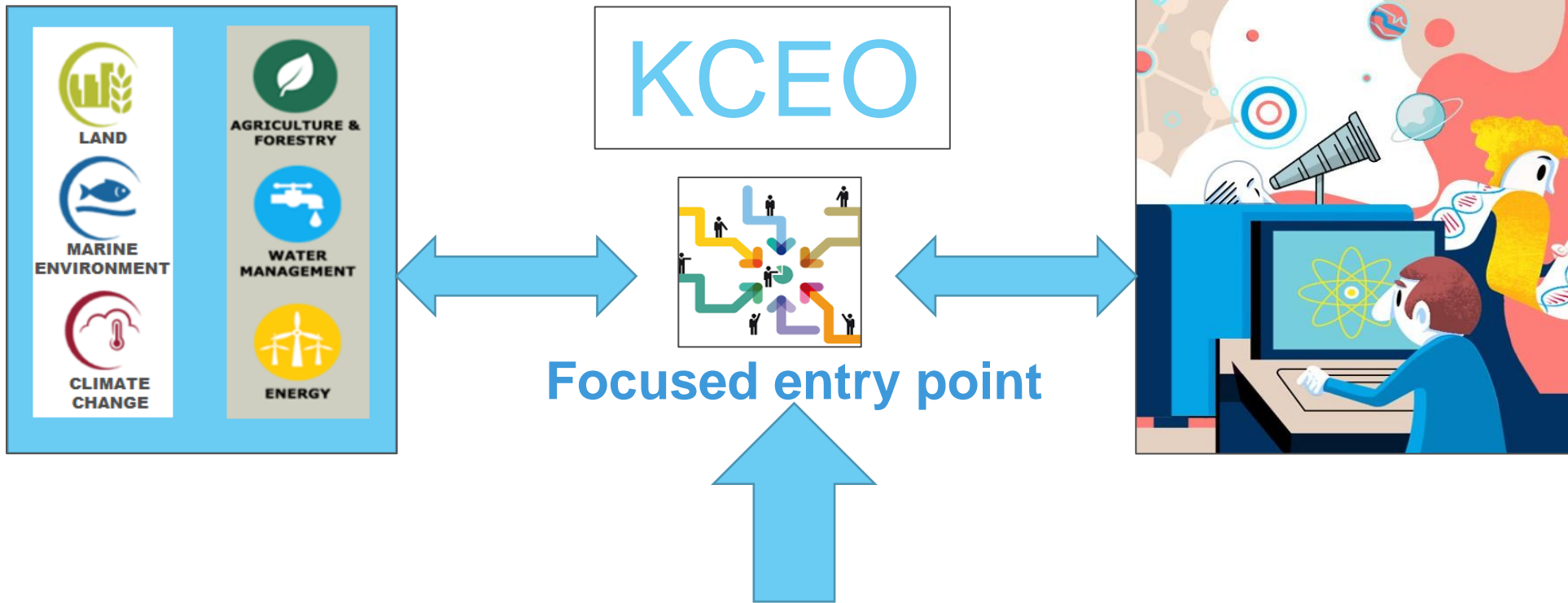
## Results: 33 policy units of 17 DGs



# KCEO Focus

**Pillar 1: Policy Uptake & Coherence**

**Pillar 2: Mainstreaming R&I**



**Inclusiveness & Transparency: Dialogue with external partners; international organisation; society.**

# Different types of needs assessment

- Maintain a broad overview of needs cross all services (i.e. update 2018 C4EC study) - provide a live web representation of this
- Consider the extension of this type of assessment to other stakeholders e.g. EU Delegations
- Undertake dedicated targeted assessments for new specific needs
- Deep Dive assessments: comprehensive studies for specific policy areas, 2-3 at a time for ~ 8month / study – we need a roadmap.

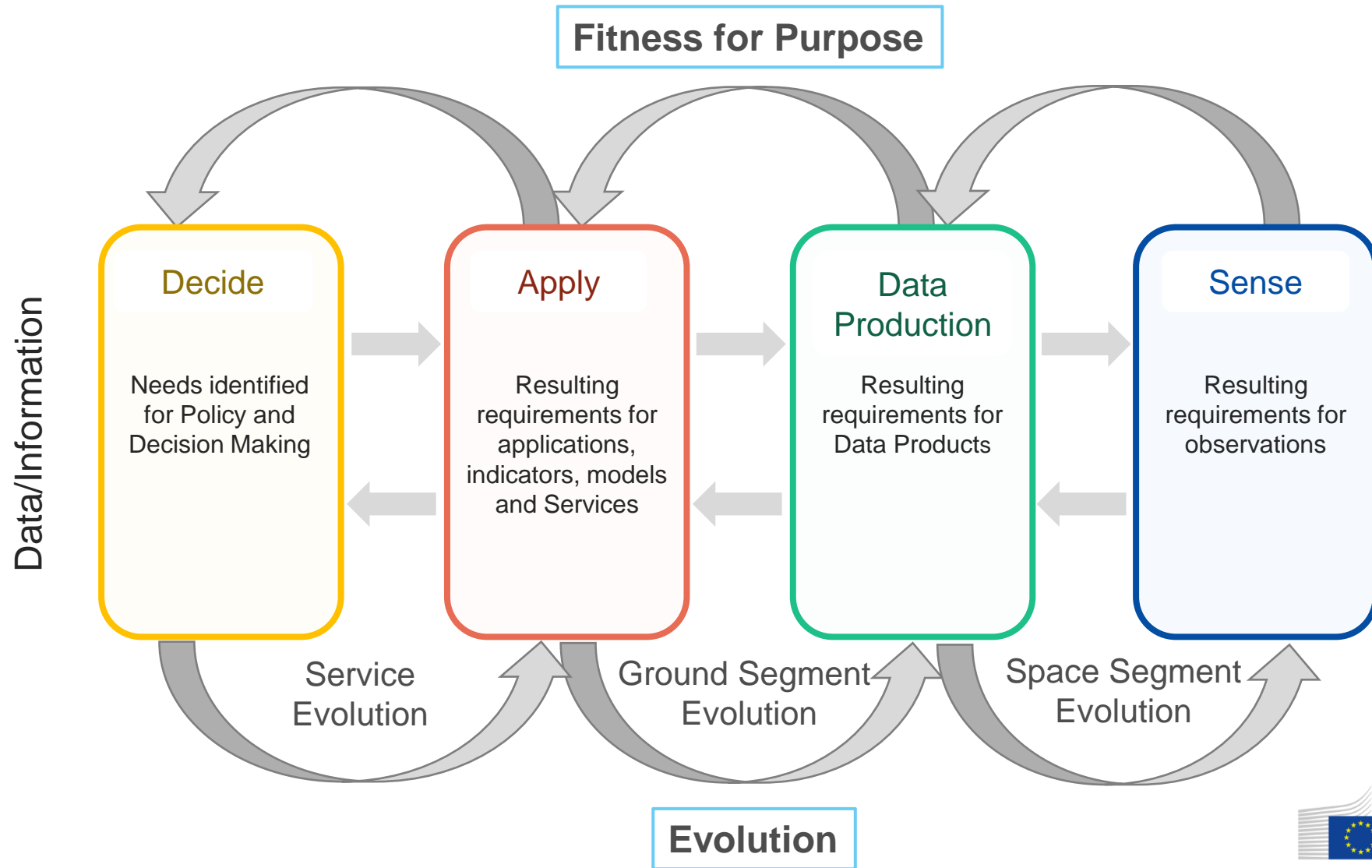
Core Activity: Definition and implementation of  
Policy/User Requirement Database

# Space Programme/Copernicus Uptake Roles

- **Member States:** Copernicus User Forum (in Regulation), MS needs, (Core Users)
- **Copernicus Entrusted Entities/Services:** ECMWF, Mercator Ocean, EEA, EMSA, Frontex, SatCen, (EUMETSAT, ESA) – link to their own thematic users
- **EUSPA (ex GSA) & Cassini:** Uptake by non-Core Users (e.g. Private Sector)
- **KCEO:** Focus on uptake for EU Policy, Core Users



# Efficient Evolution





# Taxonomy of policy areas in KCEO

28 relevant policy areas identified (in **red** those with Thematic Hubs correspondence)

n	Policy area
1	Agriculture
2	Food security
3	Forestry
4	Biodiversity
5	Plant health
6	Soils
7	Raw materials
8	Inland Water
9	Coastal zones
10	Fisheries and aquaculture
11	Marine pollution
12	Marine strategy and Maritime Spatial Planning
13	Climate change mitigation
14	Climate change adaptation

n	Policy area
15	Arctic and polar regions
16	Air quality
17	Environmental compliance
18	Transport
19	Energy
20	Regional and urban policies
21	Health
22	Tourism
23	Cultural and natural heritage
24	Support to natural and man-made disasters
25	International development and cooperation
26	Sustainable Development Goals
27	Migration and Home affairs
28	Defence and Security

# KCEO Deep Dive steps

1. Overview of Policy needs: interviews, workshops
2. Value chain assessment
3. Translation of needs into quantitative requirements
4. Assessment of fitness-for-purpose with regard to existing products/services/infrastructure
5. Gap Analysis & Recommendations for evolution

Pilot on Biodiversity

# Summary of Previous Expressed Priorities

Statistical information in the area of environmental performance

CAP post 2023: area monitoring system

Support G20 agriculture market information system

Compliance measurements

Wetlands

Support to Raw Material Platform

High quality EO for climate adaptation

Environmental Compliance Assurance

Mission on climate neutrality

High quality EO for climate adaptation

Zero Pollution: Air quality, freshwater and marine domains.

LULUCF Regulation

Arctic

Biodiversity

Marine biodiversity including issues related to fish stock assessment

High quality EO for climate adaptation

Cultural, Natural, World Heritage

Marine and Maritime Spatial Policy

Coasts, Aquaculture, Blue Economy

Support to EU Delegations

Monitoring greenhouse gas emissions (CO<sub>2</sub>, CH<sub>4</sub>)

International Partnership & Africa

Support for official statistics & SDGs

Urban Ecosystem monitoring in NRL

Support to implementation of the National Emission reduction Commitment Directive

security and defence

EU Forest Strategy, deforestation and forest degradation at the international level

# Roadmap layout and options

	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24	Q4 24
Deep Dive 1 Biodiversity	Active	Active	Active	Light	Light	Light	Light	Light	Light	Light	Light
Deep Dive 2 Climate Adaptation	Light	Active	Active	Active	Light	Light	Light	Light	Light	Light	Light
Deep Dive 3 Compliance Assurance	Light	Light	Light	Active	Active	Active	Light	Light	Light	Light	Light
Deep Dive 4 Cult/World Heritage	Light	Light	Light	Light	Active	Active	Active	Light	Light	Light	Light
Deep Dive Coastal	Light	Light	Light	Light	Light	Light	Active	Active	Active	Light	Light
Deep Dive 6 Energy	Light	Light	Light	Light	Light	Light	Active	Active	Active	Light	Light
Deep Dive 7SDGs	Light	Light	Light	Light	Light	Light	Light	Light	Active	Active	Active
Deep Dive Health	Light	Light	Light	Light	Light	Light	Light	Light	Active	Active	Active

# KCEO web presence

(<https://knowledge4policy.ec.europa.eu/earthobservation>)

KNOWLEDGE FOR POLICY

## Knowledge Centre on Earth Observation

We enable the uptake of state-of-the-art knowledge from Earth Observation for EU policies and better regulation.

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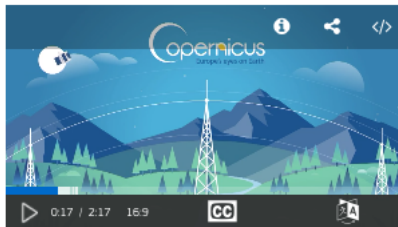
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### What we do



The Knowledge Centre on Earth Observation helps EU policymakers to fully exploit the growing amount of EO data, products and applications by

- assessing needs of EU policies and translating these into technical requirements for EO products and services
- analysing research needs and priorities for innovating EU Earth Observation programmes
- bringing together an active community of scientists, policymakers and specialists

### Brief me

The policy uptake of products and information from Copernicus, the Earth Observation programme of the EU, can be maximised by providing

- in depth assessments of needs/priorities for Copernicus products and services in support of EU policies and establishing best practices to translate policy needs into concrete requirements for products and services
- a continuous scanning of research needs and priorities and raising awareness on next generation EO science and associated technologies to enhance the exploitation on Copernicus throughout the policy cycle
- opportunities for dialogue among policymakers, scientists and technical implementing entities associated with Copernicus and Earth Observation in general, bridging policy and scientific perspectives



Knowledge Centre on Earth Observation - Infographic  
English (1.14 MB - pdf)

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Explore how EU policies can benefit from Earth Observation and maximize its uptake for better regulation.



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Guided navigation into the vast catalogue of Copernicus products and services

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Today there is a lot of EO data and products available from Copernicus and other sources. Which data/products best meet user needs? Are these fit for purpose?

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