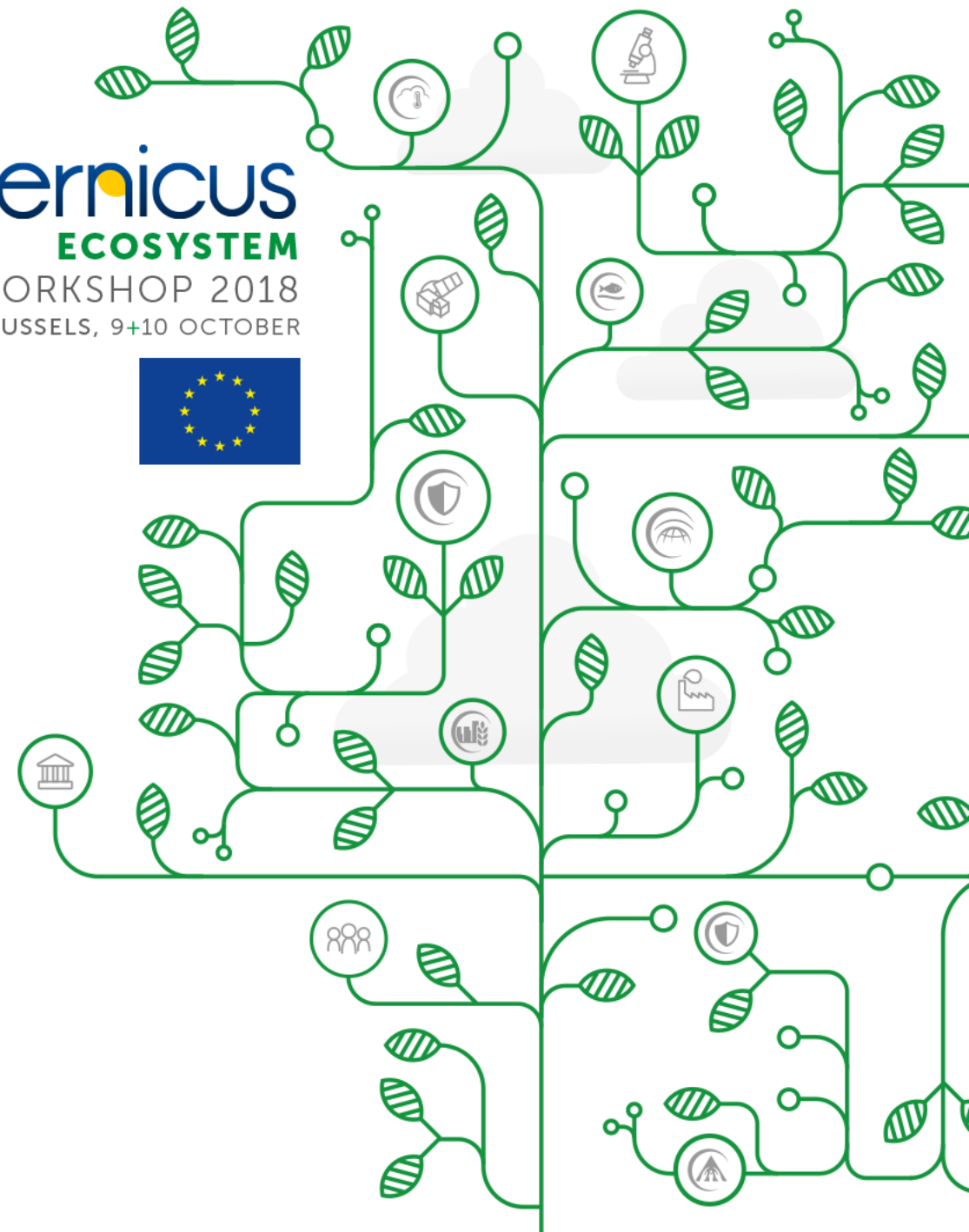


Copernicus: leveraging Europe's industrial leadership in EO

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 **Copernicus**
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Copernicus: perception of industry

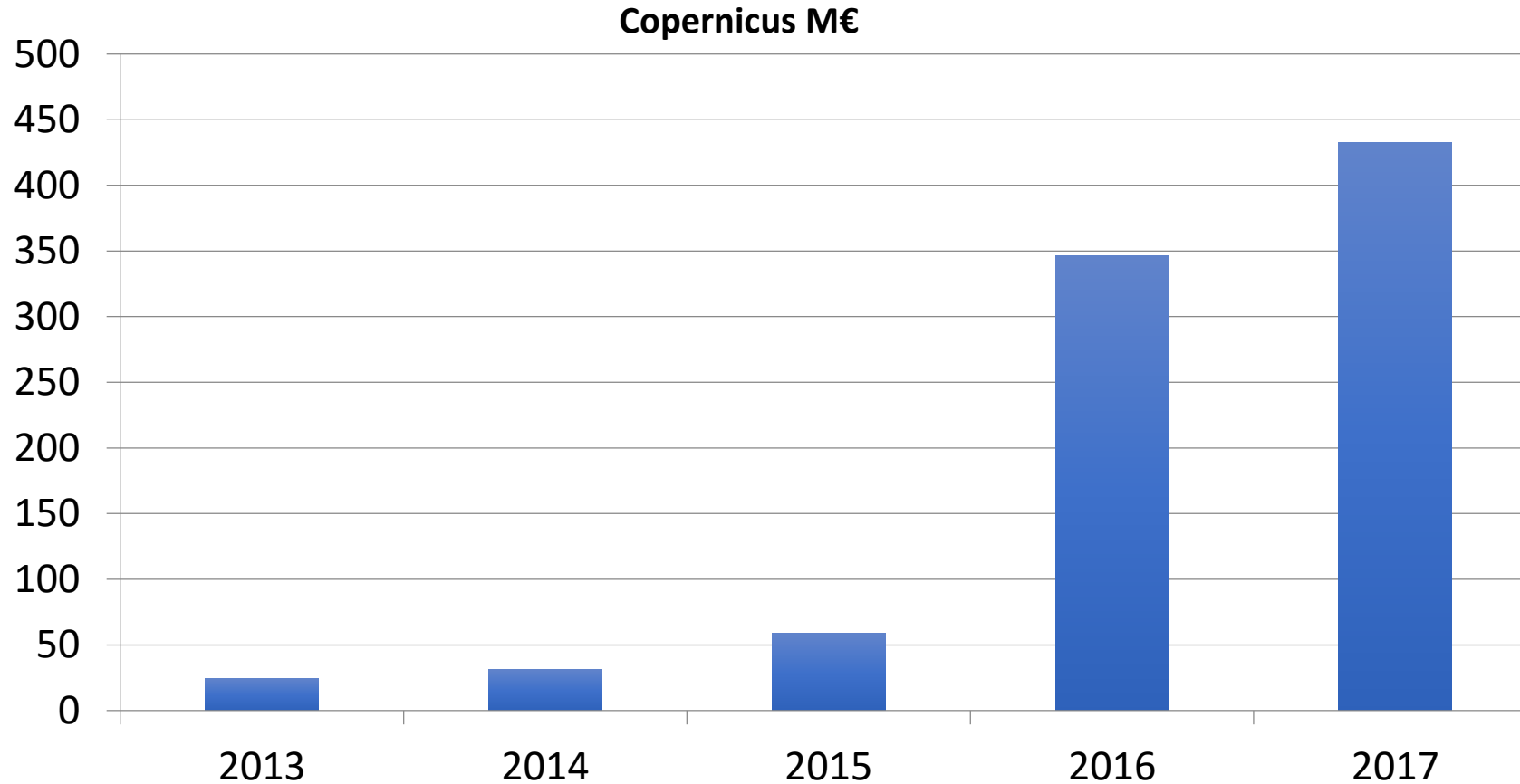
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COMMON AMBITION
LONG TERM INFRASTRUCTURE
GROWTH PUBLIC DIMENSION
AGRICULTURE MEMBER STATES
GROWING IMPACT INDUSTRIAL POLICY
EUROPEAN SECURITY SOVEREIGNTY
DIGITAL ECONOMY ESA
ACCESS TO THIRD MARKETS
AUTONOMOUS CAPACITY
CLIMATE CHANGE
USER DRIVEN EXPORTS EU
COMPETITIVENESS
BLUE ECONOMY
DIGITAL ECONOMY
INDUSTRIAL LEADERSHIP
GRAND CHALLENGES
NON DEPENDENCE



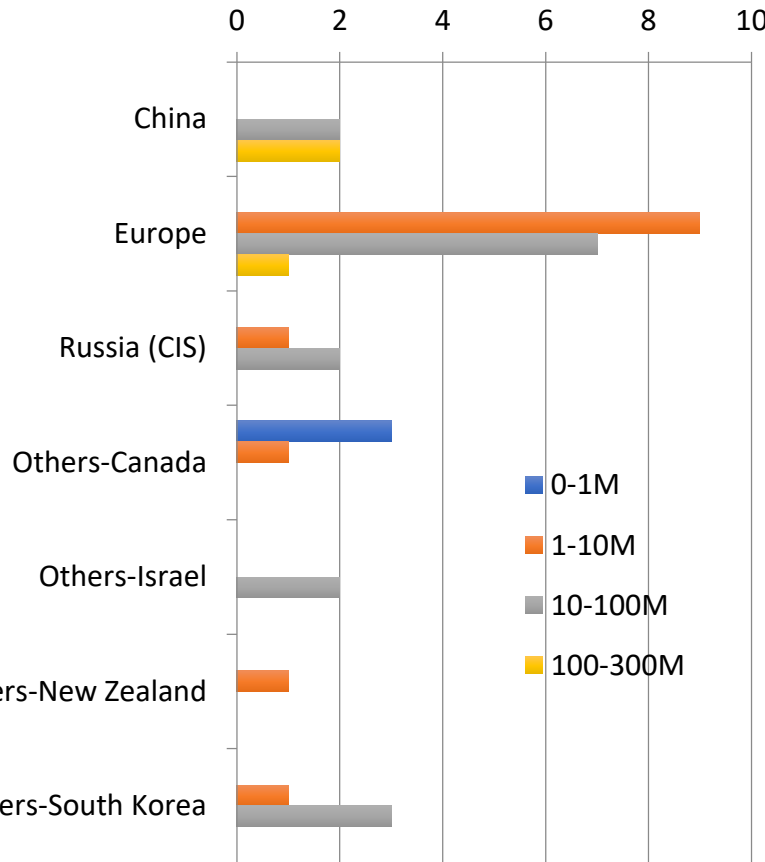
Copernicus: a generator of revenues for the European space satellite industry

Copernicus revenues in European space industry 2013-2017 (est.)



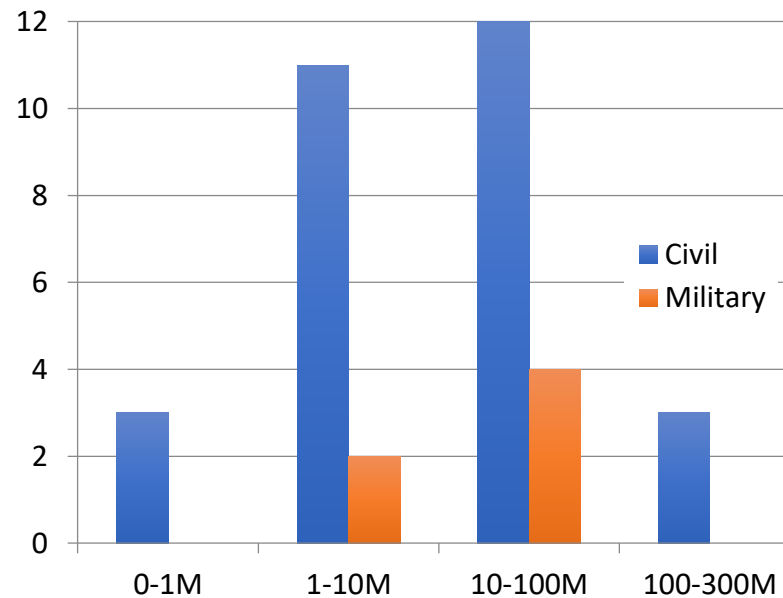
The European leadership in EO Exports

Remote sensing segment exports: suppliers' (decadal) perspective



- European suppliers lead the RS Exports segment by far (50%).
- Interestingly the other 'big players' have less presence on this market, and the USA is notably absent.
- In this market we see the emergence of export markets for smaller players (S. Korea e.g.)

Remote sensing exports by customer type and SC value class



- The RS mission segment for exports was worth 1B\$ in the decade (for 35 SC launched), i.e. about 100M\$/year
- The RS mission segment has a civil component (84% in value) and a military component (16% in value)
- This segment is almost 100% composed of governmental customers
- Foreign policy and export regulations have a strong influence on this segment
- The segment may involve a technology transfer or 'barter' dimension



European EO manufacturing industry: the driving factors of a transformation

A technological (and digital) transformation

- Constellations of small/ medium satellites
- Very High resolution Observation (including in GEO), new sensors
- More synergies with IT technologies in ground segment and operations
- Digital transformation of industry enabling to provide more efficiently valuable information products
- Going in the direction of “federated systems”: a promising trend to improve processing techniques

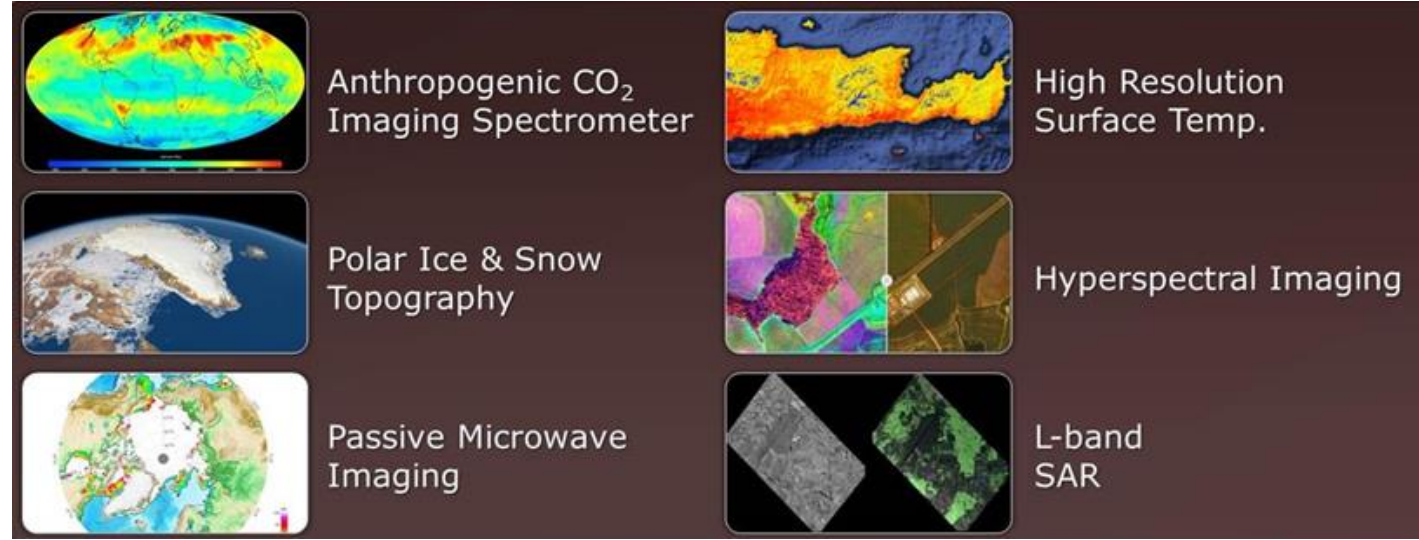
Increased pressure of competitors

- Investments of competitors in EO capacities (e.g, China, South Korea, Japan, Israel)
- New investments with a “traditional” objective: ensure independent access to imagery and to develop domestic industry



Some perspectives for Copernicus evolution

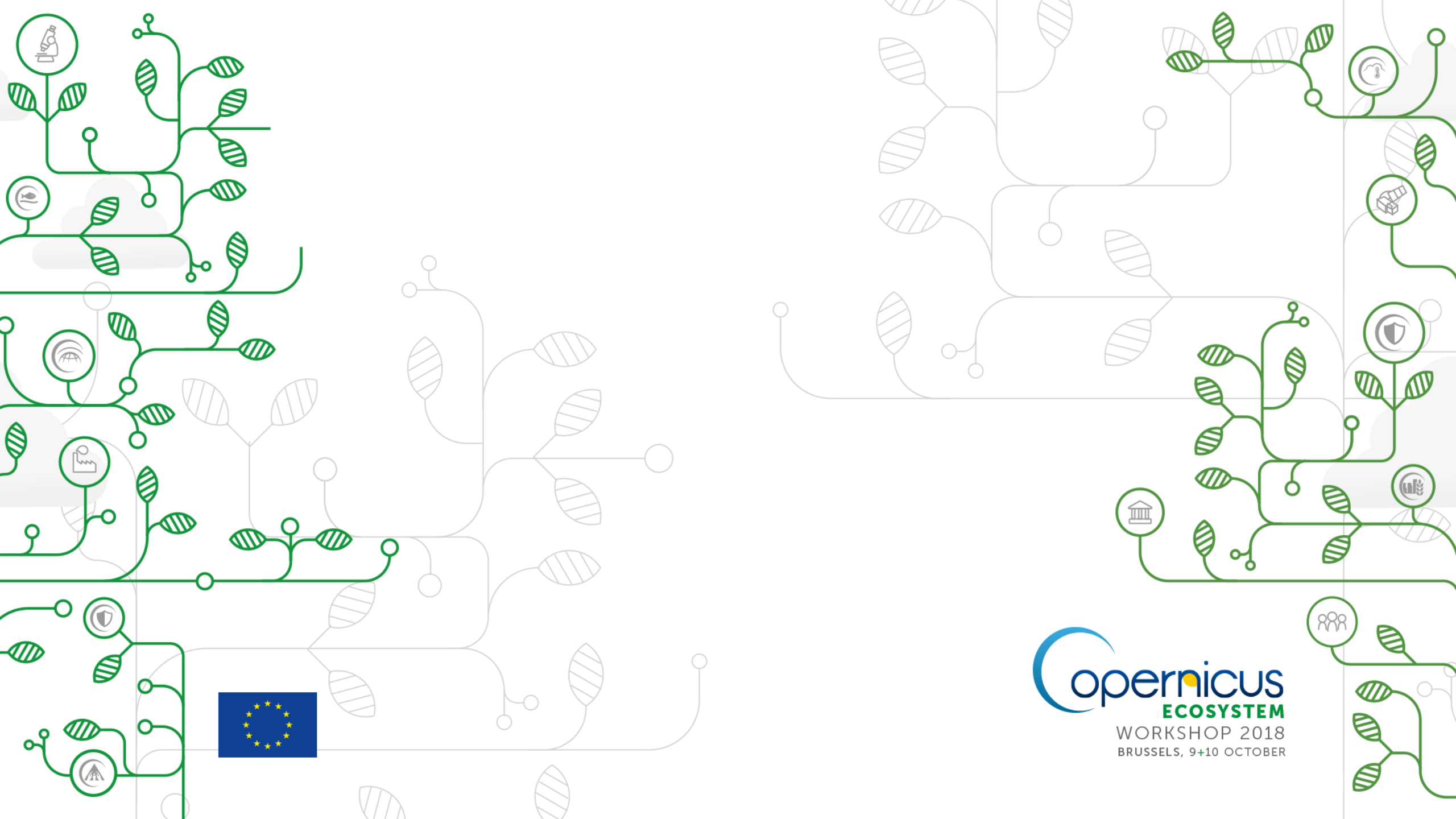
- Ensure continuity and increase the robustness of the existing Copernicus space component in the future
- Increase the quality and quantity of the existing measurements
- Expand observation types according to policies and user needs: towards “Copernicus 2.0”



Reflections on Copernicus-related industrial policy tools ⁷

- Support to research & innovation
- Maintain the public dimension of Copernicus' space infrastructure
- Make a better use of procurement policy
- Ensure the security of the programme: a parallel priority





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