



In situ

COPERNICUS WORKING GROUP OBSERVATIONS

Annual Meeting

Towards a Copernicus In-situ Data Strategy

5-6 March 2025



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Why an In-Situ Strategy for Copernicus?



By initiating this process, the EEA aims to:

Facilitate an open and strategic discussion about the evolution of the Copernicus In-Situ Component and its role in Copernicus 3.0 with all Copernicus services, ESA, EUMETSAT, and EC/DEFIS



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The Purpose of the Strategy could be to... (1/2)

- ✓ Consolidate and emphasise the **significance** of the Copernicus in-situ component;
- ✓ Provide a **high-level framework** for guiding and shaping Copernicus' in-situ data activities and initiatives;
- ✓ Help clarifying and strengthening **Copernicus' position** vis-à-vis European and international in-situ data owners and providers;



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The Purpose of the Strategy could be to... (2/2)

- ✓ Foster and facilitate Copernicus' **internal and external coordination** and cooperation efforts;
- ✓ **Increase the knowledge** about the Copernicus in-situ component vis-à-vis Copernicus Governance bodies and Copernicus participating states;
- ✓ Support **high-level EU objectives** such as strategic autonomy and the European strategy for data;
- ✓ Strengthen **links with key EU initiatives** such as HVD, Destination Earth, Horizon Europe, and Common European Data Spaces.



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Guiding principles of the Strategy



Based on
cooperation

Fit for purpose



FAIR and open

Targeted and
competitive



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Guiding principles of the Strategy

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Based on cooperation



Copernicus accesses, manages, and applies in-situ data made available by external in-situ data providers and owners. ***Close cooperation with the in-situ data community is a prerequisite for Copernicus success.***

FAIR and open



Copernicus strives to making in-situ data underpinning the production, calibration, and validation of its products and data ***available in an open and FAIR manner and acknowledges the vital contributions made by the in-situ data community.***



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Guiding principles of the Strategy

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Fit for purpose



In-situ data requirements are strictly linked to users' requests for new and improved Copernicus products and data. ***Ensuring sustained and reliable access to essential in-situ data in accordance with the needs of the Copernicus services and space component is fundamental.***

Targeted and competitive



Collection, management, and application of in-situ data constitute an integrated part of all Copernicus Services and the space component. ***The current distributed and coordinated approach has been efficient and successful and should be further developed and consolidated.***



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Proposed table of contents

The Strategy should be a high-level and rather stable document. It should be short and concise, e.g., we could aim for 6-8 pages.

1. **Setting the scene** (main purpose and rationale);
2. **Vision statement** (the overall vision for and main direction of the Copernicus in-situ (data) component);
3. (*) **Framing conditions** (overarching principles from the Space Regulation);
4. (*) **Key external factors** (a brief presentation of the main external factors that are related to and influence the Strategy);
5. **Main strategic objectives** (overall direction and key goals for the evolution of the Copernicus in-situ (data) component);
6. (*) **Recommendations**. Recommendations for (high-level) short- and long-term cross-cutting in-situ data access actions beyond 2027;
7. (*) **Implementing the Strategy** (roles and responsibilities; implementation approach);
8. **References**.

(*) = *Could be placed in e.g., a background document or annex if we want the strategy document to be short.*



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Possible elements of a future in-situ component?



Sustained support to key in-situ networks



Cross-cutting EO-oriented in-situ repositories



Closing **data gaps**



Acknowledgement via Copernicus In-Situ Label



In-situ National Collaboration Programme



Copernicus Annual Forum for in-situ providers



Strengthening **partnerships**



Integrated in-situ data and mission planning



CCM concept for in-situ commercial providers



Innovation framework for in-situ technologies



Long-term **evolution**

What would you like to see in the future Copernicus In-Situ?



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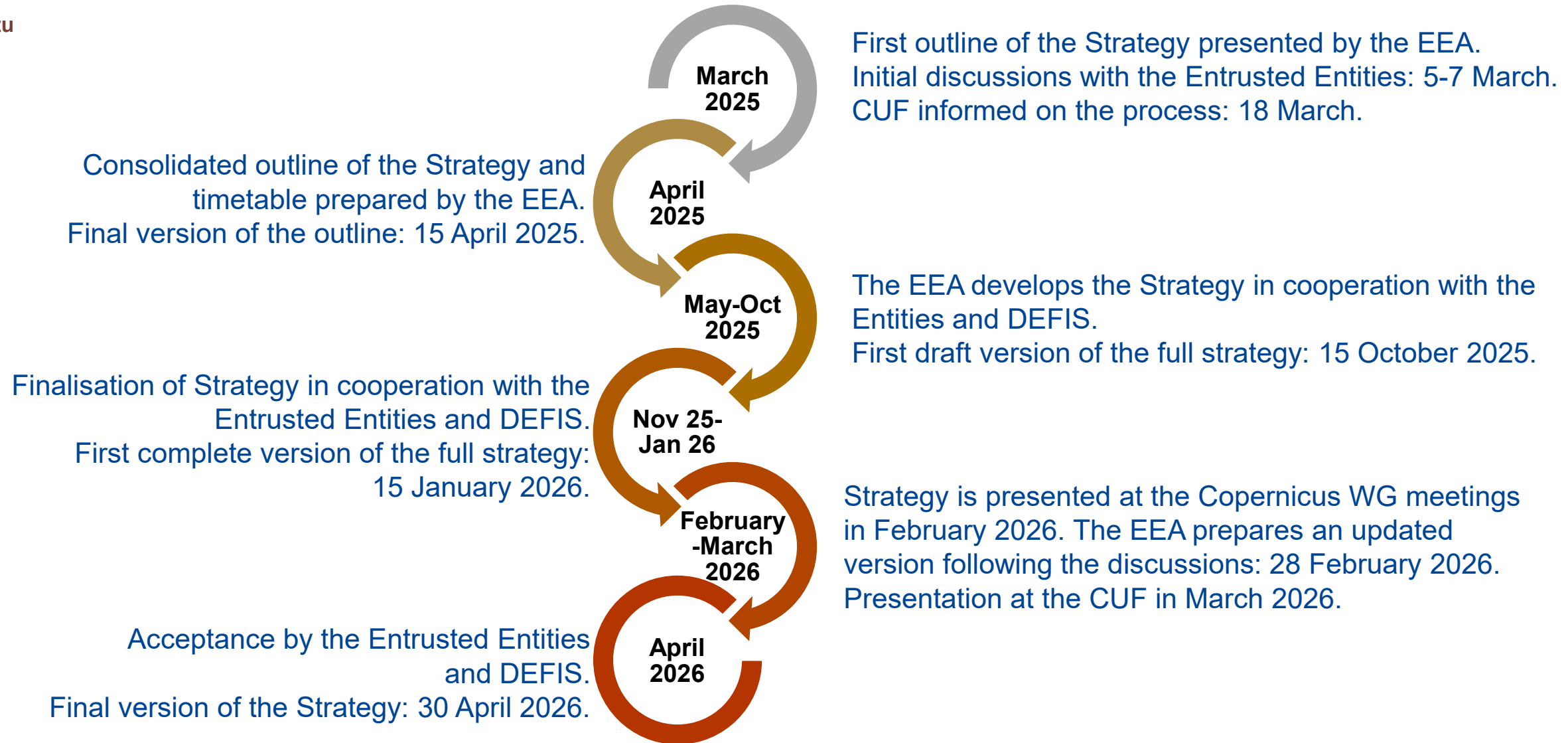




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Draft timetable for the Strategy process



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insitu.copernicus.eu

Thank you!



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State of Play : key issues encountered



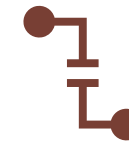
Access conditions and use restrictions



Insufficient spatial coverage



Uncertain sustainability of critical networks



Fragmentation and heterogeneity



Lack of alignment with data providers



Insufficient acknowledgement



Not long enough historical high time series



More data needed on specific areas



Increasing demands in frequency and resolution



Rapid accessibility



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