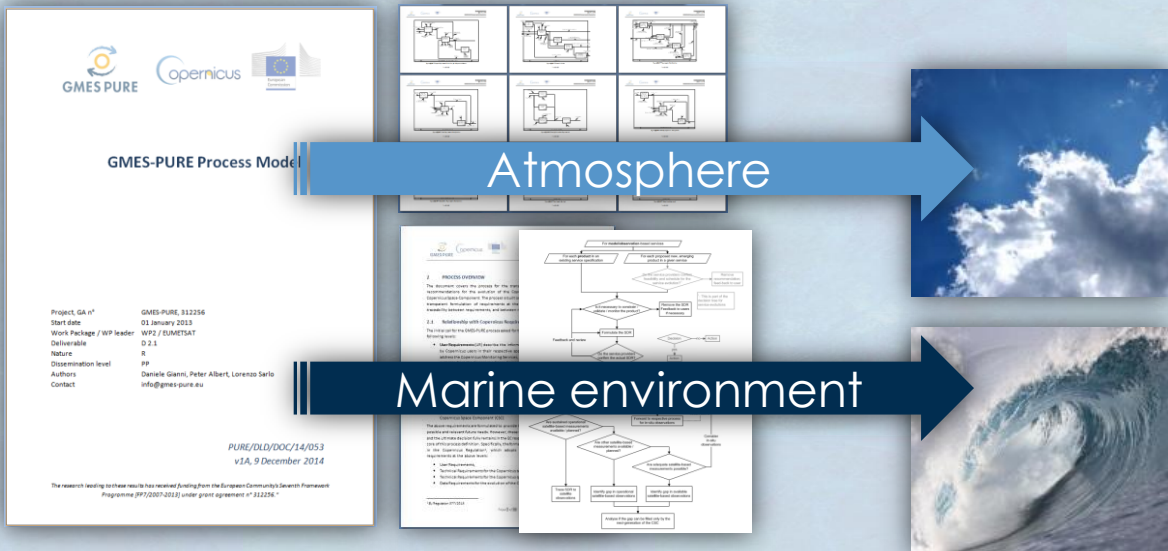


Copernicus, previously known as GMES (Global Monitoring for Environment and Security), the European Programme for the establishment of a European capacity for Earth Observation, has undergone an important change. Having been funded from research resources in the previous years, Copernicus has now become operational, with sustained funding from the European multiannual financial framework for 2014-20. The Copernicus services have already successfully demonstrated their capabilities to fulfil multiple user needs, and they are progressively reaching their full potential using dedicated Copernicus data from the Copernicus Space Component (CSC). With the launch of Sentinel-1A in 2014, and upcoming Sentinel launches in 2015-2016, the CSC, i.e. satellites and ground segments specifically designed and built for the needs of the Copernicus users, will soon reach maturity.

Due to obsolescence, advances in technology, and the evolution user requirements, a next generation of the CSC already has to be envisioned. Taking into account the operation and Development lifetimes of Space infrastructure, the design of this next generation will have to commence soon. This process will be driven by user requirements, both towards the future services and towards the evolution of the observation Infrastructure. **GMES-PURE** has supported the European Commission with the task to define a process for the involvement of users into the definition and evolution of Copernicus requirements, driving the evolution of the Copernicus monitoring services and the next generation of the CSC. The process was exemplary applied to the domains of atmosphere and marine environment monitoring. Working in close coordination with the existing service providers, the project established a requirements framework providing evolving user requirements, service specifications, service data requirements and technical requirements for the space infrastructure as well as the traceability between the requirements at different levels.



GMES-PURE Process Model

Atmosphere

Marine environment

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Deliverable D 2.3
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GMES-PURE had two objectives:

- Process Model:** the definition and documentation of a process for the involvement of users into a transparent and coherent definition of user requirements for the Copernicus Services and their translation into service specifications, service data requirements, and technical requirements (with a focus of the latter two on the space component of the Copernicus observation infrastructure); and
- The exemplary application of the process** for the marine environment and atmosphere thematic domains.



User Requirements (UR) describe the information and / or data which are required by Copernicus users in their respective application areas. User requirements can address the Copernicus Monitoring Services, eventual downstream services, or data available from the Copernicus Space Component.

Service Specifications (SSP) respond to the User Requirements, describing the actual information and data the Copernicus Monitoring Services provide.

Service Data Requirements (SDR) specify the input data the Copernicus Monitoring Services (or other services) require as prerequisite to their activities. Service Data Requirements shall be independent of the actual observation system.

High-level Technical Requirements (HLTR) for the evolution of the Copernicus Space Component target open questions and potential solutions related to the identified gaps in observation capabilities, addressing the next generation of the Copernicus Space Component.



OCT 22 2013 GMES-PURE Marine User Requirements Consolidation Workshop

JUN 10 2013 Co-located MACC-II and GMES-PURE User Requirements Workshop

