

# → ATLANTIC FROM SPACE WORKSHOP

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National Oceanography Centre  
Southampton, UK

How Pre-Commercial  
Procurement Can Boost  
Innovation in Earth  
Observation Applications:  
The Marine-EO Project

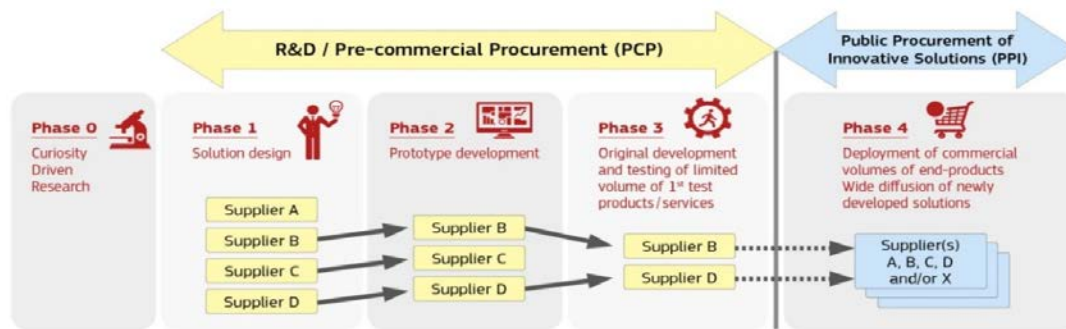
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Regional Fund for Science and Technology – Azores Government

1. Pre-Commercial Procurement: an approach to innovation
2. The PCP implementation
3. The Marine-EO project
4. SATOCEAN Services
5. SATSURVEILLANCE Services
6. Conclusions and recommendations



- Pre-Commercial Procurement (PCP) challenges the industry from the demand side to develop innovative solutions for public sector needs and provides a first customer reference which enables companies to create competitive advantage in the market.
- PCP enables public procurers to compare alternative potential solution approaches and filter out the best possible solutions the market can deliver in order to address the public need
- It's a risk shared operation allowing to Public Procurers to access custom made solutions to their needs





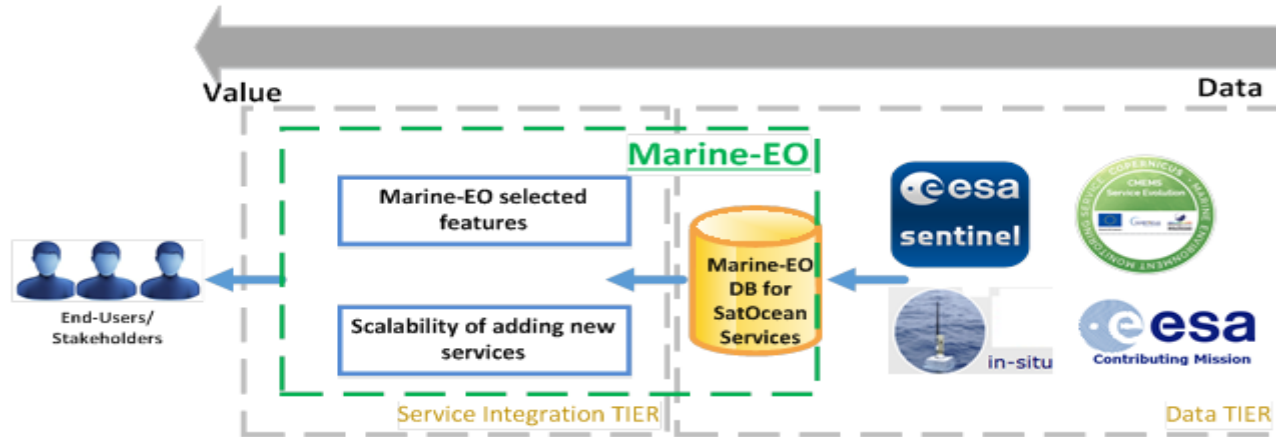
MARINE-EO follows the basic PCP concept and approach while adopting the typical product innovation life cycle:

- Phase 0: Consortium agrees on the services features and launches an Open Market Consultation. Tender Publication
- Phase 1: Solution Design
- Phase 2: Prototype development
- Phase 3: Test of the solution/services in relevant environments/real-life operational conditions



1. Consortium of maritime countries - Portugal (Azores and Mainland), Spain, Norway and Greece - teams up a group of five maritime authorities (the Buyers Group) and four prestigious scientific and technical organizations with significant experience in Earth Observation and maritime affairs.
2. Develop, test and validate two sets of demand-driven EO-based services, adopted on open standards, bringing incremental or radical innovations in the field of maritime awareness and leveraging on the existing Copernicus Services and other products from the Copernicus portfolio:
  - **Thematic Area 1** Copernicus Marine Environment Monitoring and Climate Change: **SATOCEAN** service provides information about ocean parameters variability in time and space, best probable fishing areas, fish farm locations, and water quality. It also incorporates sea ice extent for safe navigation and maritime operations in the Arctic.
  - **Thematic Area 2** Copernicus Security: **SATSURVEILLANCE** service contributes to the development of EUROSUR regulation by providing services in response to Europe's security challenges in the domains of Border Security.

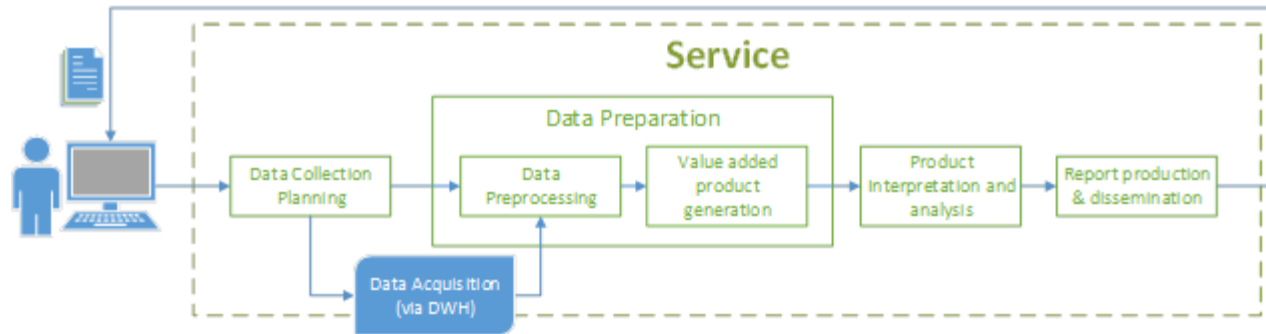
- The expected outcome under SATOCEAN is to provide three downstream feature services:
- SATOCEAN-UCS-1:** MARINE environmental status in hot spots (AOIs e.g. Gulfs, MPAs etc.).
  - SATOCEAN-UCS-2:** Fish Farms: Detection of Fish farms threats.
  - SATOCEAN-UCS-3:** Detection of vessels and icebergs in Arctic areas.



The expected outcome under SatSurveillance is to provide two downstreaming feature services:

**Service 1:** Unusual/Irregular activity monitoring around a Critical Infrastructure

**Service 2:** Enhanced Change Detection



- PCPs are very useful to develop tailored solutions, not available in the market, according to Procurer needs;
- The PCP implementation has a heavy bureaucratic load (Tender Process);
- Disruptive solutions benefit for longer implementation periods and more financial resources available;
- This model allow start-up companies to develop their solutions/ideas at the same level that established industries;
- A wider use of this procedure can bring new actors and solutions to the market
- PCP is a powerful tool to bring together costumer needs, industries and research in an effective way;
- New calls should be launched to address specific challenges (eg. MSFD implementation).



**Thank you!**

**More information available at:**

**<https://marine-eo.eu/>**

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