

Institute: ISPRA

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FPCUP Action 2021-2-47: Report on the third cycle of interaction with national users.

Introduction: this cycle of interaction took advantage of one of the periodic meetings of the Coastal Board of the Italian national Copernicus User Forum. This is a discussion group composed of public and private bodies (including institutions, research institutes, commercial and industrial subjects) that are users of Copernicus products for activities in coastal areas. As agreed with the other partners of the action this interaction should also tackle the theme of “Coastal Digital Twins”.

Copernicus products: There are not specific outputs on this topic during this cycle of interaction.

Copernicus downstream products: This meeting focused on a comprehensive review of all the ongoing activities related to Italian PNRR. With regards to the MER project, the updates being developed on coastal marine monitoring systems and operational modelling systems are illustrated, providing a rough timeframe for the entry into operation of these systems. A short discussion follows in which further details are requested on when the new buoys will be operational, on how the national sea state predictive systems will be integrated into the B31 intervention of MER project and on how the various monitoring or modelling elements developed in the context of various initiatives, not only of the MER, can then communicate with each other. The answers provided further details on what is being developed in the B31 intervention of the MER project, which aims to post-process the outputs of the oceanographic and sea state systems operating at the national meteorological agencies. The aim is to create a homogeneous mapping of national seas with essential reference variables that are available at a national scale starting from the outputs that will be made available by the national bodies running operational systems. The specific details of this operation are still being discussed between ISPRA, ItaliaMeteo and the Meteorological Agencies that operate oceanographic systems or sea state forecasting systems in operational mode. Finally, with regard to the ways in which the different elements being developed within distinct activities can communicate with each other, the technical supervision role that the National User Forum has played by providing consultative opinions to the individual managers of the various initiatives is specified, and in particular to ISPRA for the MER, to ESA for Iride and to MASE for the SIM, encouraging their interaction to avoid overlaps and promote synergy. In any case, the logic of allowing separate developments of the individual activities was followed to ensure the maximum probability of success, avoiding that slowdowns in a single activity would also penalize the others. Therefore, although the activities have been designed with the clear principle that they are all elements of a single system, most of the work of interconnecting what has been achieved in the various initiatives will be carried out starting from 2026, taking advantage of what has been achieved in the various platforms being developed at a national level and in particular that of the PNRR-SIM which has among its objectives that of interfacing with the other platforms. At the same time, it will also be necessary to set up a strategy for integration with what has been developed at a European level and in the Copernicus context.

The presentation on the Service segment of the IRIDE project follows. During the discussion the first request concerns the method of access to the products. The reply of the Coordinator of the Coastal board illustrates how the IRIDE Service Segment is not addressed to the public but to a

well-defined set of institutional entities that have guided the drafting of the specifications by expressing their monitoring needs for the purposes of their institutional tasks. These entities will therefore be the only ones to have access to the products, without prejudice to the possibility of disclosure within the various institutional services that these entities manage. Then the presentation on the SIM project follows with updates on the ongoing activities. Last there was the presentation on the Cyber-Italy initiative within the IRIDE Project. The general discussion highlights how the administrations struggle to follow all the initiatives and to manage the PNRR activities that partially overlap with initiatives underway at local level and underlining the importance of co-design activities with coastal stakeholders.

The last session of the meeting concerns the strategies to support the uptake at national level of Copernicus products and the integration strategy between PNRR and Copernicus products. The discussion opens highlighting how training activities, including practical training on products, and information are essential to propose in the NCP, it is also necessary to coordinate with what is already planned by Copernicus and for the PNRR initiatives. Then discussion switches on the topic of how guaranteeing the interoperability of the platforms hosting national products with those operated by Copernicus, discussing for example standard data formats, drawing a parallel with what is being developed in the field of meteorology and the info hub platform (<https://oceaninfohub.org/odis/>), which is organized as a catalogue of platforms. Again, the discussion reiterates the importance of dialogue with MOI for the definition of standards but highlights how it is essential to follow the paradigm of developing data dissemination channels according to interoperable platforms. Finally, it the discussion concludes by recalling the complexity of the purely technical coordination role that the Copernicus National User Forum is carrying out, in providing operational indications to the managers of the various interventions to avoid overlaps, promoting synergies between products and interoperability of platforms from 2026. According to this it is also important that the Copernicus National User Forum coordinates the definition of the activities to be included in the NCP proposal with MOI.