GRANT N°: 871153
PROJECT ACRONYME : JERICO-S3
PROJECT NAME : Joint European Research Infrastructure for Coastal Observatories - Science, services, sustainability
COORDINATOR : Laurent DELAUNEY - Ifremer, France - jerico-s3@ifremer.fr

JERICO-S3 MILESTONE

Joint European Research Infrastructure network for Coastal Observatory
Science, Services, Sustainability

MS#, WP# and full title	JERICO-S3 MS2 - WP9 - "Feedback from WP9 on D1.1"
5 Key words	Research Infrastructure, Sustainability, Coastal, Scientific Challenge, Sensor package.
Lead beneficiary	IFREMER
Lead Author	Epinoux A.
Co-authors	Cocquempot L.
Contributors	all WP9 partners
Submission date	09/04/2024

→ **Please specify the type of milestone:**

- ~~❑ Report after a workshop or a meeting (TEMPLATE A)~~
- ~~❑ Report after a specific action (TEMPLATE B) (test, diagnostic, implementation,…)~~
- ■ Document (TEMPLATE B) (guidelines,...)
- ~~❑ Other (TEMPLATE B) (to specify) ……:~~

Diffusion list			
Consortium beneficiaries	Third parties	Associated Partners	other
X			

PROPRIETARY RIGHTS STATEMENT

TABLE OF CONTENT

1. Objectives

The aim of this milestone MS2 is to evaluate JERICO-S3 D1.1 titled "First analysis of the JERICO-S3 scientific monitoring and regional approaches. Early inputs toward sustainability.", and describing common JERICO-RI scientific challenges and regional specificities concerning these challenges.

2. Main report

2.1. Sustainability in JERICO-RI

Sustainability is paramount for JERICO-RI, because observatories will need to continue to operate effectively over the long term. By implementing sustainable practices in data collection, instrumentation, and maintenance, JERICO-RI can maintain consistent and reliable monitoring of coastal environments, providing valuable data for scientific research and policy-making

Adopting sustainable practices will also help optimise resource use by JERICO-RI, including energy, materials, and funding. Minimising waste and maximising efficiency is crucial so that the project can achieve its objectives in a cost-effective fashion.

Finally, by promoting sustainability, JERICO-RI contributes to building resilience in coastal communities and ecosystems, helping them adapt to and mitigate the effects of climate change. Therefore, providing an evaluation of D1.1 in order to consolidate future work on the same topic partakes in elaborating a sound scientific strategy for JERICO-RI.

2.2. Outcomes of D1.1

D1.1 provided an identification of common scientific challenges across JERICO-partners, as well as their spatial patterns. Through a consultation of most partners across regions, 16 Specific Scientific Challenges were grouped into the 3 KSCs of JERICO (Fostering societal impact for a larger community of stakeholders; Developing innovative technologies for Coastal Ocean observing & modelling; Interfacing with other Ocean Observing initiatives). Research Axes, to be updated as time goes on, are also grouped per SSC and complete the general scientific framework. D1.1 also provided a mapping of the identified limitations in addressing some SSCs and KSCs, and leading to the conclusion that there is a need for centralised actions to tackle technological and organisational challenges.

The main strength of D1.1 is its comprehensive approach, as it tried to cover every aspect of JERICO-RI's sustainability: scientific challenges were not considered alone, as societal and technological ones were also taken into account. In Particular, criteria for technological development under the auspices of JERICO have been defined jointly with WP7, and a regional survey allowed to define the location of the future PSP (Pelagic Sensor Package) demonstration.

The designated IRSs and PSSs were evaluated regarding their potentialities, and potential heterogeneities between the two types of sites were identified. For that matter, D1.1 was fed with inputs coming from JERICO-S3 D3.1 ("Initial analysis and summary of region-specific & region-wide monitoring strategies, and regional sustainability plans") and D4.1 ("Pilot Super Site

monitoring strategies"). Mainly, addressing the two last KSCs defined by JERICO-RI will require significant technological advances (KSC2) and stronger collaboration between the different JERICO-RI partners (KSC3).

2.3. Shortcomings of D1.1

D1.1 did not describe the current state of scientific monitoring, and did not cover the challenges and limitations incurred by these current monitoring efforts, nor did it provide case studies of successful regional monitoring initiatives. This puts a relative limitation on the reach of the conclusions of D1.1. Additional information on these topics would be of help to better build the basis of JERICO's scientific monitoring.

3. Conclusion

Although no assessment of the current monitoring landscape, and its challenges and limitations, D1.1 established a sound basis to build JERICO's science strategy, together with WP3 and WP4 and their respective first deliverables. The main achievement of WP1 so far is the structuration of JERICO's scientific framework into KSCs, SSCs and RAs, which however might need to be adapted to more local constraints. The assessment of technological constraints and of sensor packages stand as another fruitful outcome of D1.1.