



## Work Packages

No.	Title	Type of activity	Leader	Participants
1	Project management	MGT	NERC	NERC
2	Technological harmonization	COORD	OGS	NERC, OGS, HCMR, UniHB, PLOCAN, SLR, IFREMER, BLIT, INGV, MI, UNIABDN, CNRS, GEOMAR, IEO, UPC, 52 North, CNR, IMAR.
3	Procedural harmonization	COORD	HCMR	NERC, OGS, HCMR, UiB, PLOCAN, IFREMER, INGV, UNIABDN, CNRS, GEOMAR, IEO, INDP, UPC, 52 North, CNR, IMAR.
4	Data management and harmonization	COORD	UniHB	NERC, OGS, HCMR, UniHB, UiB, PLOCAN, AWI, IFREMER, INGV, UNIABDN, CNRS, USTAN, IEO, INDP, UPC, 52 North, CNR.
5	Innovation through industry	COORD	SLR	NERC, UiT, SLR, IFREMER, MI, UNIABDN, UPC.
6	Interface with policy and intergovernmental bodies	COORD	UiB	NERC, HCMR, UniHB, UiB, PLOCAN, AWI, INGV, GEOMAR, NIOZ, IMAR.
7	International and European networking of fixed-point observatories	COORD	IFREMER	INGV, MI, UNIABDN, CNRS, GEOMAR, UGOT, CNR, NIOZ, IMAR.
8	Outreach and training	COORD	BLIT	NERC, OGS, UniHB, UiB, BLIT, UPC, NIOZ, IMAR.
9	Transnational access to FixO3 infrastructures	SUPP	PLOCAN	NERC, OGS, HCMR, UiB, PLOCAN, AWI, IFREMER, INGV, CNRS, INDP, UPC, CNR, IMAR.
10	Service activities: Access to data products and knowledge	SUPP	AWI	NERC, OGS, HCMR, UiB, PLOCAN, AWI, IFREMER, BLIT, INGV, CNRS, IEO, INDP, CNR.
11	Optimisation of ocean observing capability	RTD	UNIEXE	NERC, HCMR, UiB, UNEXE, CNRS, ULPGC.
12	Research and development on critical observatory functions	RTD	IFREMER	OGS, HCMR, PLOCAN, UNEXE, IFREMER, INGV, MI, CNRS, ULPGC, USTAN, nkei, UPC, TEXCEL, UGOT, CNR, IMAR.

No.	Title	Objectives
1	Project management	<ul style="list-style-type: none"> <li>• To effectively manage FixO3 to maximise the production of results in the most cost effective manner and to the proposed timescales</li> <li>• To facilitate communication and integration between the partners and disseminate information about the project to the wider community</li> <li>• To identify and resolve disputes between partners</li> <li>• To keep the project on track, and ensure timely interaction and delivery of reports to the European Commission</li> </ul>
2	Technological harmonization	<ul style="list-style-type: none"> <li>• To review the current status of existing systems in operational use considered in the project;</li> <li>• To synthesize the characteristics of infrastructures offering TNA;</li> <li>• To increase the high-frequency measurements on fixed platforms;</li> <li>• To define the best technical practices for compatible, robust and cost-effective systems on a variety of fixed applications;</li> <li>• To promote tests of new or prototype instruments on a non-operational basis;</li> <li>• To define procedures for harmonizing and merging quality assessed high frequency fixed platform data;</li> <li>• To define procedures and technological solutions for integration and testing of new sensors on these systems;</li> <li>• To increase the traceability, quality and reliability of sensor metadata and data products.</li> </ul>
3	Procedural harmonization	<p>To harmonise procedures across the network the following step will be undertaken:</p> <ul style="list-style-type: none"> <li>• Assessment of operational procedures for sustained Eulerian observations</li> <li>• Further development of principles of “best practice”</li> <li>• Development of the FixO3 observatories “label” building on ESONET and in collaboration with JERICO</li> </ul>
4	Data management and harmonization	<ul style="list-style-type: none"> <li>• To harmonise data policies and to provide a formal basis for data exchange between FixO3 infrastructures.</li> <li>• To improve standardisation, interoperability and compliance with major international initiatives</li> <li>• To harmonise data management and standardisation efforts with other European and international marine data and observatory infrastructures</li> <li>• To foster the cooperation with the marine carbon observation community by disseminating FixO3 data via relevant international infrastructures and data centres such as the ICOS Ocean Thematic Centre</li> <li>• To coordinate, harmonise, and optimize the implementation and integration of Service Activities provided by the different partners in WP10 and to strengthen and monitor the dissemination of knowledge.</li> </ul>
5	Innovation through industry	<ul style="list-style-type: none"> <li>• Promote interaction between the ocean observatory research community and the commercial sector</li> <li>• Proactively promote FixO3 and wider open ocean observatory products and services to the commercial sector</li> <li>• Identify innovative products &amp; services within the ocean observatory community and develop targeted IPR agreements to encourage interest by the commercial sector</li> </ul>

6	Interface with policy and intergovernmental bodies	<ul style="list-style-type: none"> <li>To link the FixO3 efforts to international and intergovernmental bodies and activities</li> <li>To ensure visibility and facilitate further implementation and long-term stewardship of deep-ocean fixed-point time series observations</li> <li>To develop a strategy for the future</li> </ul>
7	International and European networking of fixed-point observatories	<ul style="list-style-type: none"> <li>To consolidate and promote the synergy between European research groups and institutions.</li> <li>To enhance the interaction with industry.</li> <li>To link ocean scientists and engineers into an international team in marine science.</li> <li>Management of TNA activities.</li> </ul>
8	Outreach and training	<ul style="list-style-type: none"> <li>To engage with, educate, and inform public, scientific and policy user groups</li> <li>To develop an informative and interactive suite of complimentary tools that educates and engages public, scientific and policy user groups and maximise engagement with end users.</li> <li>To produce educational and informational resources that deliver knowledge to end user groups</li> <li>To deliver a series of training opportunities that informs, educates and promotes best practices to professional users of hardware, data and data products</li> </ul>
9	Transnational access to FixO3 infrastructures	<p>To support external scientific users by providing coordinated, free-of-charge, transnational access to fixed open-ocean observatories, including:</p> <ul style="list-style-type: none"> <li>Ocean surface, water column and seafloor observatory installations and systems considered for transnational access under this proposal</li> <li>One shallow water test site able to make practical and fast tests of instruments, systems, procedures and new technologies applicable to fixed open-ocean observatories will be accessible under TNA.</li> </ul>
10	Service activities: Access to data products and knowledge	To provide access to the data products and knowledge derived from most of the observatories which comprise the FixO3 network.
11	Optimisation of ocean observing capability	To carry out research on the specification for an optimum observational network of FixO3 platforms, integrated and complemented by other platforms.
12	Research and development on critical observatory functions	<ul style="list-style-type: none"> <li>To enhance the capability of the FixO3 infrastructures to make very high quality observations</li> <li>To develop of new low energy consuming platform design in order to promote more sensors per platform and extension capacities</li> </ul>