



WP4- Increasing the observation capacity

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WP4 description



- Partners: almost all consortium partners
- Objective:
Provide the Integration Labs with technical solutions (low-cost tech and/or citizen science activities) to collect new *in situ* obs to close obs gaps and address their challenges.
- 5 tasks are described.

WP4 description



5 tasks described:

- **4.1 Framing of the Integration Labs challenges in terms of observation capabilities (M1-M6),**
lead: SMHI
MS3 Catalogue of low-cost technologies and communities (M6)
D4.1 Summary of the technical and community needs of LILs (M6)

WP4 description



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- 4.2 **Evaluation of potential low-cost technical solutions** (M5-M9), lead: SMHI
D4.2 Comparisons and recommendations to LILs on low-cost technologies and potential and existing citizen science communities (M9)

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- 4.3 **Closing the observation gaps and perfecting the implementation strategy** (M9-M48), lead: SMHI
D4.3 Update of low-cost technologies and citizen science communities catalogue (M36)

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- 4.4 **Best practices and evolution of the Integration Labs concept** (M15-M48), lead: IFREMER
D4.4 Compilation of best practices (M46)

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- 4.5 **Low-cost technology purchase process** (M2-M36), lead: ETT
MS4 Establishment of the procurement process (M6)
MS14 Purchase of the low-cost technologies (M30)

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WP4 management towards implementation



- WP4 mtgs: 15 Feb and 18 March
- Google drive folder with all docs
- Minutes of every telcons
- Progress monitoring Excel doc



Activities to be performed in year 1



- **4.1 Framing of the Integration Labs challenges in terms of observation capabilities (M1-M6)**, lead: SMHI
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MS4 Establishment of the procurement process (M6)



3 efforts in parallel

Catalogue of low-cost tech and communities



For the catalogue of low-cost tech and communities: process in 2 steps for low cost and for communities

1st step: collection of contacts

2nd step: reaching out to the contacts and asking for specific info.

Name	Email address	Company name	Name of the person providing the info	Comment
Paul Swales	mail@swaleslab.eu	Francis Blue	francois.carpentier@lobatronic.com	Low cost temperature sensors
Théo Mours	contact@coastal-s.fr	Coastal-s solutions	francois.carpentier@lobatronic.com	Water level, temperature and salinity
Michèle Grassi	michelle@elementworks.com	HKVISION	elias@hmvn.gr	Camera for monitoring plastics or insects
Norbert Schmidt (distributor)	norschi@dog.it	DOG Pocket Science	chris@dog.it	Small boxes with various sensors (T, S, CO ₂ , CH ₄ , etc) and data transmission
Tom Brown / Bob Brown	tom@brownlab.com	BrownLab Ltd	Stefan Simis	DIYEX 2 openpollinator
Earle French	earle@earthwatch.org.uk	Earthwatch Europe	Stefan Simis	min SeaWiFS data
Adis Alvers Azaranta & students	a.azaranta@ulb.be	GHER, University of Leige (not a company but a research center)	Charles Trough	Franchisee water, salinity, turbidity, etc
Alexandra Souza	alex@coastal-s.com	ONSET HOBO	francois.carpentier@lobatronic.com	Low cost sensors with temperature, water spectrum and communications (cloud and ocean versions)
Bruno + Nicolas	bruno@meak-eb.com	NETEK	romanic.venet@meak-eb.com	Low cost surface drifters using a Raspberry as software
Frank Sotomayor	frank.sotomayor@upm.es	Sensible	patrick.germy@meak-eb.com	Low cost drifters with temperature, water spectrum and communications (cloud and ocean versions)
Arash Lariwak	arash.lariwak@uwaterloo.ca	OpenH	patrick.germy@meak-eb.com	Low cost sealed tanker + an time recovery. Spec. steel
Andrew Hester	andrew.hester@pymat.com	OpenH	patrick.germy@meak-eb.com	Temperature, depth and light
To be added		OpenH	patrick.germy@meak-eb.com	Temperature, Conductivity, Light
To be added		OpenH	patrick.germy@meak-eb.com	Salinity
To be added		OpenH	patrick.germy@meak-eb.com	Salinity, temperature, and depth
To be added		OpenH	patrick.germy@meak-eb.com	Light, oxygen, CTD
To be added		OpenH	patrick.germy@meak-eb.com	Tide monitoring
WASTCOON	ivan.petrov@wastcoon.com	Wastcoon (not a company)	ivan.petrov@wastcoon.com	Low cost shallow mooring
FUCO	francois@fucolab.com	SEABED (not a company)	ivan.petrov@wastcoon.com	Water AUV (drifter)
Francois Grassi	francois@lobatronic.com	LOBATRONIC	gilles.dupont@lobatronic.com	Water level, salinity, temperature, biological samples, etc
Francois Grassi	francois@lobatronic.com	LOBATRONIC	gilles.dupont@lobatronic.com	Water level, salinity, temperature, biological samples, etc
Francois Grassi	francois@lobatronic.com	LOBATRONIC	gilles.dupont@lobatronic.com	Water level, salinity, temperature, biological samples, etc
Arash Lariwak	arash.lariwak@uwaterloo.ca	OpenH	patrick.germy@meak-eb.com	Water level, salinity, temperature, biological samples, etc
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The **collection of low-cost tech developers/manufacturers** started on 29 Feb (reminder on 16 March).

With the goal to reach out as widely and far as possible. No limit. Step 2 will start on 8th April: a flyer inspired from SYNCHRO (US similar effort) will be circulated.

The **collection of communities** started 1st March.

With the goal to reach out to the LiLs specifically and the LSL partners.



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A flyer for Synchro technology procurement. The header reads 'We are looking to buy your low-cost marine technology!' with the Synchro logo. Below, it states: 'We aim to procure \$350,000 of low-cost marine technologies to scale solutions that meet ocean management and decision-making needs.' A section titled 'What is low-cost technology?' lists criteria: 'Costs are substantially lower than products with the same or similar functionality.' and 'Tools, devices, or systems designed to be affordable and accessible to a wide range of users. Platforms, sensors, and samplers will be considered.' It also notes: 'Technology must be ready in the volumes quoted at the outset, or ready for manufacturing, pending Synchro procurement.' and 'Subscription, leasing, and data buying/service models are of interest. Ongoing costs will also be considered such as essential maintenance and calibration.' At the bottom, it says: 'Click here for more details and submission information. Submissions due by January 31, 2024.' Logos for Stanford Ocean Solutions, Monterey Bay Aquarium Research Institute, and the Central & Northern California Ocean Observing System are at the bottom. A small paragraph at the very bottom describes Synchro's mission to foster innovative ocean observation technologies.



Integration Labs requirements

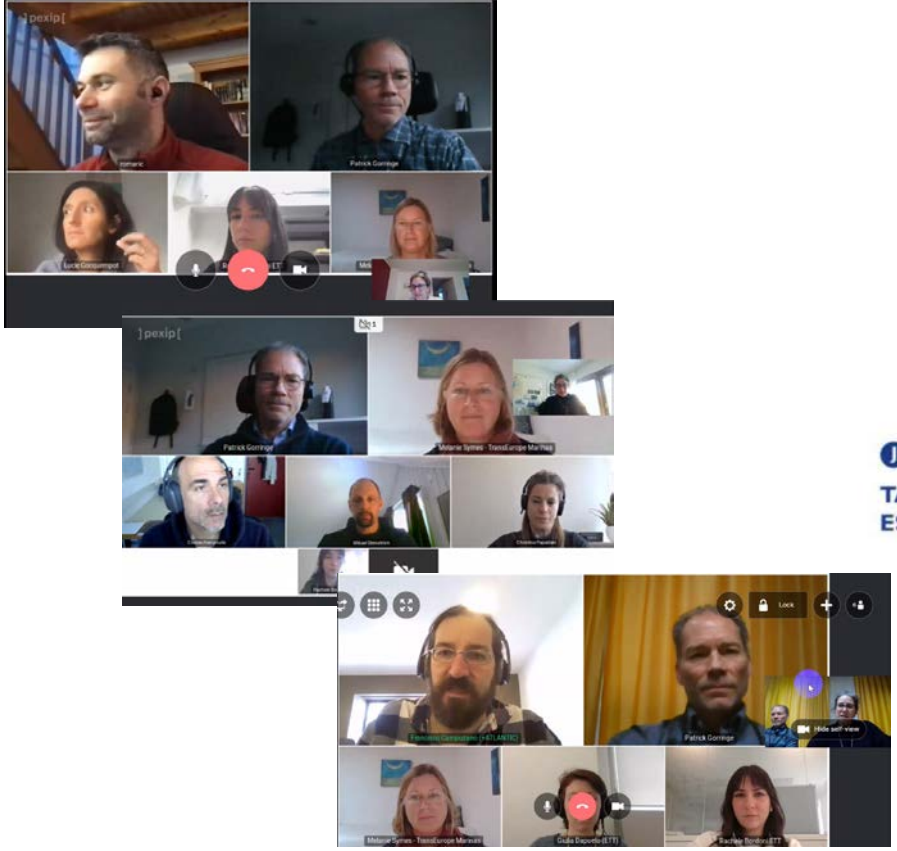
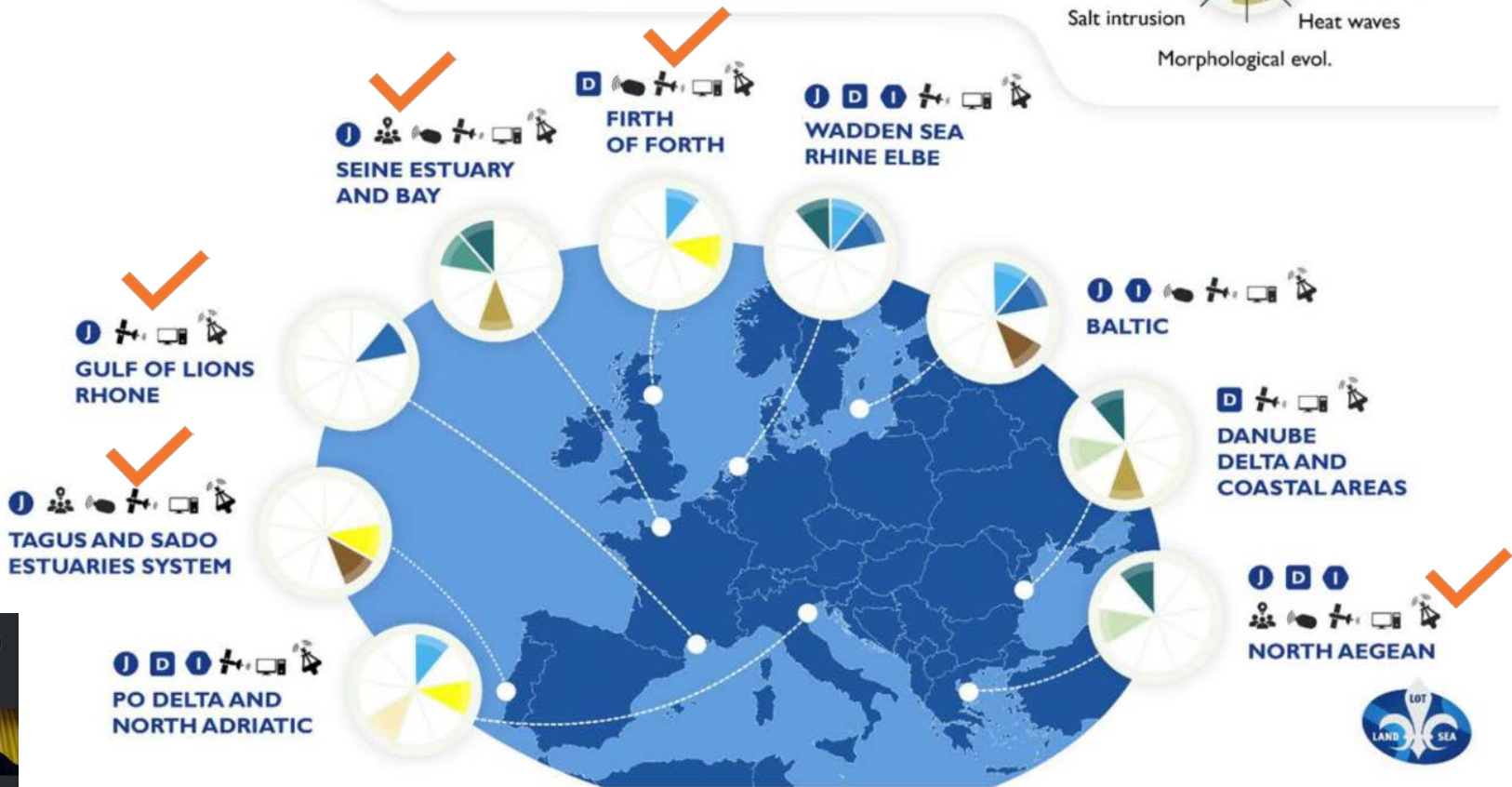
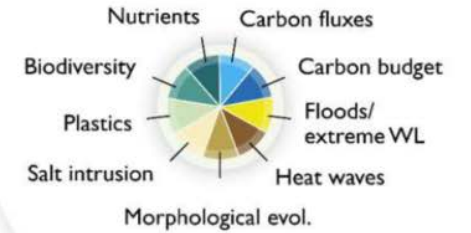


- 1-h interviews with 5 LILs
- 4 more to be schedule in April
- Videos for internal use
- Minutes available
- Analysis in April, fine tuning May

INTEGRATION LABS

LEGEND

- 📍 JERICO-RI
- 📍 DANUBIUS-RI
- 📍 ICOS-ERIC
- 👤 Citizen science
- 📡 Low-cost sensors
- 🚁 Earth observation
- 💻 Numerical modelling
- 🔬 In situ observation



Low-cost technology purchase process



From the catalogue of low-cost tech and communities → **Selection of low-cost technologies**

Procurement process (Task 4.5):

- establishment of a tender procedure
- setting up of expert panels for project evaluation and selection
- prevention of any conflicts of interest
- ...



Ensure agreement between the project coordination and each institute in order to manage the proprietary issues.

As the participants engage in RI (DANUBIUS, JERICO and ICOS) task 4.5 will encourage the participants to use **Transnational Access or similar mechanisms** to make their facilities available to the wider community.

Let's observe together!

Visit landsealot.eu

Be part of the conversation  



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Lorum ipsum