

Report from the Chair: Session 2 (1)

MRI complementary uses for monitoring and research

Monitoring and research are part of the same knowledge acquisition process.

What happens, when EC budget to research infrastructure stops abruptly ?

- The networking is more difficult .
- Few permanent positions for previous post-doc and for technicians

What happens when local monitoring stops: valuable time series are interrupted.

Laurent Mortier - Open Ocean Observation - SOCIB: Multi-platform distributed and integrated facility for new kinds of ICZM assessments and policies, combined obs. facilities in Balears.

Set-up Science priorities at mesoscales, submesoscales which can be assessed by different monitoring tools e.g. gliders

Glider operations for coastal studies for revealing physical variability and ecosystem response:

The overall aim is to use and integrate those different tools for **monitoring and research**.

Need to harmonise monitoring methodologies and standards among FP initiatives

In situ data automated, real-time => new mature relations between models and data

3 keys drivers : scientific needs, strategic societal needs and techno drivers

Towards coordination in West Med .

Do more multidisciplinary monitoring and research with each infrastructure.

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MRI complementary uses for monitoring and research

- **CEFAS - Multiple Uses of coastal and shelf sea observations (JERICO context)**

From RI to users, with a feed back loop to IR to improve the measurements

Fixed platforms irregularly distributed within EU (UK and Ireland: wide range of platforms, developed over time by accident rather than design), more physical observations compared to biogeochemical properties

Similar work in progress for gliders/ferryboxes

Fisheries are needing monitoring effort, well organised and funded (DCF), an example to develop for other env. issues of core importance

Smart buoys: physical and BioGeoChem observations: instruments on moorings to capture dynamics of plankton blooms and nutrient drawdown

Also used for validation of remote sensing and ecosystems models

Pelagic observation combined with fisheries cruises (ferrybox, CTD) for MSFD needs

Applications EMDONET + ferry box cruises + Myocean: detection of fronts and productivity

New tools: map of phyto activity using ferrybox on fisheries survey vessel

How to integrate all initiatives to gather info on EU shelf seas observing systems?

Many uses for MSFD descriptors 7, 5, 1, 4, 6 - Potential commercial/industrial uses (energy sector) based on observing systems

Optimise the use of pCO₂, nutrients, acoustic sensors etc. to feed new developing models.

More integration of RI with policy driven monitoring (ICES, MSFD,...)

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MRI complementary uses for monitoring and research

EMBOS

Marine Biodiversity research is diverse but really fragmented

BIOMARE and MARBEF catalysed integration mainly on soft seafloor species.

Aim: establish a pan EU network of marine biodiversity observatories in order to assess impact of biodiversity change on ecosystems; set up early warnings - Test feasibility on some sites.

EMBOS is concerned by MSFD, early warning systems (alien sp.) with then a role of **monitoring**: An early warning system / invasive species (example : *Marezzellena*)

Seems to be gaps in the map. But we know that each nation has a monitoring policy with many and measuring sites.

