



Sharing Research Infrastructures Experiences from two Pilot Actions

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Research Infrastructures in Ocean Sciences

- Research Infrastructures (RIs in marine sciences essential for studying, observing and understanding the ocean and its processes.
- RIs (research vessels, underwater vehicles, satellites, in situ data acquisition systems, marine data centres, etc.) very costly, esp. in extreme and remote environments.
- Access key to RIs, key to conduct research!
- Therefore, JPI Oceans seeks to:
 - Develop a common vision for marine research infrastructure use and access
 - Set-up common procurement strategies and develop common business plans
 - Strengthen land-based facilities and develop in situ testing sites



PILOT ACTION: Ecological Aspects of deep-sea mining



Pilot Action: Ecological aspects of deep-sea mining

- 11 member countries (DE, BE, FR, IT, NL, NO, PL, PT, RO, SE, UK).

Aim

- Integration of national research activities and joint use of infrastructures.

Objectives

- Jointly analyse the long-term ecological impacts of deep-sea mining and devise monitoring strategy.
- Ultimately, make common recommendations to policy-makers, industry and the ISA.



Pilot Action: Ecological aspects of deep-sea mining

Activities

- Germany has offered 118 days on the *RV Sonne* for a joint cruise in the Pacific.
- Scientists were tasked to draft a cruise proposal.
- Researchers from 25 institutes are jointly studying:
 - Environmental status of polymetallic nodule habitats in the DISCOL Area
 - Implications for future nodule mining activities in the CCFZ

Project duration

- Jan. 2015 – July 2018, including 3-legged cruise

Budget

- Approx. € 9.7m (total funding: ~6.2m €; + 118 ship days)



Benefits

- Quick implementation.
- Alignment and integration of national research activities around a common goal.
- Integration of new and ongoing research.
- Community building.
- Cost-cutting.

Challenges

- New process for funding.
- Building a consortium / getting the „most appropriate experts“.
- Securing funding at national level.



PILOT ACTION

Multi-use of infrastructures for monitoring in the North Sea



Multi-use of infrastructure in the North Sea

Background

- MS have obligations to collect data and monitor the status of their seas (MSFD, CFP).
- Very costly, therefore, a better integration and collaboration needed

Aims

- Testing the process of designing a cross-border integrated monitoring strategy.
- Jointly collecting data required by European and national legal obligations;
- Jointly collecting data for research purposes;
- Increasing the value of each Euro spent nationally on marine infrastructure and research by smart coordination and collaboration;
- Increasing experience with joint data collection, storage and processing.

Benefits

- Reducing the costs of monitoring. (Cost-Benefit-Analysis in progress).
- Freeing up resources for research.
- Standardised data collection and reporting.

Challenges

- Coordination with existing initiatives difficult
- Scaling-up to integrated monitoring programme



Conclusions

Sharing of infrastructures:

- Useful tool to align, integrate and enable national research.
- Cost-effective measure which can free up new research money.
- Enables effective and collective response to policy challenges.
- Requires flexibility in national funding procedures.

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THANK YOU

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