EuroSea achievements regarding Ocean Best Practice in support for the Ocean Information Value-Chain (OIVC)

Presented by

J. Karstensen GEOMAR, Kiel, Germany

EuroSea/OceanPredict Workshop#2

Best Practices in EuroSea - overview

- Best Practices mentioned 65 times in EuroSea proposal
- Most explicit in Project
  - WP1: improve discovery and access to Best Practices
  - WP3: improve Best Practice documentation observational networks
  - WP8: legacy ... deliver Best Practice knowledge & technology transfer
- In "Expected Impact":

> EuroSea will transfer knowledge to different target groups from scientists to stakeholders in Europe and beyond. One important component implemented by **WP1,3,6,8** is the development and articulation of ocean observing Best Practices (BPs) freely available on open access repositories (D1.3, 3.11, 6.3, 8.10). BP documentation is an essential

- Support to and leverage from IOC-Ocean Best Practices System (IOC-OBPS) project

www.oceanbestpractices.org

Example WP3: Network Integration & Improvement

EuroSea

Objective:

Improve integration of nations observations for "optimal" use in European (EuroGOOS) and contributing to global (GOOS) initiatives

- Structure along coordination groups:
  - Observational networks (7)
  - Data flow and integration
  - Augmented/OMICS observations
  - European Vision of Ocean observing Integration

	EuroGOOS	GOOS
HF Radar	HFRadar EuroGOOS Task Team	Global HF Radar Network
Glider	Glider EuroGOOS Task Team	Ocean Gliders
Fixed Platforms	Fixed Platforms EuroGOOS Task Team	OceanSITES
Autonomous Surface vehicle	*Not established yet*	
Profiling floats	Euro Argo	Argo
Ships	FerryBox + ... EuroGOOS Task Team	
Tide gauges	Tide Gauge EuroGOOS Task Team	GLOSS
Data issues	*EuroGOOS DATAMEQ WG*	*Various*
OMICS	*EuroGOOS BIOWG*	*e.g. GOOS BioEco/MBON*

Network	Coordination	Best Practice	Integration	Data
Argo	✓	✓	✓	✓
Gliders	✓	✓	✓	✓
Vessels	✓	✓		✓
Fixed Platforms	✓	✓	✓	✓
Tide Gauges	✓	✓		✓
HF-Radars	✓	✓		✓
ASV's	✓	✓		

Example: Best Practice for one "building block"

What is a mature observational network?
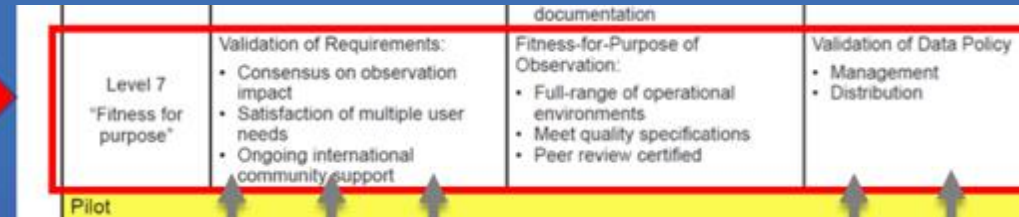
(FOO; Lindstroem et al. 2012)

- Coordinates a defined community

- Open to all operators/interest groups

- Long term (>10 years) sustained coordination-needs identified

- Best Practices strategy

- Internal coordination guided by expertise/supported technical coordinator

- FAIR data policy

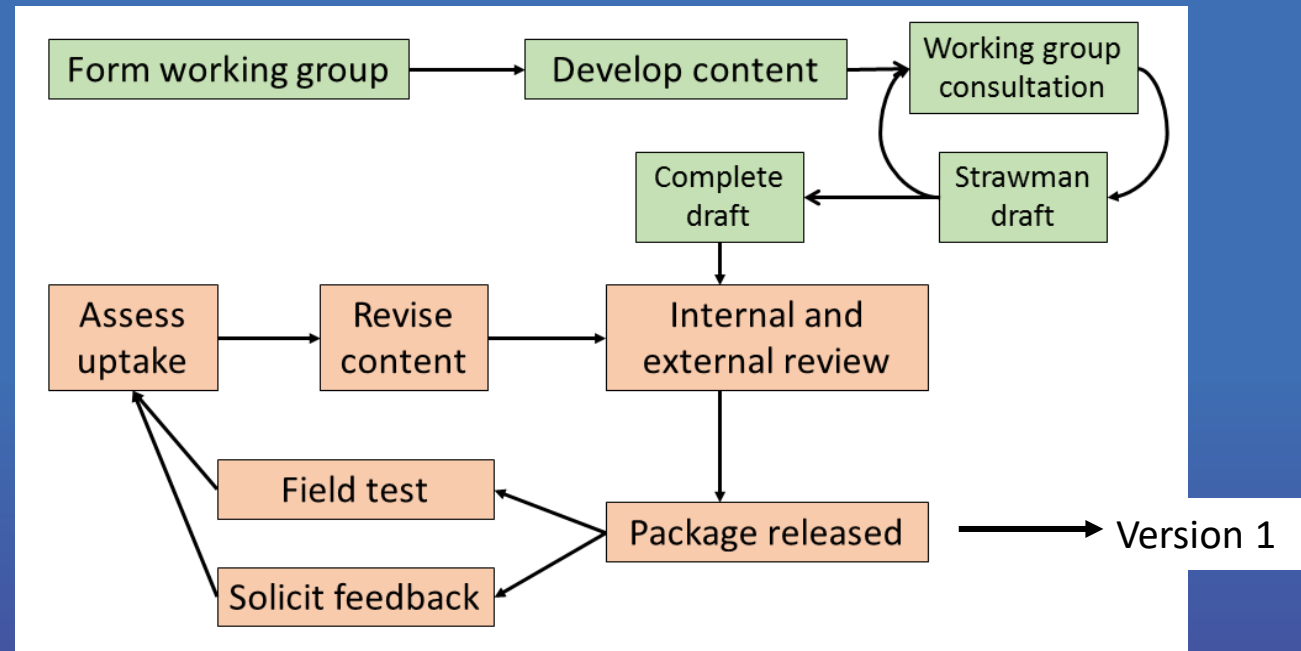- Specification and governance structure documented (ToR)

Creation & update Best Practices

- The "Convergence Process"

Hero!!

Collaboration

Form working group → Develop content → Working group consultation

Strawman draft → Complete draft

Complete draft → Internal and external review

Assess uptake → Revise content → Internal and external review

Internal and external review → Package released → Version 1

Package released → Field test → Assess uptake

Package released → Solicit feedback → Assess uptake

- *EuroSea prime example:* Convergence of Underwater glider SOPs

Best Practices Gap Analysis & Barriers for Adaptation

- Gap analysis
  - **Identification of gaps:**
    -> must be done by Community /experts
  - **Filling the gaps -> EuroSea years:**
    Incentives and money to take action (formation of expert groups, convergence, …)
  - **Future:**
    it remains to be seen! Coordination groups exist (EuroGOOS, EOOS?, OCG) but without adequate funding for the tasks needed

- Barrier for Adaptation
  - **Major issue:**
    Exclude/no consider experts in "Best Practices convergence process", practitioners are not aware of practices
  - **Consequence:**
    Best Practices are not used! No trust in the practices ("my way in doing it is superior to what has been written")
  - **Other factors:**
    Technical & Capacity limitations
    Exclusive branding creates barriers

Overcoming silos in
Best Practice access & dissemination

- Various ocean related coordination groups manage "own" Best Practices systems (e.g. FAO, ICES, WMO, GOOS) -> Methodological management Systems (MMS)

- Copy documents between MMS -> not a good solution! (update, storage,..)

- Solution:
  Federate network Ocean Practices for the Decade Federated Network (OPFN)

  see OceanInfoHub.org
  for the Implementation

OPFN is a Federated Network for MMS

Best Practices in EuroSea summary #1

- EuroSea demonstrated what can be achieved if funding exist for what "normally" is volunteers work only...

- Various EuroSea demonstration & communication activities nicely exemplifies that:

  - *only data with Best Practices attached becomes truly interoperable and **considered for any application** in the Ocean Information Value-Chain (OIVC)*

  - *Best Practices are the optimal way to share knowledge needed to efficiently execute all steps in the OIVC*

Best Practices in EuroSea summary

- Creation and care of Best Practices is one of the few key activity of regional, European, & global coordination groups

- What is a "comprehensive Best Practice"?

  - Best practices should make it possible to choose an approach to an activity (measurement, product creation) that produces the best result **under the given conditions**

  - Best Practices are created by experts – but: our conception of the term "expert" needs to be transformed to include the **entire spectrum from high tech to low cost technologies experts**

  - Making use of Standards (incl. Reference material) if possible

Thank you

For more information

www.eurosea.eu
eurosea@geomar.de

@Euro_Sea

Project coordination

GEOMAR Helmholtz Centre for Ocean Research Kiel
Duesternbrooker Weg 20, 24105 Kiel, Germany
Project leader: Toste Tanhua
Project manager: Nicole Köstner
Finance manager: Anja Wenzel