6th IMP-MED 6th WG on IMP

Virtual Knowledge Centre (VKC) on marine and maritime affairs in the Mediterranean – Feasibility Study

Phase 1: Inventory of existing marine and maritime-related Knowledge Management Systems in the Mediterranean Region

Brussels, 30th-31st October 2013

IMP-MED Project Team

www.imp-med.eu

Summary

- Introduction

- Methods

- Overview by main feature

- Analysis of strengths and weaknesses

- Conclusions & Recommendations

- Way Forward ?

INTRODUCTION

Virtual Knowledge Centre – Scope and background

➢ **The issue** : Lot of information exists on maritime information in the Mediterranean but it is scattered and not easily accessible

➢ **The proposed solution** : *The supporting working document for the 12th FEMIP Conference "Mediterranean blue economy: enhancing marine and maritime cooperation proposed a one-stop-shop for marine and maritime information to improve synergies across different initiatives and projects, in the form of a web-based portal"* ==> A **Virtual Knowledge Centre (VKC)**

➢ **IMP-MED Role** : Conduct a feasibility study for the creation of a Virtual Knowledge Centre (VKC) on marine and maritime affairs in the Mediterranean.
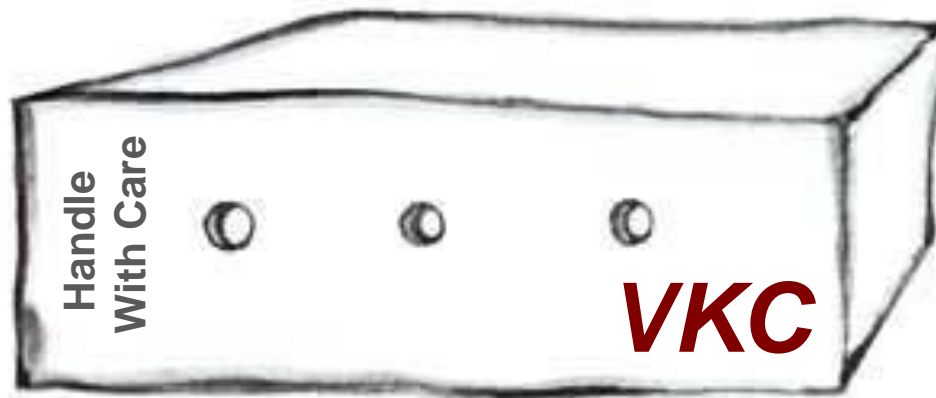
What is a VKC ?

VKC is a box !?

Handle With Care

VKC

VKC Feasibility Study - Phase 1: Objectives

Main scope of the Feasibility Study – Phase 1: contribute to the definition of what a VKC should provide to bring added value to the existing knowledge available on-line.

Main purpose of the Inventory: identify and describe the main features of the thematic Knowledge Management Systems (KMS) sharing marine and maritime information on-line in the Mediterranean region which have the characteristics we are looking for in a VKC.

Rationale of the Inventory:

➢ *avoid investing resources in a VKC which duplicates existing KMS;*

➢ *identify potential synergies and complementarities with existing KMS to improve sustainability and efficiency of the VKC;*

➢ *learn lessons from existing good and bad practice and integrate them in the VKC.*

METHODS

Selection of systems

- Criteria:

  ➤ Structural criterion*: KMS need to contain, organise and make available to the users a collection of **information coming from different sources**;*

  ➤ Thematic criterion*: KMS need to be related to **marine and maritime themes**;*

  ➤ Geographical criterion*: KMS have to cover the **Mediterranean region**.*

Number of systems inventoried: **45**
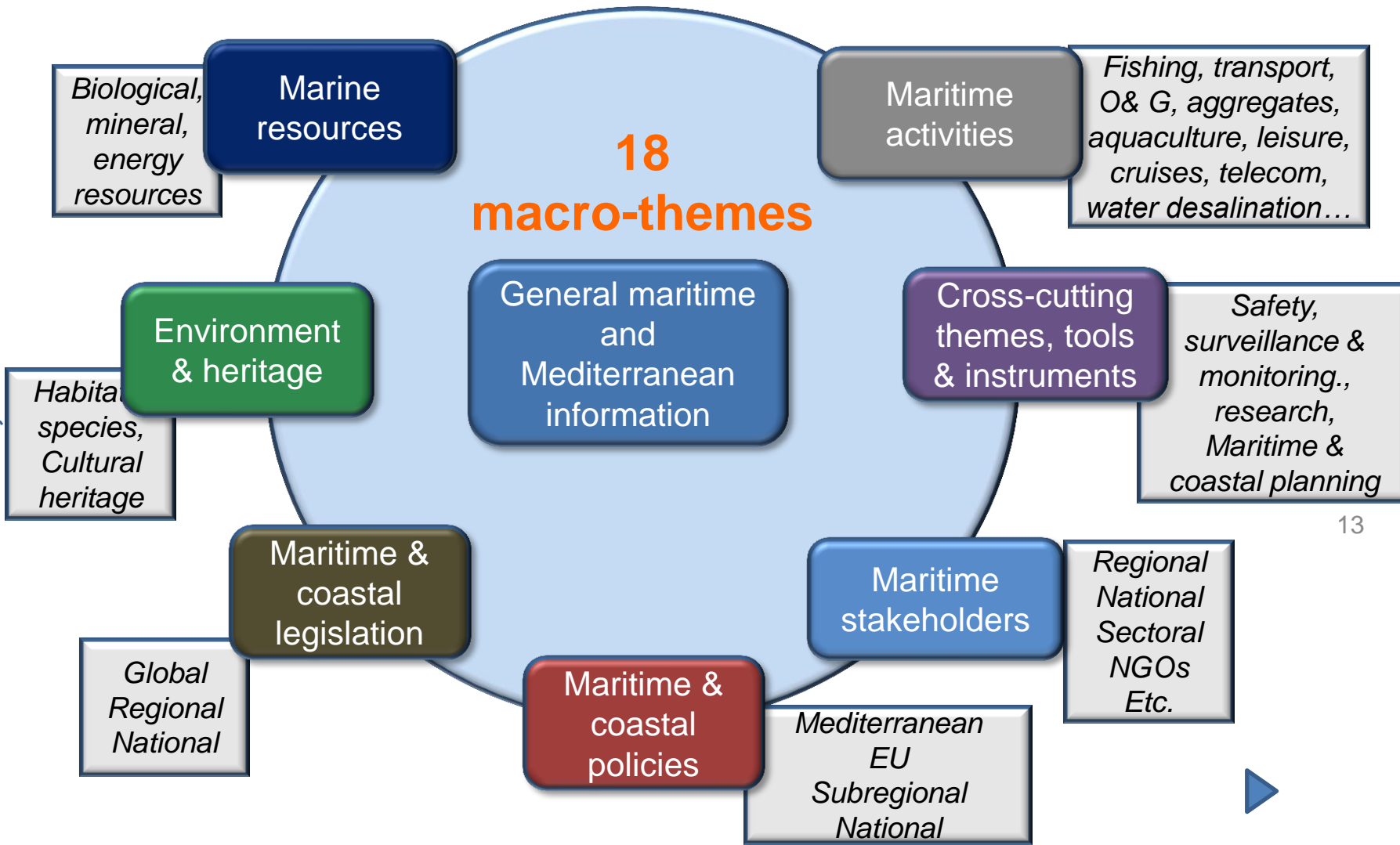
16 can be described as "systems of systems"

Note: the inventory doesn't want to be an exhaustive review of all existing KMS and judge the quality but mainly a selection of the most relevant ones for the purpose of the study

Note: it is not necessary that it is **exclusively** designed for the Mediterranean region

9

MAIN FINDINGS

Thematic coverage: are the main themes covered?

18 macro-themes

General maritime and Mediterranean information

Marine resources
Biological, mineral, energy resources

Maritime activities
Fishing, transport, O& G, aggregates, aquaculture, leisure, cruises, telecom, water desalination…

Environment & heritage
Habitat species, Cultural heritage

Cross-cutting themes, tools & instruments
Safety, surveillance & monitoring., research, Maritime & coastal planning

Maritime & coastal legislation
Global Regional National

Maritime stakeholders
Regional National Sectoral NGOs Etc.

Maritime & coastal policies
Mediterranean EU Subregional National

13

VKC Feasibility Study - Phase I:
Overview of the inventory by main feature

Thematic coverage:

- *No systems cover all the themes and topics over the entire Mediterranean region;*
- *The nature of the available information largely differs but all the macro-themes seem to be covered.*

- *Multi-thematic (40%) or focused on 1-2 macro-themes (60%)*

14

Geographical coverage:
is the Med region covered?

Global with good or partial coverage of the Mediterranean: 54 %

Mediterranean (whole or groups of countries) : 24%
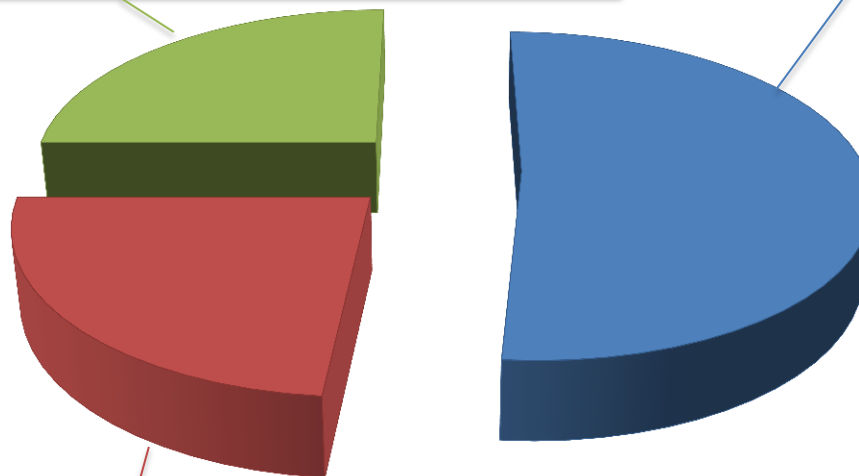
Information on non-EU Mediterranean countries can be found in 80% of the inventoried systems but the real quantity and nature of information available is usually limited.

Country level (EU MS including Mediterranean): 22%

Information types and formats: in which formats is the information available?

> *Approx. 60% of systems contain a miscellaneous of information formats (data, metadata, maps, documents, etc.)*

VKC Feasibility Study - Phase I:
Overview of the inventory by main feature

Data : 65% of systems

NEW   MODIFY

Statistical Query Results

Parameters selected **[+]**   Special values explanation **[+]**

Capture: Quantity (t)

EXPORT   GRAPH

1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
27 300	23 100	29 100	22 798	20 962	25 898	21 956	21 952	18 578	22 100	25 500	30 400	21 500	16 900	17 300	18 300	20 350	21 150	18 250

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Metadata : 60% of systems

Latitude 1	36.909333
Longitude 1	11.198333
Measuring area type	point
WHEN?	
Start date	20090316
Start time	11:49:00
End date	20090316
End time	11:49:00
HOW?	
Instrument / gear type	CTD
Platform type	research vessel
Cruise name	TU882009GH031 2009
Alternative cruise name	TI882009GH031
Cruise start date	20090120
Station name	23
Alternative station name	23
Station start date	20090316
WHO?	
Originator	Institut National des Sciences et Technologies de la Mer – INSTM
Data Holding centre	Institut National des Sciences et Technologies de la Mer – INSTM
Project name	Southern European seas: assessing and modelling ecosystem changes
HOW TO GET THE DATA?	
Data Distributor	Institut National des Sciences et Technologies de la Mer – INSTM
Access/ordering of data	web data access with registration
Internet access/ordering	
Access restriction	no access
CDI-METADATA	
CDI-record id	1585743
CDI-record creation date	20130723
CDI-partner	Institut National des Sciences et Technologies de la Mer – INSTM

Ex. SeaDataNet

18

Documents : 65% of systems

1 2 3 [Next]   **Refine Your Search**

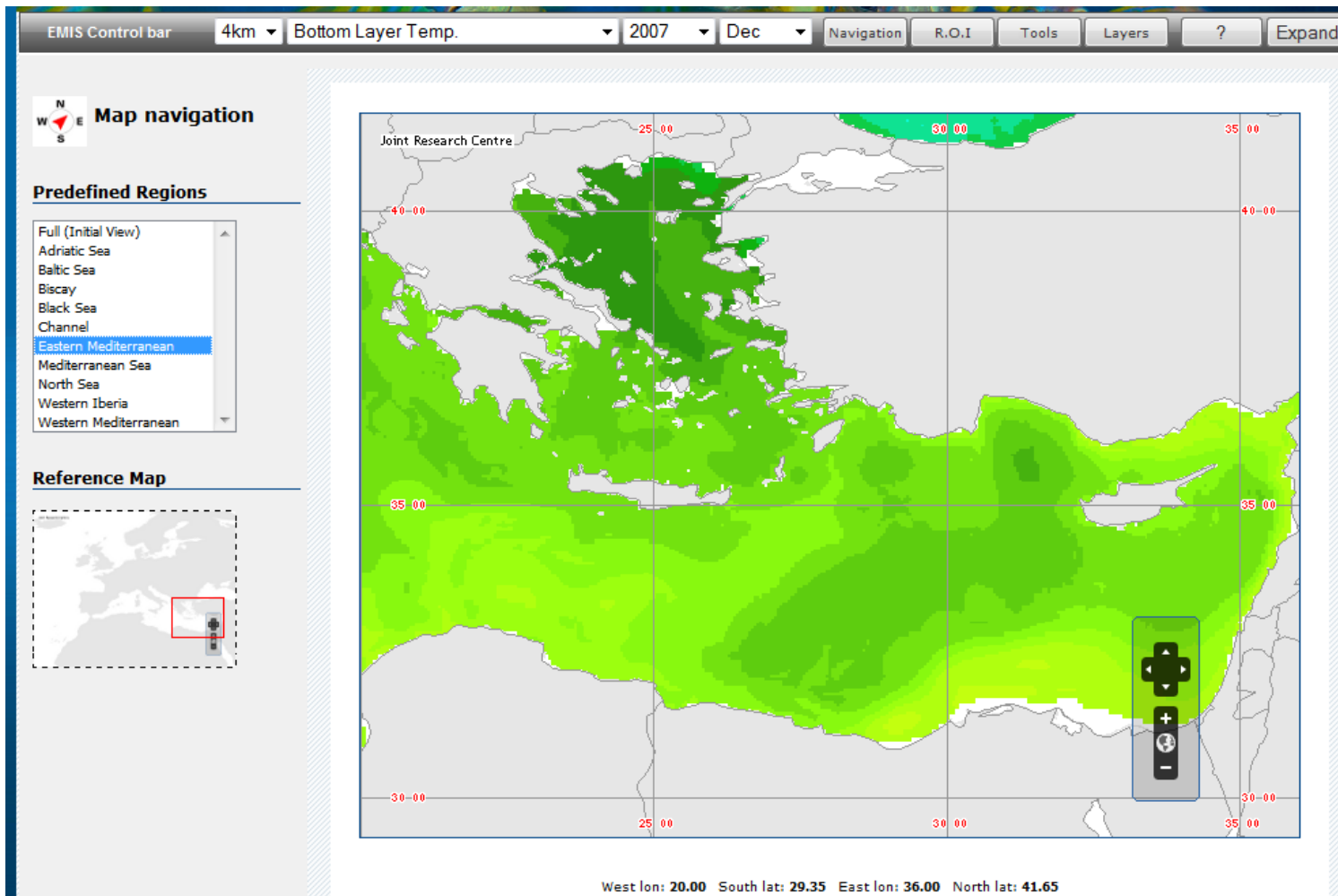| Title	Lang	Size	Type
(1) The need for foreign investment in the Mediterranean region: the exemple of air and sea transport infrastructure *Réseau Euroméditerranéen d'Agences de Promotion des Investissements (ANIMA), 2005* *Fabrice Hatem*	en	1.1 Mb	Presentation Slide
(2) Les systèmes d'information communautaires portuaires ou CCS *INRETS pour la conférence REG - MED, 2004* *Marielle STUMM*	FR	162 Kb	Report
(3) Groupe de travail EuroMed sur le transport maritime: Deuxième réunion du Sous-Groupe, Politique maritime, Ports et Navigation à courte distance" *EuroMed Transport Project, 2004*	FR	122 Kb	Report
(4) Short Sea Shipping *Bureau de Promotion du Transport Maritime de Courte Distance (Short Sea), 2003*	FR	238 Kb	Presentation Slide
(5) EuroMed Working Group on Maritime Safety: Second meeting of the Sub-Group on "Maritime Policy, Ports and Short Sea Shipping" *EuroMed Transport Project, 2003* *Anne-Charlotte Bournoville*	EN	120 Kb	Report
(6) Groupe de Travail EuroMed sur la Sécurité Maritime: Deuxième réunion du Sous-Groupe Politique maritime, Ports et Navigation à courte distance" *EuroMed Transport Project, 2003* *Anne-Charlotte Bournoville*	FR	122 Kb	Report
(7) Sous-Groupe de Travail EuroMed sur la Sécurité Maritime: Deuxième réunion (Procès-	FR	102 Kb	Report

Ex. EuroMed Transport Library

VKC Feasibility Study - Phase I:
Overview of the inventory by main feature

GIS/Maps : 60% of systems

Ex. EMIS

Governance: how is the system managed?

Medin for example has a dedicated tool to insert and edit metadata and guarantee standardised quality check

Email: medin.metadata@mba.ac.uk

Telephone: 01752 633291

Login

Email

example@oceannet.org

Password

MEDIN is a partnership of UK organisations committed to improving access to marine data. The Medin Discovery Metadata Editor allows organisations to enter information on their dataset which will then be searched using the MEDIN portal. Once the metadata has been created it may be exported as MEDIN compliant XML. MEDIN metadata is compliant with the UK Gemini and European INSPIRE standards.

Before creating metadata you must log in - this allows you to return to a metadata record and edit it again in the future.

Register for an account

Login

MEDIN Discovery metadata standard version 2.3.7

Copyright MEDIN 2013

Sustainability:

- Duration and funding:

Approx. 10% not classified
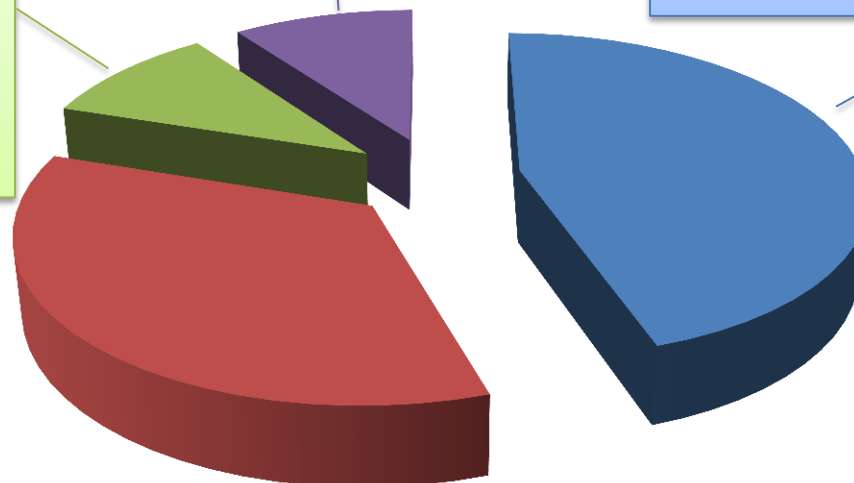
45% are **permanent** and managed directly by **international institutions / organisations** (e.g. EU Agencies, DGs, UN Agencies, REMPEC, etc.), constituting part of their regular activities

Around 10% are **sponsored** and managed by **privates** and funded even by **fees and advertisements**

Approximately 35% are **temporary** as funded under **projects/programmes**

26

GAP ANALYSIS

Userfriendlyness: is the system user-friendly at first look?

Structure is difficult to understand and access to information is complex

Intuitive and the structure is well-designed. FAQs, guidelines, tutorials are also provided.

... evaluate ... ly users understand the system structure and how to search and have access to inf...

Structure takes time to get used to but becomes rapidly effective

10%

40%

50%
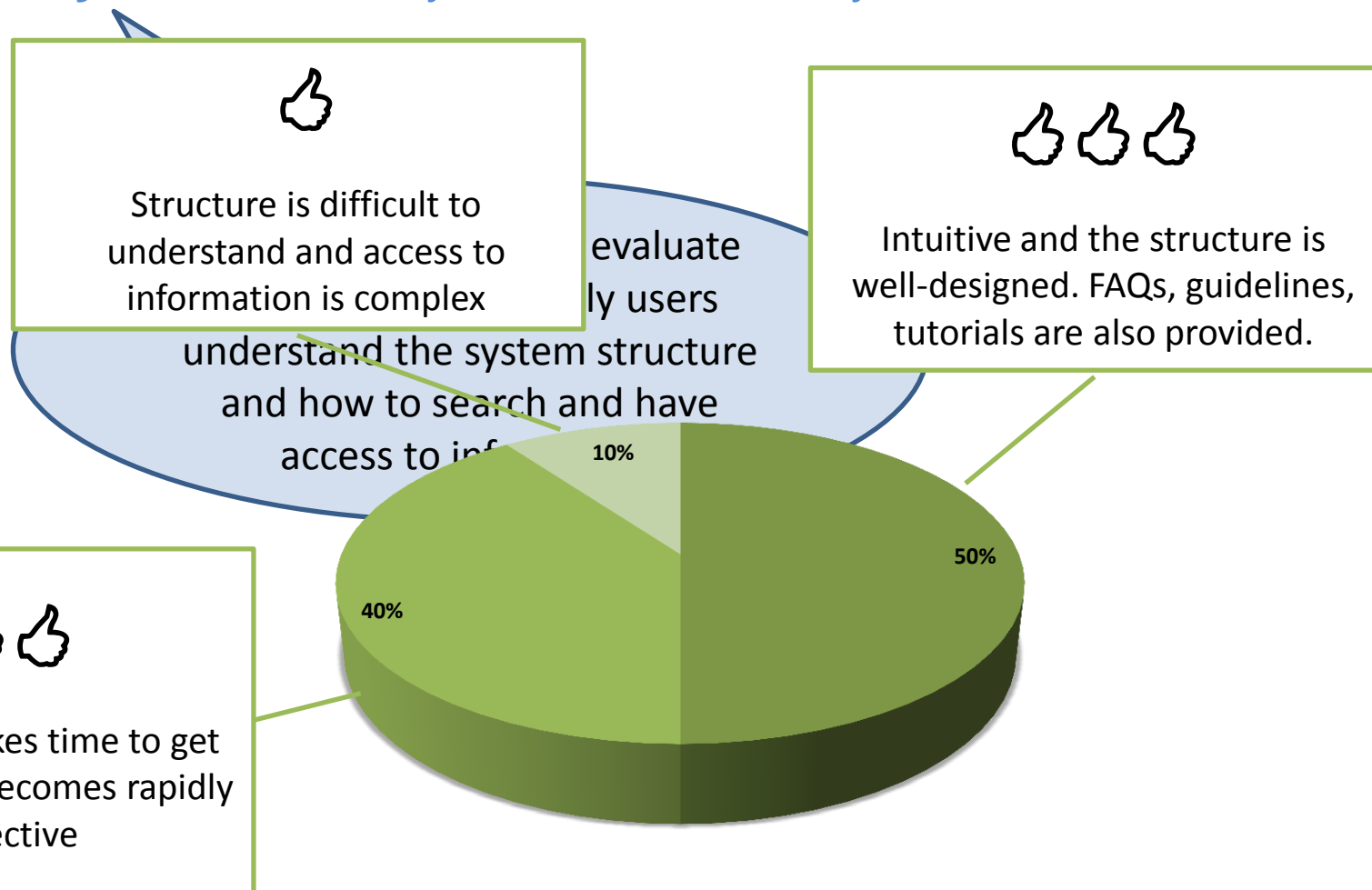
VKC Feasibility Study - Phase I: Analysis of strengths and weaknesses

Userfriendlyness: is the information useful to **decision-makers**?

LOW

Information not useable by decision makers

(e.g. raw data, scientific articles…)

HIGH

Information useful and immediately usable

(e.g. policy briefs, thematic maps)

11%

42%

47%

PARTIAL

Information can be useful to decision makers but needs additional processing

29
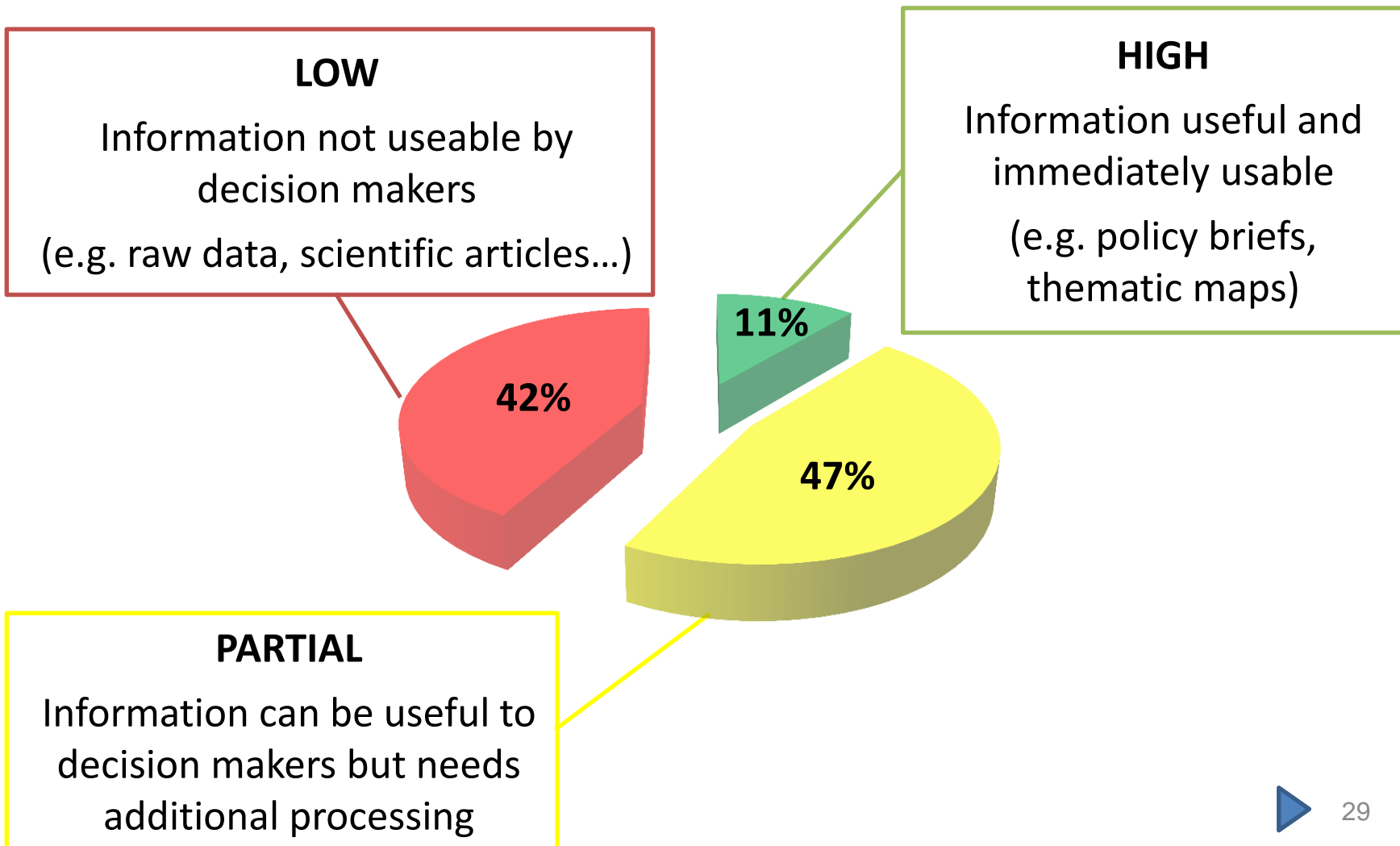
VKC Feasibility Study - Phase I: Gaps analysis

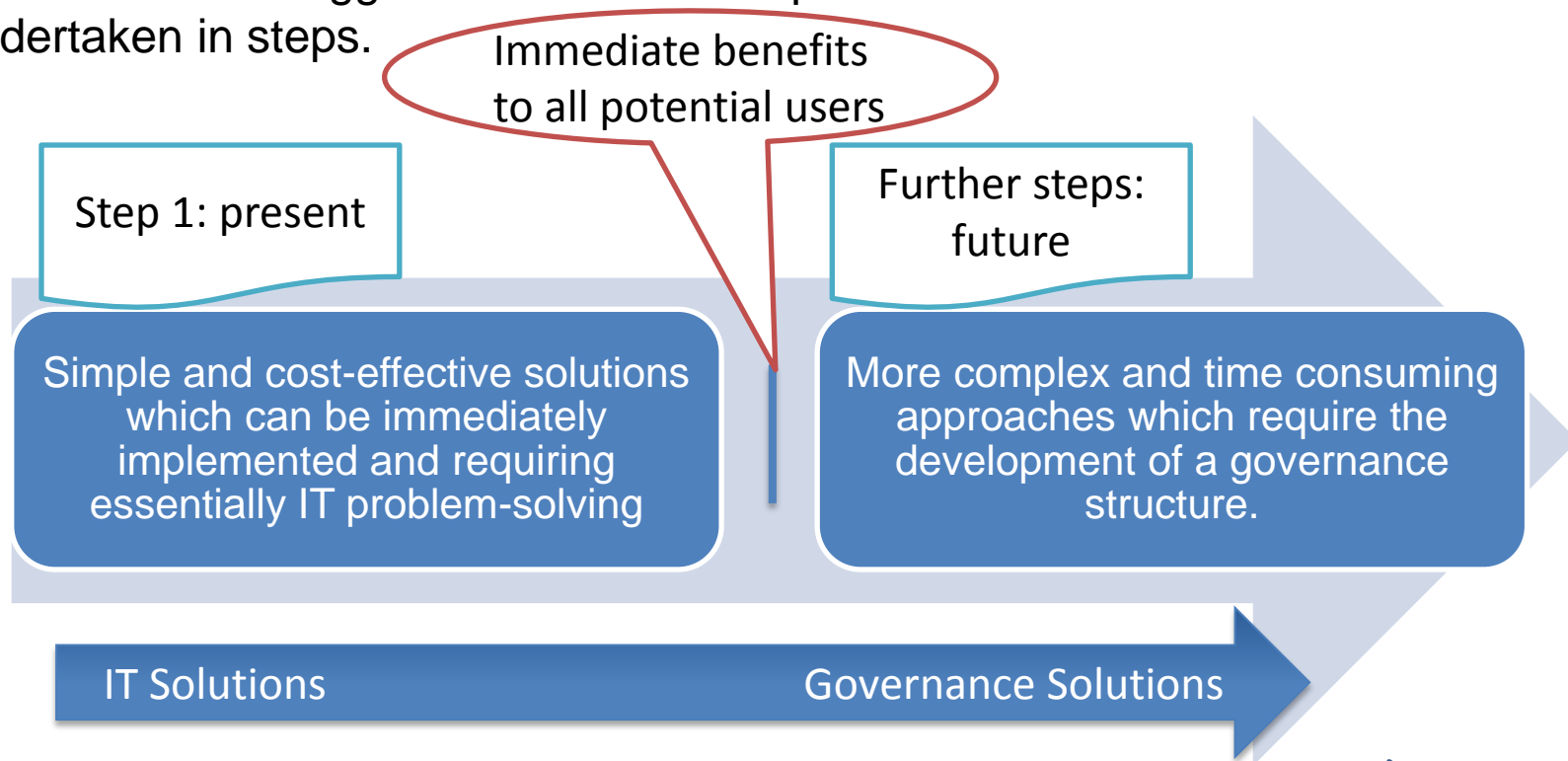| Macro-themes	Geogr. coverage	Thematic coverage	Inform. formats
Fisheries/ Marine resources	✓✓✓	✓✓✓	✓✓✓
Aquaculture	✓✓	✓✓✓	✓✓✓
Oceanography	✓✓✓	✓✓✓	✓✓✓
Transport/ shipping	✓✓✓	✓✓✓	✓✓✓
Maritime safety/ surveillance/ security	✓✓	✓✓✓	✓✓
Tourism	✓✓	✓	✓✓
Mineral resources – Oil & Gas	✓✓	✓	✓✓✓
Renewable Energy	✓✓✓	✓✓✓	✓✓✓
Telecommunication	✓✓	✓✓✓	✓✓
Scientific Research	✓✓	✓✓✓	✓✓
Biodiversity and Ecosystems	✓✓✓	✓✓✓	✓✓✓
Environment	✓✓✓	✓✓	✓✓✓
Heritage	✓✓✓	✓✓✓	✓✓✓
Planning	✓✓✓	✓✓	✓✓✓
Legislation	✓✓	✓✓✓	✓✓✓
Maritime Stakeholders	✓✓✓	✓✓✓	✓✓✓
Jobs and education/training	✓✓	✓✓✓	✓
General maritime and Mediterranean info	✓✓	✓✓	✓✓✓

CONCLUSIONS & RECOMMENDATIONS

VKC Feasibility Study - Phase I: Suggested way forward

The critical analysis reveal that the **real constraints in the development of a VKC are not technical in nature** (i.e. development of a portal, IT infrastructure, loading data etc.) **but essentially related to the governance** of the VKC itself.

This consideration suggests that the development of an IMP-MED VKC should be undertaken in steps.

Immediate benefits to all potential users

Step 1: present

Further steps: future

Simple and cost-effective solutions which can be immediately implemented and requiring essentially IT problem-solving

More complex and time consuming approaches which require the development of a governance structure.

IT Solutions

Governance Solutions

35

VKC Feasibility Study - Phase I: Suggested way forward

Which is the first step?

Step 1: present

Uploading the results of the existing inventory on maritime themes in the Mediterranean on a dedicated VKC Portal making all the information available in the report easily searchable on-line

Questions to be addressed

- **Who** would **host** the new VKC Portal ?
- Would **agreements** be required with the owners of the inventoried KMS **for publishing** information on the VKC Portal ?
- Which **copyright and disclaimer** regulations should be applied?
- Would **evaluations** (e.g. userfriendliness) be **acceptable** for publishing on-line ?
- How would the VKC Portal be funded to guarantee **sustainability, neutrality and independence**

VKC Feasibility Study - Phase I: Suggested way forward

Further steps: future

More complex and time consuming approaches which require the development of a governance structure

- Include **further systems** not inventoried and provide web-links for **other sources of information** (e.g. portals or other sources of information) to improve completeness and fill the existing gaps in the thematic coverage;

- Promote the **contribution and the integration of all Mediterranean countries** and of the whole basin to the existing systems towards an improvement of **already existent instruments**;

- **Keep alive systems** which have (or would) **run out of funding** (potentially abandoned);

- **Design new systems to address specific gaps** (e.g. on specific themes);

- Undertake a focused **needs assessment** study to identify what kind of information different **categories of users** would like to see on the VKC and for what purpose;

- **Explore options for a self-funding mechanism** for the VKC based on contributions from users or data providers (depending on sector and type of information).

VKC Feasibility Study - Phase I

THANK YOU FOR YOUR ATTENTION