



e·nventory

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Deliverable D4.3 Prototype web platform

Abstract: Deliverable D4.3 provides the final set of requirements, functional specifications and user guide for the **European e-Infrastructures Observatory** web platform. It also includes the results of the formative usability and accessibility tests that were conducted with the web platform. This deliverable also serves as a technical reference for any follow-up (production-level) version of the portal after the completion of the project.

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Authors:

Maria Roussou
Katerina El Raheb
Dimitris Nastos
Dimitra Keramida
Antonis Lebesis
Yannis Ioannidis
Nektaria Berikou
Nikos Vogiatzis
Jorge-A. Sanchez-P.

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Acronyms

BYOI	Build Your Own Index
CHRON	Chronology
GEN	Generic Requirements
HCI	Human Computer Interaction
IoM	Indicators on Maps
NMAP	Pan-European Networks
SMAP	Stakeholders Mapping
TREE	Treemaps
TREND	Trends

Preface

The **e·nventory** project targets the formation of the **European e·Infrastructures Observatory**, a single-entry-point and one-stop-shop data warehouse, capable of representing multiple primary and convoluted indicators and benchmarks, and a yardstick tool for progress monitoring, impact assessment, post-mortem analysis and ex-ante evaluation of e-Infrastructures at regional and national levels across the European Union and beyond.

The aim of the **e·nventory** project is to carry out a design study that will set the grounds towards the European e·Infrastructures Observatory; through the collection and utilisation of appropriate indicators, the project will be able to monitor the status quo and evolution over time of e-Infrastructures development and communicate all findings to related stakeholders but also to the public-at-large, in a seamless and impartial way.

The **e·nventory** project will carry out extensive consultation with e-Infrastructures stakeholders and research and innovation indicator experts and will extend prior benchmarking efforts (e.g. EARNEST) by including an extensive set of e-Infrastructures components (i.e., computing, communication and services), eventually deploying a prototype web platform dealing with a critically-selected subset of indicators, through intuitive, interactive and user-friendly mappings, plots and graphics.

The project action plan is structured so that it can achieve:

- identification of a core set of benchmarking indicators for the European e·Infrastructures Observatory that will be the baseline for monitoring e-Infrastructures development progress,
- e-Infrastructures stakeholders' feedback and consensus on the proposed structure and functionality of the European e·Infrastructures Observatory, and
- European e·Infrastructures Observatory functionality demonstration through a prototype web platform that will be available to all e-Infrastructure communities and to the general public.

The **e·nventory** project responds to the need of e-Infrastructure stakeholders by delivering a prototype tool to aid impact assessment of related e-Infrastructure initiatives and programmes. In that respect, the user communities that will effectively use the European e·Infrastructures Observatory as a yardstick tool and translate the project outputs into a real influence on e-Infrastructure policy, are the e-Infrastructure stakeholders themselves, including:

- the **European Parliament**, the **European Commission** and **National Governments** that are sponsoring e-Infrastructure initiatives and place a high value in their policy agenda on the impact assessment, post-mortem analysis and ex-ante evaluation, to help design better and more successful future e-Infrastructure programmes;
- **research funding bodies** that plan the development of strategies to address the digital divide and digital opportunity issues and need to utilise and assess the impact of e-Infrastructures contributing to this goal;
- **e-Infrastructure policy bodies** that have a clear mandate of supporting the development and the sustainability of e-Infrastructures and need an impact assessment tool to monitor the progress of achieving their objectives;
- **e-Infrastructure projects** that carry out specific e-Infrastructure activities and need to monitor their impact during deployment as well as retrospectively;
- **scientific/research communities** that are empowered by e-Infrastructures and are eager to comprehend their strengths and weaknesses that influence their everyday work.

High utilisation of the European e·Infrastructures Observatory from the broad e-Infrastructure community is a key measure of the project's impact; therefore, the entire project work plan has been designed to maximize stakeholders' engagement and awareness.

The **e·nventory** project kicked-off in September 2010 and is planned to be completed by August 2012. The project is co-financed by the European Commission's Seventh Framework Programme for Research Infrastructures.

Executive summary

What is the focus of this Deliverable?

The objective of WP4 is to create the necessary tool/web platform, albeit at a pilot/prototype level, through which access will be given to the European e-Infrastructures Observatory. The goal of the portal is to allow for various representation and statistical data aggregation methods, including graphs, distributions, and other visualisation means that will enable accurate and user-friendly utilisation of the e-nventory data repository.

Deliverable D4.3 is the continuation of deliverable D4.2 [9], which documented the requirements and draft functional specifications of the European e-Infrastructures Observatory web platform. This document includes the final additions to the requirements and specifications, as derived from the consultations with stakeholders and the evaluation conducted with representative users. The deliverable also provides the final user guide. This deliverable also serves as a technical reference for any follow-up (production-level) version of the web platform after the completion of this project.

What are the deliverable contents?

Deliverable D4.3 provides the final additions to the requirements, functional specifications and user guide of the European e-Infrastructures Observatory web platform. Specifically, Chapter 1 provides a brief description of the European e-Infrastructures Observatory services, as defined in previous project deliverables. Chapter 2 presents the usability evaluation performed with representative users and the findings per service. Chapter 3 lists the approved change requests. Chapter 4 outlines the final set of requirements and functional specifications as derived from D4.2 and the approved change requests. Finally, Chapter 5 presents the final user guide.

What are the deliverable main conclusions?

The design of any interactive tool is an iterative and evolving process, through repeated design-evaluation-redesign cycles. In this sense, the definition of requirements and functional specifications, and the subsequent design of tools and services, are being formulated continuously, also taking into account users' feedback. The process of studying users while interacting with the platform in a systematic manner yielded useful insights and practical feedback, which was fed back into the development of the platform.

How does this deliverable contribute to the project quality metrics?

This deliverable sets the ground for achieving the following project quality metrics:

- *At least 2 use cases supported by the prototype web platform, i.e. at least 2 different user-group needs addressed through the interactive visualisation of indicators developed.*

How does this deliverable contribute to the avoidance/mitigation/exploitation of the project risks?

This deliverable contributes to the avoidance, mitigation or exploitation of the following project risks:

- *Project strategic objectives not endorsed by eInfrastructure stakeholders;*
- *Project high-level objectives not clear and/or agreed within the consortium;*
- *Not accomplishing effective interactive web visualisation of the information space;*
- *The on-line interactive visualisation tool not being user-friendly enough.*

What is next in the process to deliver the e-nventory results?

- Deliverable D5.4 (M23) will take the form of an inauguration workshop that will demonstrate the European e-Infrastructures Observatory to representatives of the e-Infrastructures community at large.
- Deliverable D5.5 (M24) will provide a final report on the implementation of dissemination and outreach activities, including assessment of their impact on the targeted e-Infrastructures groups.