



European Strategy Forum
on Research Infrastructures

ESFRI WORKSHOP MONITORING OF RIS, PERIODIC UPDATE OF LANDMARKS, USE OF KPIs way forward

19-20 NOVEMBER 2018

Palazzo delle Stelline - Milano

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ABOUT ESFRI LANDMARKS

ROADMAP 2018

1. THE DEFINITION HAS BEEN REFINED AS FOLLOWS

ESFRI LANDMARKS

The ESFRI Landmarks are RIs that were implemented or reached an advanced Implementation Phase under the Roadmap and that represent major elements of competitiveness of the ERA. The Landmarks can be already delivering science services and granting user access, or can be in advanced stage of construction with a clear schedule for the start of the Operation Phase. The Landmarks need continuous support and advice for successful completion, operation and – if necessary – upgrade to achieve optimal management and maximum return on investment.

2. INTRODUCTION OF THE LIFECYCLE APPROACH AND FURTHER REFINEMENTS

THE LANDMARK DYNAMICS

UPDATING OF LANDMARKS

1. LANDMARKS HAVE LONG TERM RESIDENCY ON THE ROADMAP TO PERFORM OPERATION AT THE TOP LEVEL IN THEIR DOMAIN AND AS REFERENCE RESEARCH INFRASTRUCTURES THAT NEED CONTINUOUS SUPPORT
2. PERIODICALLY THE EVIDENCE OF THE LANDMARK STATE OF PLAY (PERFORMANCE) MUST BE UPDATED IN A NON-INVASIVE, BUT FULLY TRANSPARENT WAY
3. A SUSTAINABLE CYCLE (FOR RIS AND FOR ESFRI) OF UPDATE CYCLE (5-7 YEARS, 5-6 LANDMARKS/YEAR) MUST BE ESTABLISHED, INDEPENDENT OF THE PERIODICITY OF THE ROADMAP UPDATES

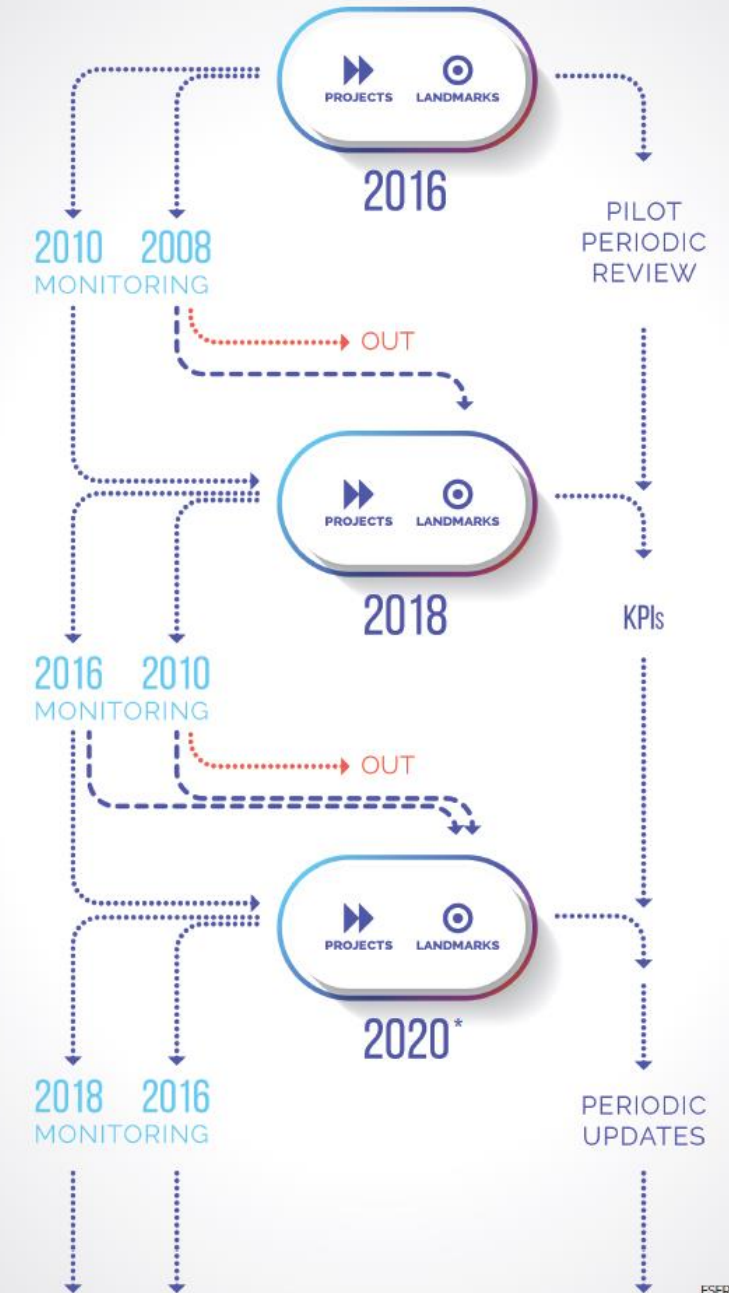


FIGURE 2.
ESFRI Roadmap Dynamics

* according to the ten-year rule the ESFRI Projects 2010 will be monitored in view of next Roadmap update that will be carried out in 2020.

Ideas from the workshop

UPDATING OF LANDMARKS

LANDMARKS AND RIS ARE **RESEARCH AMPLIFIERS** THEY ENABLE MORE RESEARCH TO BE DONE FOR THE BUDGET SHARE DEDICATED TO THEM

THIS IS SOMETHING TO BE MEASURED WITH THE HELP OF DELEGATIONS AND RIS

IMPACT IS ON THE SCIENCE COMMUNITY/ORGANIZATION OF RESEARCH/INDIRECT FUNDING TO RESEARCH BY USERS

SCOPE OF UPDATE IS NOT RANKING RIS BUT KNOWING THEIR STATE OF PLAY

Ideas from the workshop

UPDATING OF LANDMARKS

1. METHOD TO **UPDATE THE LANDMARKS** AND APPROPRIATE DEFINITION OF KPIS AND CORE-IMPACT-I:
2. LITTLE INVASIVE, BUT WELL-ADAPTED TO THE SCOPE AND TRANSPARENT, DATA MANAGEMENT TOOLS
3. APPROPRIATE PERIODICITY, BUILDING ON ACCUMULATED EVIDENCE RATHER THAT SPECIAL FORCED EFFORT
4. CLASSES OF PERFORMANCE DEFINED TOGETHER BY RI AND ESFRI, TARGET FOR CURRENT AND NEXT CYCLE, DEFINITION OF IMPLEMENTATION OF TARGET
5. DEFINITION OF **IMPACT** AS ORGANIZATION OR RESEARCH AND CO-ORDINATED FUNDING OF RESEARCH
6. UPDATE BASED ON EVIDENCE AND REFINED STATE-OF-PLAY ACCORDING WITH APPROPRIATE METHOD (SITE VISIT, WORKSHOP...)

Ideas from the workshop

UPDATING OF LANDMARKS

COLLECT ALL EVIDENCE OF ACTUAL USAGE OF KPIS BY RIS AND BY NATIONAL/INTERNATIONAL ORGANIZATIONS AND OWNERS OF RIS

COLLECT RESULTS FROM RI-PATHS, OECD, ERF...

WHERE THERE IS AND ALREADY ESTABLISHED PRACTICE, **TAKE NOTE AND GENERALIZE**

-THE STRUCTURED REPOSITORY WILL BE **FILLED BY THE RIS WHENEVER THEY HAVE DATA** (internal reports, national assessments, advisory committees, interim reports...)

ESFRI WILL BE GIVEN A **GUIDED TOUR (INDEX)** THROUGH THE REPOSTORY FOR THE UPDATE

Ideas from the workshop

UPDATING OF LANDMARKS

1. LANDMARKS UPDATE STRUCTURED REPOSITORY AS A TOOL FOR THE UPDATE:

2. DIMENSIONS OF PERFORMANCE: PAN-EUROPEAN RELEVANCE – BECOMES A KPI

IMPLEMENTATION OF KPI:

-STRENGTH AND GROWTH OF CONSORTIUM

-EFFECTIVE USAGE BY EUROPEAN/INTERNATIONAL SCIENTISTS,

-EFFECTIVE GROWTH OF USER COMMUNITY ACROSS DISCIPLINARY BORDERS

-EFFECTIVE INTEGRATION WITH HIGHER EDUCATION SYSTEM, PRODUCTION OF PHD, PRODUCTION OF TECHNICAL SKILLED HR

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Ideas from the workshop

UPDATING OF LANDMARKS

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N. **DIMENSIONS OF PERFORMANCE:** DEVELOPMENT AND APPLICATION OF **OPEN DATA PRACTICES** – BECOME A KPI

IMPLEMENTATION OF KPI:

-DEVELOPMENT OF DATA SERVICES AND DATA ANALYSIS TOOLS FOR USERS

-INVESTMENT TOWARDS FAIR DATA APPLICATION IN THE SPECIFIC DOMAIN

-INVESTMENT TOWARDS +R DATA

-DEVELOPMENT OF EFFECTIVE INTERFACES WITH THE HORIZONTAL E-INFRASTRUCTURES

-EDUCATION OF SKILLED DATA SCIENTISTS

-EDUCATION OF SKILLED DATA PRACTITIONERS THROUGH SERVICE TUTORIALS

MONITORING OF RIs

NEW MANDATE

EU COUNCIL CONCLUSIONS OF 29 MAY 2018 ON ACCELERATING KNOWLEDGE CIRCULATION IN THE EU

“Stresses the importance of human resources and training skills as key factors in the success for Research Infrastructures and ACKNOWLEDGES the need for Research Infrastructures to strengthen a service-driven approach; INVITES Member States and the Commission within the framework of ESFRI to develop a common approach for monitoring of their performance and INVITES the Pan-European Research Infrastructures, on a voluntary basis, to include it in their governance and explore options to support this through the use of Key Performance Indicators”.

THESE RECOMMENDATIONS INSPIRE THE FORMULATION OF THE

PERIODIC UPDATES OF LANDMARKS, and the work TOWARDS A FEW GENERIC KEY PERFORMANCE INDICATORS.

MONITORING OF RIS

deliverable:

GENERALIZE THE LANDMARK EXERCISE TO ALL OPERATIONAL RIS IN THE ERA

Take-away what is ESFRI LANDMARK specific e.g. pan-European relevance (perhaps replacing with impact on ERA) and articulate the KPIs for broader applicability

Suggest cycle and implementation

Make clear MONITORING is NOT designed for comparative RANKING or PRIORITIZATION

Provide the EXAMPLE OF APPLICATION TO the ESFRI LANDMARKS

The final ESFRI “paper on monitoring” will include both the LANDMARK METHOD and the proposed GENERAL METHOD



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Good work to the WG-MONITORING to the LANDMARKS and all RIs and to ESFRI

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PERIODIC UPDATES OF LANDMARKS

THE WAY FORWARD

- It will be **independent from the ESFRI Roadmap updates** and **each Landmark is addressed for update periodically**, taking into account the specific context of each RI. The updates will be “**reflected**” in the Annual Reports and Roadmaps.
- The periodic updates **primarily take stock of external and internal evaluations provided by the Landmarks themselves** and carried out by their internal bodies, funders and stakeholders. Importantly, the periodic review is directed towards providing a **basis for dialogue** between ESFRI, Landmarks and stakeholders, taking into account also **national roadmap** processes.
- ESFRI will identify a **combination of generic KPIs and specific KPIs** – suggested by the RI itself – for updating the state of play of the Landmarks. It is important that each KPI is set against certain targets or metrics in terms of self-assessment and quality assurance.
- The updates of the Landmarks are meant to establish a lasting dialogue between ESFRI and the ESFRI Landmarks – and their research communities – and with the involved countries.
- A non-bureaucratic, evidence based, periodic update of Landmarks will reinforce the strategic role and position of ESFRI in supporting these RIs when referring to the EU Council, as well as in allowing for the maintenance of the Landmarks’ list.

MONITORING MANDATE

METHODS AND USE OF KEY PERFORMANCE INDICATORS

- European RIs, not developed within ESFRI, have often a long record of excellent performance and constitute the majority of operational RIs in Europe. They are usually assessed by the OWNERS, often through international ad-hoc committees;
- National Roadmaps are often based on national assessment/monitoring of performance. Good practices must be captured and understood in order to develop a model that integrates and generalize them
- KPIs must help the monitoring, but SHOULD NOT become a SHORTCUT METROLOGY;
- The **WG-MONITORING** will work on it and report to ESFRI next summer;
- ESFRI will prepare a “**PAPER ON MONITORING**” by the end of 2019

PERIODIC UPDATES OF LANDMARKS

TOWARDS A FEW GENERIC KEY PERFORMANCE INDICATORS

To help address the unique aspects of each RI, Landmarks will develop specific KPIs and report on the few generic ones chosen by ESFRI, therefore updating their profile and capturing their own peculiarities.

Avoiding one-size-fits-all shortcomings, indicative elements for developing flexible KPIs include:

- scientific excellence outcomes, output and delivery of talent;
- reference role in the disciplinary field (uniqueness in capabilities, in capacity) at European and international level;
- progress in achieving the RI's milestones along its lifecycle;
- impact, innovation, entrepreneurship;
- establishment and development of the RIs' user community;
- scientific data management policy, metadata catalogue interfacing EOSC and similar open science initiatives, advanced data services for scientific analysis and for innovation developments;
- enforcement of quality control of access (peer review), data (FAIR and reproducible), and services to research and innovation.