

Summary report: ESFRI Workshop on the Future of Research Infrastructures in the European Research Area

6-8 November 2019, Los Cancajos, La Palma, Canary Islands

[Session 5: National RI Roadmaps and funding models – improving synergies with European priorities and programmes](#)

Session Chair: Agnieszka Zalewska

Session objectives

(as formulated in the programme)

Greater synergies between national RI Roadmaps and funding decisions with the European priorities and funding programmes are needed to foster a more effective implementation of the RIs across their lifecycle and improve their long-term sustainability. This session will take a look at InRoad recommendations and debate the different funding practices for RIs identified on national roadmaps and will explore how to improve their synergies with the European programmes foreseen under the new MFF.

Session Presentations

- [Introduction, Agnieszka Zalewska](#) (ESFRI Executive Board member) ([download the presentation](#))
- [National RI Roadmaps and funding models, Recommendations of InRoad project](#), Gerd Rücker (Senior Scientific Officer, DLR-Project Management Agency) ([download the presentation](#))

The InRoad project was aimed at contributing to a better harmonisation and synchronisation of priority-setting, funding and lifecycle management of Research Infrastructures through the exchange of best practices. The recommendations for a higher degree of coordination between national and European RI roadmapping processes are presented in the InRoad final report (https://www.inroad.eu/wp-content/uploads/2018/12/InRoad_finalreport.pdf). They are based on surveys conducted in 27 countries (22 MS and 5 AC), four case studies of roadmap processes (Finland, Czech Republic, Netherlands, Sweden), five regional workshops and about 30 interviews with RIs.

- [National RI Roadmap and funding model: Practical experiences from the Netherlands](#), Jeannette Ridder-Numan (Chair of ESFRI Implementation Group) ([download the presentation](#))

The Netherlands participates in more than 35 ESFRI projects and project proposals. The first Roadmap was created in 2006. In 2015 the Permanent Committee on Large-scale Scientific Infrastructure was settled. The Committee performs the Landscape analysis of existing RIs and the Roadmap prioritisation of large-scale RIs, takes care of calls for funding the projects on the Roadmap, advises the Ministry on e-Infrastructures, ICT and the ESFRI Roadmap updates. The developed strategic approach includes: requirement of cohesion between various facilities (clustering in case of overlap), alignment with national and European strategic agendas as well as with the ESFRI Roadmap and funding contributions to the ESFRI RIs for the first five years. There are 16 individual facilities and 17 clusters on the Netherlands Roadmap 2016.

Round table discussions

The table discussions, related to four questions and ordered in a form of *findings* and *key messages*, are summarised below. Note that not all questions were addressed by all tables.

1. Which practices in your national road-mapping and funding procedures would you recommend to other countries for improving synergies with European priorities and programmes? Are there examples when your national procedures have been adapted to better align with the ESFRI roadmap process?

Findings:

Roadmap processes are mostly bottom-up. Some countries do not use national roadmaps, but pre-existing or ad-hoc processes that take into account the national research ecosystem.

In general, national roadmaps are important tools supplying methodology and principles that stimulate structuration in a more strategic way.

Some countries focus more on the concept and design of RIs while some others more on the implementation and operation phases.

Funding models vary between countries, but typically funding schemes only cover construction and implementation. Operation costs are usually the responsibility of the host institutions. In some countries, host institutions have to prove that they can fund their participation for 5-10 years, for sustainability reasons.

National committees for RIs have often been settled, initially for evaluation (with peer review experts) and later extended to strategy (with ministries and key organizations representatives).

Key messages:

It is important that: national roadmaps are developed applying a transparent process, there is a dedicated budget line for RIs and the ministries have a long-term vision for the RIs they approve.

Setting a Permanent Committee for RIs at ministry level appears to be a good practice. The same concerns the coordination of national nodes of ERICs and ESFRI Projects.

Aligning national roadmaps with the ESFRI roadmap and using the same definitions as used by ESFRI is advisable.

Use of structural funds for identified pan-European RIs (ESFRI and not) is helpful.

2. What lessons did you learn for areas that didn't work so well in your national road-mapping and funding procedures for building synergies with European priorities and programmes and/or to align with the ESFRI roadmap process?

Findings:

Areas, which often do not work very well: sustainability, continuity of political actions, insufficient and changing staff devoted to RIs in the Ministries.

Countries that use structural funds to fund the RIs in their roadmaps face problems with sustainability and with operation costs.

In many countries, being on the national roadmap means that one can apply for funding. However, there is no guarantee to get it. This creates difficulties if one wants to apply with other countries to be on the ESFRI roadmap.

Key messages:

For countries, which do not have yet a national roadmap, assistance from other MS may be helpful (even under regional collaboration).

Bottom-up approach to road-mapping could be risky in terms of fragmentation and in some cases top down decisions have been found advisable.

More attention to connections between the ESFRI fields, based on a comprehensive landscape approach, is recommended.

Alignment of various funds is required, though difficult, between regional funds (incl. S3 and structural funds), national funds and others European programmes. A better recognition of the ESFRI label at all these levels would be valuable. (On the other hand, automatic assignment to the national roadmap for RIs from the ESFRI roadmap, which is practiced in some countries, may negatively influence the excellence of national research groups, because such assignment is not based on competition.)

Cost of RIs is often unclear, and full cost approaches could be helpful for researchers, organizations and ministries. It is good to have a proper costing book in the proposal, to orient the decision makers what to expect when making their decision.

3. What improvements in the national road-mapping and funding procedures would be most welcome from the RIs point of view to improve their functioning and long-term sustainability?

Findings:

In many countries the timing of the national roadmaps is not aligned with the ESFRI roadmap. In some cases dependence on national and regional processes causes this misalignment. Lack of synchronisation provokes difficulties in the implementation of RIs. Sometimes the ESFRI roadmap is not taken into account at all, which is a problem. Some roadmaps entirely focus on national facilities.

A well-defined user community supporting the chosen RI is very important for decision processes in Member States.

The RIs are not always familiar with national road-mapping. Sometimes the national procedures are only available in national languages, what makes coordination on the European level difficult.

The number of RIs on some national roadmaps is too big for the community they support, leading to funding spread too thin or to gap years.

Diversity of national funding models creates issues for RIs. For example, some member countries have challenges obtaining funding competing against ERICs when some countries have an ERIC-specific funding pot that is considered easier to access.

Key messages:

The national RI prioritisation process should be transparent, disconnected from politics and properly communicated in each country. It is particularly important for distributed infrastructures, strongly depending on many national road-mapping and financial commitments. Hearings at national level are advisable.

Increasing alignment and synchronisation of national roadmaps with the ESFRI roadmap, concerning both their content and timing, is needed. The same applies to the alignment between national roadmaps and funding decisions at regional level where structural funds are distributed.

National roadmaps should explicitly include a part representing their participation in European RIs. If a national node has gone through an evaluation within the ESFRI RI, the result of this evaluation should be taken into account for the national evaluation.

Ensuring consistency between the provided political support to ESFRI Projects and the national roadmaps, or at least ensuring that there is enough political support to give a real green light enabling discussions about potential further engagement, is essential.

Road-mapping could help structuring scientific landscape by creating clusters.

Centralised information system, like a common portal, where the information on national processes (procedures and timelines) is updated regularly, is needed. May be the MOS+ tool could serve this purpose.

Securing timely funding for the preparatory phase after the roadmap decision is important. Dedicated budget lines in the state budgets for the long term commitments are needed, because project financing based on calls for projects is not adapted for the long-term sustainability of the infrastructures.

Countries' decisions on putting in place a new European infrastructure should be based on a thorough analysis and having in mind a long-term commitment. A possible way to proceed at the national level is the inter-ministerial decision based on a study, how the new infrastructure will be integrated in the national scientific ecosystem and how it will contribute to the national development.

4. What improvements in the ESFRI road-mapping procedures would be most welcome from the decision makers' and RIs' points of view?

Findings:

The ESFRI procedure is in general very good, robust and adequate.

Some ESFRI projects are waiting, even if they are on the roadmap, because of missing financial commitment.

At the ESFRI level the communication between decision makers is crucial. Before going to formal processes, it is important to exchange the information on emerging ideas to prepare common decisions.

A pending issue is how to secure alignment of updating the national with ESFRI roadmaps and whether this should be done without a real commitment on national level.

Key messages:

For the RIs more timely communication from ESFRI is needed.

The concept of multidisciplinary RIs should be better integrated because thematic positioning sometimes creates constraints on RIs and limits the support they can gather.

The landscape analysis should be a real strategic tool for the European decisions to identify what are the gaps and the opportunities, the needs and the possibilities.

ESFRI roadmap practices should be transferred to a larger extent to national road-mapping processes. To help that, ESFRI should find mechanisms to keep national funders and ministries informed in a consistent way.

Increasing intervals between ESFRI roadmaps is necessary to ensure better quality and higher maturity of new proposals. The roadmap periodicity should be 3-4 years as a minimum.

The timing of the ESFRI roadmap should be known well in advance. At least the next two roadmaps' timing should be known. For example, every time a Road Map process (call) is open, the date of the next Road Map should be announced.

The fact that national procedures start only after finalisation of ESFRI methodology and fixing call deadline results in very short deadlines at national level. Making ESFRI formal announcements more in advance is very important.

Communication between decision makers of the European countries on emerging research infrastructures is crucial in order to reach the common European objectives consistently with the national interests.

ESFRI should insist on stronger financial commitments from applicants, to ensure funding once the proposal is included in the roadmap. Definiteness of the countries decisions and long-term engagements before putting in place a European research infrastructure is crucial.