

Procedure on preparing the 2nd update of the ESFRI Roadmap

to be used as an annex to the ToRs of the ENERGY and BMS TWGs

Introduction

This process is designed to ensure that all initiatives to be reviewed by the ENERGY and BMS TWGs for the update of the ESFRI roadmap have been assessed using the same transparent and fair procedure.

Methodology (modus operandi)

- Each ESFRI WG will follow the method of working defined in its ToR. In addition they will use the stage-gate methodology defined below in order to guarantee transparency and equality for the treatment of proposals:
 - First, preparation of a brief (update) survey of the given field as well as some possible foresight analysis;
 - Second, consideration of the scientific case for identified projects¹;
 - Third, consideration of the concept case for identified new RIs, analyzing technical and financial issues.

The WG should work on the basis of written evidence (see template in annex); on 'maturing' proposals, the WG might hold consultation meetings, whenever appropriate; for 'less mature' proposals², but scientifically valid, these should be indicated in a list of emerging ideas regularly updated;

- Whenever appropriate, the WG will also update the assessment of RIs now in the Roadmap, regarding their present technical and scientific development and their present degree of maturity.
- Apart of the final report, progress reports (*enabling process tracking*, according to the steps below) will be presented at every ESFRI plenary meeting, if possible with technical and financial information; these reports will also help revising the roadmap procedure, as necessary.

Basic requirements for consideration

It will be a prerequisite that each proposal is endorsed by an ESFRI delegation and/or by a Council of an EIROForum member organization³.

- Steps 1 & 2: The Executive Board will, beforehand, check whether a specific proposal meets the requirements for entering the ESFRI review process.
- The ESFRI secretariat will then send the proposal to the WG, which will assess if this proposal could be included in the update of the Roadmap as a potential (major upgrade / new) pan-European Research Infrastructure (RI) through the following steps:

¹ It is not the role of a WG to create proposals; contacts with delegations having sent proposals are possible; those countries that have already produced roadmaps will need to ensure that proposals are consistent with these;

² In case an initiative is rejected, this should also be normally reported;

³ This implies that, if the project is recognised as of pan-European interest at the end of the stage-gate process, the endorsing Country(ies) or Council of an EIROForum organisation will contribute to the process of implementing the project.

Step 3: To fulfill their tasks, and before analyzing specific initiatives, the WGs should review / update the global and EU scientific landscape in the field and its possible evolution in the next 10 to 20 years, using available information, and giving the overall frame for the user needs of RI's.

Step 4: The Scientific Case

- The specific RI should correspond to present and future needs of the scientific communities, demonstrate impacts on scientific developments, support new ways of doing science in Europe and contribute to the growth of the European Research Area.
- Accompanying documents, supported by the appropriate scientific community at European level, should demonstrate its pan-European value, setting the scene for the infrastructure in a European and an international context, as well as its relevance and quality.

Step 5: The Concept case

- The specific RI should be technologically and financially feasible and meet the necessary degree of maturity which is defined as (a) the existence of a technical concept for the realisation of the project, and of feasibility studies, including identification of technical challenges and risks, (b) the existence of a defined estimate about construction, operating and decommissioning costs, including a clear timetable.
- In addition, the ESFRI analysis requires relevant information on (c) an updated peer review of the project; (d) the potential for risks- and costs-sharing and for developing effective joint actions in Europe; (e) the mechanisms for other partners to join later on and (f) the mechanisms to ensure the human resources and the capability to use the RI in the most open and effective way.

Final deliverables:

Step 6: The final report of the WG is due in spring 2010, detailing which RI project is recommended to be included in the update of the ESFRI Strategic Roadmap⁴. This report should be accompanied by a review of the process followed by the Group to ensure that the recommendations are the result of a fair process, as well as supporting documents to help understanding the evolution of the field as well as where new areas are coming up.

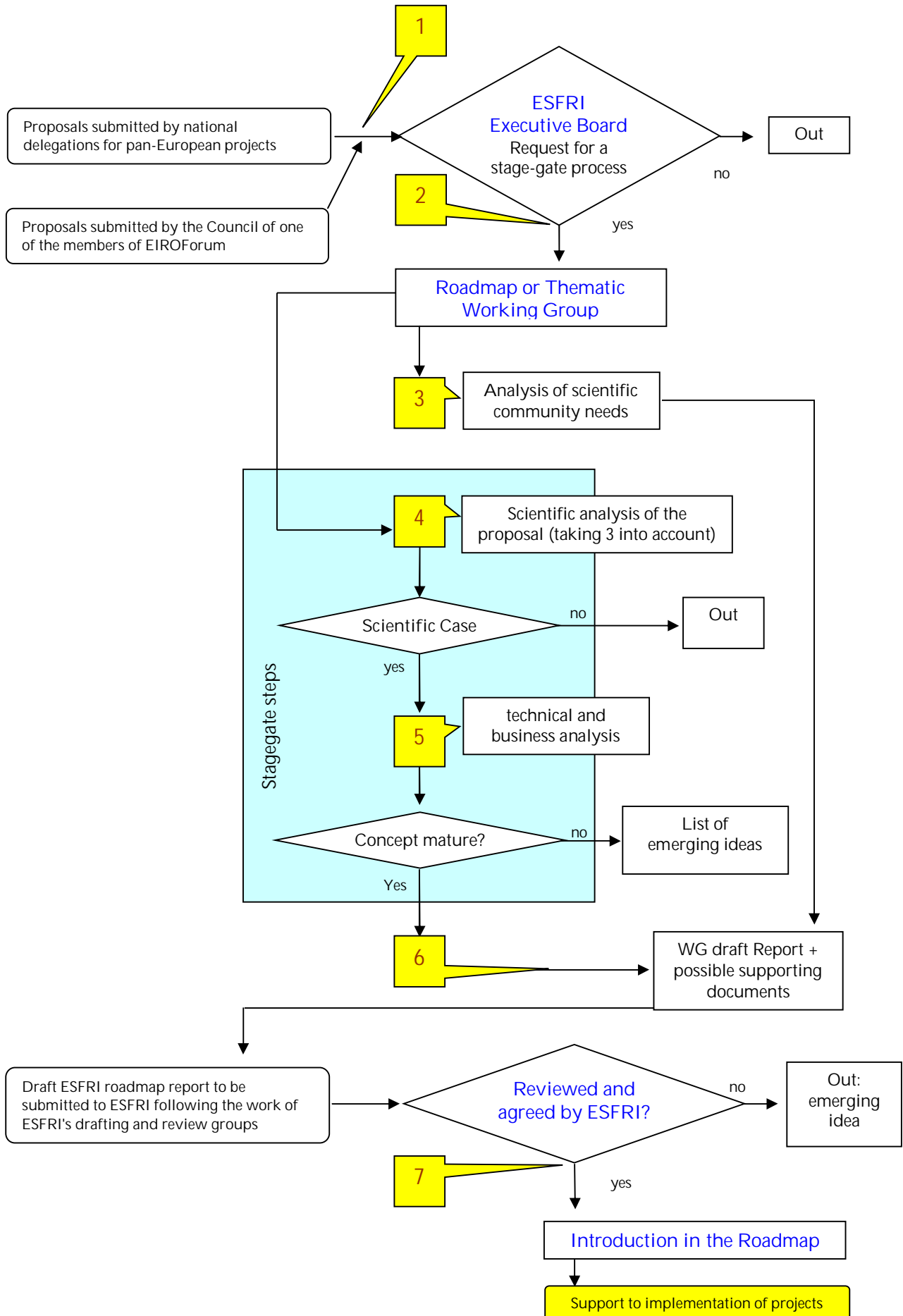
Step 7: ESFRI will ultimately decide whether individual projects should be included in the Roadmap.

Reminders:

All information exchanged within the WG is meant for internal use only, unless explicitly stated and agreed otherwise by ESFRI. The ESFRI secretariat will ensure the traceability of every proposal to ESFRI.

⁴ In approving the list, the WG has the responsibility for assuring ESFRI that it has checked the already developed design studies and the availability of appropriate information on cost estimates and other financial aspects.

- The process is described in the graph given hereafter:



Tracking Number (to be filled by the ESFRI Secretariat):

**Synthesis template for new / upgraded Research Infrastructure (RI)
of pan-European relevance
to be sent by the ESFRI delegations to the Executive Board for consideration**

1. Descriptive title, and information on the ESFRI delegation submitting the proposal (or one of the member of EIROForum)			
2. Synthesis description of the new RI (or major upgrade) and S&T fields involved at Pan EU level in its use. Add links to relevant data/web pages (half page max)			
3. Science case: scientific area(s) and potential and/or explicit users, how the new RI will fit into the existing and future landscape of Research and of existing RI's, at EU and World level (one page max, links to relevant documents, references).			
4. Technical case: summary of results (technical specifications) of conceptual and/or technical design studies (half page, list references/links).			
5. e-infrastructure: what does the new RI require as far as e-infrastructure? How is it integrated with the existing EU e-infrastructure (e.g. Geant, grid, digital repositories).			
6. Other expected socio-economic impacts: development of new technologies, effects on training, involvement of industries, local impact, other (one page, references).			
7. Commitments / maturity: which States / Organizations have demonstrated interest / commitment in supporting and/or funding the proposal?			
8. Costs for construction, operation and decommissioning, indications on project financing (half page, with references/links). Give budget info in M€			
Total preparatory cost (of which already spent or committed)	Total construction cost (specify contributions committed or indicated by possible funders)	Operation cost /year (specify contributions by possible funders)	Decommissioning cost (possible funders)
9. Timetable for construction, operation and decommissioning (half page, with references/links)with duration and possible starting dates.			
Preparatory phase	Construction phase	Operation	Decommissioning
10. Reference address for follow up			