

Aligning Research Infrastructure Roadmaps and New – ESFRI Roadmap 2015-16

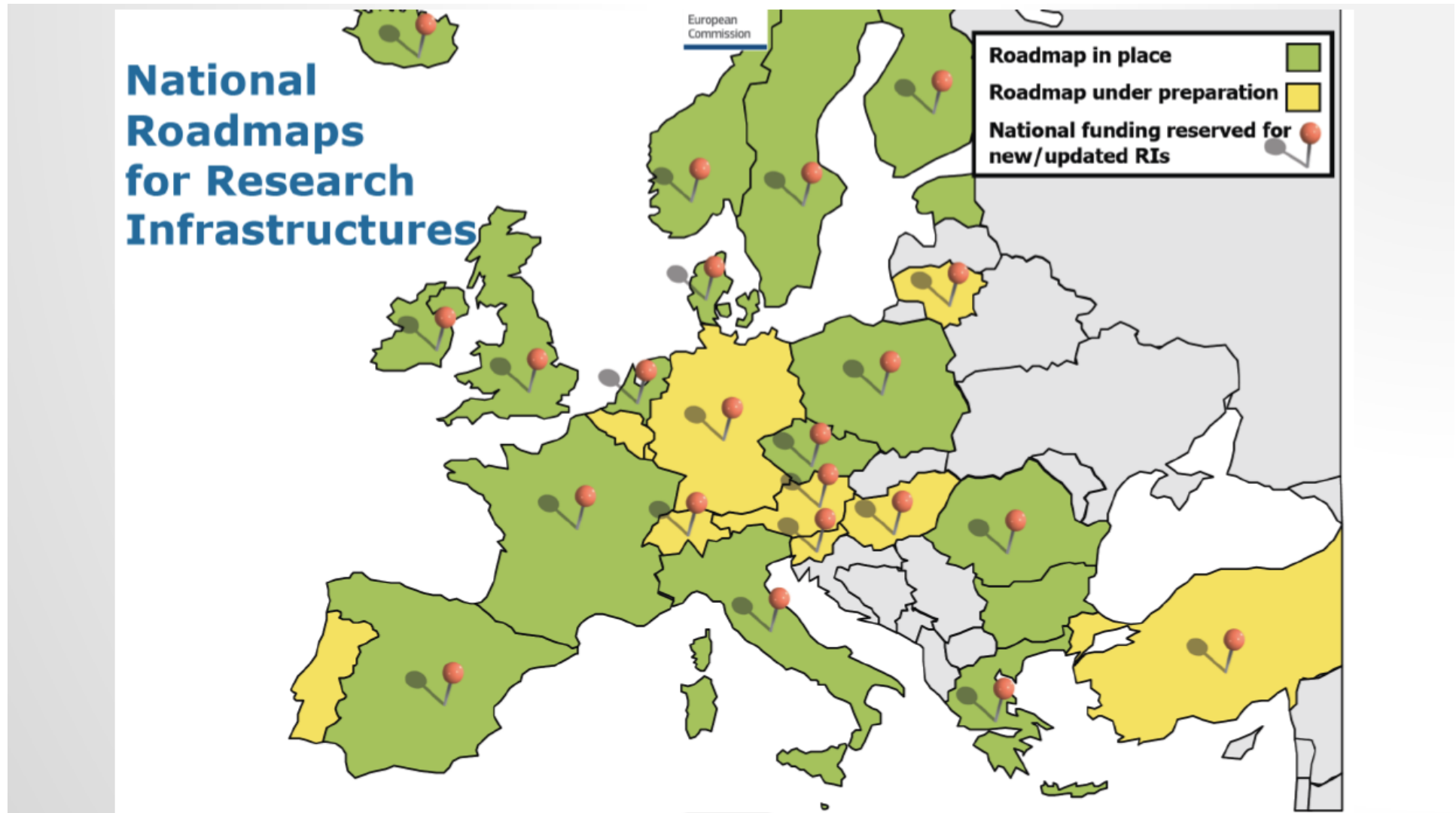
Giorgio Rossi, vice-chair ESFRI, Co.Po.RI meeting, 5th December 2013

(*Objective*)

To provide a strategy document that analyses:

- a) the landscape of RIs in Europe and elsewhere
- b) the gaps in the European RI ecosystem
- c) the pan-European RI projects
- d) the synergies with the national/regional RI projects
- e) the synergies with existing RIs and strategies for optimal use, continuous upgrade, sustainability and end of life perspectives
- f) the global research infrastructure opportunities

Colours change according to updates, most MS and AC adopted Roadmaps, these are key references for the landscape of **upgrades and new projects**



New Roadmap Rules

T_0-2y New Roadmap start decision, TOR of Work Groups

T_0-1y Call for Projects, assessment of new projects by scientific (peer review ?)
check against assessment matrix and indicators of pan-European relevance

T_0 **New projects enter the Roadmap**

T_0+10y Projects not having reached implementation go out of the roadmap

Entry level at T_0 : Decision level (conceptual design and feasibility done)

$T_0+1y - T_0+5y$ H2020 Preparatory Phase I and II (optional)

$T_0+1y - T_0+10y$ Implementation stage starts

Every 2-3 years audit of the project by ESFRI

T_0+5y **Assessment of the Project status**

A project that wants to be considered again after 10 years must apply again,
After it has solved its bottlenecks, as a new one

Minimum Entry level at the frontiere of Approval Phase (AEG matrix)

		SH	Expected requirements - Stakeholder Engagement and Financial Commitments
Preparatory Phase	Concept Screening	1	<ul style="list-style-type: none"> ▪ Encouragement of the initiative.
		2	<ul style="list-style-type: none"> ▪ Co-funding of the definition study.
		5	<ul style="list-style-type: none"> ▪ Define the concept and scientific and societal benefits. ▪ In kind contribution to the definition study.
	Feasibility Study	1	<ul style="list-style-type: none"> ▪ Co-funding of the Feasibility Study.
		3	<ul style="list-style-type: none"> ▪ Funding of the Feasibility Study.
		4	<ul style="list-style-type: none"> ▪ Expressions of interest in contributing to the construction and/or use.
		5	<ul style="list-style-type: none"> ▪ Leading the Feasibility Study and engagement of the wider user community.
Approval Phase	Business Case Review/ Delivery Strategy	1	<ul style="list-style-type: none"> ▪ Inclusion on National Roadmaps.
		2	<ul style="list-style-type: none"> ▪ Conditional intention to co-fund construction and access.
		3	<ul style="list-style-type: none"> ▪ Inclusion on the ESFRI Roadmap.
		5	<ul style="list-style-type: none"> ▪ User community identified. ▪ Commitment core institutes secured.
	Investment Decision	1	<ul style="list-style-type: none"> ▪ Approval of tender and commitment to fund construction.
		2	<ul style="list-style-type: none"> ▪ Approval of tender and commitment to fund construction.
		3	<ul style="list-style-type: none"> ▪ Legal entity approved.
		4	<ul style="list-style-type: none"> ▪ Interest in responding to the tender.
		5	<ul style="list-style-type: none"> ▪ National nodes willing to commit to a central (ERIC) node (distributed research infrastructure). ▪ Commitment to invest in kind resources in the construction.

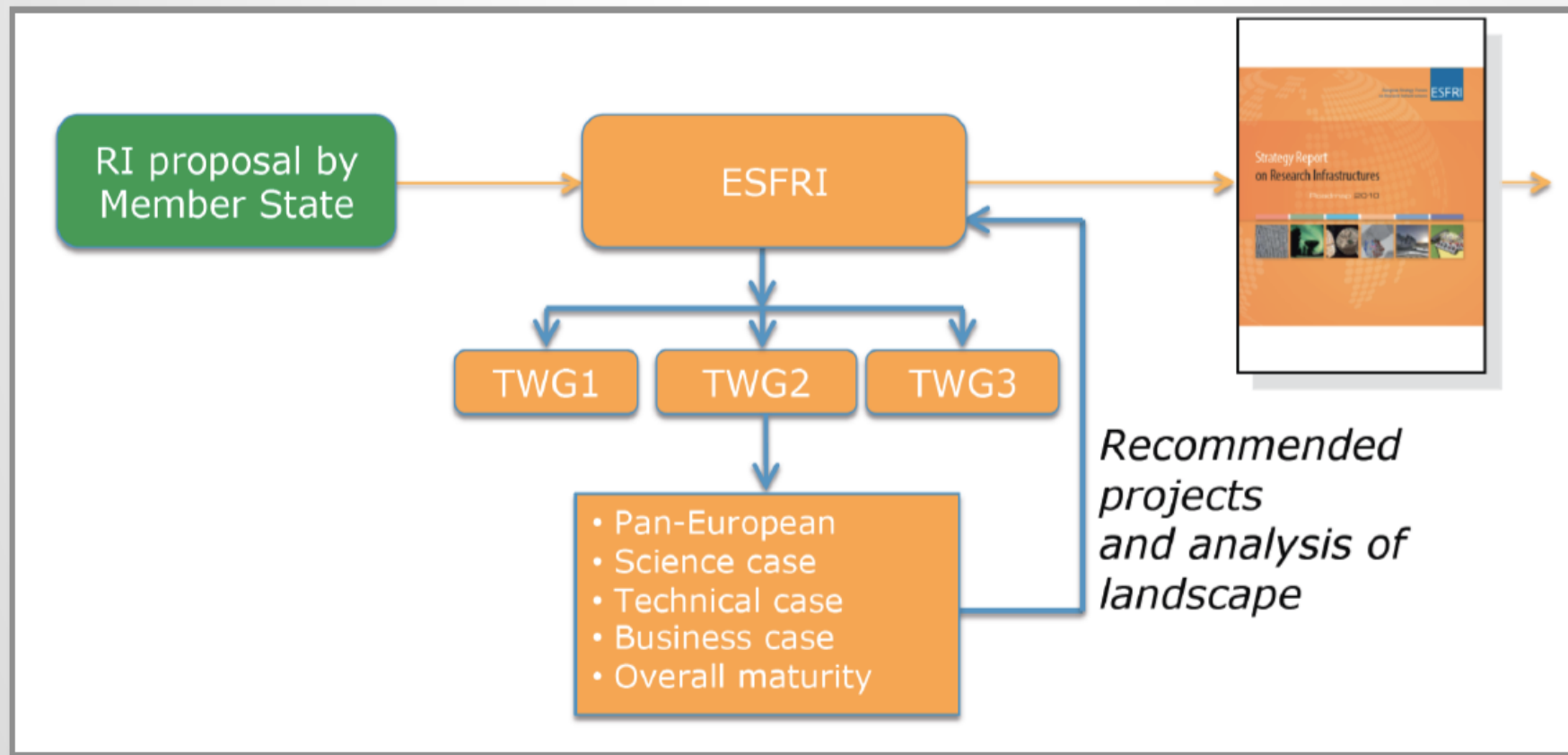


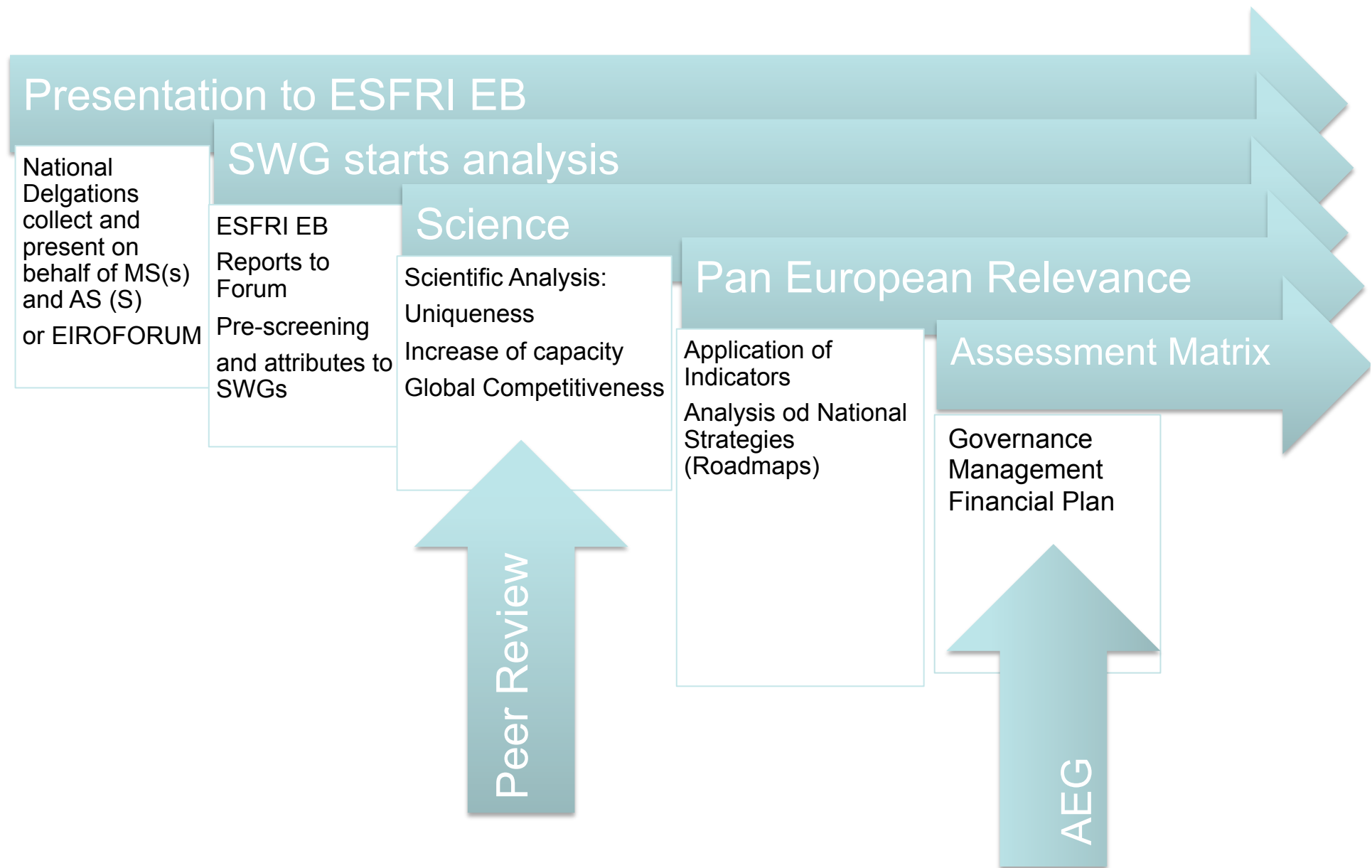
New – ESFRI Roadmap 2015-16

(*NER Format and Content*)

<i>NER rules: 10 years maximum permanence of a given project on roadmap</i>	<i>6 December 2013</i>
Content Outline: LANDSCAPE analysis of the RI in Europe and a GLOBAL landscape in terms of G8+8 definition SINERGY with operational RIs in the EU and possible strategies (Clustering, Merging, Federation)	Spring 2014
<i>Content: Non Implemented PROJECTS 2008+2010 + call for NEW ENTRIES</i>	<i>End 2015</i>

ESFRI ROADMAP - THE PROCESS





Ex-ante indicators

ANNEX 2

Table of Indicators for the ex-ante evaluation of the "pan-European relevance" of a research infrastructure

Objective	Indicator	Comment on interpretation of the indicator	Data source
0 Background of new RI or Upgrade Project			
EC			
	Previous Design Study Project	Successfully completed DS	EC (FP6, FP7)
	Previous Preparatory Phase Project	Successfully completed PP	EC (FP7)
	Well established I3 or equivalent networking in the science community that needs the RI	number / size of I3 networks in the field	EC Statistics of I3s and proposals for suggested topics
Other			
	Addressing new scientific challenges with unique / innovative approach strengthening European leadership	Expectation of new knowledge by the international science community	International Science press, evidence of international competition
	Upgrade of an existing operational RI to pan-European or Global RI	Background of RI	Project Management, EC, MS, GSO
	Re-orientation of existing science sites to host new RI	Background of RI	MS-AS, Project Management
	Landscape analysis of RI in the field and the territorial distribution of service points in Europe	Background of RI	ESFRI
1 Membership INDICATOR High, Medium, Low			
1.1	No. of MS/AC and global partners engaged with	Fraction of total funding which has been	Project management

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	determined share to (a) construction and (b) operation. Mission statement from ownership	committed so far, quantitative indicator	
1.2	Maturity of international organisation	Existence of a credible project organisation (e.g. statutes, legal form)	ERIC committee, EC, MS, Project management
1.3	No. of nodes of Distributed RI, partner facilities	Number of nodes and flux analysis of users	Project management
1.4	Structure of commitments to (a) construction and (b) operation/GBAORD	Strength of partners involvement in terms of Cash+in-kind, w/r GBAORD	Project management Ministerial sources
1.5	Estimated value of national nodes contributing to a distributed RI to (a) construction and (b) operation/GBAORD	Cash+in-kind, quantitative indicator (see above)	Project management and EUROSTAT or MS-AC authorities
2 User strategy Indicator High, Medium, Low			
2.1	Fraction of possible users of the RI per country/ total no. of scientists per country (in the given field)	geographical distribution, different science fields, interdisciplinarity, expected demand (users pressure), users initiatives to complement the project	Data base of the research field by reference research communities, Ministerial sources Project management Eurostat
2.2	Scale of service (expected number & time of access per year w.r. size of reference community)	Absolute values of access in the specific form of the RI	Data base of RI, possibly compared with existing "successful" international RIs in similar/comparable field

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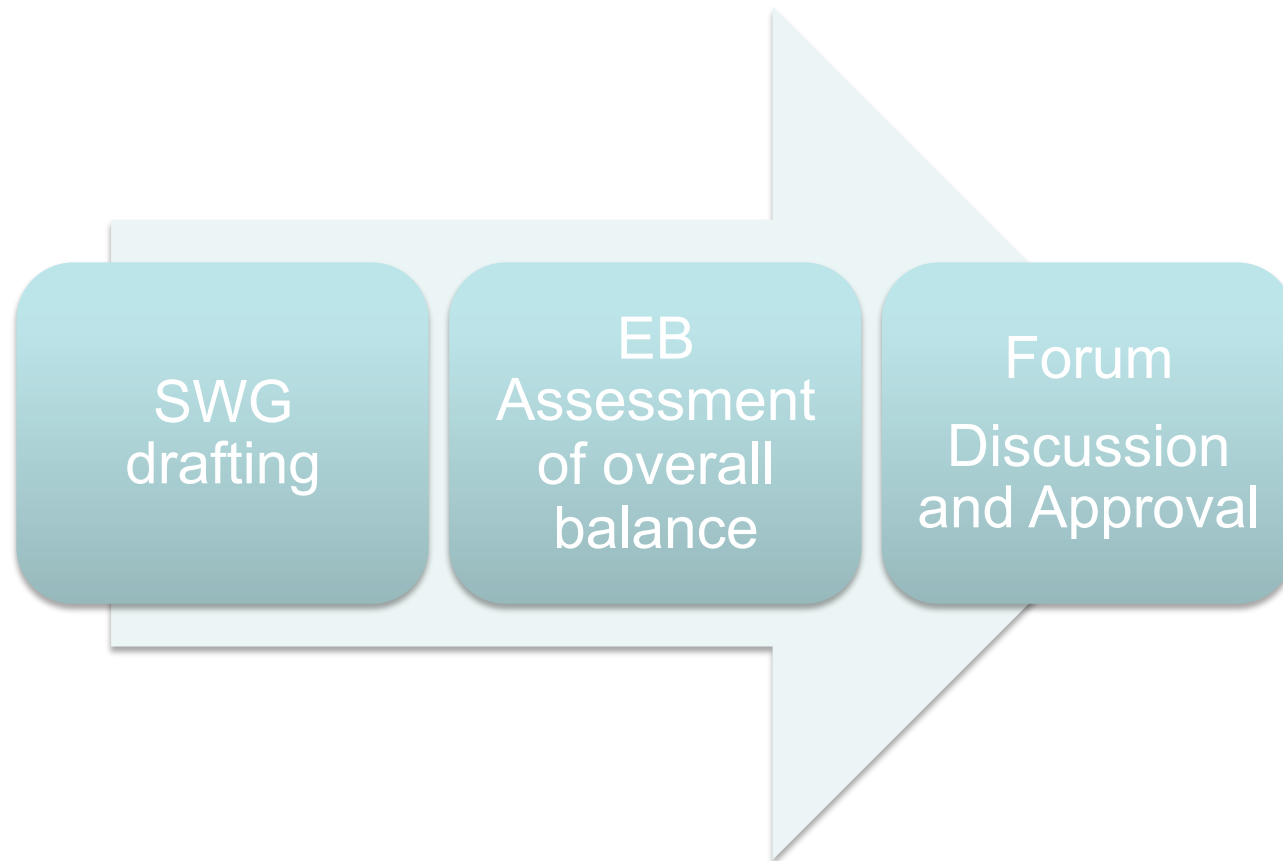
Table of Indicators for the ex-ante evaluation of the “pan-European relevance” of a research infrastructure

2.3	Data management and access structure	% of investment planned in data infrastructure normalized to the most advanced international standards in the field	Project management, data from successful international RIs in similar fields
3 Networking INDICATOR High, Medium, Low			
3.1	Number/size of users consortia willing / planning to contribute own resources to use the RI on contractual basis	number / size of perspective collaborating research teams or consortia	Project management
3.2	Expected % of non-European users	Indicator of internationalisation	Project management
3.3	Expressions of interest by diverse scientific communities	Multidisciplinarity	Project management
4 Excellence INDICATOR High, Medium, Low			
4.1	Attractiveness at international level of staff	Package offer to staff	Project management, EC, ERC
5 Knowledge Transfer INDICATOR High, Medium, Low			
5.1	PhD programme agreements with universities	Estimated number of thesis and doctorate research projects associated with the RI staff and (separately) with users	Project Management
5.2	Industrial involvement in pre-procurement studies and in the construction phase, including IPR	Indicator of industrial interest in innovation through participation to RI pre-procurement and procurement, relative to type of structure and services of the RI	Project management EC – SME related projects connected to the RI

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			Reference to successful intl. projects
5.3	Accessibility by industrial users	Indicator of “for profit” share of use of RI	Project management



New ESFRI Roadmap expectation: 20-25 Projects

Timetable

(*phase 1*)

<i>ESFRI revision of SWG Terms of Reference and assignments for a Drafting Group (SWG chairs + EB ?)</i>	<i>Winter 2013/14</i>
<i>ESFRI approval of the launch of the NEW-Roadmap (procedure, expected typology of projects, timetable)</i>	<i>Spring 2014</i>
ESFRI delegations and EIROs send proposals to the ESFRI EB for analysis	From summer to December 2014

Timetable

(*phase 2*)

SWGs first meetings for Roamap	Summer 2014
Proposals are transferred from ESFRI Executive Board to SWGs to be analyzed	Up to December 2014
<i>ESFRI decides on the final Drafting Group</i>	<i>November 2014</i>
SWGs report to ESFRI EB and Forum at its regular meetings	On-going
Expected SWGs <u>draft report</u> to ESFRI	By May 2015

Timetable

(*phase 3*)

ESFRI assessment of SWGs draft reports	June-July '15
ESFRI drafting group meetings	Ongoing 2015
<u>First draft</u> of the NEW ESFRI roadmap	August 2015
<u>Second draft</u> of the NEW ESFRI Roadmap	<i>September 2015</i>
<u>Final draft</u> of the NEW ESFRI Roadmap	October 2015

Timetable

(*phase 4*)

Finalisation of all supporting documents and sections of the NEW ESFRI Roadmap 2016	October 2015
<i>Agreement of ESFRI</i>	November 2015
Publication and press conference	January 2016