



Implementation of research infrastructures in ESFRI Roadmap

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2016

Why ESFRI?

- Set up by the EU Council of Research Ministers in 2002
- Brings together representatives of Ministers of the 28 Member States, 12 Associated States, and of the European Commission
- Supports a coherent and strategy-led approach to policy making on Research Infrastructures
- Mandate to develop a Roadmap and prioritise research infrastructures



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ESFRI

- ✓ facilitate multilateral initiatives leading to a better use and development of RI
- ✓ act as an incubator for pan-European and global RI
- ✓ facilitate decisions on implementation and ensure follow-up after assessment

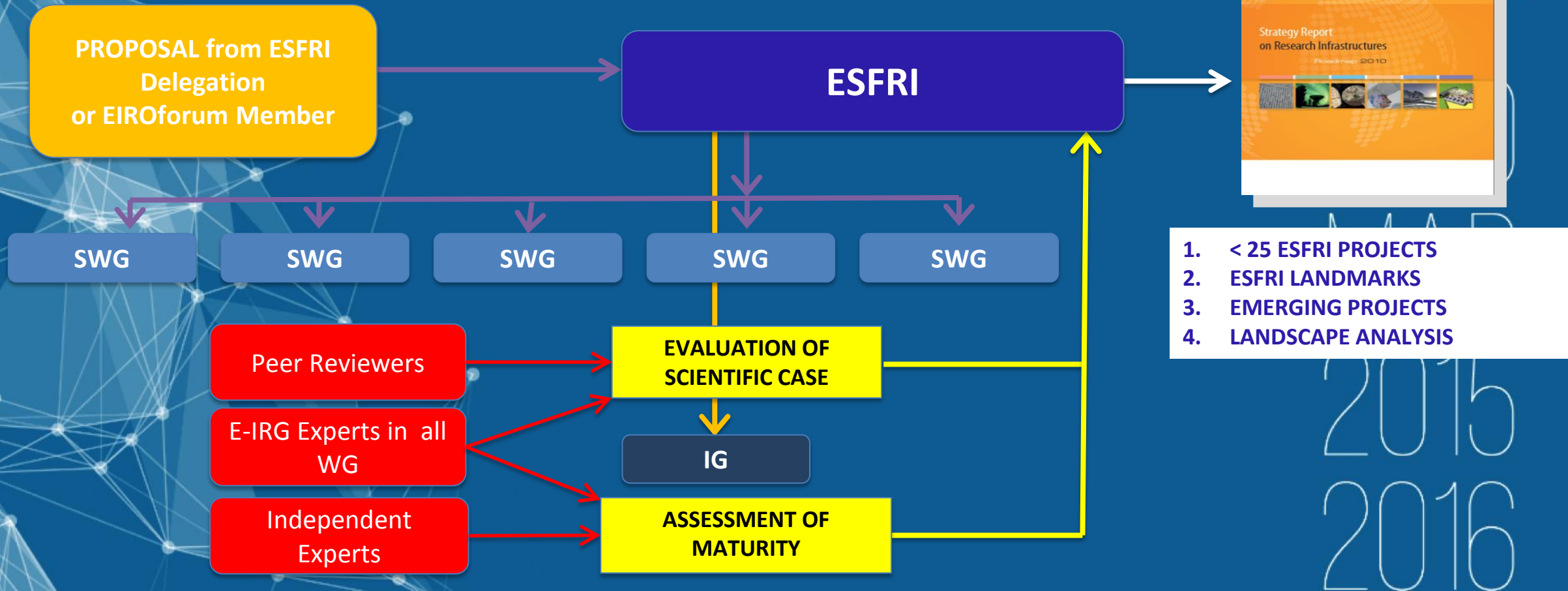
extended mandate:

- ✓ monitor state of Innovation Union & provide input as appropriate to the development of ERA Framework (Council of EU in 2010)
- ✓ prioritise projects (Council of EU in 2012)
- ✓ complete 2016 ESFRI Roadmap with fewer and more mature projects (Council of EU 2014)



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overview process



ESFRI Roadmap



- Roadmap identifies new pan-European Research Infrastructures or major up-grades to existing ones, corresponding to the needs of European research communities in the next 10 to 20 years, in all fields of Research, regardless of possible location
- ESFRI to provide help and best practice, but **MS and AC must be the major source of funding**
 - First Roadmap published in 2006
 - Followed by two updates in 2008 and 2010: Now contains 48 projects
 - Requires major financial investment (~20 b€) and long term commitment for operation (~2 b€/year)
 - New ESFRI Roadmap in 2015/16

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ROADMAP 2016

ESFRI PROJECTS, 15+6 proposed



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e-RI	ENE	ENV	H&F	PSE	SCI
	ECCSEL	EISCAT_3D	EMBRC	CTA	2008
		EPOS	ERINHA		
		SIOS	EU-OPENSREEN		
			Euro-Biolmaging		
	EU-SOLARIS		ANAEE		2010
	MYRRHA		ISBE		
	WindScanner		MIRRI		
					2016
		ACTRIS		EST	
		DANUBIUS-RI	EMPHASIS	Km3NET 2.0	E-RIHS

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ESFRI LANDMARKS, 27+2 proposed



e-RI	ENE	ENV	H&F	PSE	SCI	
PRACE	JHR	EMSO	BBMRI	E-ELT	CESSDA	
		EURO-ARGO	EATRIS	ELI	CLARIN	
		IAGOS	ECRIN	ESS	DARIAH	
		ICOS	Infrafrontier	Eu-XFEL	ESS-Social	
		LIFEWATCH	INSTRUCT	FAIR	SHARE	
			ELIXIR	ILL		
				SKA		
				SPIRAL2		2006
				EMFL		2008
				ESRF-EBS		
				HL-LHC		2016

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ESFRI WG on Implementation



- The IG assessed the implementation of the sixteen projects from the ESFRI Roadmaps 2008 and 2010.
- The methodology was derived from the Assessment Expert Group exercise of 2012, adopting an evaluation matrix and further refining the “lifecycle analysis”.
- One project was recognized to have now achieved implementation and to provide scientific key services. It was thus identified as an ESFRI Landmark.
- ESFRI also adopted specific recommendations for the remaining fifteen ESFRI Projects addressing key issues to be solved on the move towards implementation.

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Monitoring of ESFRI Projects



- Stakeholder commitment
- User strategy and access policy
- Preparatory work
- Planning
- Governance and management
- Human resources policy
- Finances
- Risks

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Central Hub and distributed RIs

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Central Hub with substantial coordinating powers demonstrating

- ✓ a high level of integration of the National Nodes (such as common access policy, harmonised and coherent IPR & data policies; adequate central resources; procurement and upgrading of technological infrastructure; human resources policy allowing for staff exchange and secondment)

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Central Hub and distributed RIs

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- ✓ have a unique specific name and legal status;
- ✓ agree on the role and funding of its central hub in a legally binding document;
- ✓ demonstrate a common access policy and provide for a single point of access for all users;
- ✓ identify and agree upon measurable and credible Key Performance Indicators (KPI) and define a governance for operation with clear responsibilities and reporting lines;
- ✓ agree on a coordinated human resources policy to gather the necessary competences for its operation, hiring, gender, secondments, education and training, in particular for the Central Hub.

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Legal Structure



ERIC (European Research Infrastructure Consortium)

- A new legal framework, at EU level, to facilitate the joint establishment and operation of Research Infrastructures of European interest among several countries
- Legal personality recognised in all EU Member States
- some VAT advantages

Use of an ERIC is not mandatory and does not confer any special status in ESFRI or H2020

- Use it when it makes sense!



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Horizon 2020

Call - Development and long-term sustainability of new pan-European research infrastructures

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Concept & Preparatory Phases

- **INFRADEV 1** Support conceptual design of new research infrastructures, which are of a clear European dimension and interest: bottom-up proposals for new infrastructures (deadline March 29 2017)
- **INFRADEV 2** Support preparatory & pre-implementation phases of ESFRI infrastructures (deadline June 22 2016)

Implementation & Operation Phases

- **INFRADEV 3** Individual support to ESFRI projects and other world-class research infrastructures with established legal structure and governance such as an ERIC through a competitive approach (deadline March 30 2016)
- **INFRADEV 4** European Open Science Cloud for Research
Pilot action addressing the federation, networking and coordination of pan-European research infrastructures and clouds for the purpose of increasing research and science data availability and use (deadline June 22 2016)

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The logo for the European Strategy Forum on Research Infrastructures (ESFRI), consisting of the acronym 'ESFRI' in white capital letters inside a white square border.

ESFRI

A decorative graphic on the left side of the slide, featuring a network of white dots connected by thin white lines, set against a dark blue background with a subtle geometric pattern.

Thank you for your attention!
Questions?

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