

EU-SOLARIS ERIC: a European Research Infrastructure Consortium

SFERA-III Final Event
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SFERA-III

Solar Facilities for the European Research Area

General objectives:

- In order to accomplish the strategic targets identified in the '*Initiative for Global Leadership in Concentrated Solar Power – Implementation Plan*' (CSP IP)* WP3 aims to bridge the existing gaps among European research organizations and to develop a critical mass of research capacity in Europe

Expected outcomes:

- Identify the missing **research infrastructures and services** required - task 3.1
- Enhance the **cooperation** among European research institutions - task 3.2
- Align the different national **research funding programmes** - task 3.3
- Foster the transformation of the consortium into a reference institution for CST technologies by establishing a **legal entity** (EU-SOLARIS ERIC) - Task 3.4

*European Strategic Energy Technology Plan (SET Plan)



What is an ERIC?

Regulation (EC) 723/2009 – Rules for the creation of an ERIC

- This regulation was adopted in order **to facilitate the establishment and the operation of large European research infrastructures** among several Member States and associated countries by providing a **new legal instrument**.
- This legal entity is set up by a European Commission decision. In the case of EU-SOLARIS is the **Implementing Decision 2022/2297**, dated on 19 October 2022.
- **Advantages of an ERIC**
 - ✓ It has **full legal capacity**, recognised in all EU countries
 - ✓ **exemptions from VAT** and excise duty
 - ✓ **flexibility** to adapt to specific requirements of each infrastructure
 - ✓ **a faster process** than creating an international organisation
 - ✓ may **adopt its own procurement procedures** which have to respect the principles of transparency, non-discrimination and competition.

What is an ERIC? (II)

▪ Requirements for an ERIC

- ✓ it must be a **European joint venture** (Member States and, under certain conditions, associated countries, other non-EU countries and intergovernmental organisations), representing a **significant improvement in the scientific and technological fields around research infrastructures**;
- ✓ it should **provide effective access** that is granted to the European research community in accordance with the rules established in the Statutes
- ✓ it should contribute to the **mobility of knowledge and/or researchers** within the ERA
- ✓ it should contribute to the **dissemination and optimisation of the results**

Who is in EU-SOLARIS ERIC?

- The **Constitutive Meeting** was held in Madrid (**12.01.2023**), after a very long process initiated in 2010.
- Legally independent entity, created by the national governments of: **Spain** (leader of the initiative and host of the ERIC), **Germany, France** and **Cyprus**, plus **Portugal** as an observer (incorporation expected within 2 years).
- Other countries that have participated in the process (Italy, Greece, Turkey) are expected to join at some point in the near future.

- Entity managed by governmental R&D agencies designated by the national governments.
- In the case of Spain, this entity is the **CIEMAT** as the central node of the ERIC is located at the **PSA**, which also is hosting the headquarters of the ERIC.



- **Constitutive members:** Spain, Germany, France, Cyprus
- **Observer:** Portugal (two-years period until end of 2024)
- **Other countries involved into the process** (and likely to join): Italy, Greece, Turkey

ESFRI: Where it all began

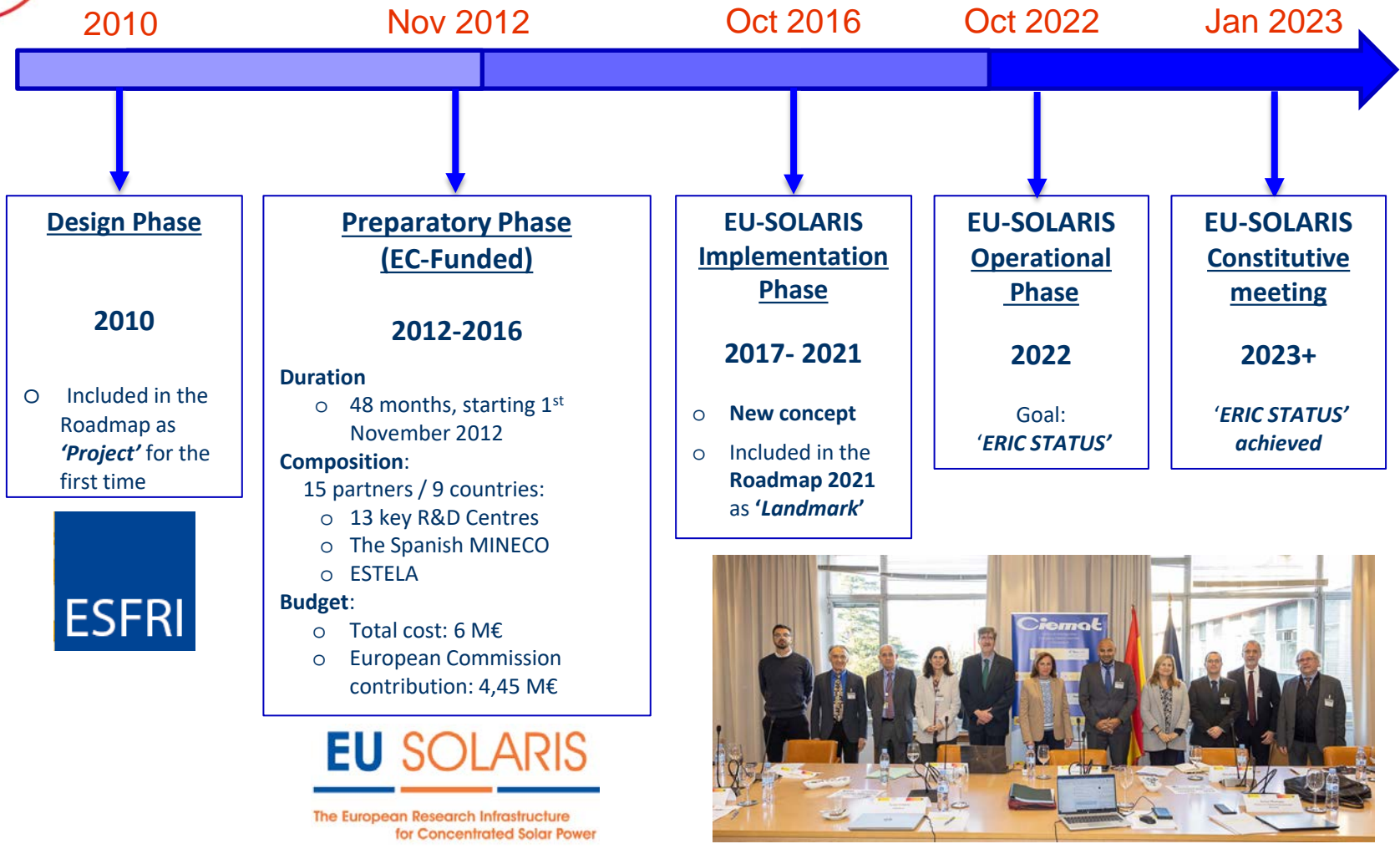
European Strategy Forum on Research Infrastructures (ESFRI)

- Strategic forum formed by the EU Member States and the European Commission, created in 2002 at the request of the European Council to **coordinate a common strategy** on scientific facilities and research infrastructures.
- Its objective is to develop a pan-European **Research Infrastructure Roadmap** to support scientific integration in Europe and strengthen its visibility and international impact.
- It includes scientific infrastructures (centralized or distributed) which corresponds to one of the **defined strategic areas**, have a **unique nature** and are identified by the **European scientific community** as the adequate for carrying out high-level research in their field.

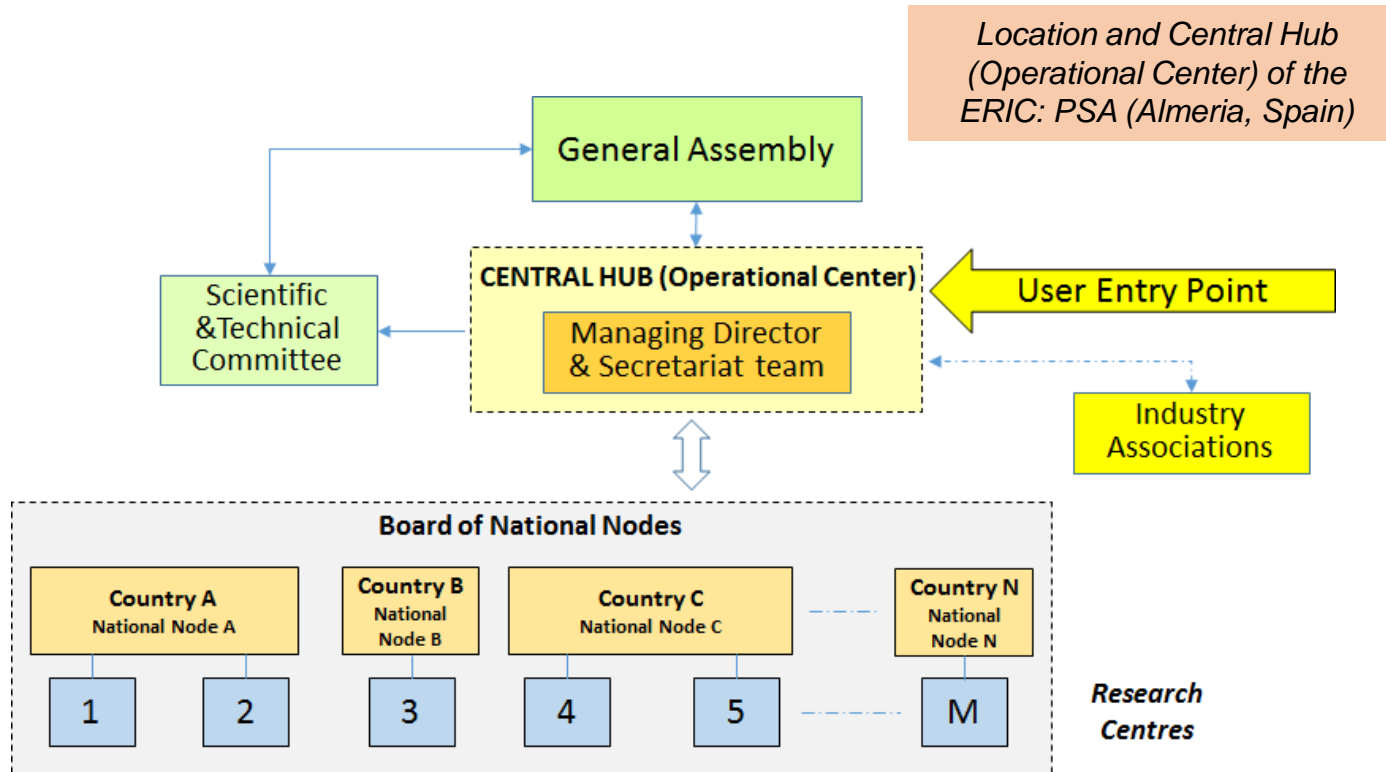


- **ESFRI Landmarks**: *RIs initiatives which have successfully finalized the full required process, or reached an advanced Implementation Phase under the Roadmap*
- **ESFRI Projects**: *RIs in their Preparation Phase, which have been selected for the excellence of their scientific case and for their maturity, according to a sound expectation that the Project will enter the Implementation Phase within a 10 year term*

The Road Travelled so Far



EU-SOLARIS Organization Scheme



Each country is fully free to organize its National Node as they wish, but a SLA (Service Level Agreement) between EU-SOLARIS and each of the participating organizations will be required

'CORE' ACTIVITIES

1. Become the **Single Entry Point for Access** for services provision: R&D services, Access to Research Infrastructure, Research Infrastructure Testing Services and Training and Dissemination activities.
2. Promote and lead the joint definition and **standardization of common testing protocols, procedures and methodologies**
3. Lead the provision of **sectorial inputs** to reference European stakeholders, i.e. strategic research agenda, prospective assessments, technology roadmaps, etc.
4. Promote and coordinate **mobility and staff exchange actions/activities** to deeper advance in the partners' integration process
5. Act as a catalyst for submission of **joint applications for new R&D projects** → three out of five proposals approved in the 2023 round.
6. Optimization of similar existing research facilities by **fostering specialization**.
7. Development and implementation of an **e-infrastructure** interconnecting the already existing research facilities.

TENTATIVE ADDITIONAL ACTIVITIES/SERVICES

1. Annual Summer School / Doctoral Colloquium
2. Identification and promotion of joint development of new facilities, when needed.
3. Continuous monitoring of the industry & research community needs for R&D infrastructures.
4. Design and implementation of a Dissemination Plan
5. Annual Meeting of the R&D staff
6. Annual Users Meeting
7. Annual Prize Award



1. Call for very first '**Internally-funded project**'.
2. Participation in **five HE proposals**: success in three of them.
3. Elaboration of **further documentation**:
 - ✓ Strategic Plan
 - ✓ Access Policy
 - ✓ Gender Equality Plan, etc....
4. Building of **National Nodes**
5. Enlargement of the **Scientific & Technical Committee**
6. Setting up the **Central Hub**



PLANNED ACTIVITIES FOR YEAR 2024

1. Second call for an '**Internally-funded project**'.
2. Submission of **new project proposals** to:
 - ✓ HORIZON EUROPE 'INFRASTRUCTURES' Programme
 - ✓ COST Programme: Extended, long lasting networking activities
 - ✓ ERDF Programme: e-Infrastructure
3. Supporting the organization of **Doctoral Colloquium & Summer School**
4. (Keep) Building of **National Nodes**
5. Enlargement of the **Consortium**



Some key messages to take away

- ✓ EU-SOLARIS ERIC is not a project, it is neither a network, it's a **long lasting consortium** under a specific European legislation.
- ✓ EU-SOLARIS ERIC is a **legal entity** set up by a decision of the European Commission. It has **legal personality and full legal capacity recognised in all EU Member States**.
- ✓ Members are the **countries**, with a leading R&D institute per country. The ERIC is **open for adhesion of countries** with an interest/activity on CST RIs.
- ✓ It **can apply to Horizon Europe calls**: it has already participated in five proposals with success in three of them.
- ✓ It's all about **Research Infrastructures** and focused on internal coordination, delivery of services (i.e. access to RIs), capacity building, development of common testing procedures and tools, policy making, etc....., **activities for the common interest of the CST R&D community, in the end....**

...and much more to come.....

Thank you!
Any questions?

EU-SOLARIS as a catalyser to foster:

- To be the **reference** in Europe with regard to Concentrated Solar Thermal (CST) research infrastructures.
- To coordinate, as a **single infrastructure of a distributed nature**, the main R+D+i facilities (example: EU-SOLARIS will offer a single access point for research facilities, resources and services).
- To advance in the **integration** of existing research facilities, identifying the requirements for their improvement and for the eventual development of new ones.
- To lead and coordinate the **dissemination of results, good practices and standardization of protocols** that contribute to the reinforcement of the **European leadership** position at an international level.
- To promote **collaborative research** among the main European centers and universities involved in the sector, also reinforcing collaboration between scientific institutions and industry.

ESFRI ROADMAP 2021

STRATEGIC AREA	LANDMARKS	PROJECTS
ENERGY	3	2
ENVIRONMENT	8	3
HEALTH & FOOD	12	4
PHYSICAL SCIENCES & ENGINEERING	12	4
DIGITAL	1	3
SOCIAL & CULTURAL INNOVATION	5	6
	41	22

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NAME	FULL NAME	TYPE	RIS TYPE
IFMIF-DONES	International Fusion Materials Irradiation facility - DEMO Oriented NEutron Source	Single-sited	project
MARINERG-i	Marine Renewable Energy Research Infrastructure	Distributed	project
ECCSEL ERIC	European Carbon Dioxide Capture and Storage Laboratory Infrastructure	Distributed	landmark
EU-SOLARIS	European Solar Research Infrastructure for Concentrated Solar Power	Distributed	landmark
JHR	Jules Horowitz Reactor	Single-sited	landmark

Energy