

EU-SOLARIS

First Meeting of the Scientific & Technical Committee

| MINUTES | 16 APRIL, 2024 | On-Line | |
|---------|------------------------|---------|--|
| WINOTES | 17:00 – 18:00 H (CEST) | | |
| | | | |

| MEETING CALLED BY | Diego MARTINEZ (EU-SOLARIS ERIC) | | | | |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| CHAIR PERSON/HOST | Nesrin OZALP (Illinois State University) Diego MARTINEZ (EU-SOLARIS ERIC) | | | | |
| MINUTE TAKER | | | | | |
| ATTENDEES | FULL MEMBERS: Nesrin OZALP (Illinois State University-ISU) Vassiliki DROSOU (Centre for Renewable Energy Sources and Saving- CRES) Juan Ignacio BURGALETA (ÁBACO Estudios y Proyectos) Mark MEHOS (Emeritus National Renewable Energy Laboratory-NREL) SECRETARY: Diego MARTINEZ (EU-SOLARIS ERIC, Managing Director) | | | | |
| ABSENT | Manuel Collares-Pereira (Scientific Advisor of Vanguard Properties) | | | | |
| RELATED MEETING FILES | Annex 1: Agenda of the meeting Annex 2: Presentation by EU-SOLARIS ERIC | | | | |



| List of acronyms used in this document | | | |
|----------------------------------------|---------------------------------------------|-----|----------------------------------|
| EC | European Commission | MD | Managing Director |
| ToRs | Terms of Reference | SLA | Service Level Agreement |
| ERIC | European Research Infrastructure Consortium | STC | Scientific & Technical Committee |



Agenda topics



Project (see slide #22 of Annex 2).

Last but not least, it has been agreed to find ways of cooperation between EU-SOLARIS ERIC and the American initiative 'Heliocon'*.

*'Heliostat Consortium' supports research, development, validation, commercialization, and deployment of low-cost and high-performance heliostats with optimized operations and maintenance for CSP and concentrating solar-thermal applications.



ANNEXES



EU-SOLARIS ERIC

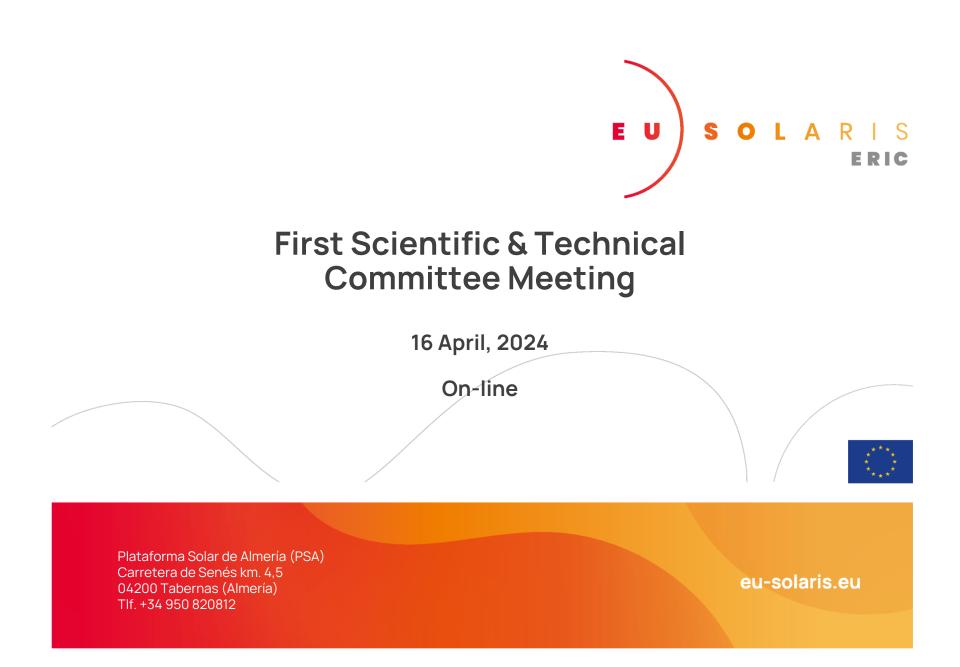
1st Scientific & Technical Committee Meeting <u>AGENDA</u>

Tuesday, 16.04.2024 - 17:00 h to 18:00 h (CEST)

On-line

Link: meet.google.com/qxe-dfzp-hdh

| Time | # | Topic | | | |
|-------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 17:00 | | Welcome by the Managing Director of EU-SOLARIS ERIC, Dr. Diego Martínez. Tour de Table: Self presentation of members. | | | |
| 17:05 | 1 | Adoption of the Agenda | | | |
| 17:10 | 2 | Election of Chair and Secretary | | | |
| 17:20 | 3 | Presentation of EU-SOLARIS ERIC and its operational status | | | |
| 17:35 | 4 | Discussion on 'Internal Project' Call 2024: Text of the call Topics to be addressed at the proposals Evaluation procedure | | | |
| 17:55 | 5 | Wrap-up and conclusions | | | |
| 18:00 | | End of meeting | | | |





Agenda

1. Welcome

- 2. Adoption of the Agenda
- 3. Election of Chair and Secretary
- 4. Presentation of EU-SOLARIS ERIC and its operational status
- 5. Discussion on 'Internal Project' Call 2024
- 6. Wrap-up and conclusions



Election of Chair and Secretary of the STC

First Scientific & Technical Committee Meeting, 16 April, 2024



Presentation of EU-SOLARIS ERIC and its operational status

eu-solaris.eu

First Scientific & Technical Committee Meeting, 16 April, 2024



Legal figure

European Research Infrastructure Consortium (ERIC)

Regulation (EC) No 723/2009 – Rules for the creation of an ERIC

- An ERIC is a legal entity set up by a European Commission decision (EU-SOLARIS \rightarrow 24.11.22)
- 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
 - ✓ It may adopt its own procurement procedures which have to respect the principles of transparency, non-discrimination and competition.

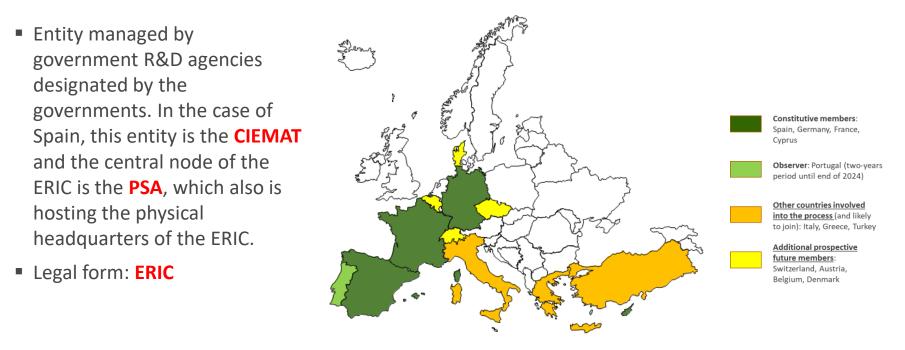
Requirements for an ERIC

- 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**



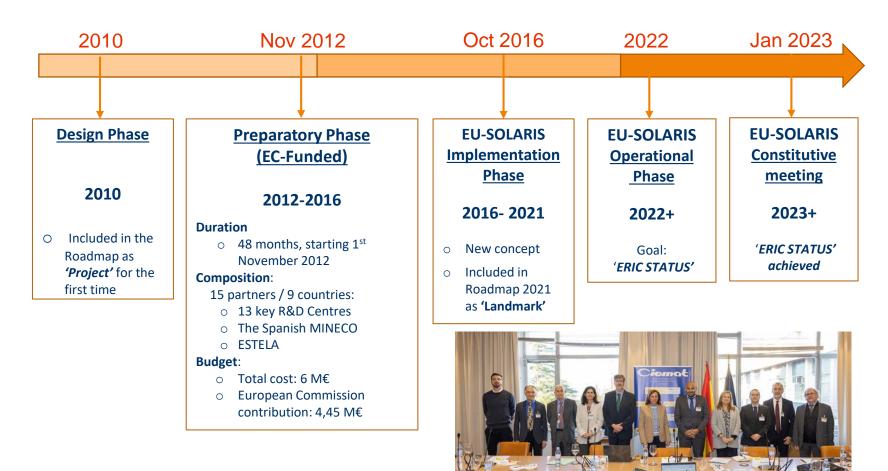
EU-SOLARIS ERIC

- Constitutive meeting 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), 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 future.





The Road Travelled so Far

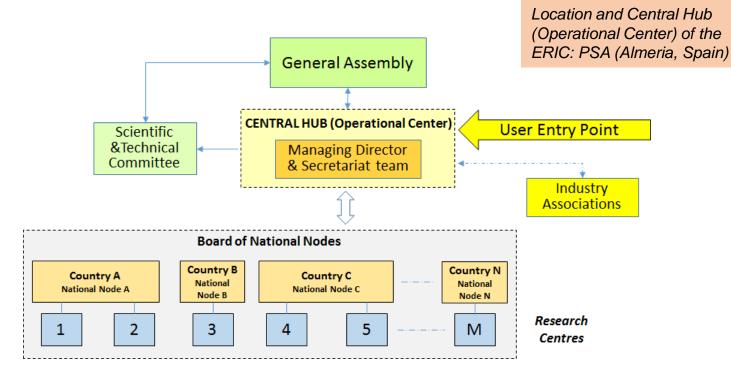


First Scientific & Technical Committee Meeting, 16 April, 2024

7



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 organizations of the BNN will be required



OBJECTIVES OF EU-SOLARIS

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.



DEFINED 'CORE' ACTIVITIES

- 1. Become the **Single Entry Point for Access** for services provision:
 - R&D services
 - Access to Research Infrastructure
 - Research Infrastructure Testing Services
 - Training and dissemination
- 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**→4 out of 5 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.



EU-SOLARIS WORKPLAN

TENTATIVE ADDITIONAL ACTIVITIES/SERVICES

- Identification and promotion of joint development of new facilities, when needed. 1.
- Continuous monitoring of the industry & research needs for R&D infrastructure and research agenda in general. Implementation of a Dissemination Pan Annual Meeting of the R&D and 2.
- 3.
- 4.
- Annual Users Meet 5.
- Annual Summer School / Doctoral Colloquium 6.
- Annual Prize Award 7.







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.
- Members are the **countries**, with a leading R&I institute per country.
- EU-SOLARIS ERIC is a **legal entity** and can apply to **Horizon Europe** calls: it has already participated in 5 proposals with success in 4 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.....



Information about current Projects



First Scientific & Technical Committee Meeting, 16 April, 2024



Summary of INFRA projects

| Short Name | Lead Institution | Duration | Starting Date | Total Budget | EU-SOLARIS' Budget |
|---------------------|--------------------------------------------|----------|---------------------|--------------|-----------------------|
| CACTUS | CEA-Liten | 24 month | 1 December 2023 | 1 495 937 | 159 875 |
| EULAC ENERGYTRAN | Organización de Estados Iberoamericanos | 24 month | 1 January 2024 | 1 494 634 | 199 750 |
| RISEnergy | Karlsruhe Institut für Technologie | 54 month | 1 March 2024 | 14 499 999 | 131 250 |
| SOLARIZE | EU-SOLARIS ERIC | 42 month | 1 July 2024 (tent.) | 4 468 405 | 536 750(80%) |



-Topic: HORIZON-INFRA-2023-DEV-01-06: Strengthen the bilateral cooperation on research infrastructures with Latin America

-Title:Enhanced Solar PV performance through improved research infrastructure for adapted climate conditions (**CACTUS**)

-Role: Beneficiary

-Coordinator: CEA-Liten

-Other participants: None from EU-SOLARIS. Entities from France, Spain, Italy, Colombia and Chile

- -Total budget: 1.495.937 €
- -EU-SOLARIS budget: 159.875 € (17 MM)
- -Activities:
- Leadership of WP2 'Enhancing Research Infrastructures'.
- Support in WP1 'General management'.



-Topic: HORIZON-INFRA-2023-DEV-01-06: Strengthen the bilateral cooperation on research infrastructures with Latin America

-Title: EULAC For Energy Transition: Research Infrastructures Cooperation For Energy Transition Between Europe and Latin-American and the Caribbean Countries (**EULAC EnergyTRAN**)

-Role: Beneficiary

-Coordinator: Organization of Iberian-American States

-Other participants: None from EU-SOLARIS. Entities from Spain, Portugal, Costa Rica, Argentina, México and Chile

-Total budget: 1.494.634 €

-EU-SOLARIS budget: 199.750 € (24 MM)

-Activities: Leadership of WP1 'Mobilities for Technology' and of WP2 'Research and Innovation for Technology'. Support in WP3 'General management'.





- **-Topic:** HORIZON-INFRA-2023-SERV-01-01: Research infrastructure services to enable R&I addressing main challenges and EU priorities
- -Title: Research Infrastructure Services for Renewable Energy (RISEnergy)
- -Coordinator: Karlsruhe Institute of Technology
- -Role: Beneficiary. RI provider.
- -Other participants: As 'Affiliated Entities'; DLR, CNRS, Cyl, LNEG, UEVORA, CENER & IMDEA (Spanish Node). CIEMAT goes as a separate Beneficiary.
- -Total budget: 15.000.000 €
- -EU-SOLARIS budget: 131.250 € (17 MM)
- -Activities:
 - Leadership of Task 2.3 'Statistic analysis of Transnational Access'.
 - Support in access activities to the AEs.
 - General management.



-Topic: HORIZON-INFRA-2023-DEV-01-03: Consolidation of the RI landscape – Individual support for evolution and long-term sustainability of pan-European research infrastructures

-Title: Bringing EU-SOLARIS ERIC to its Zenith (SOLARIZE)

-Role: Coordination.

-Other participants: CIEMAT, DLR, CNRS, Cyl, LNEG, UEVORA, ENEA, CERTH, CRES, METU, GÜNAM

-Total budget in the 2023 call: 3.557.637 €

-EU-SOLARIS budget: 429.000 € (42 MM)

-Activities: Leadership of WP5 'Project Coordination'. Leadership of several Tasks within WP1 'Strengthening the ERIC'





Discussion on 'Internal Project' Call 2024

First Scientific & Technical Committee Meeting, 16 April, 2024



Status of year 2023 round:

- Just one proposal has been received: lead by IMDEA, with Cyl and Fraunhofer as partners.
- FLARES: Fast Laser Assessment for near Real-time Evaluation of Soiling
- Passes all eligibility criteria
- Evaluation carried out by the STC members:

| | Scope | Science | Impact | Methodology | Budget | Total |
|---------------|-------|---------|--------|-------------|--------|-------|
| STC Member #1 | 5 | 5 | 5 | 5 | 5 | 25 |
| STC Member #2 | 4 | 4 | 5 | 5 | 3 | 21 |
| STC Member #3 | 5 | 5 | 4 | 5 | 4 | 23 |

- Next step: Upfront payment of 50% of the budget (22.500 €)
- Shall we proceed with round of year 2024 round? Any changes?



• Give a different weight to each criteria (proposal):

| Criterion #1: Scientific Excellence | 30% |
|--------------------------------------------------------------------------------------|-----|
| Criterion #2: Added value and benefit of the proposal to CST RIs | 25% |
| Criterion #3: Implementation of the Research Work | 30% |
| Criterion #4: Budget | 15% |
| | |
| Add name of the proposal | |
| Add name of the evaluator | |
| Allow some space for evaluator comments | |
| Allow for half points in the score | |
| | |
| push the dissemination of the call! | |
| | |
| | |
| | |



Proposed List of Prioritized Topics

- 1. Flux measurement systems.
- 2. Durability and accelerated aging of solar reflectors
- 3. Durability and accelerated aging of solar receivers
- 4. Solar field attenuation.
- 5. Collector shape assessment techniques
- 6. Solar radiation measurement, assessment and forecasting.
- 7. Other topics: development of new instrumentation
- 8. Standardization/certification of components or systems



Thanks for your participation!!!



Evaluation criteria

- <u>Criterion 1: Scientific Excellence (30%)</u>. Please provide comments emphasizing the strengths and the weaknesses of the Proposal and their relative importance with regard to the specific criterion, assessing the potential of the proposal to create new knowledge and further scientific understanding.
- <u>Criterion 2: Added value and benefit of the proposal to CST Research Infrastructures (30%)</u>. Please provide comments emphasizing the strengths and the weaknesses of the Proposal and their relative importance with regard to the specific criterion, including the potential knowledge transfer of successful project results to EU-SOLARIS Research Infrastructures.
- <u>Criterion 3: Implementation of the Research Work (25%</u>). Please provide comments emphasizing the strengths and the weaknesses of the Proposal and their relative importance with regard to the specific criterion, assessing the feasibility and complementarity of the team to carry out the proposed research work.
- <u>Criterion 4: Budget (15%)</u>. Please provide comments emphasizing the strengths and the weaknesses of the Proposal and their relative importance with regard to the specific criterion, assessing if the budget and co-funding/cost-sharing commitments are appropriate and realistic.