JRC NCP Info session Open access to JRC Research Infrastructures

Fabio Taucer
Andreas Jenet

Unit A.5 Scientific Development

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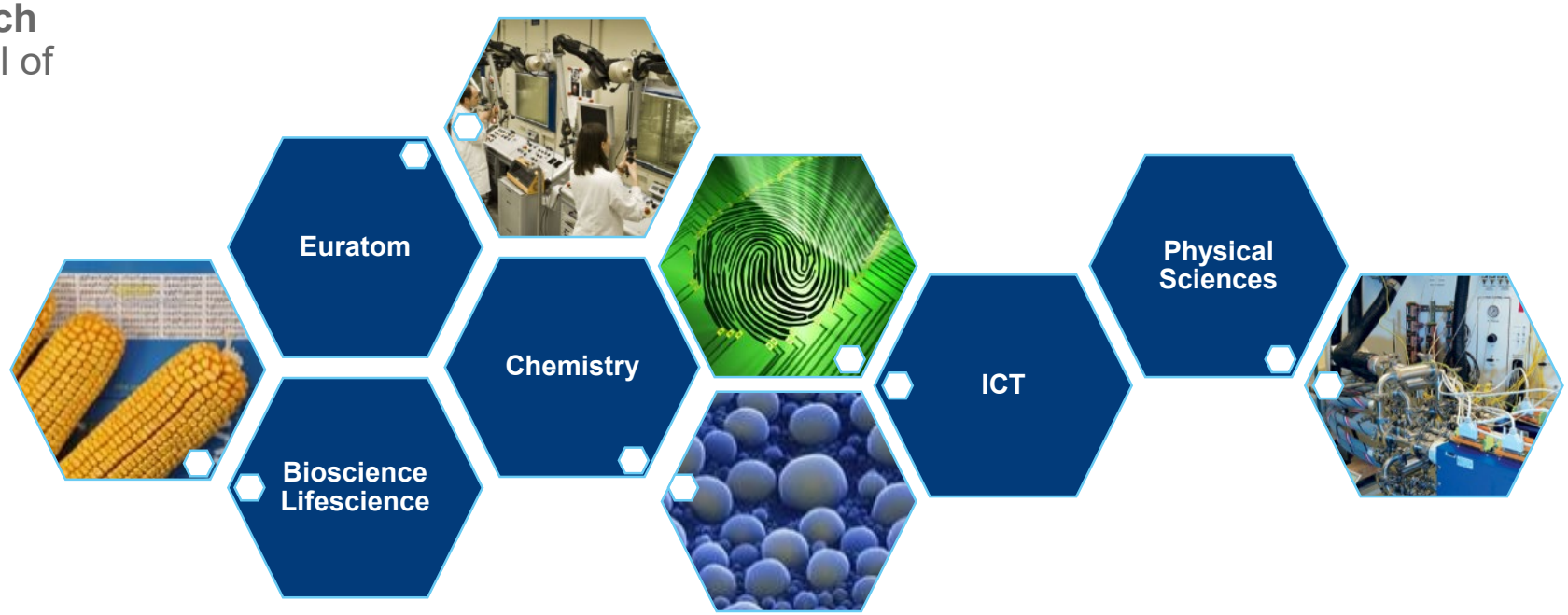
Landscape of JRC Research Infrastructures

JRC hosts **39 physical research infrastructures** with a potential of opening to external users

(out of a total of **56 facilities**)



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Rationale

Opening up access to JRC Research Infrastructures is part of the **JRC Strategy 2030**

Benefits to users and the ERA

- **Fair** and **transparent** method for allocating access
- Make JRC RIs available to external users in view of the **limited resources** in Europe
- Provide **capacity building to Enlargement and Integration countries**
- Bridge the **gap between science and Industry**
- **Dissemination** of knowledge, education and training, foster collaboration in Europe

Benefits to the JRC

- Expand JRC **networking** capabilities
- Enter into **new key areas** of research
- Maintain JRC **scientific excellence**
- Raise the **value and visibility** of JRC RIs

Framework for Access

Based on the **Charter of Access to RIs of DG RTD**

Principles and guidelines when defining Access policies for RIs

Access Modes

- **Relevance-driven**
  - **Peer-review selection** following a call for proposals: Scientific implementation, collaboration and access to new users, strategic relevance to the JRC, strategic importance for Europe
  - Mainly targeted to academia and research institutions, as well as to **SMEs**
  - Users charged the **additional costs**; nuclear RIs free of charge – Excluding consumables
  - Open dissemination after an 18 month embargo period
- **Market-driven**
  - Selection by the JRC
  - Mainly targeted to industry
  - Users charged the full costs
  - Data not disseminated via open schemes

Open to

✓ EU Member States

✓ Countries associated to Horizon Europe

Eligibility

Non-nuclear

- **Member States**
- **Associated countries**: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Kosovo, Moldova, Montenegro, Morocco, North Macedonia, Norway, Serbia, Tunisia, Turkey, Ukraine, United Kingdom*

Nuclear

- **Member States**
- **Associated countries**: Ukraine, United Kingdom*

Dedicated portal at EU Science Hub

- **All supporting documents**: Framework and related annexes (template for proposals, agreement documents, IP rules, etc.)
- **Eligibility Criteria**
- **Call for proposals per Research Infrastructure**
  - ✓ Estimated total number of Access Units allocated to the call
  - ✓ Average number of Access Units per project
  - ✓ Estimated additional costs per Access Unit
  - ✓ Priority topics of the Research Infrastructure
- **Selected Projects**
- **User Access Report** / link to databases (after embargo period)


Call for proposal: Hopkinson Bar facility, European Laboratory for Structural Assessment (ELSA)

Hopkinson Bar facility

Definition and conditions of access

Options for the allocation of intellectual property rights:

Eligibility criteria

How to apply

Selection criteria

https://ec.europa.eu/jrc/en/research-facility/open-access

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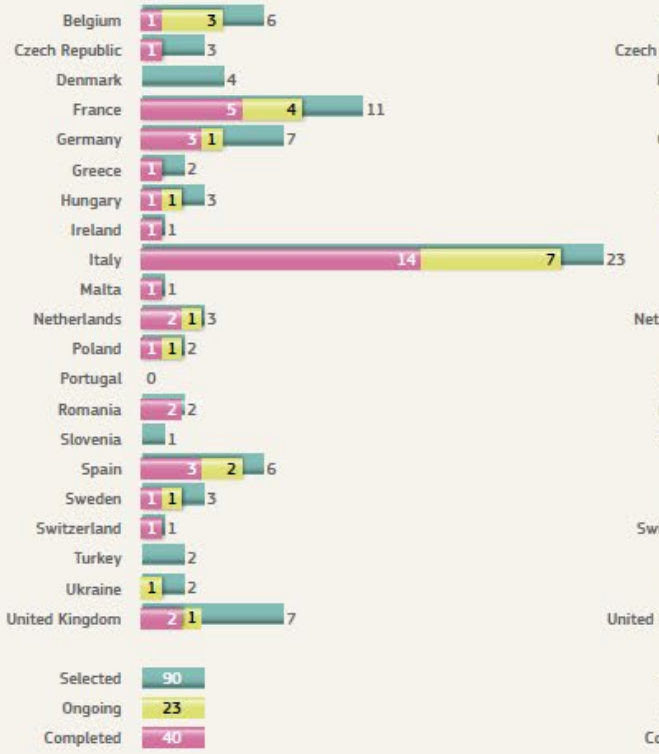
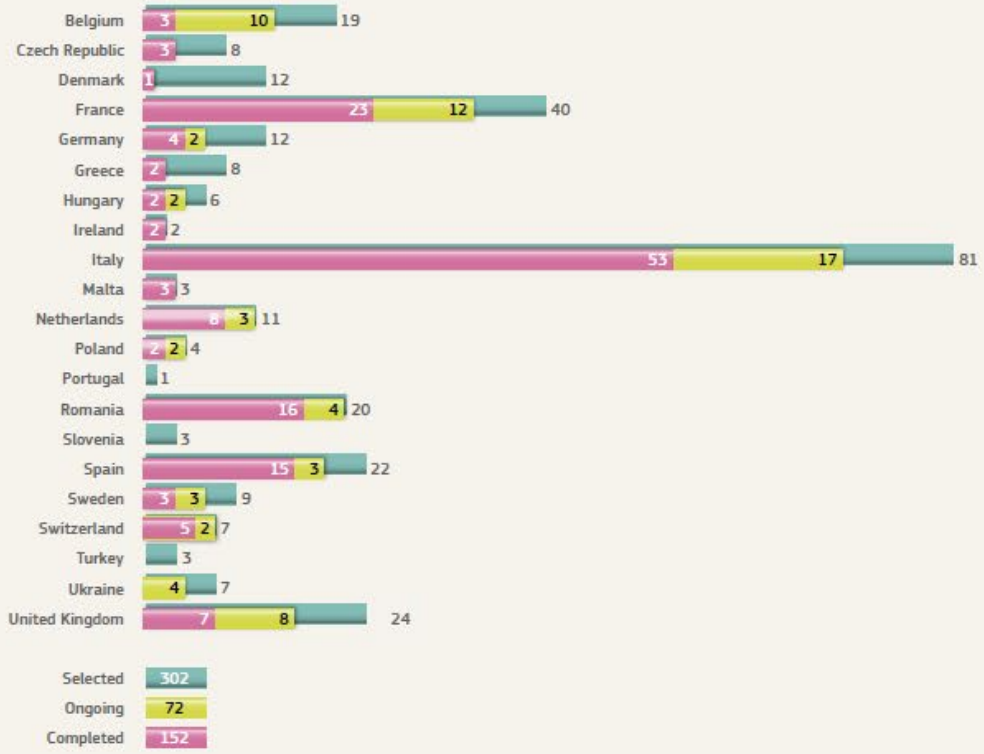
Statistics





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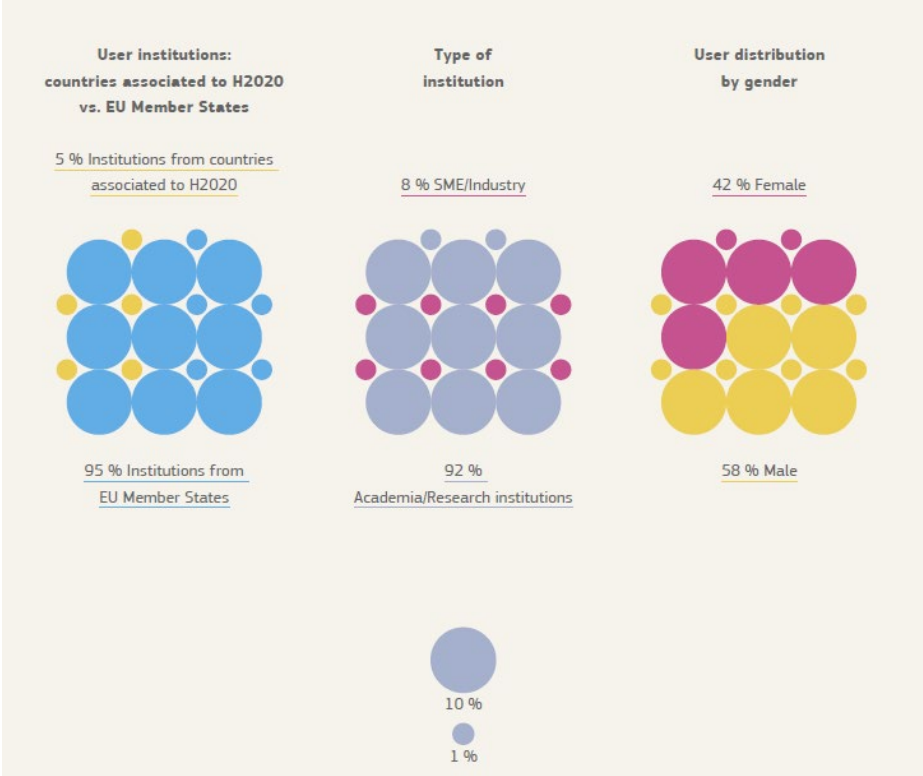
Statistics

49 calls since June 2017

- ✓ **17** Research Infrastructures
- ✓ **169** Eligible proposals
- ✓ **138** Selected proposals
- ✓ **78** Signed RIAAs
- ✓ **50** Completed Projects
- ✓ **27** Countries (6 / AC H2020)

Users (Signed RIAAs)

- ✓ **202** User Institutions (**8%** SMEs)
- ✓ **495** Users



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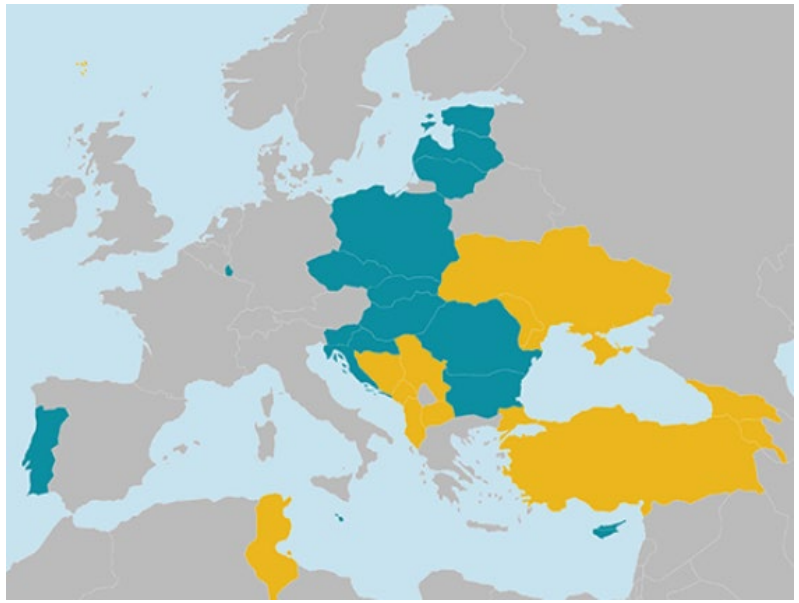
Facilitating Access to WPSE countries

Relevance-driven mode – Non-nuclear

- **Cover travel and accommodation** of Users from User Institutions located in **countries associated to HE** from the RTD Spreading Excellence and Widening Participation list.
- **Waive the access costs** in the relevance-driven mode to proposals where the Lead User Institution, and at least 2/3 of the Users Institutions are from the **Widening Participation and Spreading Excellence** list of countries.
- The calls are in competition with EU Member States

Relevance-driven mode –nuclear

- **Cover travel and accommodation** of Users as part of the Pilot Action in the field of nuclear safety (MS + Ukraine and UK)



Widening Participation and Spreading Excellence (WPSE) countries

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Facilitating Access – list of countries

Relevance-driven mode – Non-nuclear

- **Member States:** Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia.
- **Associated countries:** eligible countries based on an indicator and published in the work programme.
- **Legal entities from outermost regions as defined in Article 349 TFUE**: Guadeloupe, French Guiana, Martinique, Réunion, Saint-Barthélemy, Saint-Martin, the Azores, Madeira and the Canary Islands.

Relevance-driven mode –nuclear

- **Member States**
- **Associated countries**: Ukraine, United Kingdom*.

Training and capacity building

- Addressed to groups of Users from **universities, research or public institutions, or from a Small-Medium-Enterprises (SME)**
- Preferably with existing or under construction RIs similar or complementary to those of JRC
- The JRC covers the costs of **travel and accommodation** of Users from Institutions from the **WPSE list of countries**
- Stays at the JRC will comprise a **full week**, with the participation of groups from several institutions and countries.

ELSA Reaction Wall + Nanobiotechnology

https://ec.europa.eu/jrc/en/research-facility/open-access/relevance-driven/2021-1-rd-elsa-reactionwall

22 September 2021 → **16 January 2022**

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ELSA Reaction Wall + Nanobiotechnology

Priority topics of the Reaction Wall

- **Safe and green renovation of buildings for the New European Bauhaus**
- **Smart and sustainable materials** including nanomaterials in buildings and construction
- **Design and retrofit for resilience** (e.g., modular construction, damage-free structures, self-healing structures, influence of non-structural elements, cumulative damage, ageing construction, integration of structural stability, energy efficiency and new architectural/security demands)
- Safety of built infrastructure against **multiple hazards, including climate change**
- **New materials and technologies** (e.g., design for deconstruction, multifunctional building envelopes, structural glass, advanced manufacturing, 3D printing)
- **Sustainable materials for construction** (e.g., recycled concrete, biodegradable and sustainable materials, low-carbon steel and concrete)
- Application of **advanced testing methods** (e.g., hybrid testing)

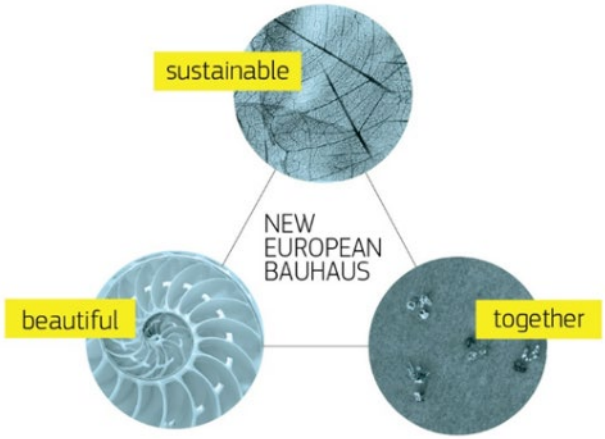
New European Bauhaus

Principles

- Global/local, participatory and transdisciplinary approach

Thematic axes of the transformation path

- Reconnecting to nature
- Regaining a sense of belonging
- Prioritizing the places and people that need it the most
- The need for long term, life cycle thinking in the industrial ecosystem



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Laboratory of Environmental & Mechanical Materials Assessment

AMALIA (assessment of nuclear power plants core internals)

to study the effect of environment on the mechanical and corrosion performance including life assessment and qualification of structural materials for present and next generation of nuclear systems

Laboratory of Environmental & Mechanical Materials Assessment

Structural Materials Performance Assessment Laboratories (SMPA)

the mechanical performance characterisation, life assessment and qualification of structural materials for present and next generation nuclear systems (equipment for creep, tensile and fracture tests)





Laboratory of Environmental & Mechanical Materials Assessment

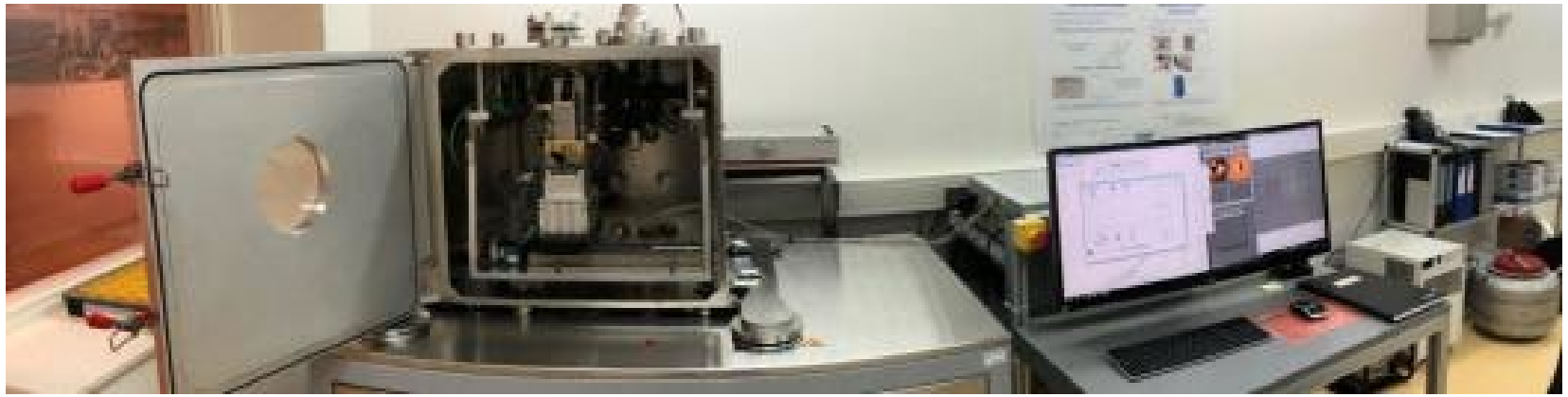
The Liquid Lead Laboratory (LILLA)

testing of mechanical and corrosion properties of materials in liquid lead with controlled dissolved oxygen concentrations and for temperatures up to 650°C

Laboratory of Environmental & Mechanical Materials Assessment

Micro-Characterization Laboratory (MCL)

To study of materials performance in terms of microstructure and micromechanics (metals, ceramic materials, polymers)



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Thanks

Any questions?

You can find me fabio.taucer@ec.europa.eu
andreas.jenet@ec.europa.eu

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