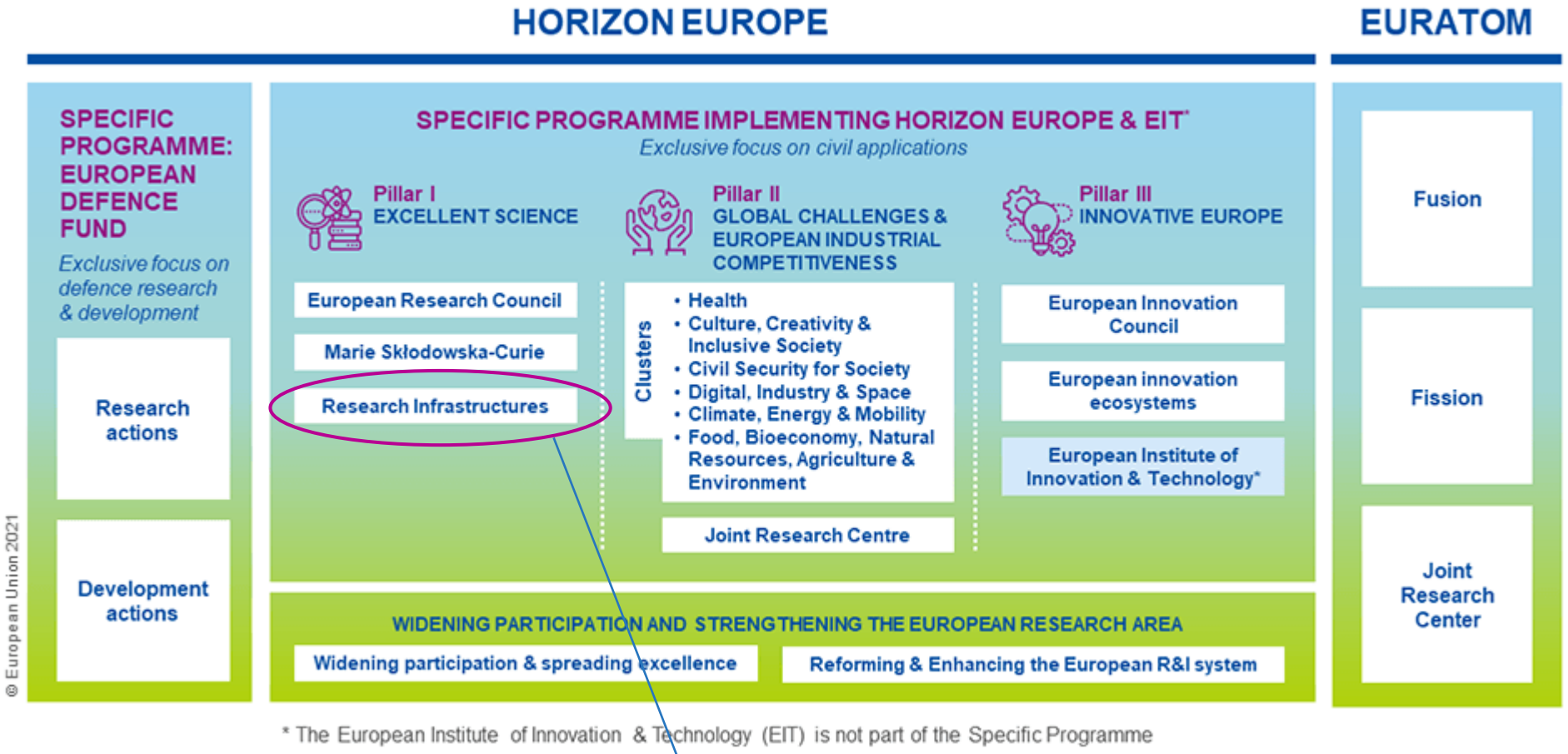
M. Vretenar, CERN
(on behalf of the TIARA Collaboration)

Industry Workshop on HTS developments and applications

Trieste 18.04.2023

Funding for accelerator research in Horizon Europe



Our traditional funding source for R&D on particle accelerators

RI was the only programme that had a budget reduction going from H2020 to HE…

Not many options for support in other pillars:

- *accelerators for applications face a difficult or impossible competition (e.g. in the Health cluster that does not finance instruments)*
- *the European Innovation Council is oversubscribes, little chances of success.*

Short, medium and long term TIARA programme

The **TIARA Collaboration Council** (chair: E. Nappi, coordinator J.M. Perez, scientific secretary M. Vretenar) is closely following the preparation of new calls and proposals for accelerators, and is constantly in contact with the EC to promote our activities.

Short (2024)	HORIZON-INFRA-2024-TECH-01-01: R&D for the next generation of scientific instrumentation, tools, methods, solutions for RI upgrade INFRA-TECH call, 10 M€, **12.03.2024**, 1 proposal bw. “intense muon beams” and “HTS magnet technology”. Strong support from the community for HTS. HORIZON-INFRA-2024-DEV-01-01: Research infrastructure concept development INFRA-DEV call, 3 M€, 12.03.2024, so far 1 proposal on “gamma factory”
Medium (WP 2025/ 2027)	Present to the RI Unit a proposal for a pilot call in **2025** (new Work Programme 25+ in preparation) for “innovation-like” activities for the 3 INFRA-INNOV advanced communities (accelerators, synch. light instruments, detectors), goal 10 M€ each.
Long (next Horizon 2028-2035)	Aim for a **long-term co-funded partnership for accelerators** in the next Horizon programme.

The 2024 INFRA-TECH call

HORIZON-INFRA-2024-TECH-01-01: R&D for the next generation of scientific instrumentation, tools, methods, solutions for RI upgrade

Funding (EC contribution):
5 to 10 M€ (everyone will go for 10 M€.
Deadline for submission 12 March 2024

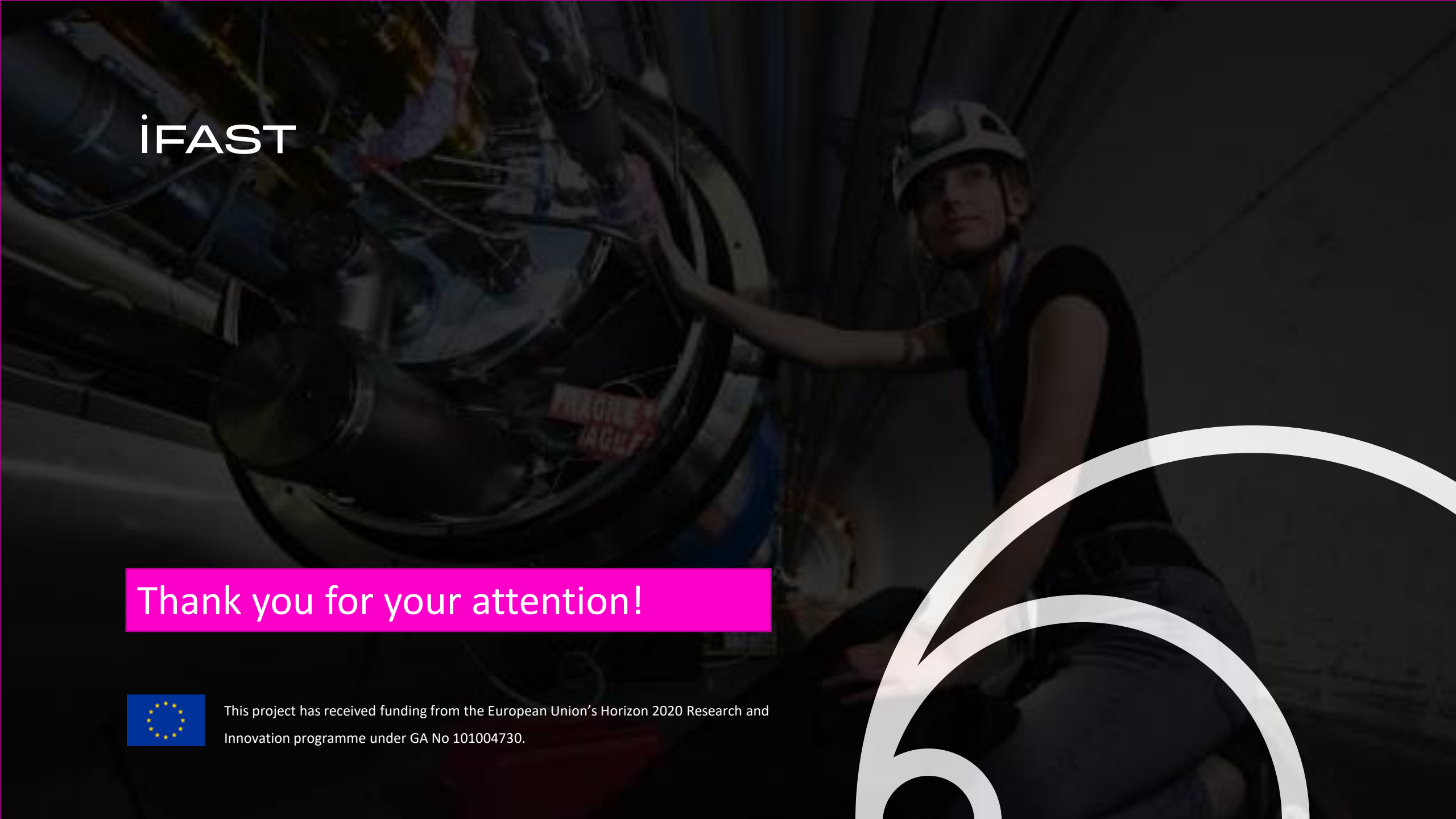
Consortia should be built around a leading core of at least 3 world-class research infrastructures, being ESFRI infrastructures, European Research Infrastructures Consortia (ERICs) and/or other world-class research infrastructures of European interest Other technological partners, including industry and SMEs, should also be involved.

Requirements for the INFRA-TECH call

Project **results** are expected to contribute to:
- enhanced scientific competitiveness of European RI's;
- enhanced RI capacities to address research challenges and EU policy priorities;
- foundations for the development of innovative companies;
- increased collaboration of research infrastructures with universities, research organisations and industry;
- increase of the technological level of industries through the co-development of advanced technologies for research infrastructures and creation of potential new markets;

Scope: The aim of this topic is to deliver innovative scientific instrumentation, tools, methods and solutions which advance the state-of-art of RIs in the EU and Associated Countries, and show transformative potential in RIs operation. The related developments should lead research infrastructures to support new areas of research and/or a wider community of users, including industrial users. Cutting-edge technologies will also enhance the potential of RIs to contribute addressing EU policy objectives and socio-economic challenges.

Proposals should address the following **aspects**, as relevant:
- Research and development of new scientific instrumentation, tools and methods for research infrastructures taking into due account resource efficiency and environmental impacts.
- their technology validation and prototyping;
- training of RI staff for the operation and use of these new solutions.
- the innovative potential for industrial exploitation of the solutions and/or for the benefits of the society, including facilitating proof of concept for use by SMEs.



Thank you for your attention!

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