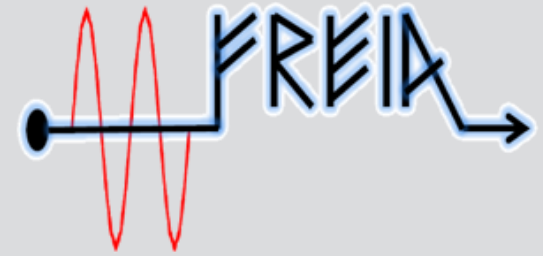




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WP2.3 Accelerator and SC magnet TI sustainability

WP2.3 Accelerator and SC magnet TI *sustainability* (UU)

Reports: M2.3 in month 18 and D2.3 in month 30

“The objective of the AMICI project is to engage the Technological Infrastructure which is currently dedicated to European science-based accelerators and large SC magnets with a new, efficient and *sustainable* collaboration/production model by means of Cooperation and Innovation. “

“To strengthen or at least maintain this position, in a context of increasing size of the projects, larger gaps between the construction phases and global competition, Europe needs to ensure the *sustainability* and the further development of the R&D potential, expertise and know-how built-up in accelerator and SC magnets technology during the last decades.”

“The sharing of information, pooling of resources, coordination of R&D activities, and access to fabrication, assembly and verification platforms will contribute to the *sustainability* of TIs and ensure that Europe in the future will continue to be able to develop cutting-edge technologies for accelerators and SC magnets and build highly competitive accelerator-based RIs in Europe, therefore staying at the forefront of scientific research.”

Work Package 2 on Strategy

Objectives

The objective of this WP is to identify the strategic elements necessary to successfully implement a viable and *sustainable* cluster of Technological Infrastructures in partnership with industry, creating an ecosystem helping to boost basic research and applications through laboratories or universities and industry, large or SME.

The *third element* will be to study how to support and develop the Technological Infrastructures in future. Each of the currently proposed future accelerator construction or upgrade Research Infrastructure projects is typically larger or much larger than hitherto Research Infrastructures, in many cases calling for a global collaboration for, and financing of, the construction work. The much larger size will lead to that there will be significantly fewer projects under construction in future. This implies that there will be larger fluctuations with time in the demand for the support from the Technical Infrastructures and of high-tech specialized industrial companies. There will probably be time periods of significant length when there will be no demand for accelerator or large magnet development and construction, and other time periods when there will be too large a demand to be satisfied by the currently existing accelerator and magnet Technical Infrastructures and high-tech specialized industrial companies. These fluctuations with time imply that there will be, and already to some extent is, a *sustainability* problem for the Technical Infrastructures and also for the specialized industrial production lines.

WP2.3: Accelerator and SC magnet Technological Infrastructures *Sustainability* (UU, DESY, CEA, CNRS, CERN)

This Task will study how to *sustain* the Technological Infrastructures and the specialised industry in view of the foreseen increase in the fluctuations with time of the demands for support from the very large future RI's

- by the establishing a coordination and collaboration between the European accelerator and magnet Technological Infrastructures and with industry,
- by increasing the involvement of the Technological Infrastructures in the work on applications of new accelerator and magnet technology to satisfy societal needs and
- by informing and explaining to the general public and governments, using public events and media, the essential role played by the Technological Infrastructures for the development both of new Research Infrastructures and of new high-tech applications useful to society.

Deliverable

D2.3: Report on propositions to guarantee the long term *sustainability* of TIs (M30).

“All AMICI core-group members base their actual cooperation or project driven collaboration on a variety of written agreements or contracts. Since most activities are temporarily funded, *sustainability* is not always guaranteed. AMICI will study existing general collaboration agreements and use the expertise of the involved legal experts to harmonize such agreements with the goal to ease the later definition of attachments dealing with technical developments. Innovation brings technology transfer, and the latter requires license agreements – either with license fees or royalty arrangements. In many cases concerted actions would be preferable and definitely help with respect to the AMICI goals. “

Discussion points

- The important role of the ILOs as link to Industry but also, most importantly, to Ministries & Governments
- Start by finding out how the different Technological Infrastructures in AMICI operate with the Accelerator Infrastructures, including how collaborative projects are created, agreed and financed
- The "Black Hole", or "Valley of Death", separating Fundamental Research and Technological Developments for Applications in Society



Psalm 23:1-6

Yea, though I walk through the Valley of the Shadow of Death, I will fear no evil: for thou art with me; thy rod and thy staff they comfort me.