

Sustainability of Accelerator R&D in Europe

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ARIES Kickoff

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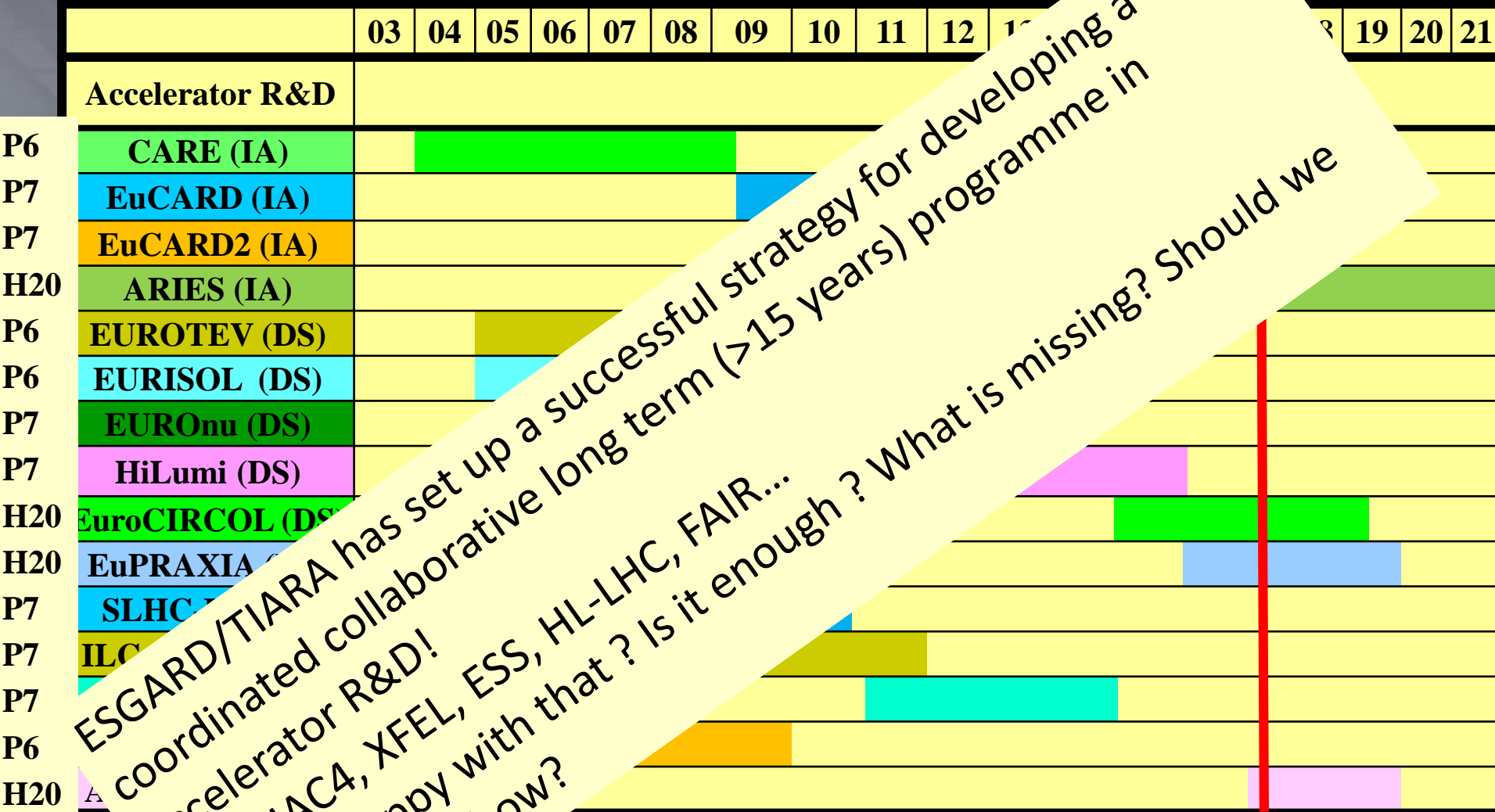
1. Objectives
2. Tasks
3. Next step
4. Conclusion



ARIES



Past and on-going activities (Historical)



ESGARD/TIARA has set up a successful strategy for developing a coordinated collaborative long term (>15 years) programme in accelerator R&D!

⇒ LINAC4, XFEL, ESS, HL-LHC, FAIR...

Are we happy with that? Is it enough? What is missing? Should we do more and how?

Approvals in H2020, ESGARD/TIARA has overseen the... 15 successful projects in the INFRA calls :
 Total... 293 M€ with EC contr. ~95 M€

Development of future accelerators requires a steady R&D effort

In parallel to encouraging National R&D efforts, it is vital to

- Facilitate exchange of information, dissemination and outreach
- Facilitate coordinated collaborative R&D effort
- Facilitate access to existing infrastructures
- Promote Education and Training
- Promote Innovation with industry

Objectives in ARIES

- **Reflect on most effective way to ensure sustainable collaborative effort for AS&T in Europe**
- **Propose appropriate mechanism, including funding scheme**
- **Propose new and ambitious EC instruments**

Sustainability of Particle Accelerator Research in Europe in WP1

3 Sub-Tasks are foreseen

- Sub-Task1: Coordination and Communication
- Sub-Task2: Identify mechanisms ensuring sustainable collaborative R&D
- Sub-Task3: Propose a European Strategy, including funding mechanisms for developing R&D projects

Sub-Task1 aims are :

- Management of the activity
- Provide support
- Set up communication tools
- Coordinate reports' write-ups.

Sub-Task2 aims are :

- Identify needs and constraints for enabling long term collaborative Accelerator R&D efforts
- Survey established national/international mechanisms ensuring sustainable accelerator R&D activities (including Education&training)
- as well as mechanisms ensuring industry involvement both on R&D and innovative new products
- Investigate the existing EC instruments, evaluate their effectiveness for supporting a strategy for developing sustainable collaborative accelerator R&D

“Sustainability” Task in ARIES

Sub-Task3 aims are :

- Based on sub-task2, identify optional strategy scenarios enabling long term collaborative Accelerator R&D efforts, including funding mechanisms
- Foster discussions within ARIES and TIARA on a European Strategy for facilitating and funding sustainable collaborative R&D
- Produce a final report on European Strategy proposal and a tentative Roadmap for ensuring sustainable collaborative R&D in AS&T ⇒ **fall 2020**.

Establish a joint ARIES-TIARA Working Group

- To start the activities of sub-task 2
- Composition
 - ~10 people
 - ARIES and TIARA members
 - Labs, universities, industry should be represented
- Objective : a first meeting before **end September 2017**

Conclusion

Developing a strategy and establishing means to enable sustainable collaborative R&D in Accelerator Science and Technology in Europe is vital

- **for fundamental science**
- **to address directly or indirectly societal and technological challenges**

i.e. for accelerating Knowledge and Innovation

ARIES is an appropriate forum for participating to this endeavor as it integrate the vast majority of the European partners involved in Accelerator Science and technology

Thank you

**Comments
and/or
Questions**