

TIARA Activities (relevant for SEEIIST)

<http://www.eu-tiara.eu/>

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November 27th, 2018



Test Infrastructure and Accelerator Research Area

1. **Introduction and History**
2. **Next (selected) actions and relevance for SEEIIST**
3. **What should SEEIIST do**
4. **Conclusion**

From ESGARD to TIARA

**Strengthen the role of the European consortium
and formalize it through a MoU**

CEA (FR), CERN (INO), CNRS (FR), CIEMAT(SP),
DESY (DE) , GSI (DE), INFN (IT), PSI (CH), STFC
(UK), Uppsala U (SW)*, IFJ-PAN (PL)**

* Representing consortium of Nordic institutes
** Representing consortium of Polish institutes

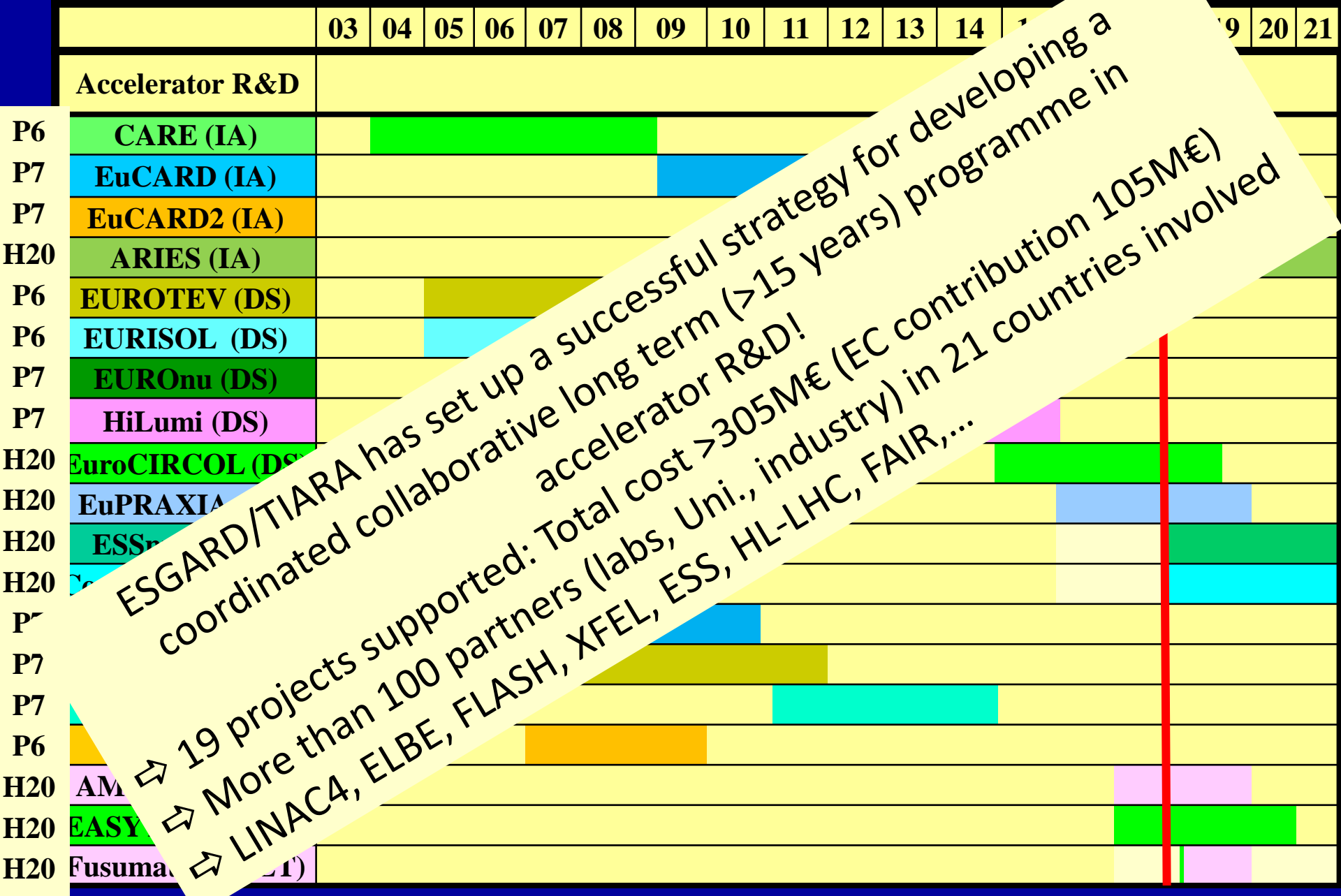
**Established in 2015 and
superseding ESGARD**

TIARA is a dedicated structure, the purpose of which is to exchange expertise and to facilitate and support the setting-up of joint R&D programmes and education and training activities in the field of Accelerator Science and Technology in Europe.

Concerning TIARA activities, Key Words are:

- Collaborative projects for Accelerator Science and Technology
- Development of R&D infrastructure and access
- Innovation with industry
- Education and Training
- Dissemination and Outreach

Past and on-going projects supported by ESGARD/TIARA



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

⇒ 19 projects supported: Total cost >305M€ (EC contribution 105M€)

⇒ More than 100 partners (labs, Uni., industry) in 21 countries involved

⇒ LINAC4, ELBE, FLASH, XFEL, ESS, HL-LHC, FAIR, ...

Summary

ESGARD and now TIARA is promoting and developing a consistent collaborative programme in the field of Accelerator Science and Technologies (19 projects approved).

Strong and very advanced integrated community for R&D in AS&T is now very active and efficient.

It embraces all aspects, including:

- **Brainstorming of new ideas through Networking activities**
- **Generic R&D**
- **Dedicated R&D in Key Accelerator Research Areas**
- **Access to Test Infrastructures**
- **Design Studies toward new Accelerator-Based Research Infrastructures**
- **Education and Training**
- **Industrial Development of state-of-the-art components and co-innovation with Industry**

Many discussions with the EC for H2020

Development and Long Term Sustainability

Topics (Type of Action)	Budgets (EUR million)			Deadlines
	2018	2019	2020	
INFRADEV				
Opening: 05 Dec 2017				
INFRADEV-03-2018-2019 (RIA)	15.00			22 Mar 2018
Opening: 16 Oct 2018				
INFRADEV-02-2019-2020 (CSA)		20.00		29 Jan 2019
INFRADEV-04-2019 (RIA)		20.00		
Opening: 14 Nov 2018				
INFRADEV-03-2018-2019 (RIA)		40.00		20 Mar 2019
Opening: 25 Jul 2019				
DS INFRADEV-01-2019-2020 (RIA)		20.00	10.00	12 Nov 2019
Overall indicative budget	15.00	100.00	10.00	

Impl. for ESFRI/OWCRI

PP for ESFRI RM18

Fast Track operation ELI

Impl. for ESFRI/OWCRI

DS

Action : TIARA reviews and oversees the preparation of bids

INFRADEV-02-2020: Preparatory Phase of new ESFRI projects

Discussion with the EC for H2020

Innovation

Topics (Type of Action) INFRAINNOV	Budgets (EUR million) 2019	Deadlines
Opening: 10 Oct 2018		
HPC use for SMEs INFRAINNOV-01-2019 (RIA)	8.00	29 Jan 2019
Opening: 14 Nov 2018		
Network of RI-ILO INFRAINNOV-02-2019 (CSA)	1.50	20 Mar 2019
Overall indicative budget	9.50	

Indicative budget for 2020: ?

INFRAINNOV-04-2020: Innovation pilots (accelerators considered)
Total amount for the call : 60M€ (under discussion)

Funding for DS and beyond

Design Study

EU conditions (at least 3 partners from member states , other partners can also participate)

TIARA can help by overseeing the preparation of the bid and possibly recommend the project to the EC (so far 100% success rate!)

Project proponents need to present the progress regularly at TIARA meeting and include TIARA recommendations in proposal

Preparatory Phase or Implementation

In all cases, being in ESFRI Roadmap is necessary if EU support is required

Next ESFRI RM issue will be in 2021 (exact schedule tbd)

How to get in the ESFRI RM

RM2021 Conditions and Methodology to be defined

Launch of the process is foreseen around June 2019 (but likely to be similar to RM2018)

Announcement of RM2021 likely to be in Autumn 2021

3 important show stoppers

Projects needs to be included in the national Roadmaps of at least one of the partners (EU member states)

Projects needs the political support of 3 EU member states (no funding commitment needed but support letters signed by relevant ministries needed)


Deadline for Proposal to ESFRI expected around spring 2020 (exact timing to be refined in 2019)

Conclusions

After having established an accelerator R&D strategy, its implementation through many very successful projects in FP6 FP7 and H2020, has enabled to integrate the European expertise (Labs and universities) for collaborative Accelerator R&D.

All aspects, from generic R&D (low TRL) to industrialization (high TRL) are covered by the projects supported by TIARA.

TIARA continues to work toward a successful integration of all AS&T actors in Europe with the involvement of Industry in order to enhance further the impact of Accelerators in Science and Society.



Accelerator science is a powerful mean
toward scientific, technical and
industrial breakthroughs and innovations...

Personal Tentative (aggressive) Schedule

