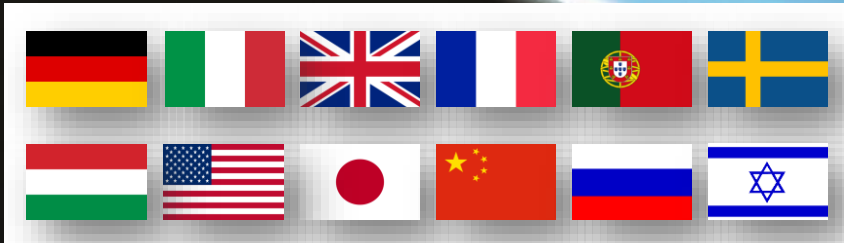


EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS



5th Steering Meeting

R. Aßmann, 7.April 2017



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 653782.

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1. ESFRI Roadmap:

- a) INFN will inquire from the Italian Government if it supports the process with funding.
- b) DESY will inquire about the prospects of joining the German Roadmap, as this is a pre-requirement for joining the ESFRI roadmap.
- c) A third country needs to be selected: France, UK, or a smaller country are all options.
- d) A decision on applying in 2017 will be made in February 2017.

➔ **No decision in Germany yet. France must put EuPRAXIA on French roadmap first. PROPOSAL: Apply in 2019 but start working on this now. Hire consultant (DESY budget).**

2. Contact eupraxia-admin@desy.de if you would like to be part of the **Asia/US outreach tour** of EuPRAXIA or if you would like to suggest any feedback to it (action **All**).

➔ **Not being organized so far. Japanese colleagues organizing some meetings with government representatives adjacent to HEDS workshop in Japan – will report on this next time.**

3. WP4 asked the question if the **100 fs parameter** of the laser pulse length is fixed or if it could be equal to 150 or 200 fs? Discussion with WP2/3/9 is needed (action **Leo Gizzi**).

4. An **informational movie for EuPRAXIA** could be produced. (action **Carsten Welsch**).
 - ➔ In progress
5. Please give feedback to Carsten Welsch about the amount of attendees (either 250 or 500 people) for the Liverpool symposium in 2018 (action **All.**).
 - ➔ **Decided to go for 250 as maximum number of attendees. Budget prepared. Location being rented.**

6. New associated members should be informed of the vote to accept them.
→ *done*
7. The SAC members have to be invited.
→ *in progress*
8. A list of requirements and a template for potential future associated partners should be prepared.
→ *in progress*
→ *New applicant: see next slide*

Application for a membership to the Eupraxia project of :

The Queen's University of Belfast

Dr. Gianluca Sarri



Upcoming symposium “***Fostering the Innovation Potential of Research Infrastructures***”, organized by the above mentioned project in close collaboration with the European Commission (DG RTD), and that will take place on



II RICH Symposium:
“Fostering the Innovation Potential of Research Infrastructures”

May 8th, 2017
Fundação Calouste Gulbenkian, FCG
Av. de Berna 45 A, 1067-001, Portugal, Lisboa

- 9:00 **Registration with coffee**
- 9:30 – 10:00 **Welcoming words and objectives of the symposium**
- *Philippe FROISSARD, Deputy HoU, Research Infrastructures, DG RTD, European Commission*
 - *Representative from Gulbenkian Foundation*
 - *Representative from FCT*
 - *Monique BOSSI, Agency for the Promotion of European Research (APRE), RICH project coordinator*
- 10:00 - 10:30 **Keynote speaker:** *Ernest MONIZ, former United States Secretary of Energy (or Fabiola GLANOTTI, Director-General CERN)*
- 10:30 – 11:30 **Plenary Session #1 – Innovation at the RI level and at the project level**
- Moderator:** *Marta MARCH, Research Infrastructures NCP (INTA, Spain)*
- Panelists:**
- *Fosca GLANNOTTI, Director of Research, Knowledge Discovery and Data Mining Laboratory, KDD LAB, CNR-ISTI - SoBigData (Innovation Platform / Social Innovation)*
 - *Gelsomina PAPPALARDO, Consiglio Nazionale delle Ricerche – Coordinator ACTRIS2 (Innovation Platform)*
 - *Giorgio ROSSI, Coordinator of NFFA-Europe (Technical Liaison Network)*

- *Anton USSI, Operations & Finance Director EATRIS - CORBEL (Innovation Office)*

Questions, answers and debate session

11:30 – 12:00 **Coffee Break**

12:00 – 13:00 **Plenary Session #2 – Policy tools and Instruments**

Moderator: *Ricardo MIGUEIS - Advisor on technological infrastructures and international programmes (ANI – Portuguese National Innovation Agency)*

Panelists:

- *Lieve BOS, DG CNECT Innovation Unit - PPI and PCP in H2020*
- *Margarida RIBEIRO, DG RTD, H2020 RI WP tools and policy goals*
- *Bob JONES, HNSciCloud coordinator (CERN) - HelixNebula Science Cloud PCP*
- *ELI (Socioeconomic impact of RI investment)*

Questions, answers and debate session

13:00 – 14:00 **Lunch**

14:00 – 15:00 **Plenary Session #3 – Innovation in Action – Clusters and spin-offs**

Moderator: *Georgia TZENEU, Research Infrastructures NCP (EKT, Greece)*

Panelists:

- *Olivier NAPOLY (CEA) – AMICI Project coordinator*
- *Claes-Göran WAHLSTRÖM, LASERLAB-EUROPE – Innovation Spin-offs from research*
- *Werner KUTSCH, ICOS Director General – SME relations*
- *Axel Börsch-Supan, Coordinator of SHARE – Spinning-off research into policy*

15:00 – 16:30 **Plenary Session #4 – Round Table: Fostering the Innovation Potential of RIs**

Moderator: *Jose ANTAO*, Research Infrastructures NCP (FCT, Portugal)

Panelists:

- *Kinga STANISLAWSKA* (European Innovation Council and Exterior Venture Fund)
- *Jaya BALOO* (KPN Telecom and Quantum Technologies HLSC)
- *Fabiola GLANOTTI* (CERN)
- *Giorgio ROSSI* (ESFRI)
- *John WOMERSLEY*, ESS Director General, European Spallation Source
- *Iñaki SAN SEBATIÁN* – CEO Tecnalia

Questions, answers and debate session

16:30 – 17:00 **Closing and concluding remarks**

Philippe FROISSARD, Deputy HoU, Research Infrastructures, DG RTD,
European Commission

17:00 – 18:00 **Cocktail Reception**

Probably important to be there

→ Networking and lobbying

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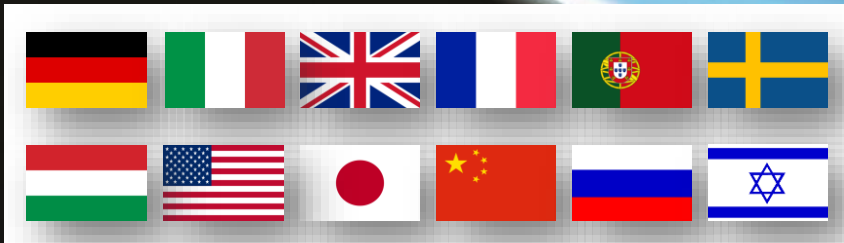
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5th Steering Meeting WP 1 Report

R. Aßmann, 7.April 2017



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 653782.

- Several WP1 milestones and deliverables in first 18 months → all completed.
- Outlook to other milestones and deliverables:
 - Next Milestone: M32
 - Next Deliverables: M42
- Focus in 2017:
 - Project management
 - Collecting output from WP's
 - Organization of general meetings
 - Baseline work on layout and costs
 - Investigation of new funding opportunities/lobbying

- Concerning milestone/deliverable reports
 - Very good track record for our project so far
 - But stressful periods to make the submission deadline
 - Template available in Latex
- Proposal from Ruth is working fine
 - Advance working with you to help avoid last minute crash efforts
 - First request: **2 months before submission deadline**
 - Aim for final draft: **1 month before submission deadline**
- Feedback on this procedure?
 - Please mention now or send by email to Ruth...

2017

May 2017

IPAC 2017 with contributed EuPRAXIA Talk → IMPORTANT
Drafts will be distributed as soon as possible

19.-23.6.2017

1st EuPRAXIA Collaboration Week at DESY

- *next round of our design – take it to the next level*
- *should bring together EuPRAXIA management and*

ALL

EuPRAXIA paid personnel

- *do we want SAB here as well? Propose yes, if they want. We need them in November*

Aug 2017

ESFRI roadmap application – see notes before (not yet)
Contact with Euroopportunities, Tallin

24.-30.9.2017

EAAC2017 (Italy)

Invite high level speaker EU

Special EuPRAXIA Day

Distribute Announcement to EuPRAXIA (to be done to be sure)

- 20.-24.11.2017 **2nd EuPRAXIA Collaboration Week** fix (place **tbd**)
2nd Annual Meeting / Mid-Term Meeting (incl. EU)
2nd Collaboration Board Meeting
EuPRAXIA Work Week first part of week
- Nov 2017 **LEAPS Event** in Brussels
Hope that EuPRAXIA is included in roadmap and maybe as flagship project (?)
- 14.12. morning **8th Steering Committee Meeting at DESY** – remote (tbc)

2018

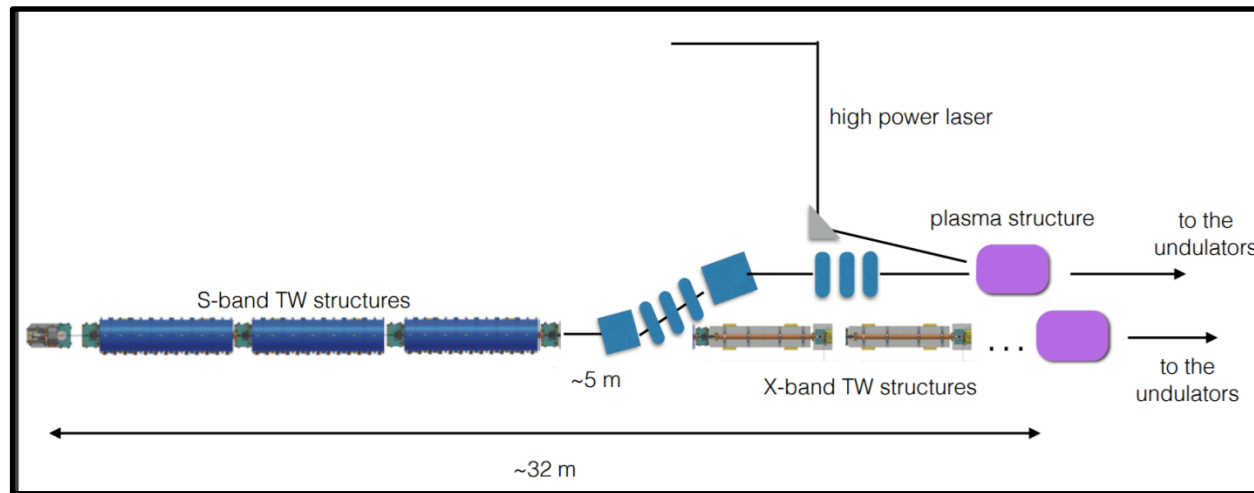
- 2-5.7.2018 **3rd EuPRAXIA Collaboration Week** (Liverpool)
- 6.7.2018 **Symposium EuPRAXIA** in Liverpool
Industry day
- Nov 2018 **EuPRAXIA 3rd Yearly Meeting** (**place tbd**)
EuPRAXIA 3rd Collaboration Board Meeting
SAB meeting and report

2019

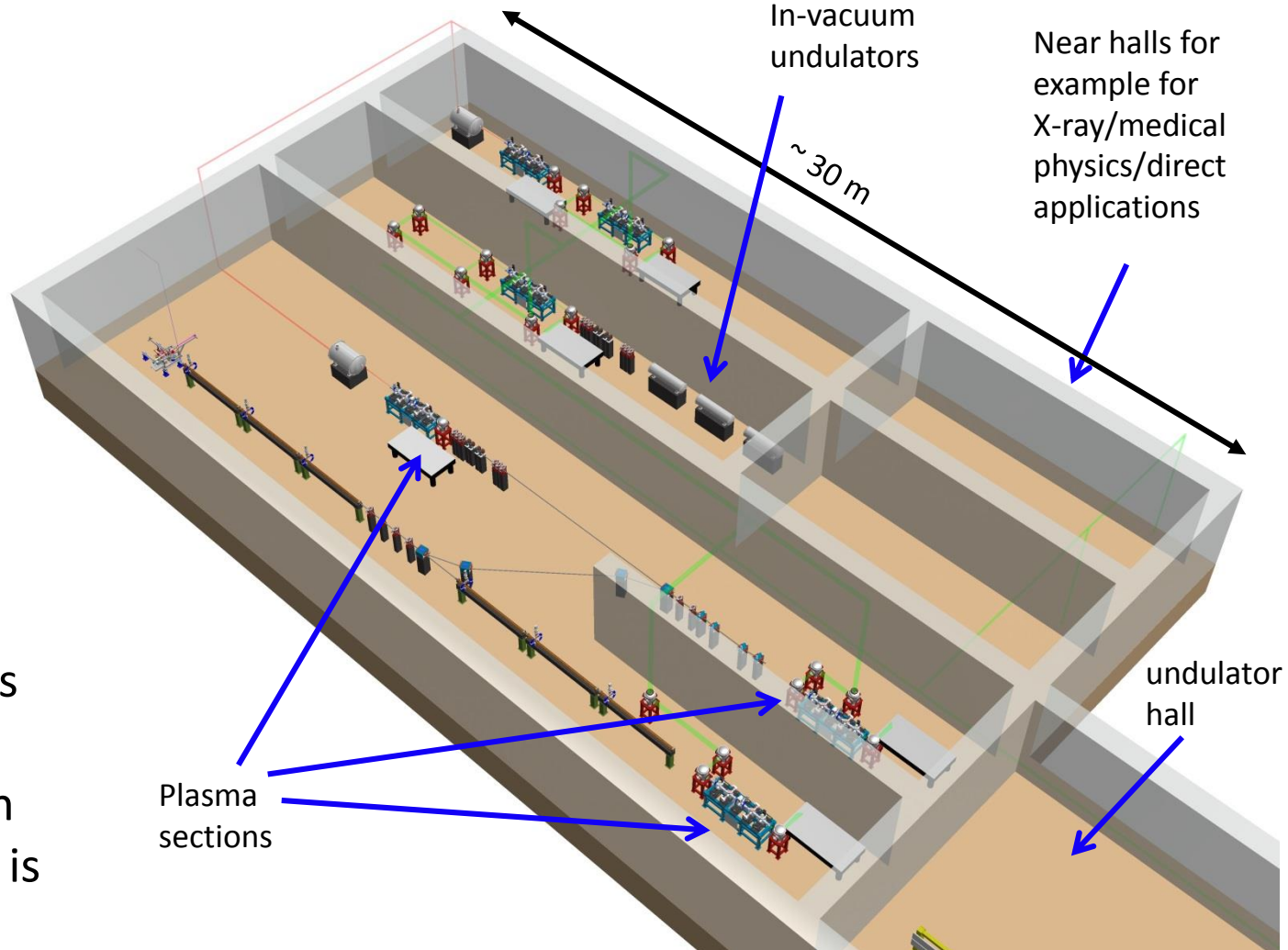
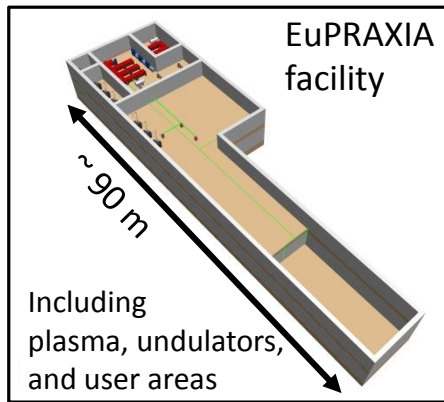
- February 2019 **EuPRAXIA 4th Collaboration Week**
in the Alps (tbd)
Heraeus support (?)
- May 2019 **EAAC2019** (Italy)
EuPRAXIA day (?)
- 25-29.5.2019 **IPAC19** (in Australia) → *Invited talk for EuPRAXIA!?*
- August 2019 **ESFRI Roadmap** application... (for sure)
- September 2019 **EuPRAXIA 4th Yearly Meeting** (Hamburg)
EuPRAXIA 4th Collaboration Board Meeting
“Big” Compact Accelerator Event in Hamburg
Industry day
Outreach to public

- Who wants to host events?
- In case of no volunteers: Hamburg

- Work on draft of layout ongoing
- Suggestions from WPs were received and integrated
- One example: WP5 suggestions from WP meeting in 1/2017:
 - Gun & S-Band RF acc. (M5.2)
 - X-band structure for PWFA (straight section, bottom line)
 - Dogleg and plasma structure for LWFA with LWFA (upper line)

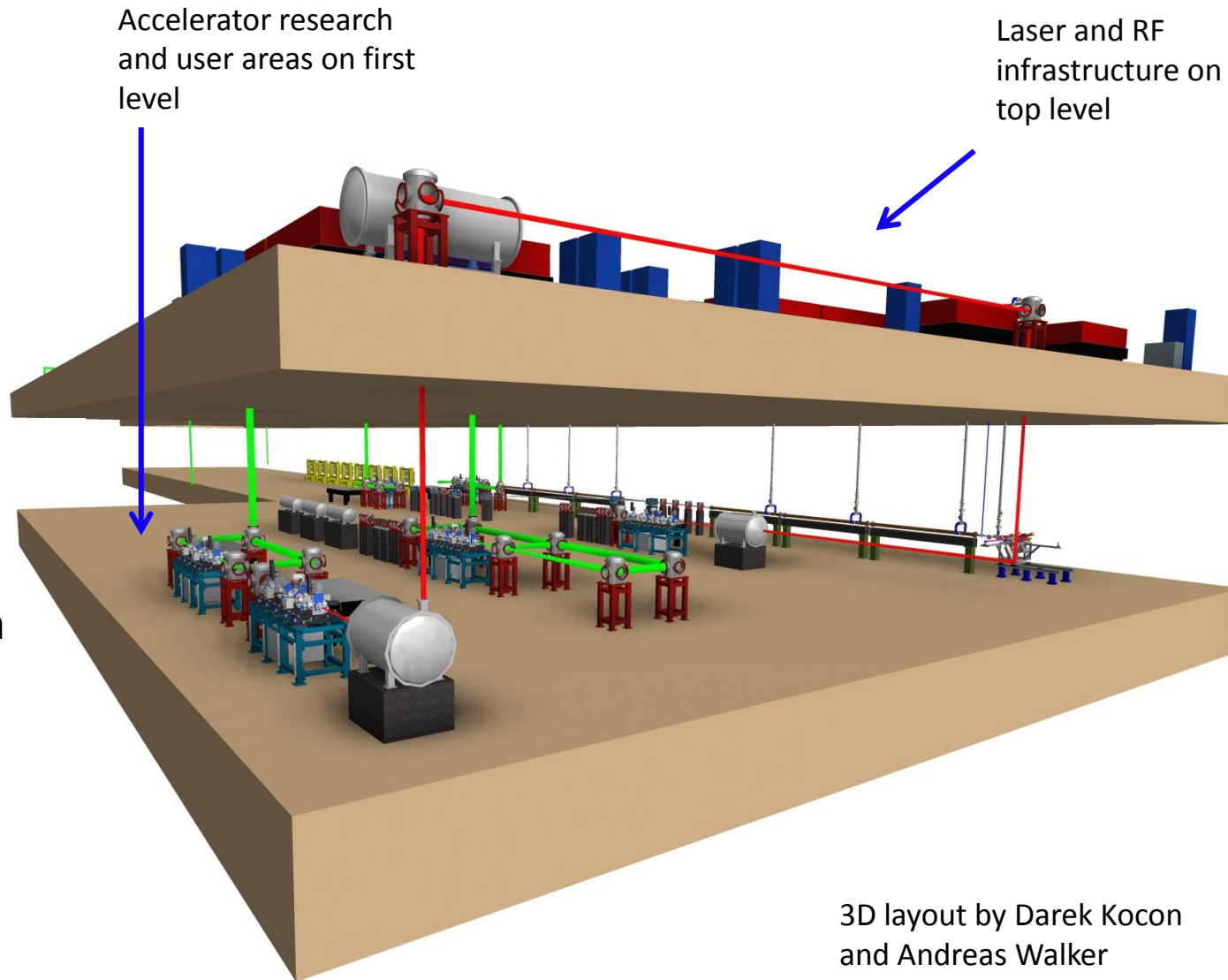
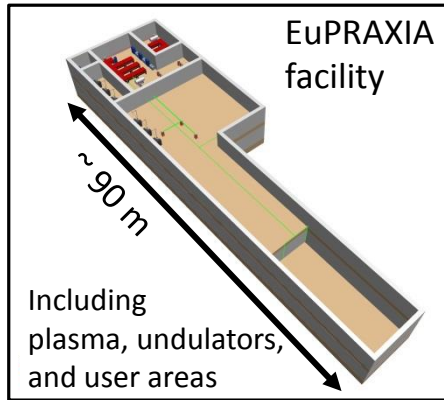


From WP5 meeting in January 2017 by Enrica Chiadroni



- WP5 suggestions integrated
- Several plasma stations as well as user areas
- Further reduction and combination is needed

3D layout by Darek Kocon and Andreas Walker



- Laser and RF infrastructure on top level
- Laser available in user areas

3D layout by Darek Kocon and Andreas Walker

- **EuPRAXIA construction cost:** Layout with its various configurations will be used to estimate costs of these configurations
- So please look at it once we send it around
- In addition to EuPRAXIA construction cost we would like to perform an **R&D program** as soon as possible:
 - Design/develop next generation devices for central components
 - Build prototypes and test them
 - Involve industry very early (industrialize R&D devices – stability – reliability)
 - Demonstrate crucial concepts

- Funding review on required R&D. 41 contributions from 28 institutes received → Many thanks!
 - total of **68 M€** → not fully optimized yet for overlap or synergies
- Topics include:
 - RF development
 - Plasma/gas target design
 - Laser development
 - Magnet development
 - Nano-collimation
 - Electron beam line diagnostics
 - Undulator prototype
 - R &D set-ups
 - Conceptual studies
- Introducing this into discussions (TIARA, LEAPS, ...)

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- **Documents requiring external signatures**
- Support by at least 1 ESFRI representative or EIRO forum member (mandatory, your ESFRI application can only be submitted by a ESFRI representative or EIRO forum member)
- At least 1 letter of funding commitment (mandatory), with indication on the % of implementation + operational costs covered (to be calculated when your project cost book is finalised)
- At least 2 letters of political support (mandatory, letters can be issued by a funding agency or governmental body: e.g. MIUR or CNR for Italy, Bundesministerium für Forschung for Germany)
- Letters of support from relevant research institutions (nice-to-have, to be obtained before or during the preparation of the ESFRI application)
- Letters of support from other potential users (letters of support from companies: strongly recommended, other potential users: nice-to-have)
- Registration of your project on the national Roadmap (one registration on a National Roadmap or acknowledgment by the body in charge of the National Roadmap that your project will be considered for the next Roadmap update: strongly recommended, additional registrations: nice-to-have). In practice, the registration of your project on one or more National Roadmaps can be done after being registered on the ESFRI Roadmap. As a single site infrastructure, I would recommend you to obtain at least a letter from the body in charge of updating the National Roadmap acknowledging that your project will be considered for the next Roadmap update.

- **Other long-lead documents that can be produced internally (no need for external signatures but external inputs may be required)**
- A design or pre-feasibility study of the infrastructure (for single-site infrastructure) or at least the hub/one important node (distributed infrastructure) (strongly recommended)
- Scientific case (mandatory)
- Conceptual Design Report (strongly recommended)
- Cost-Benefit Analysis (a part of Euroopportunities' offer) (strongly recommended)
- Statutes of the legal entity operating the infrastructure + governance scheme + organisational scheme (nice-to-have although at this stage of any RI project, most ESFRI Roadmap candidate projects do not have statutes, governance scheme or organisational scheme to offer, it is however strongly recommended to design a governance and organisational scheme that is not dependent on a particular legal status)
- Funding agreement(s) (nice-to-have, as a complement to the letter(s) of funding commitment)
- Cost book (strongly recommended, included in Euroopportunities' offer)