



Research Infrastructures in Horizon 2020

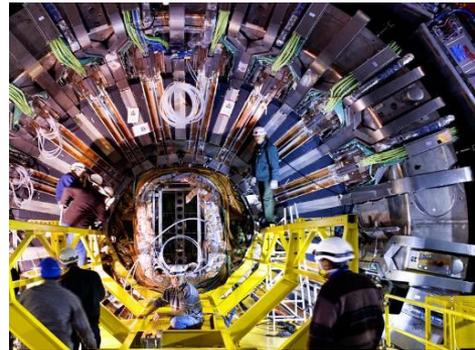
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Research Infrastructures

Research infrastructures are *facilities, resources and services* that are used by the research communities to conduct research and foster innovation.

Major scientific equipments

Knowledge-based resources



e-infrastructures

Horizon 2020 – Framework Programme for Research and Innovation (2014-2020)

Excellent science

- European Research Council
- Future and Emerging Technologies
- Marie Curie actions
- **European Research infrastructures (including e-infrastructures)**

Societal challenges

- Health, demographic change, wellbeing
- Food security, sustainable agriculture, marine - maritime research, bio-economy
- Secure, clean and efficient energy
- Smart, green, integrated transport
- Climate action, resource efficiency, raw materials
- Inclusive, innovative and reflective societies
- Secure societies
- *Spreading excellence & Widening Participation*
- *Science with and for Society*

Industrial leadership

- Leadership in enabling and industrial technologies (ICT, space, nanotechnologies, advanced materials and advanced manufacturing and processing, biotechnology)
- Access to risk finance
- Innovation in SMEs

Research Infrastructures in Horizon 2020

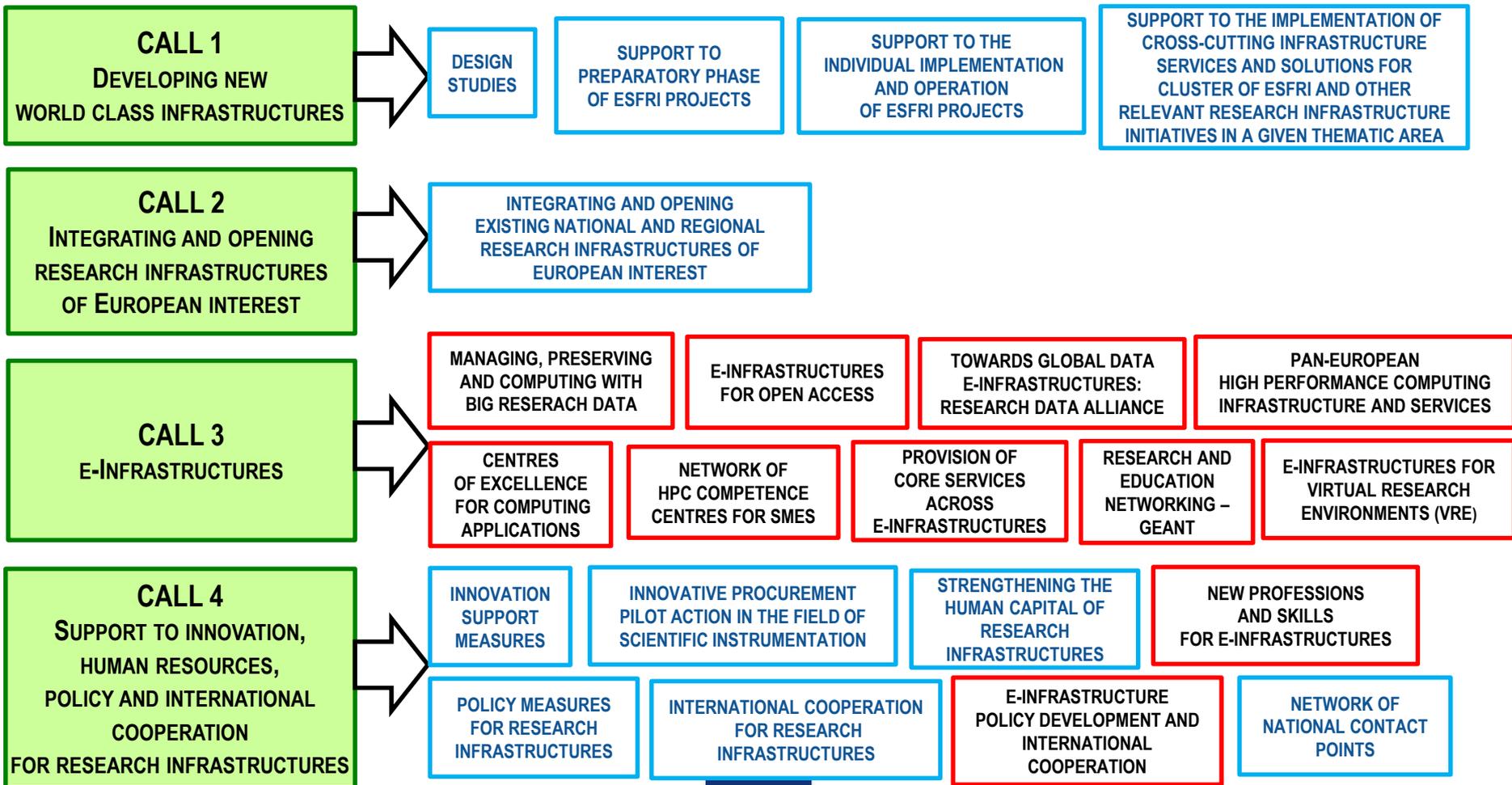
1. Developing the European RIs for 2020 and beyond
 - Developing **new world-class RIs**
 - **Integrating and opening national and regional RIs of European interest**
 - Development, deployment and operation of ICT based **e-Infrastructures**
2. Fostering the **innovation** potential of RIs and their **human resources**
3. Reinforcing European RI **policy** and **international cooperation**



Work Programme 2014-2015

RESEARCH INFRASTRUCTURE

Work Programme 2014-2015 – 4 calls, 22 topics



WP 2014-15 –outcome

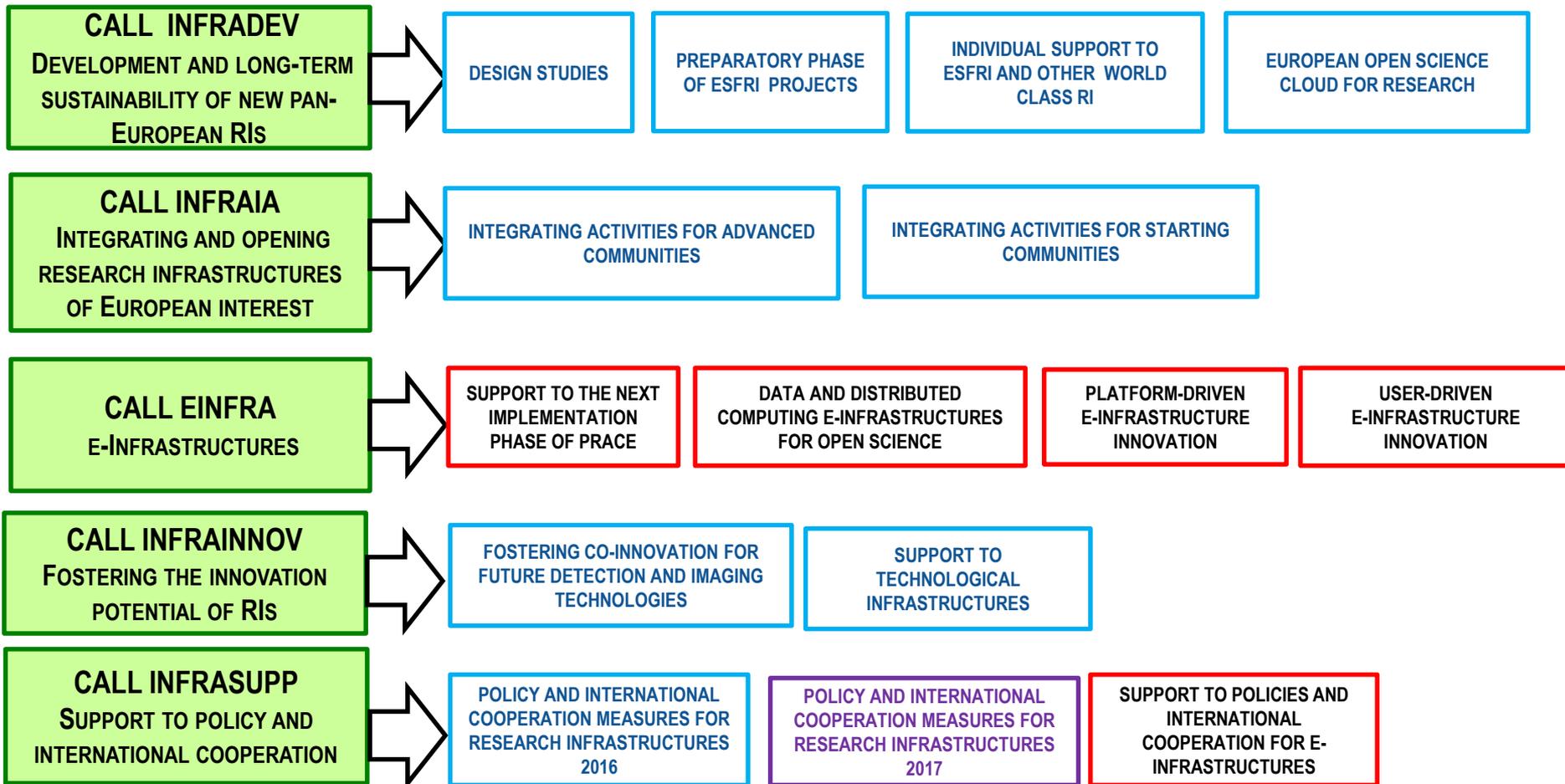
- **8 Design Studies (22,3 M€)**
- **3 Preparatory Phases (3,9 M€)**
- **15 Implementation Phases (99,3 M€)**
- **8 Clusters (92 M€)**
- **19 Integrating Activities (160 M€)**
- **2 PCP/PPI (incl. CSA) (4,6M€)**
- **4 support actions (StrESFRI, MERIL, RICH, RITRAIN)**
- **7 INCO support actions (11,5 M€)**



Work Programme 2016-2017

RESEARCH INFRASTRUCTURE

Work Programme 2016-2017: 5 calls, 15 topics





Call INFRADEV– Development and long-term sustainability of new pan-European RIs

To support the development of a comprehensive landscape of new sustainable world-class research infrastructures in Europe, helping to respond to challenges in science, industry & society

Emphasis on long-term sustainability, efficient operation, data management and on fostering the innovation potential

1. Design studies (2017, 20 M€)
2. Support to Preparatory Phase and to Early Phase of ESFRI projects (2016, 32 M€)
3. Individual support to ESFRI & OWCRI (2016-2017, 70 M€)
4. Pilot action for a Eur. Open Science Cloud for Research (2016, 10M€)

Call INFRAIA - Integrating and opening RIs of European interest: *Integrating Activities*

To open up **key** national and regional research infrastructures to all European researchers and to ensure their optimal use and joint development:

1. **INFRAIA-01-2016-2017: IA for Advanced communities:** whose RIs show an advanced degree of coordination gained through previous IA grants
One stage call. Targeted approach based on a Multi-Annual Plan (MAP)
Total budget 160 M€ - EU contribution per proposal (RIA) up to 10 M€
2. **INFRAIA-02-2017: IA for Starting communities:** never supported for their RI integration under EU FP7 or Horizon 2020 calls, in particular within an IA
Two-stage call. Bottom-up approach
Total budget 40 M€ - EU contribution per proposal (RIA) up to 5 M€



Call INFRAINNOV - Fostering the innovation potential of Research Infrastructures

INFRAINNOV-01-2017 – Fostering co-innovation for future detection and imaging technologies

Establishment of a novel research and innovation collaborative framework to support technology and innovation transfer from RI towards industrial partners and joint development of high-tech components

- **Total budget 20 M€ - EU contribution per proposal (RIA) up to 20 M€**
- **Financial support to third parties**

INFRAINNOV-02-2016 – Support to Technological Infrastructures

Development of strategic agendas & roadmaps for key technologies for the construction/upgrade of RI, identification of potential markets, exchange of good practices, ...

- **Total budget 10 M€ - EU contribution per proposal (CSA) up to 2 M€**
- **Expected to cover at least five different technological domain of interest for pan European RI**



Call INFRASUPP - Policy and International cooperation

INFRASUPP-01-2016 – Policy and INCO measures for RI

1. *Synchronising and harmonisation of RI evaluation mechanisms and road-mapping*
2. *International landscaping exercise for RI*
3. *Bilateral cooperation on RI with Africa*
4. *Training needs of **SESAME**, Jordan*

➤ Total budget **8** M€ - EU contribution per proposal (**CSA**) 1.5 – 2 M€

INFRASUPP-02-2017 – Policy and INCO measures for RI

1. *Development of a **model** describing the **socio-economic leverage** of RI*
2. *Support to **RDA** secretariat, participation of new communities and **ESFRI** RI and emergence of building blocks for interoperable data infrastructure (**CNECT/RTD**)*

➤ Total budget **5** M€ - EU contrib. per proposal (**CSA**) (1): up to 1.5 M€;
(2): 3 - 3.5 M€

Thank you for your attention

HORIZON 2020

