EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS

EuPRAXIA

WP3: rules and regulations
Second site

A.Speka, A.Ghigo and P.Campana

INFN
Istituto Nazionale di Fisica Nucleare

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101079773

WP3 Report (1)

We prepared the report for the milestone WP3-MLS3.1: April 2024

Benchmark of comparable RI organisational models

We make the comparison between the following EU distributed RI:

- EMFL European magnetic field
- The Extreme Light Infrastructure: ELI
- KM3 - NET
- ELIXIR -EMBL

EMFL European magnetic field

- Four main labs distributed in three european countries

- the Dresden High Magnetic Field Laboratory (HLD, Germany),
- the Laboratoires National des Champs Magnétiques Intenses (LNCMI) in Grenoble and Toulouse (France),
- High Magnetic Field Laboratory in Nijmegen (HFML, The Netherlands) –

Each of the laboratories has a specialization in the measurement of magnetic fields from different types of magnets such as pulsed magnets, superconducting magnets, high field magnets etc.

These laboratories are associated with other laboratories that are users of these infrastructures and use them continuously.

- The legal framework is an AISBL.

The Extreme Light Infrastructure: ELI

- Three main labs distributed in three european countries
- ELI Beam lines located in Prague Czech Republic;
- ELI Alps in Budapest Hungary;
- ELI-NP in Magurele close to Bucarest Romania
- and a certain number of laboratories which are users who also contribute to the development of equipment and research lines. The three pillars host very high powerful lasers made available for experiments to external users.

Czech and Hungarian laboratories joined forces in an ERIC, European Research Infrastructure Consortium together with other member countries, Italy and Lithuania.

The legal framework is an ERIC.

KM3-NET

- Two main infrastructure located in two European countries:

- ARCA telescope located in Italy
- ORCA located in France

KM3NeT is a research infrastructure housing the next generation neutrino telescopes. Once completed, the telescopes will have detector volumes between megaton and several cubic kilometres of clear sea water.

The governance and management of the implementation, the commissioning and the first operation period of KM3NeT-phase 2 is defined in a Memorandum of Understanding signed by the funding authorities.

- After the completion of the infrastructure the legal framework chosen is an AISBL.

ELIXIR -EMBL

- ELIXIR is an European intergovernmental organisation that is made up of life scientists, computer scientists and support staff. The ELIXIR goal is to help researchers take advantage of the huge amounts of data produced in life science, so that we can gain new insights into how living organisms work in health and disease.

- ELIXIR is part of the European Molecular Biology Laboratory that is an organization with the commitment to making biological data and information accessible to life scientists in all disciplines.

- In ELIXIR there are 23 countries that work together using a ‘Hub and Nodes’ model.
- ELIXIR makes use of the legal structure of European Molecular Biology Laboratory (IGO)

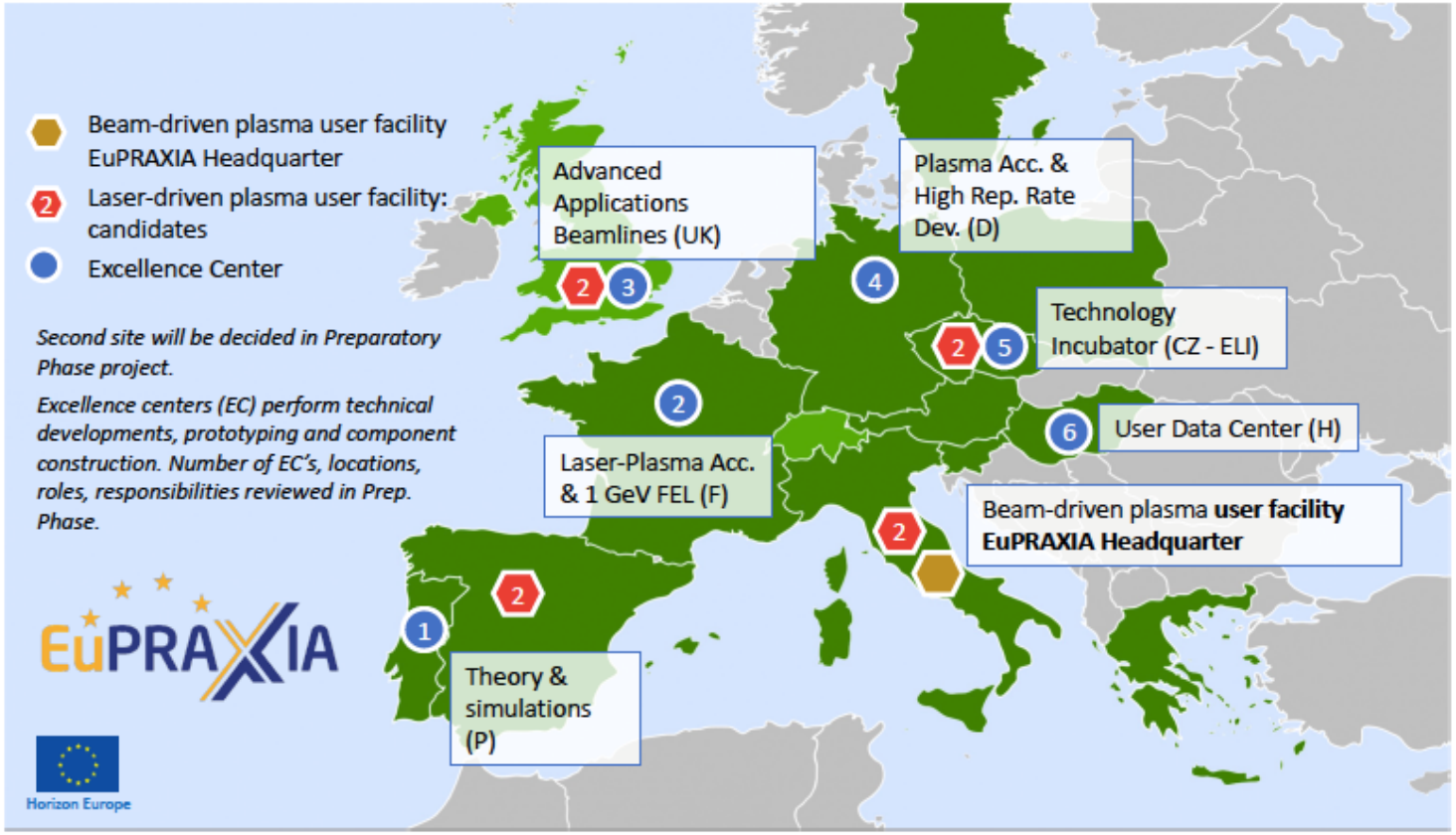
WP3 reports

We prepared the report of the Deliverable
WP3-DVL3.1: April 2024

Criteria and methodology for 2nd site selection
aimed at sites that propose themselves as a second site:

CLPU - Salamanca (ES)
CNR - Pisa (IT)
ELI-ERIC - Prague (CZ)
EPAC - Oxford (UK)

Distributed Research Infrastructure *(June 23)*



Today`s status

Excellence centers: **several** (6 – 10) assumed to be realized

Second site: **one** to be selected

Connect with WP´s to Horizon Europe and national funding lines

Criteria and methodology for 2nd site selection

- The report describes the main elements that will be used to prepare the path toward a decision for the choice of the second site, i.e. the one that will host the Laser Driven Plasma Accelerator of the ESFRI EuPRAXIA infrastructure.

the report contains :

- General Assessment Criteria for Research Infrastructure
- Assessment Criteria Specific to Laser Plasma Acceleration

- These criteria are the the framework of the “bid-book” that laboratories that want to host the second site can present at the Collaboration Board

Bid-book

We prepared a short document titled :

EuPRAXIA Laser based infrastructure bid-book request

in which we ask to the lab that proposed themselve to be EuPRAXIA laser site to describe the characteristics and conditions proposed to meet the requirements of the second site

In the next presentation Arnd will describe the bid-book

Visits to possible second site

We visited the proposed second sites:

CNR - Pisa (IT) → 13-14 June 2023

CLPU - Salamanca (ES)→ 3-4 December 2023

ELI-ERIC - Prague (CZ) → 1-2 October 2023

EPAC - Oxford (UK) → 13-14 February 2024

Following the agenda:

- Overview of the structure (Ongoing/planned researches and infrastructure)
- Facility tour
- Round table discussion

EUROPEAN
PLASMA RESEARCH
ACCELERATOR WITH
EXCELLENCE IN
APPLICATIONS

EuPRAXIA

Thanks for the attention

INFN
Istituto Nazionale di Fisica Nucleare

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101079773