DE LA RECHERCHE À L'INDUSTRIE

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PANEL 1C: OPTIMIZING THE USE AND OUTCOMES OF NATIONAL RIS THROUGH INTERNATIONAL PARTICIPATION

Quick overview in France

2018 French Research infrastructures Roadmap

99 Research Infrastructures

Source: French Ministry of Research

http://www.enseignementsup-recherche.gouv.fr/pid25384/strategie-nationale-des-infrastructures-de-recherche.html

Variety of infrastructures

Variety:

- Single site, locally distributed, dematerialized
- International, European, National, nodes of international infrastructures
- France and abroad
- Different disciplines (Physics, Biology, Human Sciences, Health….)

→ Various policies for international access

Important financial investment from Ministry and the French Research Organizations

- Full cost analysis 2016: 1,38 G€ (*source Ministry*)
- Sustainability is a concern (investment, operation, upgrades…)
- Cost increase ⟶ Economic model to adapt
- Industry participation: 2% in average (eventual cap by legal statute)

Driving force: EXCELLENCY

International access policies: European facilities ESRF & ILL

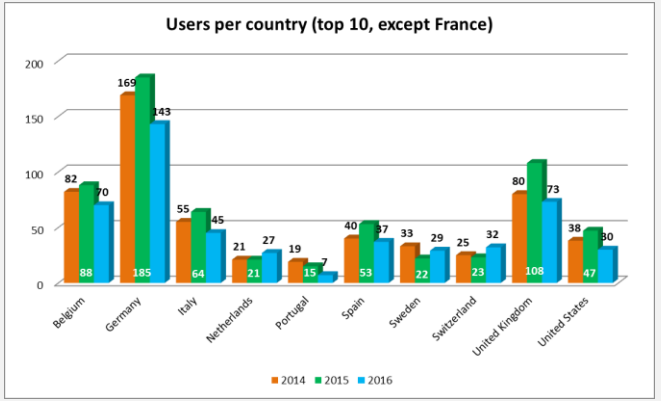
- **Civil society (non profit) under French Low, ruled through Intergovernmental agreement**
- **Possibilities for new comers:**
  - **Become a full member:** Complex and long process (agreement of all existing members, ratification in the different member countries). Example: **Russia new member of ESRF in 2018**
  - **Become a scientific member (ILL)/scientific associate (ESRF)**

    Example ILL (10 countries)
    - Interim membership (participation to operation cost: 1% for 1% beam time based on excellence)
    - Scientific member (Entrance fee + operation cost)
      - Participation in the scientific life
      - Observer in the Steering Committee
      - Reimbursement travel expenditures
      - CRG
      - Eligibility to ILL positions

International access policies: National facilities

National facilities policy access: based on excellence

Researchers from abroad can apply to the calls
Example:
Soleil Synchrotron (2 calls/year, evaluated by international committees): 1/3 foreign users
GENCI (HPC): National and European (Prace) calls



Courtesy Soleil

Variety of policies depending on the type of funding

- TGIR (special government funding): access free of charge for academic users/publication), pricing for industry/confidential research
- RI Biology/Health (funded by research organization): financial participation (marginal costs) requested even for academics

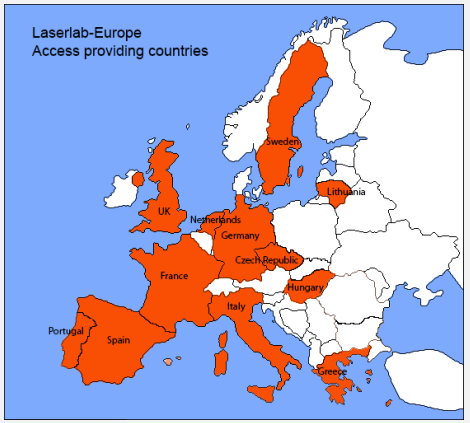
European fundings facilitating TNA and International implementation

European research infrastructures (FP6/FP7/H2020)

Integrating activities:
- Networking
- Transnational/virtual access activities
- Joint research activities

Ex: Laserlab: 12000 access days since 2014 free of charge, including travels

➡ Very appreciated from national RI



22 RI in 12 European countries
Courtesy laserlab

InfraDEV (ESFRI)

- **IDEAAL:** Internationalization development of Ganil Spiral2 (nuclear physics): 3,9 M€
- **FILL2030:** New business model to support the neutron users community with optimised services and financial resilience beyond 2030: 4M€

New consortim taking shape 1 /2 LEAPS

League of European Accelerator-based Photon Sources

Ensure and promote the quality and impact of the fundamental, applied and industrial research carried out at their respective facility to the greater benefit of European science and society.

LEAPS aims to further enhance excellence of services and solutions to target the three challenges: ‘Open Science’, ‘Open Innovation’ and ‘Open to the World’.

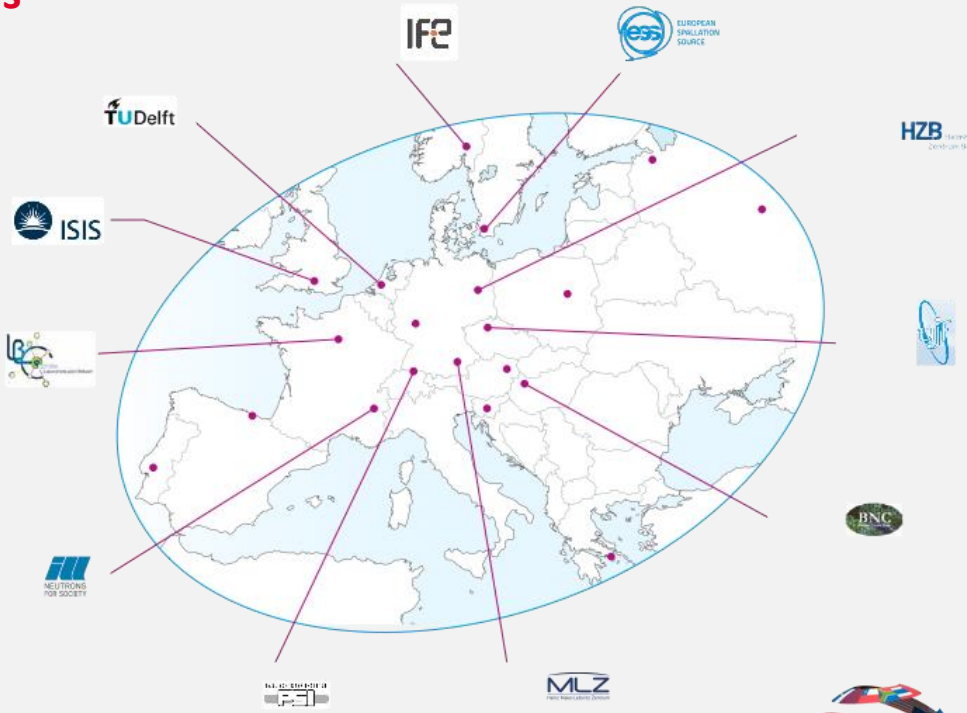
13 SR and 6 FEL RIs in 10 Eu states

New consortium taking shape 2/2: LENS

League of advanced European Neutron Sources

«Facilitate any form of discussion and decision-making process that has the potential to strengthen European neutron science via enhanced collaboration among the facilities ».

LENS hopes to maintain the attention and support of European and National funding authorities to benefit the European user community as a whole.



Conclusions

- Excellency should remain the main driver: open access

vs

- Financial constraints endanger the RI long term sustainability

- For RI sustainability, **Eu and National fundings are essential**
- Necessity for each infrastructure to know better its costs to **establish fair cost access** when necessary
- Industry participation remains low but i**ndustry** could be better involved **in the enhancement of the RI**

  Example: Infra Innovation: AMICI H2020 project
- Promote collaboration between RI: coordination/complementarity

Thank you for your attention