

# Research Infrastructures in Horizon 2020

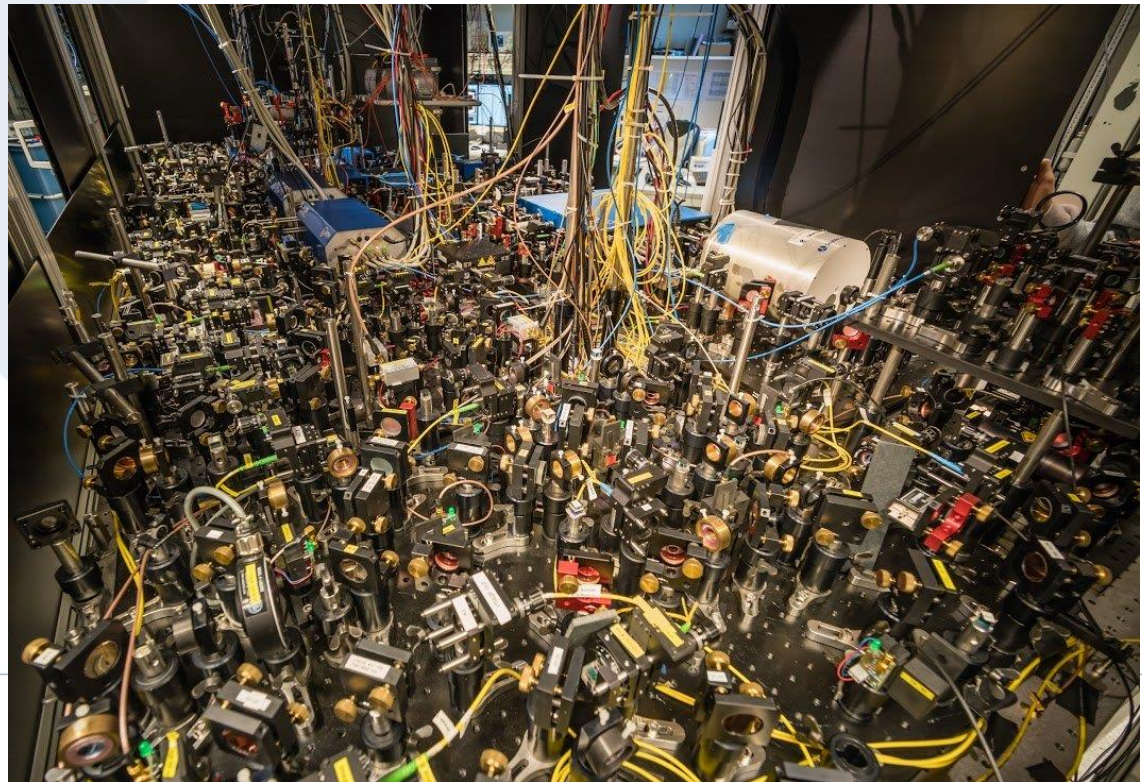
**Rafał Duczmal**

**National Contact Point for Research Programmes of the EU**  
Institute of Fundamental Technological Research PAS  
[www.en.kpk.gov.pl](http://www.en.kpk.gov.pl)



# Research Infrastructures

1. Something for the institution
2. Something for the researcher



# Definition

„Research infrastructures are facilities, resources and services that are used by the research communities to conduct research and foster innovation in their fields. For example:

- Laboratories and observatories
- Scientific collections (biological, archeological, ...)
- Libraries and archives deposits
- Genome and tissue banks
- Scientific vessels and aircrafts
- National parks and nature reserves
- Data storages
- e-infrastructures



# Excellent Science

(€ million, 2014-2020)

<b><i>European Research Council (ERC)</i></b> Frontier research by the best individual teams	<b>12.873</b>
<b><i>Future and Emerging Technologies</i></b> Collaborative research to open new fields of innovation	<b>2 696</b>
<b><i>Marie Skłodowska-Curie actions (MSCA)</i></b> Opportunities for training and career development	<b>6 162</b>
<b><i>Research infrastructures</i></b> <i>(including e-infrastructure)</i> Ensuring access to world-class facilities	<b>2.383</b>



## Call types

- Development and long-term sustainability of new pan-European research infrastructures
- Interoperability and European Open Science Cloud
- Integrating and opening research infrastructures of European interest
- European Data Infrastructure
- Demonstrating the role of Research Infrastructures in the translation of Open Science into Open Innovation
- Support to policy and international cooperation

# Call types

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# INFRADEV Call

Call supports different phases of preparation and development of big pan-European research infrastructures like XFEL or ELI, included in the ESFRI Roadmap.

Three different topics for three different stages:

- Design Studies
- Preparatory Phase of ESFRI projects
- Individual support to ESFRI and other world-class research infrastructures

# ESFRI – Roadmap

ESFRI – European Strategic Forum on Research Infrastructures

<https://www.esfri.eu/>

## ESFRI Strategic Report on RIs in Europe

ESFRI has established a European Roadmap for research infrastructures (new and major upgrades, pan-European interest) for the next 10-20 years, stimulates the implementation of these facilities, and updates the roadmap as needed.



## ESFRI Roadmap 2018

The new Strategy Report on Research Infrastructures in Europe will be announced soon! [more...](#)

## ESFRI Monitoring System

ESFRI-MOS is the central online platform for information on the ESFRI Projects and ESFRI Landmarks. The overall objective is to provide efficient knowledge management for supporting political decision making and public awareness on the ESFRI Research Infrastructures [more...](#)



## ESFRI Roadmap Archive

The ESFRI roadmap is an ongoing process. First published in 2006, with 35 projects, it was updated in 2008, 2010, 2016 and 2018 bringing the number of RIs of pan-European relevance to 55.



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## INFRAEOSC

## 02-2019: Prototyping innovation services

Develop an agile, fit-for-purpose and sustainable service offering

Accessible through the EOSC hub that can satisfy the evolving needs of the scientific community by stimulating the design and prototyping of novel innovative digital services.

*(bottom-up proposals, 5-6 mln euro/project)*

Important notes:

Proposals should take due consideration of any outcomes of the projects funded under EINFRA-12-2017 (EOSC-hub, OpenAIRE).

These services should be based on systems and technologies that have reached TRL 6 before the start of the project and will be brought to at least TRL 8 by the end of the project.

Expected Impact:

- ✓ Integrating co-design into research and development of new services to better support scientific, industrial and societal applications benefiting from a strong user orientation
- ✓ Supporting the objectives of Open Science by improving access to content and resources, and facilitating interdisciplinary collaborations
- ✓ Fostering the innovation potential by opening up the EOSC ecosystem of e-infrastructure service providers to new innovative actors.

Deadline: 29/01/2019

# INFRAEOSC

## 06-2019-2020: Enhancing the EOSC portal and connecting thematic clouds

The aim of this topic is to facilitate wide, user-friendly and cross-disciplinary access to the data and services of the EOSC through the development of the necessary interfaces. The EOSC aims to offer a trusted and open environment for research users of all scientific disciplines across the whole lifecycle of scientific data. This requires concrete solutions to address the current fragmentation of entry points, to avoid duplication of efforts across thematic initiatives and from different scientific disciplines.

(up to 2 mln euro/project)

### Important notes:

The proposals will build on the work produced by the elnfraCentral project and provide additional support for the implementation of the EOSC hub to further develop and optimise the functions and interface offered via the EOSC portal. In particular, the successful proposal should incorporate existing scientific gateways and thematic portals developed under FP7 and Horizon 2020 across all work programmes.

### Expected Impact:

- ✓ Establish the EOSC as the open-to-all, cross-border and cross-discipline access point for data driven science involving the whole European Scientific Community including the “long-tail” of science.
- ✓ Expanding the relevance of the EOSC as enabler of excellent science and multiplier of impact across disciplines to tackle current and emerging societal challenges .

Deadline: 20/03/2019

## Call types

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# INFRAEDI

**Calls that had been foreseen in that domain have been transferred to EuroHPC Joint Undertaking.**

**Work Programme of the Joint undertaking will be published in Q1 or Q2 of the next year.**

**<https://eurohpc-ju.europa.eu/index.html>**



## Call types

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# Supporting Actions

- Specific topics directed on supporting the ecosystem of Research and Innovation Infrastructures
- Networking projects involved also in standardization processes
- Connected with internationalization of research infrastructures and collaboration with Third Countries
- Support for advisory and coordination bodies established in Europe for research infrastructures (ESFRI, e-IRG)

People who found these topics interesting for them are strongly encouraged to acquaint themselves with the Work Programme and to contact individually.

## Call types

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# INFRAIA

## Integrating Activities

Integrating projects for new and experienced consortia

(5-10 mln euro/project)

### Actions (mandatory):

- **Networking:** coordination, common resources, databases and access rules, exchange of staff, training, etc.
- **Transnational /virtual access:** joint, coordinated actions and organisation of access
- **Joint research activities:** construction of new generation apparatus, testing of new techniques and methods

### Outcomes:

**Easy access to the best infrastructures**

**Integration of equipment, resources (archives, collections, etc.)**

## Advanced Communities

Consortia whose infrastructure has achieved a significant degree of coordination, in particular as a result of earlier actions in FP7 or Horizon 2020 projects

Project themes defined in advance - 7 domains in the call for 2019:

- *Biological and Medical Sciences*
- *Energy*
- *Environmental and Earth Sciences*
- *Mathematics and ICT*
- *Material Sciences and Analytical facilities*
- *Physical Sciences*
- *Social Sciences and Humanities*

**Deadline: 20/03/2019**



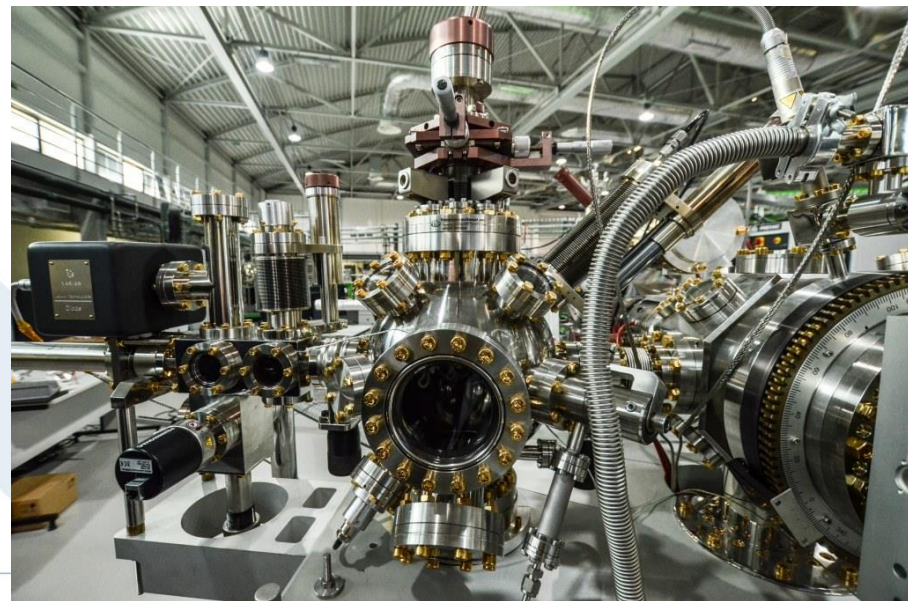
## Starting Communities

Consortia whose infrastructure did not benefit from the support of integration projects in the 7th Framework Programme or Horizon 2020.

The subject matter of the projects is not defined in advance (bottom-up). However, the European Commission expects 1 proposal per theme.

The evaluation procedure is likely to be a single-stage procedure with a deadline in the second half of 2019 or at the beginning of 2020.

# Transnational Access: make your research, free of charge, in the best European laboratories



## *Transnational/Virtual Access*

**Transnational/Virtual Access to Research Infrastructure**  
is an obligatory part of Integrating Activity project

Basic rules:

- You need to go abroad
- Time of stay – from 1 week to 3 months
- Projects can pay for:



research



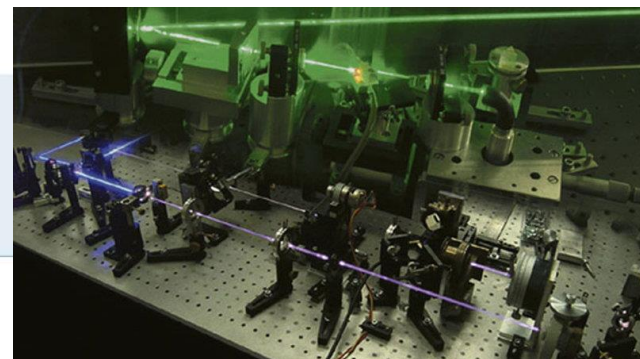
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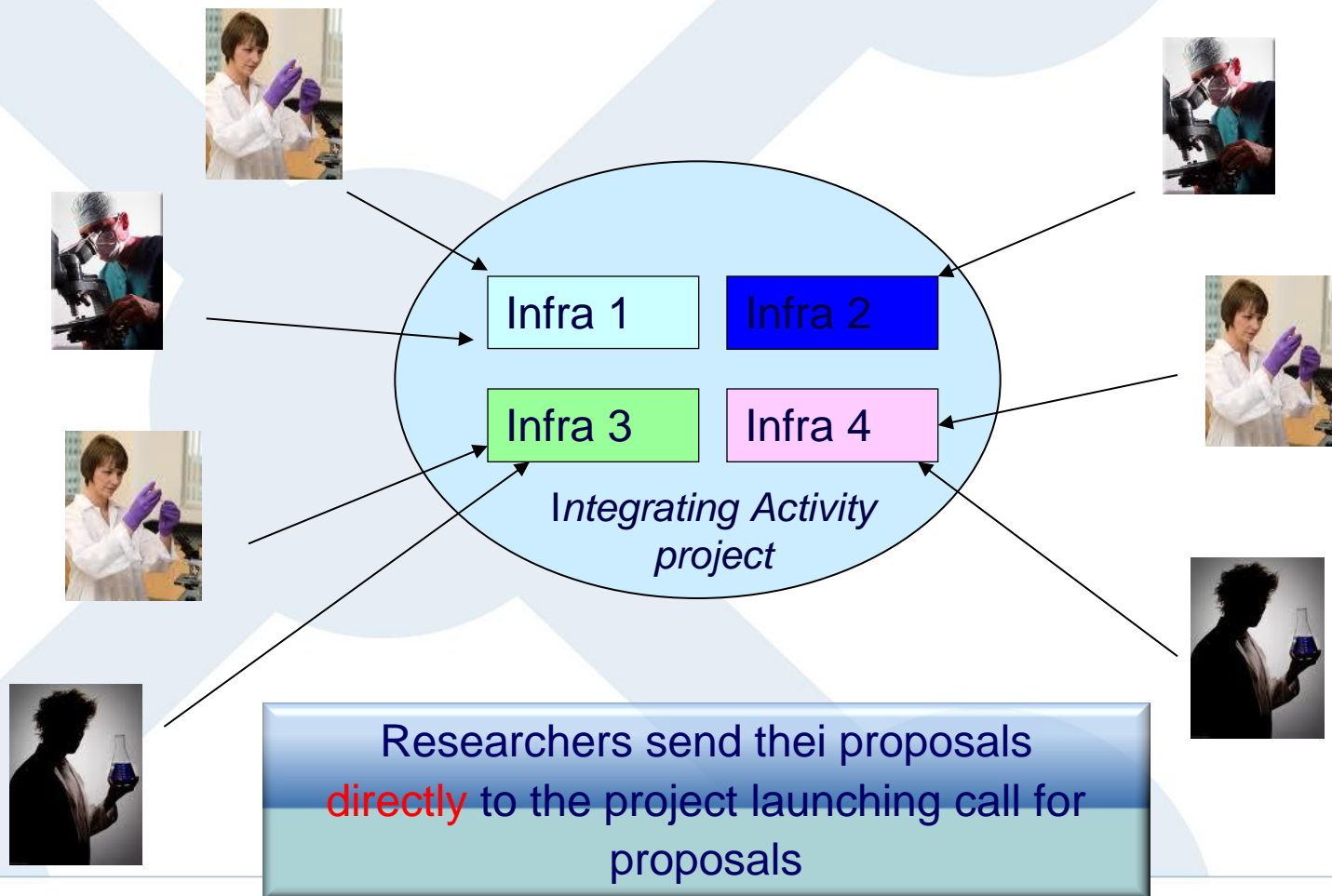
access to e-infrastructures



HORYZONT 2020

# Transnational/Virtual Access

Free of charge research in the best European infrastructures



# How to find your project?





# Legend

## THEMES



Energy



Biological and Medical  
Sciences



Environment



Materials and Analytical  
Facilities



Physics



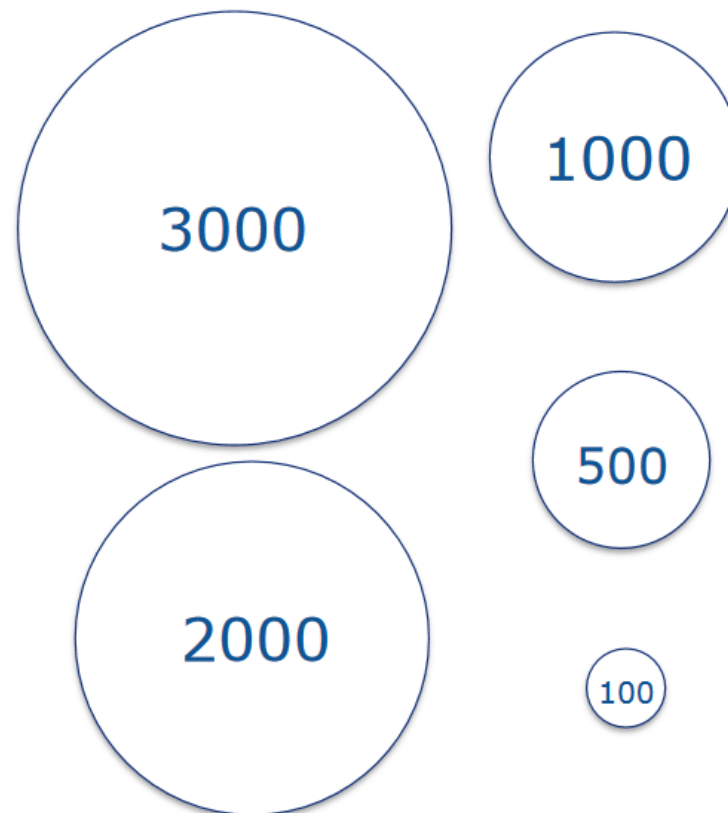
Social Sciences and  
Humanities



Information and  
Communication Technology

have  
already  
registered  
access      active but  
with no  
registered  
access

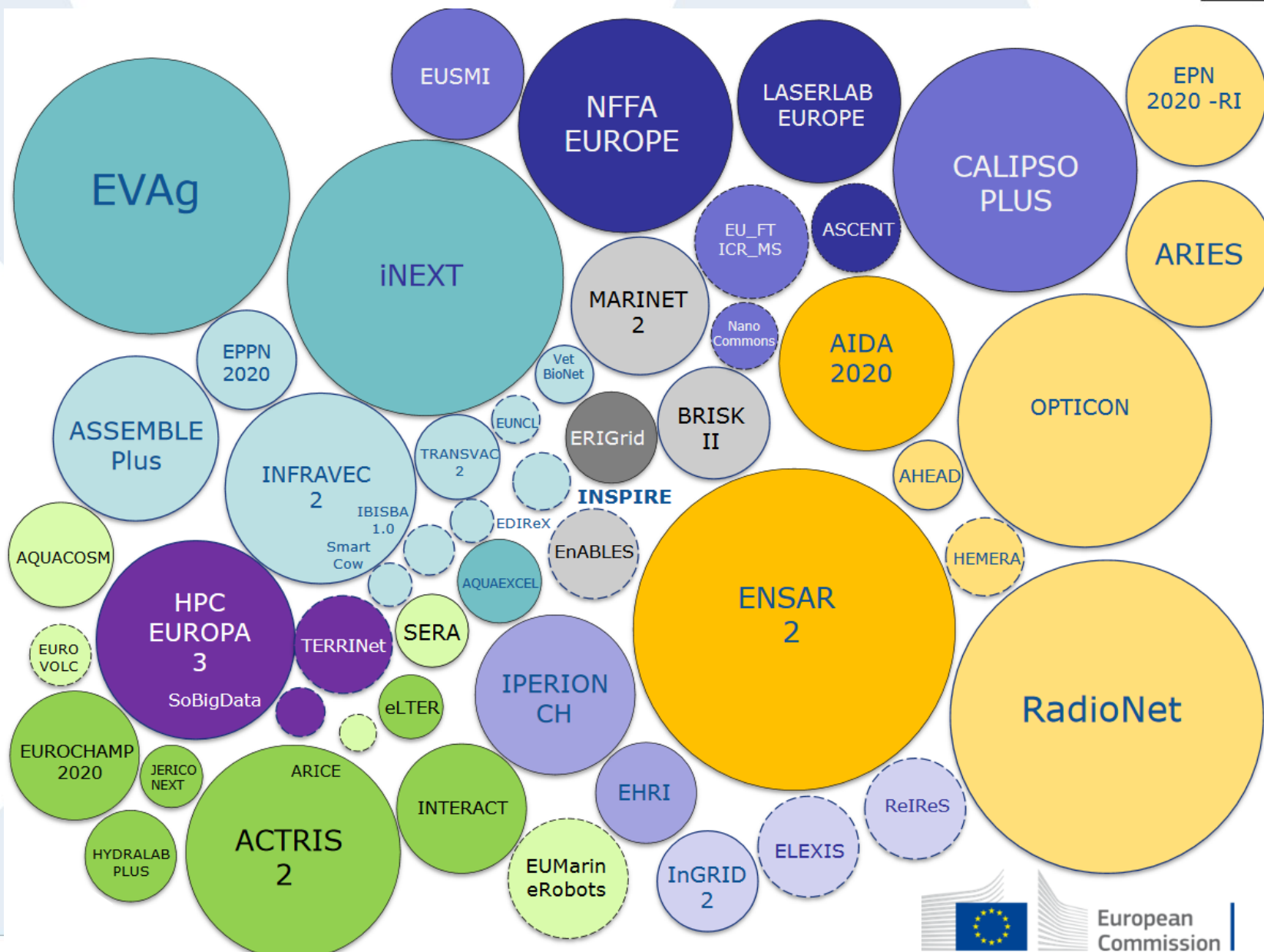
## EXPECTED NUMBER OF USERS



Starting community



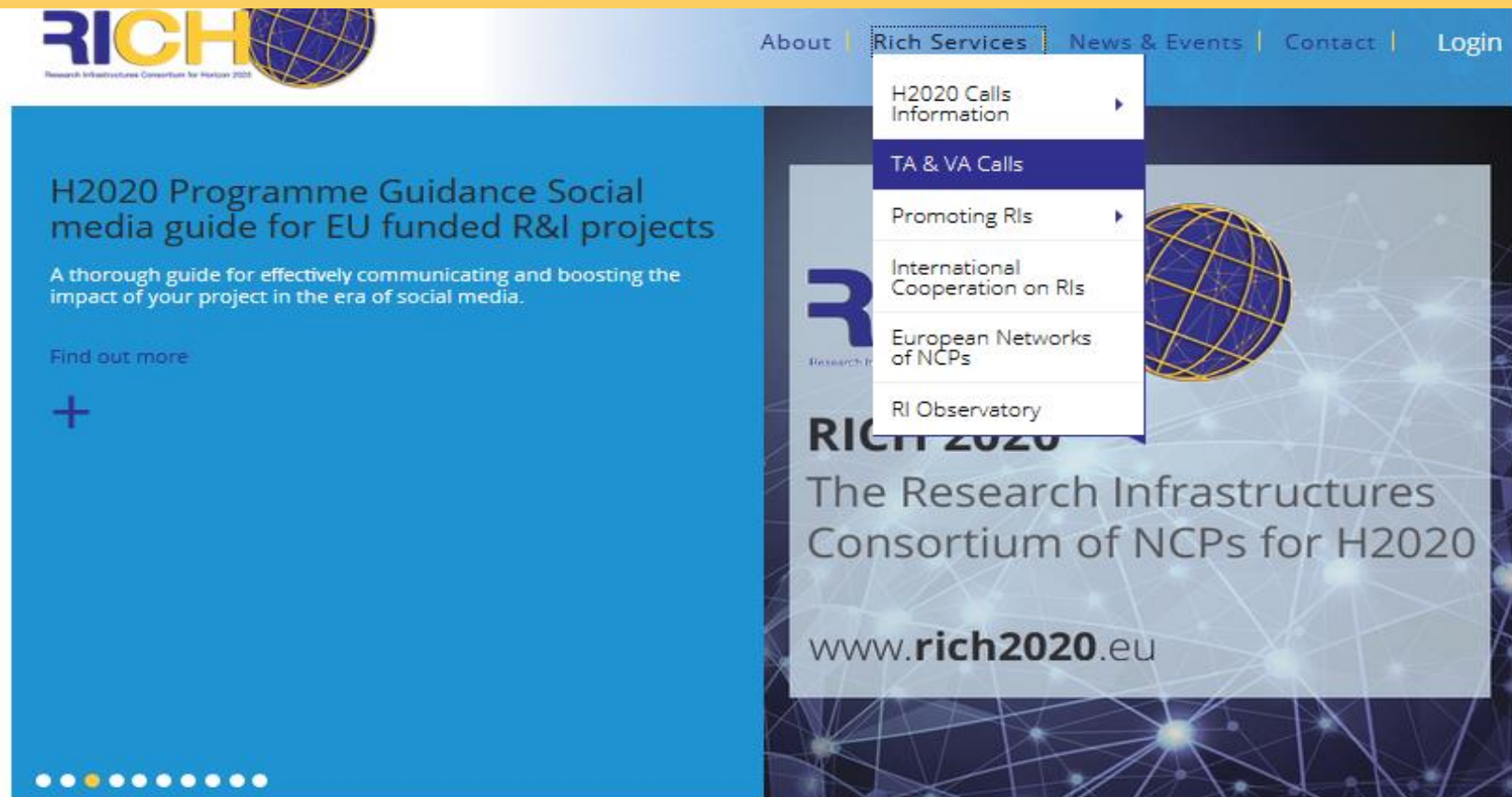
European  
Commission



European  
Commission

[www.kpk.gov.pl](http://www.kpk.gov.pl)

# All Integrating Activities and open calls for proposals: <http://www.rich2020.eu>



**RICH**  
Research Infrastructures Consortium for Horizon 2020

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H2020 Calls Information  
TA & VA Calls  
Promoting RIs  
International Cooperation on RIs  
European Networks of NCPs  
RI Observatory

H2020 Programme Guidance Social media guide for EU funded R&I projects  
A thorough guide for effectively communicating and boosting the impact of your project in the era of social media.  
Find out more  
+

**RICH 2020**  
The Research Infrastructures Consortium of NCPs for H2020  
[www.rich2020.eu](http://www.rich2020.eu)



**RICH 2020**

The Research Infrastructures Consortium of NCPs for H2020

RICH 2020, the European Network of National Contact Points (NCPs) for Research Infrastructures in Horizon 2020, facilitates transnational cooperation between NCPs, promotes the effective implementation of the RI programme, supports transnational and virtual access to RIs and highlights the opportunities offered by Research Infrastructures - at the European and international level.

The Network builds on the experience of previous networks of National Contact Points for the Research Infrastructures programme (EuroRIs-Net and EuroRIs-Net+, 2007-2013).

## Transnational & Virtual Access

The list hereunder includes all the on-going projects funded under FP7 and H2020 RI to open their research infrastructures to transnational/virtual researchers/users. These are the projects funded under the Integrating Activities part of the RI Work programme, some of the ESFRI projects (if access is granted to all researchers no matter if their country is member of the ESFRI RI) and some e-infrastructures (provided services are addressed to researchers and not to RIs or other e-infra).

For each project, a short description of the transnational/virtual activities is given as well as the deadline to submit a proposal to open call and a link to the project website and the TA&VA access webpage. The projects can be filtered by scientific domain and type of access (transnational or virtual).

[More information about Transnational Access](#)

[RICH: TA & VA Users' Testimonies](#)

Project Acronym	Domain
<input type="text"/>	<div>e-Infrastructures Energy Engineering and Energy Environment and Earth Sciences Life sciences</div>
Type of Access	Status
<div>Any</div>	<div>Any</div>
<div><a href="#">SORT ON DATE</a></div>	<div><a href="#">CLEAR</a></div> <div><a href="#">SEARCH</a></div>

64 RESULTS

INGRID-2 | Inclusive Growth Research Infrastructure Diffusion | Social Sciences and Humanities

### Transnational Access Info:

A key activity of the InGRID-2 project is providing transnational access to research infrastructures with data and expertise within the fields of poverty and living conditions.



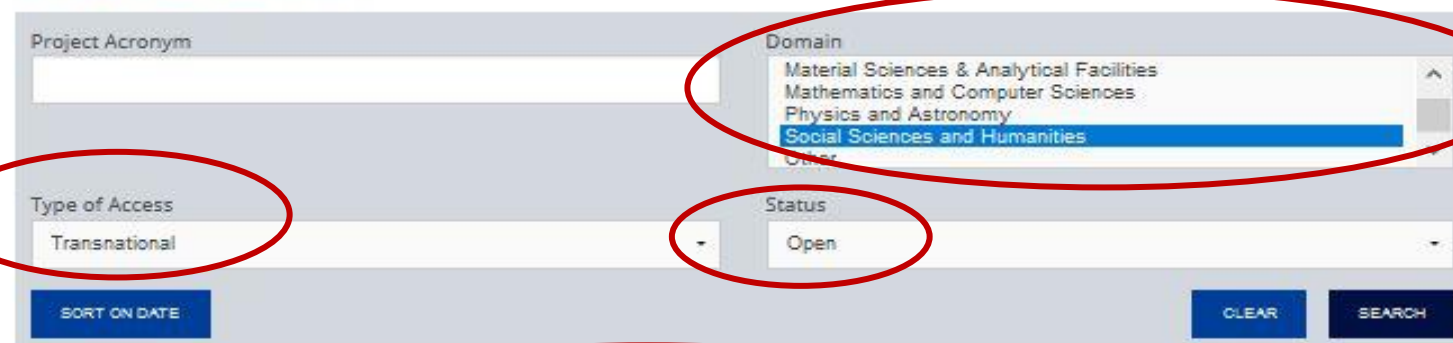
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Project Acronym

Domain

- Material Sciences & Analytical Facilities
- Mathematics and Computer Sciences
- Physics and Astronomy
- Social Sciences and Humanities

Type of Access

Transnational

Status

Open

[SORT ON DATE](#) [CLEAR](#) [SEARCH](#)

1 RESULTS

[IPERION CH](#) | Integrated Platform for the European Research Infrastructure ON Cultural Heritage | Social Sciences and Humanities

### Transnational Access Info:

IPERION CH makes world-class scientific tools and knowledge available to Heritage scientists through three integrated Trans-National Access platforms:

ARCHLAB: access to specialised knowledge and organized scientific information – including technical images, analytical data and conservation documentation – to datasets largely unpublished from terlarge archives of prestigious European museums, galleries and research institutions.

FIXLAB: access to large-scale facilities (synchrotrons, neutron sources, accelerators) uniquely also having expertise in CH, for sophisticated scientific investigations on samples or whole objects, revealing their micro-structures and chemical compositions, giving essential and invaluable insights into CH historical technologies, materials, alteration and degradation phenomena.

MOLAB: access to an impressive collection of advanced mobile analytical instrumentation for non-invasive measurements on precious, fragile or immovable objects, archaeological sites and historical monuments. The MOBILELABoratory allows its users to implement complex multi-technique diagnostic projects, permitting the most effective in situ investigations.

TNA calls have 2 deadlines per year, in February and in September

**More info on the project:** <http://www.iperionch.eu/>

**More info on the access:** <http://www.iperionch.eu/calls-for-proposals/>





## CALLS FOR PROPOSALS

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### Quicklinks

[Access to facilities](#)

[ARCHLAB](#)

[FIXLAB](#)

[MOLAB](#)

[Calls for proposals](#)

[Evaluation and criteria](#)

[Financial support](#)

[User duties](#)

[Glossary](#)

[TNA Contacts](#)

[IPERION CH users meetings](#)

The Integrated Platform for the European Research Infrastructure ON Culture Heritage IPERION CH launches calls for proposals **twice a year**. Proposals are addressed to three advanced transnational platforms ARCHLAB, FIXLAB and MOLAB.

The access is offered to:

- Archives in European museums or conservation institutes (**ARCHLAB**);
- Advanced mobile analytical instrumentations for in-situ non-invasive measurements (**MOLAB**);
- Integrated platforms where large scale facilities are coupled with medium scale installations (**FIXLAB**).

### Calls for proposals

Applications for MOLAB and ARCHLAB access can be submitted at any time. There are cut-off deadlines twice a year.

ARCHLAB\* and MOLAB – Cut-off deadlines on **February 15th** and **September 15th**.

FIXLAB – [Click here for the cut-off deadlines](#).

\*Due to the large number of proposals received, OPD's and British Museum's archives are currently NOT ACCESSIBLE.

### Application form

MOLAB application form – [download here](#)

ARCHLAB application form – [download here](#)

FIXLAB application forms – [click here](#)

## FIXLAB

### Quicklinks

Access to facilities

ARCHLAB

FIXLAB

MOLAB

Calls for proposals

Evaluation and criteria

Financial support

User duties

Glossary

TNA Contacts

IPERION CH users meetings

The goal of FIXLAB is to provide access for the Cultural Heritage (CH) community to large-scale facilities that develop and maintain sophisticated state-of-the-art instrumentation for advanced diagnostics and archaeometry. Access is offered to researchers in Heritage Science to help address the major questions raised by the materiality of CH artefacts in terms of their genesis, manufacturing processes, alterations, conservation and preservation.

The unique FIXLAB services offered to the CH community embrace:

- advanced state-of-the-art instrumentation
- dedicated facilities with teams of experts in the field of micro-analysis of CH artefacts
- novel developments resulting from IPERION CH joint research activities to progressively improve access
- development of both new sample-positioning devices at a micro-scale and software tools for the integration of imaging data

### Contacts

**Name:** Michel Menu

**Email:** [michel.menu@culture.gouv.fr](mailto:michel.menu@culture.gouv.fr)

### Available techniques



**NIPS-NORMA (Neutron-Induced Prompt Gamma-ray Spectroscopy & Neutron**



**PSD (Powder Diffractometer with a Position Sensitive Detector System)**



**TOF-ND (Time of Flight Neutron Diffractometer)**



**NAA (Instrumental Neutron Activation Analysis)**



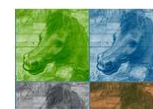
**FSANS (Time of Flight Small Angle Neutron Scattering)**



**RAD ( Neutron X-ray and gamma-ray imaging )**



**PCAA ( Neutron-induced Prompt Gamma Activation Analysis )**



**Raman**



**XAS ( X-ray Absorption Spectroscopy )**



**FTIR ( Fourier transform infrared spectroscopy )**



**XRF (X-ray fluorescence)**



**ERDA ( Elastic Recoil Detection Analysis )**

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[RICH: TA & VA Users' Testimonies](#)

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<b>Type of Access</b> <div>Transnational</div>	<b>Status</b> <div>Open</div>
<div>SORT ON DATE</div>	<div>CLEAR</div> <div>SEARCH</div>

3 RESULTS

AIDA-2020 | Advanced European Infrastructures for Detectors at Accelerators | Physics and Astronomy

## Transnational Access Info:

AIDA -2020 aims to reinforce the Transnational Access to beam test, irradiation test and detector characterisation facilities by offering common and free TA to more than 900 users.

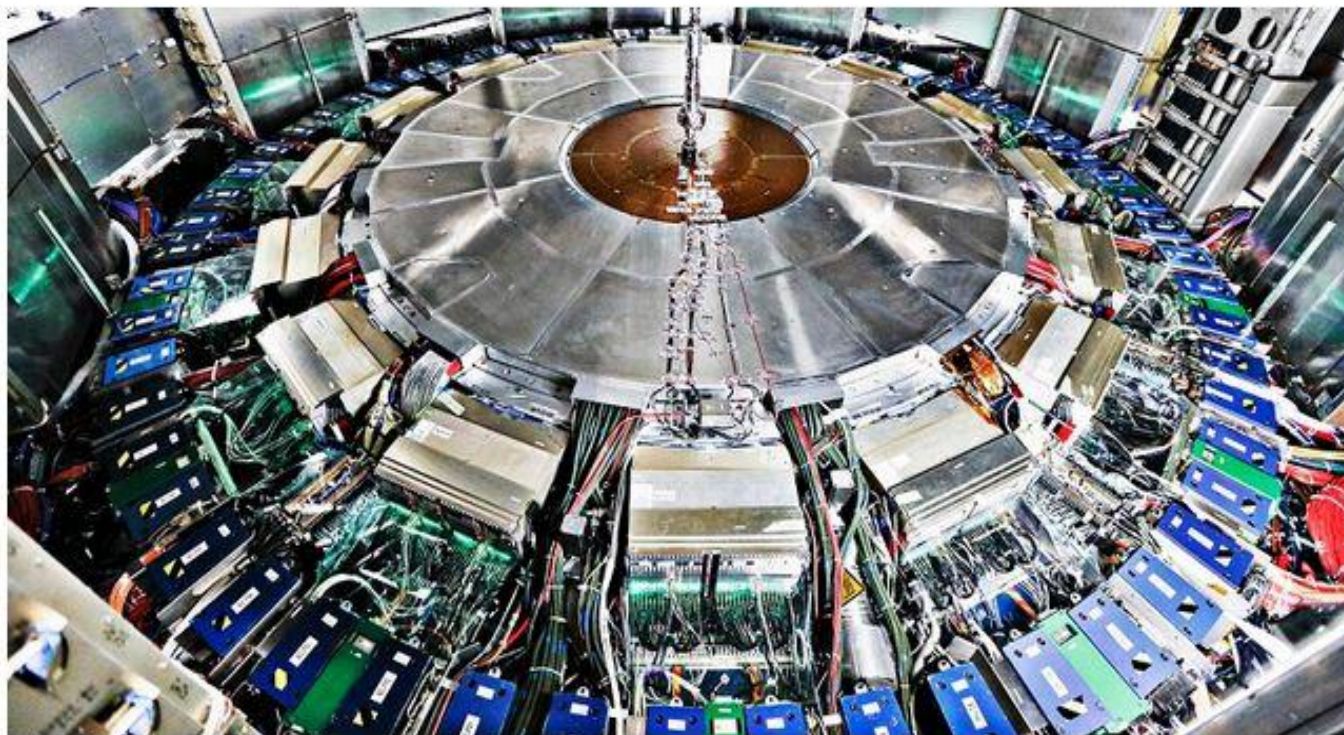
There are no deadlines for applications; application and selection is a rolling process

**More info on the project:** <http://aida2020.web.cern.ch/>

**More info on the access:** <http://aida2020.web.cern.ch/content/transnational-access>



## Welcome to the AIDA-2020 website!



View of the ATLAS calorimeters from below

### NEWSLETTER



### HIGHLIGHTS

6 Nov 2018

**DESY- Call for beam time**

Read more info [here](#)

3 Jul 2018

**Publishable summary of P2 report** is available  
[Link](#)

7 Jun 2018

**Vacancy announcement:**  
Postdoctoral Research Associate 

24 Apr 2018



# AIDA<sup>2020</sup>

## Advanced European Infrastructures for Detectors at Accelerators

[Home](#) [Project](#) [Activities](#) [Transnational Access](#) [Events](#) [Documents](#) [AIDA](#) [Newsletter](#) [Contact](#)

### TRANSNATIONAL ACCESS

[Apply for Transnational Access](#)

[Eligibility criteria](#)

[CERN](#)

[DESY](#)

[JSI](#)

[KIT](#)

[UCLouvain](#)

[UoB](#)

[RBI](#)

[ITAINNOVA](#)

[User Selection Panel](#)

## Transnational Access

### Transnational Access

AIDA-2020 Transnational Access supports small teams to carry out experiments and tests at one of the 10 European facilities listed below. By clicking on the facilities' name you will access a video providing more information on the available equipment.

Type of facility	Access provider	Infrastructure	Country	Facility Coordinator Contact
Beam test	<a href="#">CERN</a>	PS&SPS	International Organisation	<a href="#">Henric Wilkens</a>
	<a href="#">DESY</a>	DESY-II	Germany	<a href="#">Marcel Stanitzki</a>
Irradiation test	<a href="#">CERN</a>	IRRAD	International Organisation	<a href="#">Michael Moll</a>
	<a href="#">CERN</a>	GIF++	International Organisation	<a href="#">Michael Moll</a>
	<a href="#">JSI</a>	TRIGA Reactor	Slovenia	<a href="#">Vladimir Cindro</a>
	<a href="#">KIT</a>	KAZ	Germany	<a href="#">Alexander Dierlamm</a>
	<a href="#">UCLouvain</a>	CRC	Belgium	<a href="#">Eduardo Cortina Gil</a>
	<a href="#">UoB</a>	MC40 Cyclotron	UK	<a href="#">David Parker</a>
	<a href="#">RBI</a>	RBI-AF	Croatia	<a href="#">Stjepko Fazinić</a>
Detector				





### TRANSNATIONAL ACCESS

#### Apply for Transnational Access

#### Eligibility criteria

#### CERN

#### DESY

#### JSI

#### KIT

#### UCLouvain

#### UoB

#### RBI

#### ITAINNOVA

#### User Selection Panel

## How to apply for Transnational Access

### Step 1 - Informal request

Contact the facility coordinator for the facility you are interested in with brief details of your proposal. This step will ensure you are [eligible](#) before you go through the formal application procedure.

Contact details for facility coordinators:

Type of facility	Facility	Coordinator	Contact
Beam test	CERN PS&SPS	Henric Wilkens	<a href="#">E-mail</a>
	DESY-II	Natalia Potylitsina-Kube	<a href="#">Email</a>
Irradiation test	CERN IRRAD	Michael Moll	<a href="#">Email</a>
	CERN GIF++	Michael Moll	<a href="#">Email</a>
	JSI TRIGA Reactor	Vladimir Cindro	<a href="#">Email</a>
	KIT KAZ	Alexander Dierlamm	<a href="#">Email</a>
	UCLouvain CRC	Eduardo Cortina Gil	<a href="#">Email</a>
	UoB MC40 Cyclotron	David Parker	<a href="#">Email</a>
Detector characterisation	RBI-AF	Stjepko Fazinić	<a href="#">Email</a>
	ITAINNOVA EMCLab	Fernando Arteché	<a href="#">Email</a>

### Step 2 - Application form

Fill in the application form ([Word](#), [PDF](#)) for transnational access. Please contact the facility coordinator with any questions you have about this step. Once complete send your application form to [AIDA-2020-TA@cern.ch](mailto:AIDA-2020-TA@cern.ch). There are no deadlines for applications; application and selection is a rolling process. After your application is accepted, you will be required to fill in an [electronic registration form](#).

### Step 3 - Selection procedure

The selection of user groups and experiments is primarily the responsibility of the facility coordinator, acting with approval of the User Selection Panel. The primary criterion for selection of a proposal will be scientific merit but factors such as previous usage of the facility and availability of similar facilities in the users' home country will also be taken into account.

### Step 4 - Access and reimbursement

# Research Infrastructures – Horizon 2020 Work Programme

[http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-infrastructures\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-infrastructures_en.pdf)



# Thank you for your attention

**You can find us here:**

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