



## Milestone 1.1: Review report of existing access management practices and used access modalities and monitoring tools across RIs

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Work package n°	1
Milestone n°	MS 1 / 1.1
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Deliverable Type	Document
Dissemination Level	PU
Estimated delivery date	M18
Actual delivery date	M23
Version	V1
Reviewed by	
Accepted by	
Comments	





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## 1 Introduction

This document is prepared in the context of the ATMO-ACCESS project (Solutions for Sustainable Access to Atmospheric Research Facilities), a pilot project funded by the EU to prepare for integration of the research infrastructure services and produce recommendations for establishing a comprehensive and sustainable framework for access to distributed atmospheric Research Infrastructures (RI), ensuring integrated access to the services they provide.

This milestone compiles results of the initial work carried out in WP1 “Developing the concept and guidelines for access to distributed atmospheric Research Infrastructures”, for Task 1.1 “Developing common access management concept, procedures and tools for access provision to distributed atmospheric research infrastructures”, to investigate, map and analyse the available access management practices and modalities adopted by the existing RIs.

## 2 Purpose and content the overview

The inventory presented here aims to collect and help recognize effective access practices, tools, and solutions and serves as the required knowledge base to propose a common access management concept for atmospheric RIs.

The purpose of the analysis is to gain hints on possible solutions to ensure sound, efficient and effective access management, learning from other existing RI’s experiences.

Accordingly, the scope of the overview covers:

- Access management practices (considering organization, selection process and modes, review)
- Access modalities (i.e., access types and modalities)
- Access monitoring tools

found in:

- ESFRI research infrastructures,
- other non-ESFRI European RIs, and
- some non-European research infrastructures.

### 2.1 List of studied RIs

The RIs whose access practices were considered for the study are reported in Table 1, with details on the main research domain and life-cycle phase. The survey considers mostly existing distributed Research Infrastructures in the ESFRI Roadmap, starting from those in the Environment domain and also considering RIs in other fields, such as the Health & Food, Energy, e-Infrastructures and Physical Science & Engineering, reviewed to gather complete information. Non-ESFRI European and non-European Research Infrastructures were examined as well.

Of the three RIs participating in ATMO-ACCESS, ACTRIS is the only one currently providing physical or remote access along with wide, virtual access to data. For this reason, it is in the list of studied RIs. ICOS and IAGOS mainly offer access to data and digital services. Both are working together and with ACTRIS in the ATMO-ACCESS WP10 to develop and implement a specific process for VA

to new cross-RI on-line data, computing and training services involving the leading European atmospheric RI data hubs. All details on that are in WP10 milestones and deliverables.

*Table 1: Research Infrastructures considered for this study*

#	RI Name	Main Scientific Field	Life-cycle phase
1	ACTRIS, Aerosol, Clouds, Trace gases Research Infrastructure	Environment	Implementation (ESFRI Landmark)
2	ANAEE ERIC (Analysis and Experimentation on Ecosystems)	Health & Food	Operations (ESFRI Landmark)
3	Argonne national laboratory - University of Chicago	Multidisciplinary (Energy, Engineering, Computer science, Astrophysics, Material science, Nanoscience, etc.	Operations ( <i>non-ESFRI, non-European</i> )
4	BBMRI – ERIC Biobanking and BioMolecular Resources RI	Health & Food	Operations (ESFRI Landmark)
5	BRISK, Biofuels Research Infrastructure for Sharing Knowledge	Energy	Operations (European, non ESFRI)
6	CERIC-ERIC, Central European Research Infrastructure Consortium	Materials, biomaterials and nanotechnology.	Operations ( <i>non-ESFRI, European</i> )
7	DiSSCo - Distributed System of Scientific Collections	Environment, Natural sciences	Implementation (ESFRI Project)
8	ECORD, European Consortium for Ocean Research Drilling	Environment, Marine	Operations ( <i>non-ESFRI, European</i> )
9	e-LTER - Integrated European Long-Term Ecosystem, critical zone and socio-ecological system Research Infrastructure	Environment	Implementation (ESFRI Project)
10	EMSO - European Multidisciplinary Seafloor and water column Observatory	Environment	Implementation (ESFRI Landmark)

11	EPOS – European Plate Observing System	Environment	Implementation (ESFRI Landmark)
12	ERIGrid (European Research Infrastructure supporting Smart Grid Systems Technology Development)	Energy	Implementation ( <i>non-ESFRI, European, H2020 funded project</i> )
13	EUFAR Aisbl (European facility for airborne research)	Environment	Operations ( <i>non-ESFRI, European</i> )
14	EURO-BIO IMAGING ERIC (European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences)	Health & Food	Operations (ESFRI Landmark)
15	EUROFLEETS	Environment	Implementation ( <i>non-ESFRI, European, H2020 funded project</i> )
16	INSTRUCT ERIC (Integrated Structural Biology Infrastructure)	Health & Food	Operations (Landmark)
17	INTERACT (International Network for Research and Monitoring in the Arctic)	Environment	Implementation ( <i>non-ESFRI, European, H2020 funded project</i> )
18	JERICO	Environment	Operations ( <i>non-ESFRI, European</i> )
19	JRC	Interdisciplinary	Operations ( <i>non-ESFRI, European</i> )
20	Laserlab-Europe AISBL	Laser Research	Operations ( <i>non-ESFRI, European</i> )
21	MIRRI - Microbial Resource Research Infrastructure	Health & Food	Operations (Landmark)
22	PRACE, Partnership for Advanced Computing in Europe	e-RI	Implementation (Landmark)

All the studied examples have different characteristics suited to their missions and constraints, and offer different solutions for access management. The information contained in this report will set the ground to evaluate pros and cons of each element to help base development of the common access management concept for atmospheric RIs.

## 3 Existing access management practices

### 3.1 Access management organization

In the considered RIs, the governance of the access process typically revolves around the central head office of the research infrastructures in charge of managing the infrastructure and operational aspects, among which, considering the RI mission, a relevant role has the management of access to services and facilities for excellent science.

Rare infrastructures that do not align with this general practice have variable degrees of centralization in access management. Plans for access management in the EPOS assign to the Consortium Board (CB) of each Thematic Core Service (TCS) the responsibility for managing TNA within their thematic domain, including:

- Selection of TNA providers,
- Appointment of the Scientific Evaluation Committee,
- Designation of the TNA coordinator (1 per TCS)

So centralized management (or rather central shared co-ordination), but at the intermediate level of the central facilities.

In the US Argonne national laboratory, the multidisciplinary science and engineering research center born out of the University of Chicago's work on the Manhattan Project in the 1940s, access is not centrally managed. Decentralized access management is understandable for the Argonne Lab, considering the comprehensive suite of research facilities it maintains and the wide range of core scientific capabilities, from high-energy physics and materials science to biology and advanced computer science. Each facility open to user research (user facility) receives the access requests directly from the users and manages the access process, which, as a uniform, centralized guideline, needs to involve peer review.

Decentralized access management is implemented also in the BBMRI-ERIC, where the Partner Biobanks negotiate the access directly with the users, and the BBMRI-ERIC Central Executive Management Office only maintains the main tools to facilitate access (Biobank catalogue, Sample/Data Locator and BBMRI-ERIC Negotiator, the IT Service providing a communication platform for biobankers and researchers requesting samples and/or data).

#### 3.1.1 Tools

The digital and non-digital tools used in access management vary widely in sophistication and maturity, reflecting the maturity and access management experience of the RIs.

As for the *digital tools*, RIs in the design/project stage or even in implementation mostly use offline word application forms or, at most, use Google forms or very simple interfaces to collect user access requests. The (very few) more advanced tools have built-in collaboration features to work with teams, automatize workflows, and, in some cases, enable data-driven reports. These software solutions have different degrees of system rigidity, although they all share the ambition to be lightweight, simple, and straightforward to use.

Examples of interesting software tools to take into further consideration are:

- CERIC's Rocket.Chat tool, which connects successful applicants with colleagues and scientists from the CERIC facilities.
- Eurofleets+ Virtual Playground (VP), a web-based tool providing a space of data, information and knowledge in which collaborative research can take place in easy way
- INTERACT Infrastructure Matrix and Access Modality Selection Tool, which help users to identify the most suitable stations and form of access (TA/RA/VA) for their study.
- ACTRIS PASS, Platform for managing user Access to ACTRIS ServiceS, which, compared to other similar tools, seems to offer greater degree of flexibility to host the complexity of different types and forms of access to Xdisciplinary services.

Regarding the services/resources offered to users, almost all RIs have built their digital catalogues, ranging from simple lists of facilities available for access, described in static pages on the RI website, to fully searchable databases with simple and attractive front-ends. These catalogues are, in most advanced cases, interoperable with the EOSC marketplace and other service aggregators. However, with the few exceptions of RIs offering biological and biomedical analytical or imaging services, RIs tend to describe the facilities rather than the services provided.

As for the *non-digital tools*, mature RIs have developed:

- Research Infrastructure Access Agreements, detailing the organisation and management of the user access project by the particular facility and covering any necessary technical and legal aspects,
- User Access Agreement, sort of written contracts between the access provider and the end-user to delineate the actions to be undertaken, the resources allocated, the length of planned user stays, the period of use, rights and obligations of the Parties. These agreements in many cases include intellectual property rights, confidentiality, third party liability, insurances, the documents to be provided by the User, and the rules on the different sites.
- Service Level Agreements (SLAs), defining the level of service the user can reasonably expect from a particular provider, listing expectations of service type and quality, and providing remedies when requirements aren't met.
- Material Transfer Agreements (MTAs), Data Transfer Agreements (DTAs) or Data Access Agreements (DAAs) to govern material transfer between parties, especially in case of remote access

## 3.2 Access process

### 3.2.1 Access request

Access is typically provided following user request, submitted in response to a standard or rolling call for access.

RIs that offer access mostly within EU-funded projects typically issue one/two calls per year, or continuous call with cut-off dates. That seems a good compromise between different needs:

- to offer ample opportunities for users to apply and to have adequate time to plan and prepare suitable proposals
- to have a sufficiently high number of proposals to select the best ones



- to distribute the workload for staff and reviewers reasonably and sustainably, avoiding the need for RIs to hire and sustain staff to work on-off on the calls

CERIC-ERIC introduced an innovative two-steps deadline in the semestral call for access. Submission within the first deadline allows a pre-evaluation of the proposal at the facilities and, if necessary, two weeks for editing on the basis of the suggestions received, before final submission at the second deadline.

Calls are typically general, with the topic chosen bottom-up by the user, or topical, with the thematic framework set top-down.

In the great majority of the considered cases, users are recommended to contact access providers before submitting a proposal to make the application process smoother and faster. In the interesting example of EMSO, the access process formally includes a phase for the Joint elaboration of the full project proposal by the user and the provider, which culminates with the submission of the proposal form signed by the user and the facility manager. This practice can be worth consideration, especially where the access is RI funded.

### 3.2.2 Selection

In almost all cases of RIs considered, user requests undergo selection, which consists of 2, 3, or 4 steps of review based on eligibility (made by the access management office or even the facility), technical considerations for feasibility, and scientific merit.

Eligibility is not only a check of compliance with the EU (in the case of EU-funded TNAs) and internal rules but also of alignment with the RI scientific objectives and strategy.

The feasibility check is carried out preliminarily, typically as a condition for external peer review but in some cases also for application. Applicants for access to BRISK need to obtain and attach written confirmation from the host institution confirming they can accommodate the access and all research will be completed in a timely manner.

In rare cases (for instance, AnaEE, INTERACT) the feasibility check is made after the external review, which focuses on the scientific merit and is performed by external and internal experts composing the RI access evaluation panel.

Access decisions are typically taken by simply acknowledging the results of the peer review or after a final selection by the access team. The only exception among the studied RIs is INTERACT, where the final decisions are taken by the research stations based on the reviewers' recommendations, the feasibility of the projects at the station, station strategy, and focus areas.

Negotiation, rather than selection, is implemented in the BBMRI – ERIC to grant users access to the RI biobanks and their resources. After receiving information on the availability of resources/services, the requester follows up directly with the provider (biobank) in order to provide any additional information needed for the facility to assess whether to grant access. The negotiation is confidential, though happening via the BBMRI-ERIC Negotiator tool, and the provider decides whether to accept the user.



### 3.2.3 Review criteria

The assessment of access requests largely follows the access modes set out in the EU Access Charter. All the RIs studied adopted the excellence-driven method, and a large number also the market-driven one, defining their own criteria against which to evaluate the proposals.

Discussion on the opportunity to update the EU Charter and the access modes has recently started. However, except for ACTRIS and EURO-BIO IMAGING, the infrastructures seem to have not yet defined and adopted new, more specific modes and criteria reflecting the different types of access requests they receive.

*Excellence-driven* access is typically assessed against same criteria (scientific and/or technical merit of the project, novelty, impact, appropriateness of the proposed method or approach, scientific/technical excellence of user group,

Interestingly, some RIs also apply, as criteria, the possibility that access enhances the know-how and capacity of the facility accessed, the strategic relevance, the societal challenge addressed. It is also noteworthy that ERIGrid introduced *plagiarism* as an additional criterion in line with the general [H2020 strategy](#); it implies the rejection of proposals with an unjustified high amount of similarity.

Criteria for *market-driven* access typically consider the scientific and technical value, description of work, originality and innovation, quality of the proposing team and strategic relevance.

In addition to the excellence-driven and the market-driven access, ACTRIS introduced two specific access modes to reflect the peculiarities of the services offered to users: the *technical need-driven* access, when access to services is required to meet technological needs to ensure instrument quality (maintenance, calibration, QA), high-performance measurements and operator training; and the *training need-driven* access, when access is needed to fulfil the researchers/operator training needs.

As regards scoring, RIs mostly use numeric ratings to select the best proposals, with scores that vary from 0/1-5, 0/1-10 per each criterion, or, more often, sub-criterion in a given group. EURO BIO IMAGING has no scoring per single criteria, just overall categorization of the proposal (Outstanding, Very good, Good, Average, Poor).

### 3.2.4 Post-access

The post-access duties required of users who complete their projects at the RIs' facilities are largely the same for the studied cases. All RIs demand users to prepare a final activity report of their research work performed at the facilities, provide feedback, and acknowledge the support and the use of the RI in any publication resulting from access.

EURO-BIO IMAGING is more effective in imposing on users the duty to acknowledge the use of the infrastructure. Users need to report any presentation or publication resulting from the granted access using the appropriate form on the EURO-BIO IMAGING Web Portal. Failure to do may result in users not being able to use EURO-BIO IMAGING services in the future.

### 3.3 Special access

#### 3.3.1 *Fast-track*

A few RIs among those studied offer fast track access.

A main example is the CERIC-ERIC, which offers continuous access (no call needed) to some instruments with a quick selection procedure that enables to schedule the access in a month from the request, after only the feasibility evaluation by the facility.

Fast-track access is offered for:

- Feasibility studies: to test feasibility of experiments or measurements
- Commissioning: to perform measurements with newest instruments and contribute to their commissioning
- COVID-19: to contribute to the research on Covid-19.

#### 3.3.2 *Private access*

Out of the 21 RIs analyzed, only two (JRC and PRACE) have established specific, tailored procedures to process access requests from private users.

PRACE offers European SMEs a specific access program, SHAPE (SME HPC Adoption Programme in Europe), to help them benefit from the expertise and knowledge developed within the RI. SHAPE provides free support to adopt high-performance computing. SHAPE Calls for access run every six months as opposed to the standard bi-annual calls. A particular review panel including also members from the PRACE Industry Advisory Committee and Business Development Officers evaluates the requests. The specific criteria used consider compliance with the objectives of SHAPE, strength of the business case, technical feasibility and commitment of the SMEs to co-invest with PRACE, innovation, socio-economic impact.

In the case of JRC, private users can submit proposals for a pool of JRC infrastructures on a continuous basis. Applications undergo an eligibility check (with respect to ethics and country of location of the User Institutions) and a review by the JRC on a first-come basis. The criteria to evaluate private access proposal assess the scientific implementation (Originality and innovation, Exploitation plan, Quality of the proposing team), access to SMEs and new Users, relevance to EU priorities, regulations and directives, value for the research performed at the JRC infrastructures, importance for European standardisation and harmonisation.

## 4 Access modalities in use

The different RIs offer physical, remote and virtual access in standard modalities (simultaneous access of the user group to single facilities) or more advanced ones, including hybrid, consecutive access.

Some RIs have started pushing towards more innovative access, involving multiple facilities and techniques to support and foster the X-disciplinary research needed to address the current societal challenges.

PRACE has developed three particular access types:

- The Preparatory Access: short-term access to resources, required to prepare proposals for larger Project Access and to demonstrate scalability of codes.
- The Project Access, which is the access to PRACE Tier-0 HPC systems for projects that use previously tested codes with demonstrated high scalability and optimisation.
- The Distributed European Computing Initiative (DECI), for projects requiring access to resources not currently available in the PI's own country and whose projects do not require resources on the very largest (Tier-0) European Supercomputers or very large computational allocations.

## 4.1 Virtual access

Among the studied RIs, only ERIGrid has introduced, so far, a specific process for VA, following the recent EU recommendations on the subject.

The VA process features:

- User identification through a user login system and automated means of user verification (e.g., mail addresses)
- User Questionnaire: users are diverted to a user questionnaire before being redirected to the web-address of the actual VA infrastructure. In the questionnaire users are asked to provide basic details about the intended use of the VA facility.

Monitoring for VA is ensured by the collection of web analytics for users visiting the VA facilities. The collected statistics are augmented by the inputs provided by the users via the VA user questionnaire.

## 5 Monitoring tools

Access monitoring is mostly a responsibility of the RIs' Central Hub and covers the quantity and quality of access granted, type of User, geographic distribution, and User satisfaction, etc. Some RIs define specific Key Performance Indicators (KPIs) in the Service Level Agreements, in addition to those general, established in the RIs' work plans.

Access monitoring reports are prepared with the help of the tools supporting access management, which enable, where present, access data collection and data-driven reports. Where access management tools lack reporting functionalities and access tracking features, the monitoring reports are derived by extracting information from the access documents.

## 6 Conclusions

Most research infrastructures modelled their access policies and practices based on the European Charter of access to Research Infrastructures, seeking to adapt them, to varying degrees, to the needs of their users. That provides for the large, strong similarities detected in the access procedures (esp. steps in the access process, main evaluation criteria, modalities, and governance...).

However, differences become apparent in terms of procedures and policies, where infrastructures largely base funding of their access programs on membership fees. Differences are also in the tools used to perform and ease management (more or less advanced and sophisticated).

There are a few fascinating examples of access modalities to be taken into future consideration (PRACE, JRC, EMSO, ERI-Grid, etc.) and, for the full transparency of access terms, also the models for Service Level Agreements and User Access Agreements developed by JRC, AnaEE, BBMRI.

## 7 Reference documents

1. ACCELERATE Deliverable 2.1, State of Open Access procedures at Research Infrastructures, 2021
2. [ACTRIS Access Management Plan, 2nd Draft \(ACTRIS IMP Milestone MS6.5\)](#)
3. ATMO-ACCESS Grant Agreement (ID: 101008004).
4. [ATMO-ACCESS Milestone 9.1: Description of application, review and selection process for TNA to ATMO-ACCESS facilities](#)
5. eLTERPlus, TA-RA Scheme (Transnational and Remote Access). Reference document for project applicants (users) and site managers, 2022
6. ERIGrid Deliverable D6.1: Specification of the Trans-national Access and Virtual Access Programmes, 2021
7. European Charter for Access to Research Infrastructures: Principles and guidelines for access and related services. Publications Office of the European Union, 2015. ISBN: 978-92-79-45600-8, doi: 10.2777/524573, KI-04-15-085-EN-N. [https://ec.europa.eu/research/infrastructures/pdf/2016\\_charterforaccessto-ris.pdf](https://ec.europa.eu/research/infrastructures/pdf/2016_charterforaccessto-ris.pdf)
8. [Framework for access to the physical research infrastructures of the Joint Research Centre \(JRC\), European Commission, Joint Research Centre, 2022](#)
9. Jana Kolar, Ornella De Giacomo, Applicability and challenges related to the Charter for Open Access to Research Infrastructures. <http://doi.org/10.5281/zenodo.4475208>
10. Richard Wessels, Geertje ter Maat, Elisabetta Del Bello, Lucia Cacciola, Fabio Corbi, Gaetano Festa, Francesca Funicello, George Kaviris, Otto Lange, Jörn Lauterjung, Ronald Pijnenburg, Giuseppe Puglisi, Danilo Reitano, Christian Rønnevik, Piergiorgio Scarlato, Letizia Spampinato, Transnational Access to Research Facilities: an EPOS service to promote multi-domain Solid Earth Sciences in Europe, ANNALS OF GEOPHYSICS, 65, 2, DM214, doi:10.4401/ag-8768, 2022.

+ Websites of all the studied RIs

## ANNEX 1 – Inventory of existing access practices, modalities and monitoring tools across RIs

RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
<b>ACTRIS</b>	Topical Centres, Observation Facilities, Atmospheric simulation chambers, Mobile facilities	- Service and Access Mgmt Unit (SAMU) of the Head Office, responsible for the access centralized mgmt board - Access evaluation board	- Access Management Plan - <b>Catalogue of services</b> - <b>PASS Platform</b> for managing user Access to ACTRIS ServiceS - <b>Science and User Access Forum</b> and <b>Knowledge-base</b> - <b>Helpdesk</b>	<p>a) Publication of the Call for TNA (annual, semestral, topical)</p> <p>b) User request, via PASS</p> <p>c) 3-step selection, via PASS</p> <p>c.1 eligibility, by SAMU</p> <p>c.2 feasibility, by the Facility provider assessing the scientific/technical feasibility and resources required to serve the users</p> <p>c.3 independent merit review, by ad-hoc panels of up to 3 reviewers, one of whom acts as Rapporteur. Reviewers' scores are averaged, then Rapporteur summarizes results and produces recommendations</p> <p>d) access provision, starting with the user signing the acknowledgement of access terms</p> <p>e) post-access requirements, including user scientific activity report, user feedback questionnaire, dissemination of the project results</p>	- Excellence-driven - Technical need-driven - Market-driven - Training need-driven	<p><b>I. Excellence-driven access</b></p> <ul style="list-style-type: none"> <li>• Scientific and technical value (0-15 points, for Scientific and technical quality, Impact on science, Dissemination and exploitation plan)</li> <li>• Novelty and innovation (0-15 points, for X-disciplinarity, Novel or unconventional access approaches, Potential for seeding links with industry and innovation)</li> <li>• Quality of the applicant (0-20 points, for Scientific qualification / track-record of the user group, Gender balance, Collaboration and access to new Users, Involvement of students / young scientists)</li> </ul> <p><b>II. Technical need-driven access</b></p> <ul style="list-style-type: none"> <li>• Technical and scientific relevance (0-25 points, for Relevance of the instrument, Frequency of the technical need, Training</li> </ul>	- Physical, remote, virtual - transnational (mostly EU project funded in this phase)	- Standard: single facility, simultaneous access; - non-standard: multiple facilities, in person/ remote - Free TNA funded by EU projects	Monitoring is carried out by SAMU with monitoring tools embedded in PASS. PASS enables both collection of the main access metrics and gathering of the user feedback needed to measure KPIs on the users, quantity and quality of access provided, type of services requested, user satisfaction. Customized Access KPIs & Service Provision Activity reports are produced at specific intervals of time.	Acknowledge ment of the access terms Feedback provision Scientific activity report	Plans for private sector access and Fast-track / crisis access

RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
						<p>for the staff using the instrument, Interest to the scientific community, Dissemination plan: availability and use of data)</p> <ul style="list-style-type: none"> <li>• Quality of the applicant (0-15 points, for References and experience of the user group, Gender balance, Collaboration and access to new Users)</li> </ul> <p><b>III. Market-driven access</b></p> <ul style="list-style-type: none"> <li>• Scientific and technical value (0-10 points, for Scientific and technical quality, Dissemination and exploitation plan)</li> <li>• Innovation and market potential (0-20 points, for Likelihood of developing a new successful technology / product, Anticipated benefits of the proposed work in comparison to current commercial and emerging technologies, Market potential, Novel</li> </ul>					



RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS	
						<p>or unconventional access approaches)</p> <ul style="list-style-type: none"> <li>• Quality of the applicant (0-15 points, for References, capabilities and experience of the user group/company, Gender balance, Collaboration and access to new Users)</li> </ul> <p><b>IV. Training need-driven</b></p> <ul style="list-style-type: none"> <li>• Scientific/learning objectives and motivation (0-15 points, for Relevance of the scientific and training objectives, Relevance of the training for the user current/future position, Relevance of the training for the belonging organization, Multiplier effect of the training)</li> <li>• Quality of the applicant (0-25 points, for Academic achievement, Gender balance, Collaboration and access to new Users, Involvement of students / young scientists,</li> </ul>						

RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
						Potential for seeding links with industry and innovation)					
<b>ANAEE ERIC</b>	Open-air platforms Enclosed platforms Analytical platforms Modelling platforms	- Central Hub, responsible for the central management of the access - AnaEE Project Review Committee (PRC, independent from AnaEE ERIC) entrusted with review of requests	- <b>Searchable list of facilities</b> (in the RI web portal) allowing basic search of the facilities, with descriptive, static presentations - <b>Dedicated web interface</b> (in the RI web portal) for application submission. Very basic form (similar to a Google form) to collect the main idea and objectives. - possibility of specific calls for access to AnaEE platforms - Platform service legal agreements (SLA)	<b>a)</b> Application, consisting of a short <i>Pre-proposal</i> <b>b) 2-step selection:</b> - Scientific evaluation and, upon positive review - provider's confirmation of the technical feasibility, and quotation of the service costs <b>c) project optimization</b> , following suggestions from reviewers and providers. The optimized project proposal is then submitted to a funding body (external) <b>d) Access provision</b> (for funded projects): AnaEE processing and scheduling on the relevant platforms. If the funded project proposal was changed compared to the optimized and validated project proposal (in step b), step b is repeated	- Scientific review (exc.- driven) - Technical review (feasibility + pricing) - Review for private users	<ul style="list-style-type: none"> <li>• Scientific excellence and novelty</li> <li>• Scientific expertise of the project consortium members</li> <li>• Potential impact of expected results</li> <li>• Usage of national access, TNA, and VA</li> <li>• Scientific feasibility</li> <li>• Technical and scientific compliance and complementarity with the long-term integrity of the platform(s)</li> <li>• Carrying capacity of platform(s)</li> <li>• Compliance of the DMP with platform's and AnaEE criteria</li> <li>• Usage of national access, TNA, and VA.</li> </ul> <b>For private user review:</b> Rules for scientific and technical evaluation, access to the data, and IPR are defined in a prior agreement made with AnaEE.	- Physical, remote, virtual - national, transnational	- Standard: single facility, simultaneous access; - non-standard: multiple facilities, in person/ remote - NO FREE access, access is paid with funds the users get elsewhere (AnaEE is not a funding body for the user projects to be realized on its platforms)	Monitoring is a responsibility of the Central Hub and covers the quantity and quality of Access granted, type of User, geographic distribution, and User satisfaction, etc. KPIs, to be monitored by the Platforms, will be defined in the SLAs.	- Acceptance of the access terms - Acceptance of the user duties in appendix to platform service legal agreement (SLA) - activity report	None

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Argonne national Lab. (US)	From particle accelerators to automotive testbeds	Argonne's Science and Technology Partnerships and Outreach directorate is the main reference for outreach and engagement of external users.  Access is not centrally managed for all the facilities as requests are received directly by the user facilities, which manage the access process involving peer review.	- User Agreements: formal legal agreement between the user's employing institution and the host institution. Such agreements protect the interests of both parties by articulating the disposition of IP and data rights from the work undertaken at the facility. - The proposal submission process is mostly done electronically via the web and e-mail. - No special tools to manage the review, carried out in meetings of the facilities' Program Advisory Committees (PAC)	<b>a)</b> Establishment of a user agreement (or verification that one already exists with the user organization) <b>b)</b> Registration as User (online database) <b>c)</b> Application, in 2 main types: - Individual Proposal: submitted by individual investigators or small groups typically in response to an open call for proposals. - Collaboration Proposal: a formal self-organized collaboration of researchers submits a proposal (large, may involve dozens or even hundreds of researchers from a number of different institutions who work together to propose experiments) <b>d)</b> Selection, consisting in the Peer review by the facility Program Advisory Committee and the parallel feasibility check by Facility PIs <b>e)</b> Completion of the "end of experiment" survey	Excellence-driven	<ul style="list-style-type: none"> <li>Scientific and/or technical merit of the project, including the likelihood that the research will lead to new discoveries or fundamental advances within its field, or have substantial impact on progress in that field or in other scientific fields.</li> <li>Appropriateness of the proposed method or approach;</li> <li>Competency of applicant's personnel and adequacy of proposed resources.</li> <li>Reasonableness and appropriateness of the requested resources for the activity.</li> <li>Relevance of the proposed activities to the Facility.</li> </ul> In addition, logistical feasibility, cost, and programmatic priorities in making final decisions on proposed activities.	- Physical, remote, virtual - national, international	- Non-standard: access to multiple User Facilities for multimodal and cross-functional projects. - FREE access for users who publish their results - access on a cost-recovery basis for proprietary research that is not intended for the public domain.	Monitoring at Facility Level, with many user statistics and metrics collected and reported following the guidelines and rules established by the US Department of Energy (User Statistics Collection Practice) - Users are counted based on the completed registrations, physical access is monitored in the facility registry, remote access is monitored with remote logins. - User satisfaction monitored with the "end of experiment" survey.	Users have to publish the results and acknowledge the Facilities, submit the data products, and provide a summary report of the activity.	None

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BBMRI – ERIC	Biobanks	- BBMRI-ERIC Central Executive Management Office maintains the main tools to facilitate access (Directory, Locator and Negotiator)	- <b>BBMRI-ERIC Directory</b> (Biobank catal.) - <b>Sample/Data Locator</b> : service for searching preliminary availability information on samples and data sets. - <b>BBMRI-ERIC Negotiator</b> : IT Service providing a communication platform for biobankers and researchers requesting samples and/or data, particularly when users need to communicate with multiple candidate biobanks. It is also used to file the request once the "negotiation" is completed, and for the user report of results. - Material Transfer Agreements	a) Registration of requester b) Request of samples/data via the BBMRI-ERIC Negotiator. c) Access control & samples/data delivery: After receiving adequate Availability Information, the requester follows up directly with the provider (biobank) in order to provide any additional information needed to assess whether access can be granted. The provider decides whether samples/data are released for the project requested. MTA/DTA are signed in this phase d) Return of results: Providers collect reports on project outcomes for accountability purposes e) Request completion notification: BMRI-ERIC Partner Biobanks are required to inform BBMRI-ERIC whether the request has been completed successfully or not, and in case report the results.	Excellence-driven access recommended to BBMRI-ERIC Partner Biobanks	Not defined at central level, as "selection" is made by BBMRI-ERIC Partner Biobanks during the negotiation, which is confidential though happening via the Negotiator.  - As access facilitator, BBMRI-ERIC provides infrastructure implementing Step-a, Step-b and Step-f. BBMRI-ERIC is not directly involved in Step-c and Step-d.	Mostly remote	BBMRI-ERIC Partner Biobanks may require the requesters to partially or fully cover the costs incurred in providing samples and/or data. Cost aspects must be regulated in the MTA/DTA between the requester and the BBMRI-ERIC Partner Biobank.	Monitoring at provider's level.	Users have to accept the ethical principles in the Access policy, comply with the "Acceptable Use Policy of BBMRI-ERIC Services" and report the results of the access	None at Central level

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			(MTAs), Data Transfer Agreem. (DTAs) or Data Access Agreem. (DAAs)								
<b>BRISK</b>	Biological and thermal biomass conversion facilities	- Project coordinators take care of centrally managing TNA requests  - User Selection Panel (USP) performs the peer-review	PDF application form	<b>a)</b> 2-step application: <b>a.1)</b> users first complete the Transnational Access Application Form and submit it via email to the host organization for approval. Applicants need to obtain written confirmation from the host institution confirming they can accommodate the access and all research will be completed in a timely manner (feasibility). <b>a.2)</b> upon confirmation from provider, the users submit the form to the BRISK2 Project Coordinators uploading it through the website. <b>b)</b> Selection: all BRISK2 applications are reviewed by a panel of bioenergy experts comprising two independent experts and two BRISK2 project partners.	Excellence-driven	Scientific merit	- Physical, remote, virtual - only transnational (funded by EU projects)	- Standard: single facility, simultaneous access; - FREE TNA funded by EU projects	Standard, project-based	Standard project reporting duties	None

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CERIC-ERIC	Analytical facilities in the fields of materials, biomaterials and nanotechnology.	CERIC central office.	<p>- <b>Virtual Unified Office (VUO)</b> provides the interface for submission, travel/shipment support request / reimbursement, feedback and reporting</p> <p>- <b>Rocket.Chat</b> tool to connect successful applicants with colleagues and scientists from the CERIC facilities. The service is available from 6 months prior the beginning of the planned measurements to 1 year after the end of last measurement.</p>	<p><b>a)</b> Publication of the Call for TNA: 2 calls for proposals per year, 2 deadlines per each: 1st at the beginning of the month (enables a pre-evaluation of the request by the provider and the possibility to improve it), the 2nd at the end.</p> <p><b>b)</b> Application, consisting of: - a short Electronic Application Form (user data, facility requested, access/service); - Proposal Description Form, downloaded, completed and uploaded in the VUO.</p> <p><b>c) 2-step selection:</b> <b>c.1</b> Technical evaluation, performed by the providers to determine the technical feasibility. <b>c.2</b> Scientific evaluation performed by a panel of 2 independent experts</p> <p><b>d)</b> Scheduling: users have to place an access request (admittance) to CERIC Laboratories via VUO at least three weeks in advance before the arrival.</p> <p><b>e)</b> Post-access: experimental report to be uploaded in VUO together with the publication record + User's Survey</p>	Scientific review (excellence-driven), upon confirmation of the technical feasibility by the facility	<ul style="list-style-type: none"> <li>• Overall scientific excellence of the project,</li> <li>• the novelty of the approach and</li> <li>• necessity and effectiveness of the technique requested for achieving the results.</li> </ul>	<ul style="list-style-type: none"> <li>- Physical, remote, virtual</li> <li>- national, transnational, international</li> </ul>	<ul style="list-style-type: none"> <li>- Single proposals</li> <li>- multi-technique proposals for up to 5 complementary techniques</li> <li>- Free access for non-proprietary research, but with publication of the results, citation of the facilities and local contacts involved.</li> <li>- partial support for user's mobility</li> <li>- financial and logistic support for the shipment of the samples dedicated to remotely scheduled measurements for EU users.</li> </ul>	Metrics monitored through the VUO	- publication of results is a condition for benefiting from free of charge access	<p><b>Fast-track for:</b></p> <ul style="list-style-type: none"> <li>- feasibility studies: to test feasibility of experiments or measurements</li> <li>- commissioning to perform measurements with newest instruments and contribute to their commissioning</li> <li>3) contribute to the research on COVID-19</li> </ul> <p>Evaluation consists only of the feasibility assessment by the facility.</p>

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DiSSCo	Natural history museums, botanic gardens and collection-holding universities	- Coord. and Support Office (CSO)  - User Selection Panel (50-50 internal/external)	- <b>Collection Digitisation Dashboard</b> , summarizing the digitisation status, content and strengths of collections across the community  - <b>ELViS: European Loans and Visits System</b> , a one-stop shop for access that provides a unified way to request TA, virtual access and (in future) loans. At the moment it is only for application submission.  - <b>Knowledge-base</b> , using DSpace  - <b>Helpdesk</b> , using JitBit software.	<b>a)</b> Publication of the annual call for TNA/VA <b>b)</b> Application, submitted via the ELVIS. Applicants need to upload a Supporting Statement from a senior peer (not by a staff member from the chosen facility). <b>c)</b> 2-step selection with: <b>c.1:</b> Eligibility, by the CSO <b>c.2:</b> Review by the User Selection Panel. Results of the selection are communicated via email to users. The selection process takes between 12-15 weeks from the deadline. <b>d)</b> access provision <b>e)</b> post-access: User Evaluation Report. It requires that users enter the anticipated scientific output (e.g. peer-reviewed publications, conference contribution) and keep it updated.	Excellence-driven	<ul style="list-style-type: none"> <li>• Methodology (up to 10 points, weight 30%)</li> <li>• Research Excellence (up to 10 points, weight 10%)</li> <li>• Supporting Statement (up to 10 points, weight 10%)</li> <li>• Justification (up to 10 points, weight 25%)</li> <li>• Expected Gains (up to 10 points, weight 10%)</li> <li>• Scientific Merit (up to 10 points, weight 10%)</li> <li>• Societal challenge (up to 10 points, weight 5%)</li> </ul>	- Physical and virtual access - transnational, via EU funded projects	- Standard: single facility, simultaneous access; - no single application to visit multiple facilities - no training-only need-driven access	Standard, project-based	Submit and update the User Evaluation Report.	None



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<b>ECORD</b>	Mission-specific platforms for IODP expeditions (IODP-International Ocean Discovery Program, int. research program for drilling at sea).	- EMA (ECORD Managing Agency) - ECORD Science Support & Advisory Committee, responsible for Coordinating expedition applications, nominating shipboard participants and reviewing quotas of shipboard scientists between participating countries.	PDF application form	<p><b>a)</b> Call for applications to sail on the organized expeditions on-board the research vessels</p> <p><b>b)</b> Application to sail, including information on the funding scheme and support from the belonging institution or national funding agencies</p> <p><b>c)</b> Evaluation and identification of scientists to participate in the ECORD Facility Board</p>	Scientific review (excellence-driven)	<ul style="list-style-type: none"> <li>• Scientific excellence</li> <li>• Scientific expertise of the applicant</li> <li>• Availability of travel support, post-cruise funding opportunities</li> </ul>	<ul style="list-style-type: none"> <li>- Physical</li> <li>- Remote (to samples)</li> </ul>	<ul style="list-style-type: none"> <li>- Full participation to the expedition: as shipboard scientist</li> <li>- Shore-based participation: as member of the expedition's scientific party working on data and samples during the 12-month moratorium period.</li> <li>- no direct financial support for participation in IODP expeditions. Funding for participation is responsibility of individual applicants.</li> </ul>	At IODP programme level	Science party members are obliged to conduct post-expedition research on samples and/or data collected and publish the results.	None
<b>e-LTER</b>	LTER Sites (up to 10 km <sup>2</sup> , comprising mainly one habitat type and form of land use)	- eLTER Head Office - eLTER PLUS Access Team - eLTER PLUS	- service portfolio (initial development) - eLTERs Digital Asset Registry - eLTER PLUS TA-RA Proposal	<p><b>a)</b> Publication of TNA Calls (in the frame of EU funded projects). 2 types of calls: - bottom-up (topic chosen by the user) - top-down (thematic framework set)</p>	Scientific review (excellence-driven)	<p><b>For bottom up calls:</b></p> <ul style="list-style-type: none"> <li>• Scientific quality (up to 5 points, weight 2)</li> <li>• Approach and methodology (up to 5 points, weight 2)</li> </ul>	<ul style="list-style-type: none"> <li>- Physical, remote, and combination</li> <li>- Virtual access to data</li> <li>- Transnational (TNA)</li> </ul>	<ul style="list-style-type: none"> <li>- single-site access</li> <li>- multiple-site access</li> <li>- FREE TNA funded by EU projects</li> </ul>	Standard project-based monitoring. Password-protected file store serving as database of proposals, from which data are	Enter metadata in eLTERs Digital Asset Registry for each of the variables they monitored /	None

RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
	and LTSER Platforms representing the main habitats, land use forms and practices relevant for broader regions (up to 10000 km <sup>2</sup> )	selection panel, consists of representatives of the institutions which own or operate the sites made accessible through the access scheme. Fairness is guaranteed by the rule that nobody may evaluate proposals requesting access to their own site, nor by users from their own country.	<p>Template (MS Word document)</p> <ul style="list-style-type: none"> <li>- password-protected file store, to serve as database of proposals</li> <li>- eLTER PLUS TA-RA Proposal Evaluation Form (MS Word document)</li> <li>- eLTER PLUS TA Agreement template (MS Word document)</li> <li>- eLTER PLUS TA Reporting template (MS Word document)</li> </ul>	<p><b>b)</b> Application, submitting via email the PDF form</p> <p><b>c)</b> 4-step Evaluation, (10-12 weeks from the deadline):</p> <p><b>c.1</b> Eligibility check, by the eLTER PLUS Access Team</p> <p><b>c.2</b> Plausibility check by site owners</p> <p><b>c.3</b> Scientific evaluation: 1 or 2 individual evaluations depending on:</p> <ul style="list-style-type: none"> <li>- availability of TNA budget at the requested site/ provider (1 evaluation).</li> <li>- the requested site/provider has exceeded the TA budget (2 evaluations)</li> <li>- Multi-site proposals (2 independent evaluations).</li> </ul> <p>In case of discordant evaluations, a third is performed.</p> <p><b>c.4</b> Final Selection, by eLTER PLUS Access Team.</p> <p><b>d)</b> Post-access: Metadata entry in eLTERs Digital Asset Registry + Report completion</p>		<ul style="list-style-type: none"> <li>• Relevance for eLTER (up to 5 points, weight 1)</li> </ul> <p><b>For top-down calls:</b></p> <ul style="list-style-type: none"> <li>• Scientific quality (up to 5 points, weight 1,5)</li> <li>• Approach and methodology (up to 5 points, weight 1,5)</li> <li>• Relation to the chosen framework (up to 5 points, weight 2)</li> </ul> <p><b>Final selection:</b> evaluation outcomes + H2020 prioritization criteria</p>			extracted for monitoring purposes	measured / observed during the visit, within two weeks after the visit.	
<b>EMSO</b>	12 Reg. Facilities placed at key sites around Europe.	<ul style="list-style-type: none"> <li>- EMSO physical access coordinator</li> <li>- EMSO ERIC</li> </ul>	<ul style="list-style-type: none"> <li>- Data portal</li> <li>- Website page describing the 4 Facilities offering physical access, including the</li> </ul>	<p><b>a)</b> Publication of annual call for TNA. Pilot 2022 TNA call 8 month opening, four cut-off dates</p>	Scientific review (excellence-driven)	<ul style="list-style-type: none"> <li>• Scientific and technical objectives (up to 10 points, threshold is 7)</li> <li>• Quality of the methodology and implementation (up to</li> </ul>	-Virtual access From 2022 (pilot): <b>MoA 1 Remote:</b> user presence not required	EMSO ERIC provides direct funding for the expenses related to the	internal database of received proposals	Signature of the contract specifying all duties and details of the project	None

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	Observatories are platforms equipped with multiple sensors, placed along the water column and on the seafloor.  4 facilities offer physical access in 2022	Engineering and Logistics Officer  - Evaluation Panel.	details of the provision  - EMSO physical access dedicated email  - Letter of intent template (MS Word doc.)  - EMSO ERIC Physical Access  Proposal Submission Form (MS Word doc.), rather long and detailed  - Waiting list: if proposals pass the threshold but other proposals with higher scores consume the budget available for the intermediate call, the lower scored ones can enter the next intermediate call without the need to be evaluated again	<p><b>b)</b> Letter of intent, sent by the interested user with one-page proposal</p> <p><b>c)</b> Host facility assignment, based on the choice in the project proposal. The host facility ascertains feasibility and contacts the user for the next phase</p> <p><b>d)</b> Joint elaboration of the full project proposal. The proposal submission form is signed by the user and the facility manager</p> <p><b>e)</b> Evaluation, by a panel formed of 3 experts from EMSO ERIC. One month is the expected time needed to evaluate all proposals</p> <p><b>f)</b> Contract signature: three-party written contract between the "Access Provider", the "End User" and the "Call Coordinator"</p> <p><b>g)</b> Project execution</p>		10 points, threshold is 7) <ul style="list-style-type: none"> <li>• Scientific/Technical Excellence of user group (up to 10 points, threshold is 7)</li> <li>• International collaboration. 4 points if the user is from a different country than that of the access provider. 3 points if the user group is multinational (up to 7 points, threshold is 3)</li> <li>• Bonus points. Links or potential for seeding links with European Industry (for Research Institutions) or Innovation and potential new products or patents (for SMEs and Industries) - Up to 8 points</li> </ul>	<p><b>MoA 1a</b> Access that contemplates the hosting and monitoring of one or more sensors or the exclusive use of one or more of the Facility's sensors for the experiment.</p> <p><b>MoA 1b</b> Access for training remotely and having virtual access to the lab.</p> <p><b>MoA 2: Partially remote:</b> user presence required at some stage.</p> <p><b>MoA 3: In-person</b> ("hands-on"): user presence required</p> <p><b>MoA 3a:</b> Access for hosting and monitoring of</p>	following costs categories: <ul style="list-style-type: none"> <li>- Operations</li> <li>- Hardware adaptations</li> <li>- Shipping of equipment</li> <li>- Consumabl.</li> </ul> <p>Maximum amount of the funding per project proposal is up to 8.000 EUR. There is also a budget for travel of members of the user team or host facility personnel that can reach 3.000 EUR per project.</p>			

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							<p>one or more sensors or the exclusive use of one or more of the Facility's sensors for the experiment. The user is present at the Facility's lab/site/cruise.</p> <p><b>MoA 3b</b> – Access for training on-site with a host expert. It does not include sensor hosting.</p> <p>- national, transnational and international access (no restrictions for the user country of origin)</p>				
<b>EPOS</b>	Research facilities (laboratories, volcano obs.) for solid Earth science in Europe. Thematic	• Consortium Board (CB) of each TCS managing TNA in their domain, including: - selection of TNA provid.,	- Data Portal, e-infrastructure built around a central hub (ICS-C) where users can discover and access data and data products available as well	Pilot TNA provision by TCS MSL and VO based on: <b>a)</b> publication of TNA calls <b>b)</b> user submission of project proposals <b>c)</b> 3-step review phase, including:	Excellence - driven Market-driven	<ul style="list-style-type: none"> <li>• Scientific excellence</li> <li>• Originality</li> <li>• Quality</li> </ul>	- So far virtual access to multidisciplinary solid Earth science data, data products, services - physical and remote access	- Standard: access to single facility - Free access (funded in EU projects)	Standard, project-based	Standard project reporting duties	None

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	Core Services (TCS) Multi-scale Laboratories (MSL) and the Volcano Observations (VO) provided pilot physical access	- appoint. of Scientific Evaluation Committee (SEC), - appoint. of the TNA coordinator (1 per TCS)  •TNA coordinators sign collab. agreements with the ERIC and the TNA providers establishing requirem. and financial regulations for TNA.  • TNA Scientific Evaluation Committee	as access a set of service for integrating and analyzing multidisciplinary data.  -TNA Brokering Service to provide a cross-TCS catalogue of the TNA possibilities offered  - user application forms (Google form)  - user feedback forms	<b>c.1</b> Eligibility, by the TNA coordinator <b>c.2</b> Feasibility, by the TNA provider <b>c.3</b> Scientific peer-review  <b>d)</b> access phase, with signing of user-provider access agreements  <b>e)</b> reporting phase, post-access			to facilities is in planning phase (TNA programme still to be implemented)				
<b>ERIGrid</b>	Smart Grid Labs for power system testing, smart grids	- TA Work Package coordinators and team	- TA Labs Gallery (in the RI web portal), with descriptive, static facilities presentations in	<b>a)</b> Publication of the TNA Call (every 4 months, open for 3) <b>b)</b> Submission of the User Proposals via via ConfTool (registration needed)	Scientific review (excellence-driven)	• General quality of the proposal (score: 0-10) • Scientific/technical merit (score: 0-10):	- Physical, remote, virtual - transnational (TNA)  Process for VA:	- Standard: access to single lab - non-standard: multi-site user project	- Standard project-based monitoring for TA  - For VA: collection of web	- Sign user contract - publish results	None

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	and energy systems (testing and simulation facilities)	- User Selection Panel (USP)	dedicated subpages - ConfTool Project Proposal Administration - User Support Forum for VA providers (Discourse)	<p><b>c)</b> Evaluation of the User Proposals (1-2 months after the deadline):</p> <p><b>c.1</b> Pre-screening, by the Lab PI, assessing the technical, economic and organisational feasibility</p> <p><b>c.2</b> Evaluation by the User Selection Panel (each proposal by at least three experts)</p> <p><b>d)</b> Proposal Selection and Notification to the User</p> <p><b>e)</b> Access to the Lab:</p> <p><b>e.1</b> Signature of the Contract between the Lab and the user</p> <p><b>e.2</b> assistance to the user</p> <p><b>e.3</b> Declaration of Use of the Lab, by the user</p> <p><b>f)</b> Reporting and Dissemination of the Project Results (user feedback questionnaire and project technical report)</p>		<ul style="list-style-type: none"> <li>• Improve know-how and capacity of the lab (score: 0-10)</li> <li>• Compliance with EU policies and priorities (score: 0-10)</li> </ul> <p>Final score calculated as the mean value of the scores issued by USP members, expressed in % over the maximum of 40 points:</p> <ul style="list-style-type: none"> <li>• Excellent (75-100%)</li> <li>• Good (50-75%)</li> <li>• Fair (25-50%)</li> <li>• Poor (0-25%) --&gt; 'Poor'-scored proposals are normally rejected.</li> </ul> <p>Additional criterion is Plagiarism: proposals with unjustified high amount of similarity will be rejected.</p>	<ul style="list-style-type: none"> <li>- User identification through a user login system and automated means of user verification (e.g., mail addresses)</li> <li>- User Questionnaire: users are diverted to a user questionnaire before being redirected to the web-address of the actual VA infrastructure. In the questionnaire users are asked to provide basic details about the intended use of the VA facility.</li> </ul>	- Free access (funded in EU projects)	analytics for users visiting the VA facilities. The collected statistics are augmented by the inputs provided by the users via the VA user questionnaire		
<b>EUFAR</b>	Research aircraft and instruments	- Executive secretariat - Selection panel	- Central data archive	<p>a) TNA Call opening</p> <p>b) Expression of Interest (Eoi) for Transnational Access, via online form in the website</p>	- Scientific review (excellence-driven)	<ul style="list-style-type: none"> <li>• Quality and impact of the science</li> <li>• Impact on the users (project are better evaluated if they can identify a large potential user base).</li> </ul>	<ul style="list-style-type: none"> <li>- Physical, remote, virtual</li> <li>- transnational (project funded)</li> </ul>	- Standard, single facility -free access (project funded TNA)	Standard, project-based	Standard, project-based	None

RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
				c) Eol circulation to EUFAR aircraft operators and other EUFAR expert scientists to provide feedback on scientific and technical aspects of the proposed work and on the opportunities to cluster it with other existing or proposed flight activities		For Instrument development: <ul style="list-style-type: none"> <li>• Perceived demand for, and scientific impact of, the new instrument.</li> <li>• ability to cluster with other projects to increase the cost-effectiveness of the flying.</li> </ul>					
<b>EURO-BIO IMAGING ERIC</b>	Biological and biomedical imaging facilities (nodes)	Central Hub	<p>- Searchable list of available imaging technologies, directly linked to the proposal submission form</p> <p>- Web access application in the Euro-Biolmaging Portal featuring a messaging tool. The application only enable submission of the proposal form, sending messages, track the status of the proposal and send the feedback after the end of the access.</p>	<p><b>a)</b> Application</p> <p><b>b)</b> (optional) scientific advice from an external expert: this step can be faster or even skipped if the user project has undergone some type of scientific evaluation before (to receive the needed funds)</p> <p><b>c)</b> technical feasibility check by the provider</p> <p><b>d)</b> selection, performed by 2 invited scientific experts</p> <p><b>e)</b> Submission of post-access feedback</p>	<p>Scientific review (excellence-driven)</p> <p>Special selection for training requests</p>	<p>• Scientific review:</p> <ul style="list-style-type: none"> <li>- Significance / importance of the project for international research and standards in the field,</li> <li>- Progress beyond state-of-the-art</li> <li>- Scientific quality of the research and study concept</li> <li>- Benefit for applicant (e.g. training received, results obtained, scientific networking started) Impact of project on field of science, economy and society.</li> </ul> <p>No scoring per single criteria, just overall categorization of the</p>	<ul style="list-style-type: none"> <li>- Physical, remote, virtual</li> <li>- national, international and transnational. The latter in case of EU projects funding the access</li> </ul>	<ul style="list-style-type: none"> <li>- Standard: single facility</li> <li>- NO FREE access. A list of the funding opportunities at different levels is available in the web portal to help users seek funds to cover the access.</li> </ul>	Standard, via the Euro-Biolmaging Web Portal	<ul style="list-style-type: none"> <li>- Fill in the required feedback form(s) on the Euro-Biolmaging Web Portal;</li> <li>- Acknowledge Euro-Biol. in any presentation or publication containing results obtained during a Euro-Bio. Techn. access visit;</li> <li>- report any such presentation</li> </ul>	None



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						<p>proposal (Outstanding, Very good, Good, Average, Poor)</p> <ul style="list-style-type: none"> <li>• Selection for training requests: applications for the high and advanced courses are handled at facility level and selection is typically based on the relevance of the course for the student.</li> </ul>				<p>or publication to Euro-Biol. using the appropriate form on the Euro-Biolm. Web Portal. Failure to do (a)-(c) may result in users not being able to use Euro-Biol. services in the future.</p>	
<b>EUROFLEETS</b>	Advanced research vessel operators in Europe, North America and Oceania	- EUROFL. Evaluation Office - Scientific Liaison Panel, in charge of the final selection -Operational Liaison Panel OLP), consisting of Eurofleets+ RV operators.	- Portable telepresence system to enable remote access by researchers  - online proposal submission portal  - Eurofleets+ Virtual Playground (VP), a web-based tool providing a space of data, information and knowledge in which collaborative research can take place in easy way	<p>a) Publication of the call</p> <p>b) Application, via the submission portal</p> <p>c) 3-step selection:</p> <p><b>c.1</b> - Evaluation by external experts</p> <p><b>c.2</b> - Selection by the Scientific Liaison Panel</p> <p><b>c.3</b> Logistic evaluation of proposals ranked as excellent by the OLP</p>	Excellence-driven Access mode	<ul style="list-style-type: none"> <li>• Scientific and technical quality of the ship-time proposal</li> <li>• Quality of the work programme</li> <li>• Scientific qualification/track record of the proposing PI and user group</li> <li>• Technical capability to carry out the research cruise and data exploitation</li> <li>• Collaboration with international /national partners/industry</li> <li>• Training of young scientists/ public outreach</li> </ul>	- Physical, remote - transnational (project-funded)	Standard, single vessel	Standard, project based	Standard, project based	None

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INSTRUCT ERIC	Structural biology laboratories and facilities	- Instruct-ERIC hub (manages the peer review process, collects metrics and provides support to users and facilities) - Panel of reviewers	- ARIA platform for access management  - Access Catalogue listing technologies and services offered, linked to ARIA  - User appeal vs rejection decisions	a) Application (anytime, via ARIA). Special (topical) calls for access are published from time to time with a defined deadline  b) scientific eligibility by a Moderator, based upon alignment with Instruct-ERIC's mission of integrated structural biology.  c) Evaluation, by three reviewers (one internal and two external).  d) Final decisions, made by the Access Committee, based upon the recommendation of the Moderator, without prejudice to the right of a facility to decline access. All facilities have a local right of veto for access without justification.  e) Access reports, after the end	Scientific review (excellence-driven)	<ul style="list-style-type: none"> <li>• Field and scope of research (0-1)</li> <li>• Impact of the research (0-3)</li> <li>• Preliminary data and Plan B (0-3)</li> <li>• Strengths and weaknesses (0-1)</li> </ul> <p>Maximum score = 8 Threshold for acceptance = 6 Revision required = scores 3-5 Rejected = scores 0-2</p>	- national, transnational	- Integrated access proposal (multiple techn.) - standard access proposal to single technologies/facility - Free access to researchers coming from member countries (access is funded with the annual subscription to Instruct-ERIC). They can also apply for partial funding of T&S costs (up to €400) - Researchers from non-member countries pay an Academic rate fee, and agree to publish results - Access provided on a service basis	Embedded in ARIA	- Access activity reports at the end of access	None

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								(subject to fee, non-Academic rate) for commercial use - Free TNA access in case of EU-funded projects			
<b>INTERACT</b>	State-of-the-art terrestrial research and monitoring stations, and large research field sites throughout the Arctic	- Transnat. Access office - Transnat. Access Board, defining the calls and taking care of the scientific review. It consists of 8 experts external to INTERACT and 8 representatives of stations in particular geographic regions	- Data Forum  - List of available platforms for access  - <b>Infrastructure Matrix and Access Modality Selection Tool</b> help users to identify the most suitable stations and form of access (TA/RA/VA) for their study.  - INTERACCESS, online tool for managing the TA and RA applications, evaluations and granting procedures, as well as the	<b>a)</b> Publication of the call  <b>b)</b> Application, via INTERACCESS  <b>c)</b> 3-step Evaluation (4 months): <b>c.1</b> eligibility check, by the TNA office <b>c.2</b> scientific evaluation, by the TA Board. TA Board recommends user groups for TA to the research stations <b>c.3</b> TA decisions, taken by the research stations based on the recommendations, feasibility of the projects at the station, station strategy and focus areas etc.  <b>d)</b> TA/RA decisions are sent to applicants via INTERACCESS and the user accepts/refuses the access granted  <b>e)</b> Post-access activity report	Scientific review (excellence-driven)	<ul style="list-style-type: none"> <li>• Scientific quality of the planned research (score 1-5)</li> <li>• Scientific merits of the TA User Group leader (score 1-5)</li> <li>• Relevance of the planned research for INTERACT goals (score 1-5)</li> <li>• Value for money (score 1-5)</li> </ul>	- Physical, remote, virtual - transnational	- Access to single facility and to multiple - Free access (funded in EU projects)	Monitoring Tools embedded in INTERACCESS	Successful applicants are required to - Agree to their project name and description being published on INTERACT website - Provide a Project Summary Report on results obtained during the visit(s) - Publish the results within a reasonable time in open literature, specifying in	None

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			management of users groups and reporting.  - INTERACT VA Single-Entry Point (a Data portal), providing Virtual Access and related data products and services							Acknowledgements	
<b>JERICO</b>	European Coastal Observatories and Calibration Facilities (fixed platf., gliders, cabled observ., ferryboxes, calibration labs)	- TA mgmt. team  - Selection Panel (SP)	- Written contract or agreement between the "Access Provider" and the "End User" to delineate the actions to be undertaken, resources allocated, length of planned user stays, period of use, rights and obligations of the Parties.	<p><b>a)</b> Publication of the TA call</p> <p><b>b)</b> Application, submitting via email the form to the access officer</p> <p><b>c)</b> 4-step selection:  <b>c.1</b> Eligibility check by the TA management team  <b>c.2</b> Feasibility assessment by the facility operator  <b>c.3</b> Evaluation, by members of the SP  <b>c.4</b> Final selection by the SP</p> <p><b>d)</b> Post-access requirements: activity report</p>	Scientific review (excellence-driven)	<ul style="list-style-type: none"> <li>• Scientific and/or technological excellence of user group (score 0-5)</li> <li>• Scientific and technical value of the project (score 0-5)</li> <li>• Quality of the work plan (score 0-5)</li> <li>• Potential for seeding links with industry and / or potential application to stakeholders (score 0-5)</li> <li>• European relevance and interests for the scientific community (score 0-5)</li> </ul> <p>Proposals are accepted if they receive a total score that is <math>\geq 15</math>.</p>	- Physical, virtual	- Project-funded TNA	Standard, project based	Standard, project based	None

RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
JRC	Scientific laboratories and facilities in the fields of nuclear safety and security (Euratom Labs), chemistry, biosciences/life sciences, physical sciences, ICT, Foresight.	- User Selection Committee, composed of experts from academia and research institutions at European level and a JRC official.	- Research Infrastructure Access Agreement (details the organisation and management of the User Access project by the facility and will cover any necessary technical and legal aspects)  - User Access Agreement (covers legal aspects including intellectual property rights, confidentiality, third party liability, insurances, the documents to be provided by the User, and the rules on the JRC sites)	<b>I - Relevance-driven access</b> <b>I.a)</b> Publication of calls for proposals at the EU Science Hub, for a pool of JRC infrastructures <b>I.b)</b> Proposal submission, through the EU Science Hub using a specific template <b>I.c)</b> Eligibility check (with respect to ethics and country of location of the User Institutions) by the JRC <b>I.d)</b> Evaluation , by the User Selection Committee, which also carries out and discuss evaluation for cost and feasibility <b>I.e)</b> Research Infrastructure Access Agreement, signed after negotiation between the user and the facilities covering all details of the access and the project  <b>II - Market-driven access:</b> <b>II.a)</b> Announcement of calls for proposals allowing to submit, on a continuous basis, market-driven proposals for a pool of JRC infrastructures <b>II.b)</b> Proposal submission <b>II.c)</b> Eligibility check (with respect to ethics and country of	- Relevance-driven access, exclusively dependent on scientific and socio-economic relevance at European level  - Market-driven access	<b>I. Relevance driven access</b> • Scientific implementation (50 points, for Scientific and technical value, description of work, originality and innovation, dissemination and exploitation plan, quality of the proposing team) • Collaboration and access to new Users (20 points, for Uniqueness and availability of similar facilities and expertise in any of the Users Institution's countries, Previous use of the RI by any User or User Institution, Training and involvement of young scientists, Synergies and complementarities with existing research projects and the ESFRI/ERIC • Strategic relevance (30 points, for relevance to priority topics of the RI(s), Importance for EU	- Physical, remote, virtual	<b>I. Relevance-driven access</b> entails costs. Users are charged the additional costs associated (i.e. the variable costs related to access). Payment may be a monetary payment or in the form of economically valuable in-kind contribution. (consumables, instrumentation, testing rigs, or provision of human resources). <b>II. Market-driven access</b> - granted upon payment of a fee covering the full access costs of the JRC.  - The JRC may provide a financial or in-		- Users should acknowledge contribution of the Research Infrastructure in any output (publication, patent, data, etc.) deriving from research conducted within its realms	See the market driven access

RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
				<p>location of the User Institutions) by the JRC</p> <p><b>II.d)</b> Proposal review proposals by the JRC on a first-come basis</p> <p>Following steps are the same as for the I.</p>		<p>standardisation and harmonisation, Importance for EU integration and cohesion).</p> <p><b>II. Market-driven access</b></p> <ul style="list-style-type: none"> <li>• Scientific implementation (50 points, for Scientific and technical value, description of work, Originality and innovation, Exploitation plan, Quality of the proposing team)</li> <li>• Access to SMEs and new Users (20 points, for Uniqueness and availability of similar facilities and expertise in any of the Users Institution's countries, Previous use of the RI by any User or User Institution, Participation of SMEs)</li> <li>• Strategic relevance (30 points, for relevance to EU priorities, regulations and directives, Value for the research performed at</li> </ul>		kind contrib. to support Users to cover their costs of travel and subsistence			

RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
						<p>the JRC infrastructures, Importance for EU standardisation and harmonisation).</p> <p>Thresholds (for I-II): a minimum of 30 points for the criteria of “Scientific Impl.”, and a minimum total (considering all criteria) of 60 points.</p>					
<b>Laserlab-Europe AISBL</b>	46 leading laser research infrastructures in 22 European countries	- Laserlab-Europe Access Board - Laserlab-Europe Users Selection Panel (USP)	- Catalogue of technologies and services  - LASERLAB-EUROPE Electronic Proposal Management System (ARIA).	<p><b>a)</b> Publication of the call</p> <p><b>b)</b> Application, via ARIA. Applications to a number of facilities have different forms and are handled at facility level</p> <p><b>c)</b> Evaluation: <b>c.1</b> eligibility check, performed by the host facility <b>c.2</b> scientific review by external referees, who recommend proposals to the USP <b>c.3</b> final selection by the USP</p> <p><b>d)</b> post-access: Project Summary Report, Laserlab User Group Questionnaire</p>	Scientific review (excellence-driven)	Scientific merit, taking into account the interest of the Community	- Physical, remote, virtual - transnational (project-funded)	- Access to single facility and to multiple - Free access (funded in EU projects)	Standard, project-based	Standard, project-based	None
<b>MIRRI</b>	Microbial domain Biological Resource	- MIRRI Central Coordinating Unit (CCU)	- Catalogues of services (for general services, and for	a) Initial contact with the Access Officer, who guides the applicants throughout the process and interacts with	'- Excellence-driven - Market-driven	'- only for excellence-driven access:	'- Physical, remote, virtual - national, transnational	- Access to single facility and to multiple	Standard, project based	Successful users need to: - sign User Access	None



RI Short Name	Facilities	Access governance	Tools	Access process	Selection modes	Review Criteria	Access types	Access modalities	Access monitoring tools	User duties	SPECIAL ACCESS
	Centres (mBRCs)	<ul style="list-style-type: none"> <li>- Access officer, coordinating the process and performing the eligibility check</li> <li>- Liaison Officer, performing the feasibility check</li> <li>- User selection panel (USP) providing scientific review</li> </ul>	<p>Application-Specific Services, i.e. provided by more than 1 organization and tackling strategic areas</p> <ul style="list-style-type: none"> <li>- Catalogue of microbial resources (and associated data)</li> </ul>	<p>Liaison Officer to verify the feasibility of the project.</p> <p>b) Proposal submission:</p> <ul style="list-style-type: none"> <li>- for excellence driven access in response to a call funding TNA</li> <li>- for market-driven or technical need-driven access anytime, contacting the access officer.</li> </ul> <p>c) Scientific review by members of the USP</p> <p>d) Access</p> <p>e) Post-Access duties (activity report, user feedback)</p>	- Technical need-driven	<ul style="list-style-type: none"> <li>• Originality and impact of the research project (score 1-20)</li> <li>• Scientific Approach (score 1-15)</li> <li>• Knowledge and expertise of the applicant (score 1-10)</li> </ul> <p>- For market-driven and technical need-driven access a contract is established between the User and MIRRI-ERIC, which defines obligations and responsibilities of each party, confidentiality, and Intellectual Property management</p>		<ul style="list-style-type: none"> <li>- Free or partially-free access is provided only to the best rated proposals in excellence-driven access mode, and only within a project that funds TNA.</li> <li>- User fees for market-driven and technical need-driven access, unless the user enters into a collaborative agreement with MIRRI, where both benefit from collaboration.</li> </ul>	<ul style="list-style-type: none"> <li>- Contract and Material Transfer Agreement (MTA)</li> <li>- provide final activity reports</li> <li>- disseminate and acknowledge the RI</li> </ul>		
<b>PRACE</b>	High performance computing (HPC) and data management systems and services	<ul style="list-style-type: none"> <li>- PRACE Access Committee (AC)</li> <li>- SHAPE review panel</li> </ul>	PRACE Application and Peer-Review Tool	<p>a) Launch of the Call for access, typically bi-annual calls. Calls to the SHAPE Programme run every six months. Applications for Preparatory Access are accepted at any time, with a cut-off date every 3 months.</p> <p>b) Application Submission: forms can be completed online</p>	<ul style="list-style-type: none"> <li>- Technical assessment</li> <li>- Scientific assessment</li> </ul>	<p><b>For technical assess.</b></p> <ul style="list-style-type: none"> <li>• Need to use PRACE resources</li> <li>• Software availability on the requested system(s).</li> <li>• Feasibility of the requested resource.</li> </ul> <p><b>For scientific assess:</b></p> <ul style="list-style-type: none"> <li>• Scientific excellence.</li> </ul>	Physical, remote	<ul style="list-style-type: none"> <li>- <b>Preparatory Access:</b> short-term access to resources, for code-enabling and porting, required to prepare for Project Access and</li> </ul>			

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				<p>or downloaded and sent via email</p> <p><b>c)</b> Administrative assessment, to check/allow review of minor oversights.</p> <p><b>d)</b> Evaluation:  <b>d.1 Technical assessment</b> by relevant PRACE techn. experts. Applications for Preparatory Access undergo technical review only.  <b>d.2 Scientific assessment</b> by a review panel of int. experts selected by the PRACE AC, which recommends applications to be accepted to the PRACE Board of Directors.  <b>d.3 Scientific ranking</b> by the PRACE AC for the PRACE Resources Allocation Session (RAS)</p> <p><b>f)</b> Post Award obligations: final report and acknowledgement of PRACE support.</p>		<ul style="list-style-type: none"> <li>• Novelty and transformative qualities.</li> <li>• Relevance to the call.</li> <li>• Methodology</li> <li>• Dissemination.</li> <li>• Management.</li> </ul> <p><b>For SHAPE access</b></p> <ul style="list-style-type: none"> <li>• Fit with the goals of SHAPE</li> <li>• Strength of the business case</li> <li>• Technical Achievability</li> <li>• Other aspects are the SME's commitment to co-invest with PRACE, innovation, socio-economic impact.</li> </ul>		<p>demonstrate scalability of codes.</p> <p><b>- Project Access</b> to PRACE Tier-0 HPC systems for projects that use previously tested codes with demonstrated high scalability and optimization.</p> <p><b>- SHAPE Access</b> to help SMEs benefit from expertise and knowledge developed within PRACE.</p> <p><b>- DESI Access</b> provides Tier-1 users access to supercomputing architectures from another European country for smaller-scale projects.</p>			