

Euro-BioImaging Preparatory Phase II Project

D4.4 Report on Nodes funding scheme for user access

Project N.	688945
Project Title	Euro-BioImaging Preparatory Phase II
Project Acronym	EuBI PPII
Associated Work Package	WP4
Associated Task	Task 4.2
Lead Beneficiary (short name)	CNR, EMBL
Nature	Report
Dissemination Level	Public
Estimated Delivery Date (Grant Agreement, Annex I)	31/12/2017
Actual Delivery Date	23/12/2017
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Funded by the
Horizon 2020
Framework Program
of the European Union

Abstract

The financial effort that Nodes and users must sustain when accessing the EuBI facilities is critical for the functioning of the Infrastructure. On one hand, Nodes must cover operational costs related to user access, and on the other hand users must cover their travel expenses and very often they are also charged for (part of) the operational costs. Funding options are therefore of paramount importance both for the Nodes and for the users. WP4 has determined existing and potential new funding instruments to support Node operational activities and users travel expenses. This analysis will be the basis for negotiating new funding options with the host Countries and national/European funders. Furthermore, possible mechanisms for funding user access grants, with a special focus on transnational access, have been analysed. They will be discussed with EuBI ERIC Member States and the EC.

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1. Introduction

Open access to the technologies offered by Euro-BioImaging Node (Candidate)s implies that Nodes have to sustain some costs, which are strictly related to the user access, such as instruments, staff, and consumables costs (D4.3). These costs are currently charged to users to a different extent depending on the funding instruments available at the different facilities. Beside these access costs, users also have to sustain travel and lodging expenses when they access a Node (Candidate).

Clearly, the lower the access costs, the more the users would be attracted by the research infrastructure. For this reason, it is of paramount importance to find funding schemes and set up procedures to help the Nodes to self-sustain and to support successful EuBI users with their access-related and travel expenses.

WP4 has determined existing and potential new funding instruments to support Node operational activities and users travel expenses, including identification of specific support from the Nodes-hosting countries, by a survey. This analysis will be the basis for negotiating new funding options with the host Countries and national/European funders.

Furthermore, possible mechanisms for funding user access grants, with a special focus on transnational access, have been analysed. They will be discussed with EuBI ERIC Member States and the EC. All the feasible options (i.e. all relevant calls at the EU, national and regional level, with timelines, eligibility criteria, scope and size of grant) will be communicated to the Node (Candidate)s and published on the EuBI website in a user friendly manner to enable the user to identify the most suitable funding instrument in the shortest time to facilitate their access procedure.

28 out of 29 Node Candidates completed the Survey. Nevertheless, data are referred to 29 units because two facilities of a multi-sited Node answered the survey.

The questions were about:

- 1) Update of the information regarding funding instruments available to support user access, collected in 2015 from EuBI Countries;
- 2) Management of user access costs (operational costs related to use of instruments, staff, consumables etc.);
- 3) Possibility of supporting users with travel expenses;
- 4) Suggestions about funding options at the national and EU level;
- 5) Management of training-related costs.

2. Existing funding instruments at the Node Candidates

2a. Funding instruments available in EuBI Countries

In 2015, all delegations from IB countries were asked to provide information on funding mechanisms that can be used by national researchers for covering user access costs to Euro-BioImaging Nodes. The Node Candidates have now indicated if some changes have occurred in the last two years in their Countries. The updated information can be found in annex 1. No relevant changes have been evidenced.

2b. User access costs.

The Node Candidates were asked to indicate the percentage of user access costs they charge to users. The great majority (76%) charges these costs to users, to different extent depending on the entity of the economic support they receive from their own Institution and/or national funders/Ministries.

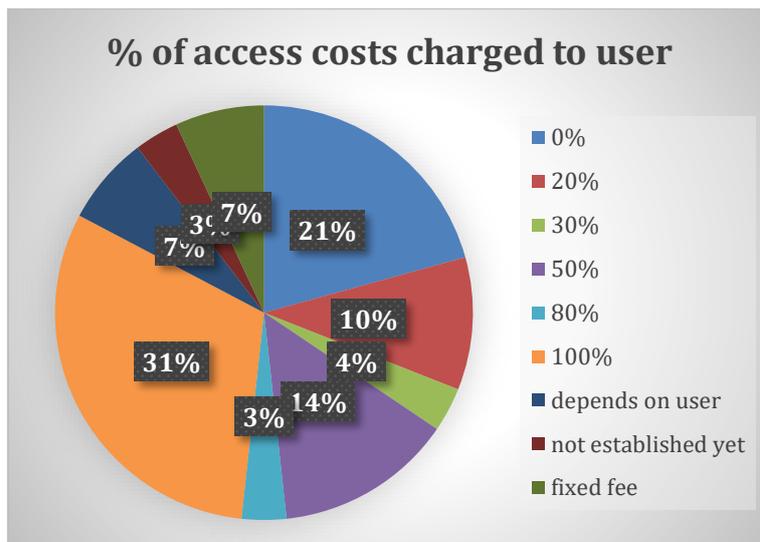


Figure 1

The 19 Nodes that (partially) subsidize the user access costs get the financial support to operational costs from the Nodes' Institutions or from national/regional funding as depicted in figure 2:

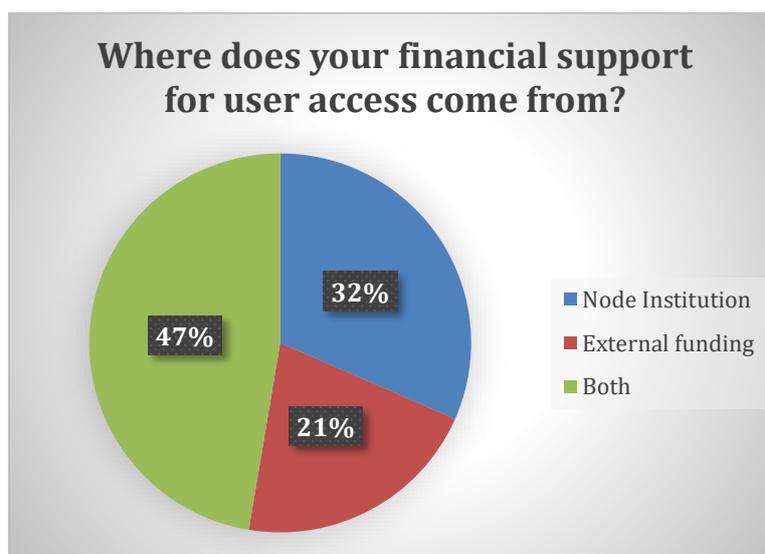


Figure 2

45% of the Nodes think that something will change in the future. This group includes both Nodes that are currently charging all the access costs to users and Nodes that subsidize the costs. The first ones aim at diminishing the financial pressure on users in order to make access more attracting, by exploiting initiatives of their national Ministries. Two Nodes state that they hope to do the same but do not see any possible solution at the moment. The latter ones (Nodes subsidizing up to 100% of costs) need to get rid of their own costs and plan to partially charge the costs to users in the future. In this second case, most of the Nodes wish to apply fixed fees and to keep them sufficiently low to not discourage users.

In both cases, it becomes clear that further funding is necessary: to help the Nodes to increase subsidizing and to avoid that also Nodes currently covering access costs come to charge users in the future.

It has been in fact pointed out by a number of Node Candidates that potential users, initially very excited to hear about Euro-BioImaging and possibility to access state of the art imaging technologies, become really disappointed when they find out that they will have to pay for access. This has already occurred during the Interim Operation and user has decided not to access Node Candidate for this reason.

2c. Travel and lodging expenses

79% of the Nodes have no means of supporting incoming users with their travel and lodging expenses and 76% do not foresee any possible change in the future.

Where possible (17% of the Nodes) support for users is usually for lodging and determined on a case-by-case basis.

24% of Node (Candidate)s thinks that something could change in the future, depending on future decisions of their Ministries, but precise indications in this regard are still missing.

3. Potential mechanisms to support Nodes operational costs and to fund user access grants

Beside the funding options described in annex 1, the Node Candidates have indicated the following further opportunities, which should be explored for future possible utilization:

- *COST Actions short term scientific missions (STSM)*: users travel expenses could be covered by STSMs if both the host Node and the user belong to the same Action. A list of existing imaging related or potentially suitable COST Actions has been created (annex 2) and will be communicated to the Node Candidates. As Infrastructure, EuBI should be eligible to participate in COST Actions when it becomes an ERIC, but the mechanism will need to be clarified.
- *H2020 Calls supporting European Research Infrastructures*: the work programme 2018-2020 was not published at the time of the Survey but specific measures for sustaining new pan-European Research Infrastructures were foreseen (INFRADEV, INFRASUPP).
- *Science and foundation grants*.
- *Specific instruments at the national level*.

The last two options will be further evaluated in 2018 by a comprehensive screening of all the instruments available in the different Countries, paying attention to eligibility, type of costs which may be covered, available budget etc. All the collected information will then be published on the EuBI ERIC website at the launch of the ERIC, in such a way that users and Nodes will be able to quickly check which measures could be applicable to them when necessary.

The possibility of creating a EuBI fund to activate a number of travel grants has also been explored. Options include:

- Assigning part of the yearly Hub budget to travel grants, in case not all the budget is spent in the consumable year;
- Further small contribution from Member States (to be negotiated with Member States);
- Voluntary contribution from Industry Board members.

4. Costs related to training activities

Beside access to imaging technologies, training will be one of the services offered by Euro-BioImaging, and as such it is important to estimate how the related costs could be covered by the Nodes organizing the training activities at their sites, and prepare plan to support them in this regard.

Of the 23 Node candidates that already offer or plan to offer training activities for users and/or facility staff, 70% charge or will charge the training costs to attendees (9% fully charged to attendees, 61% partially subsidized by the Node). The remaining 7 facilities cover the training-related costs by contributions from sponsoring industries (44%), thanks to national initiatives supporting research infrastructures (28%), or by inclusion of the courses in specific local training programmes (14%). In one case (14%) only local attendees (with no costs) are foreseen.

5. Conclusion

The need to get funding to support Nodes' operational costs and users' expenses is clearly evidenced in this report and it is a common feeling among the EuBI Node Candidates and potential users.

Some work should be done at the Nodes level to encourage them to start or to continue a dialogue with their Ministries in order to coordinate actions at the national level. The same should be done at the central level by continuously discussing with Member States. In fact, there is a fundamental need to enhance in the different Countries the "culture" of access to distributed infrastructures. Member States and/or their national representative entities have to be ready to work closely with their Nodes to define the "algorithms" that should rule the national contribution to the effective user-access provided by each Node. Already in the implementation phase it would be useful to go along this way.

On its side, the EuBI Hub will continue to monitor these aspects and will distribute information on best practices with the goal of improving the "culture" of the user access and harmonizing, as much as possible, the conditions for users.

Annex 1: Updated information about funding instruments at the host Countries



National funding mechanisms for EuBI user access in IB Member and observer countries

In 2015, all delegations from IB countries were asked to provide information on funding mechanisms that can be used by national researchers for covering user access costs to Euro-Biolmaging Nodes. The present document reports the answers received at that time.

UPDATES 2017 IN RED.

Austria

1. FFG- Austrian Research Organisation (National funding institution for applied research and development in Austria)

FFG provides funding mechanisms that can be used by national researchers for covering user access costs to Euro-Biolmaging Nodes in certain programmes under certain restrictions and ONLY if there is a relation to a research project/grant.

Eligibility: Depends on the programme, typically universities, non-university research institutes and companies.

Requirements: In funded project generally personnel costs, R&D infrastructure use, costs of materials, Third-party costs, travel costs can be funded. Cost Guidelines for the accounting of project costs in funding applications and reports for projects based on funding agreements according to the "FTE-Richtlinien" and "FFG-Richtlinien":

https://www.ffg.at/sites/default/files/downloads/page/kostenleitfaden_v1_4_2014_en.pdf

Budget: Different ranges, depending on the type of grant

European Access: Possible, depending on the programme resp. guidelines

Duration: Depending on the type of grant

2. FWF - Austrian Science Fund (funding organization for basic research)

FWF: There is no specific funding mechanism for user access costs. But within the frame of research projects those can be requested.

Eligibility: mainly researchers from Austrian research institution (non-profit)

<https://www.fwf.ac.at/en/research-funding/decision-making-procedure/funding-guidelines/eligible-researchers/>

Requirements: In principle project-related non-personal costs, i.e. consumables, traveling costs, accommodation and use of research facilities could be requested. <https://www.fwf.ac.at/en/research-funding/decision-making-procedure/funding-guidelines/eligible-projects/>

Budget: The grant size strongly depends on the programme. The average grant size of a Stand-Alone-Project is about €90 000 per year, including personal and non-personal costs. <http://www.fwf.ac.at/en/research-funding/application/stand-alone-projects/>

European Access: This is possible with respect to the programme specific guidelines.

Belgium

All listed funding organizations from Belgium provide funding mechanisms that can be used by national researchers for covering user access costs to Euro-BioImaging Nodes.

Hercules Foundation – funding research infrastructure

IWT – funding fellowships and research projects – applied research

FWO – funding fellowships and research projects – blue sky research

Eligibility: FWO – Flemish universities; IWT and Hercules Foundation – Flemish universities and public research institutes.

Requirements: All are open to all research disciplines. Hercules Foundation only capex and related costs. IWT and FWO could fund travel costs.

European Access: For IWT and FWO grant not restricted to access to national facilities; access to facilities located on other countries is possible.

Duration: IWT-FWO - There is no limit but the travel costs and access fees must be covered by the grant.

SPW-DGO6 – Department of Research programmes

Eligibility: French-speaking Universities, public research institutes and private companies

Requirements: all costs are eligible and covered by a bench fee.

Budget: A typical fellowship includes a bench fee of 18 to 54.000 € that can be used to cover such expenses.

European Access: budget can be used in the frame of a project funded by SPW-DGO6, it may cover access to a EBI node in another country.

Duration: SPW-DGO6 – Time limits are linked to the duration of the project, repetition is allowed.

FNRS-FSR – Fund for Scientific Research

Eligibility: French-speaking Universities

Requirements: funds travel and subsistence cost

Budget: access fees should be included in the research project submitted

Duration: There is no limit but the travel costs and access fees must be covered by the grant.

Bulgaria

Pending.

Czech Republic

Funding organization: Ministry of Education, Youth and Sports

The Czech funding organizations do not publish special grant schemes aimed at support of individual researchers who plan to access a RI. The open access to the instrumentation and expertise provided by the large RI is funded via the RI itself. The RIs are funded by the Ministry of Education, Youth and Sports that opens regular calls for large RIs. The RIs that request funding in these calls have to be listed in the Czech Roadmap of large RIs. As an example of an ongoing project supported by the MEYS we can mention the project “CEITEC – open access” (2012 – 2016) which supports the open access to the CEITEC core facilities, including the imaging platforms, of the Czech and international researchers. More info at: <http://www.ceitec.eu/project-ceitec-open-access/t1368>

The proposal of a large RI in biological and medical imaging (Czech-BioImaging) submitted to the MEYS call in autumn 2014 requests funding of operational costs related to the open access and also for a grant scheme to support costs of the users that will use the Czech-BioImaging RI (including two prospective CZ-EuBI nodes). The selection of users will be done on a competitive basis as regards the scientific excellence and technical feasibility of their projects.

The funding should be available from 2016. The details will be negotiated with the MEYS in 2015. The costs that are not included in the open access funded by the RIs (e.g. travel, accommodation, consumables) have to be covered by the individual researchers. It is their responsibility to find resources for these expenses (e.g. scientific grants).

Additional funding by Ministry of Education, Youth and Sports (project OPVVV), Funding for 2020 - 2022 is in negotiation process.

Finland

Funding organization: Academy of Finland, a public funding agency that awards funding for cutting-edge scientific research, researcher training and the development of research capabilities and Infrastructures. The Academy of Finland provides funding mechanisms that can be used by national researchers for covering user access costs to EuBI Nodes.

Eligibility: Researchers with a scientifically qualified research plan in the fields of research supported by the EuBi infrastructure.

Requirements: Grant is approved as a lump sum for x years. The grant includes the costs presented in the plan and which are approved by the Academy of Finland based on the scientific evaluation. The plan can include access fees, consumable/reagent costs during access, travel costs, accommodation, and additional training costs.

Budget: The size of the budget varies depending on the research plan. A rough estimation is from tens of thousands to a few hundreds of thousands euros / each grant.

European access: There is no restriction.

Duration: The only restriction is the funding period, which is normally 3-5 years.

France

Agence Nationale de la recherche; Ministry of Higher Education and Research

These funders provide funding mechanisms that can be used by national researchers for covering user access costs to EuBI Nodes.

Eligibility: All members of research organizations or companies acting under French law.

Requirements: Access fees, consumable/reagent costs during access, travel costs, accommodation, additional training costs

Budget: 100 K€/year. 2-4 year grants

European access: No restriction.

Duration: No limit

Revision foreseen in beginning of 2018.

Germany

Funding organization: DFG – German Research Foundation

The DFG provides funding mechanisms that can be used by national researchers for covering user access costs to EuBI Nodes.

Eligibility: All scientists eligible for research grants from the DFG may apply for user fees (based on the currently accepted rates) within their research projects.

Requirements: User fees are granted on the basis of hourly rates (agreed upon with the selected communities). These cover access, running costs, consumables/ reagents, up to special personnel support if needed. Travel costs and/or accommodations as well as training costs have to be applied for separately.

Budget: Budgets vary a great deal depending on the individual project. Access fees are granted on basis of the actual instrumentation time needed during the project. Average projects last three years, instrumentation usage can range from a few hours per month to a many hours per week. However, many institutes provide their own infrastructure, which may be cheaper than core facilities (as running costs are covered by the institute and only consumables are then applied for).

European access: Any infrastructure may be used, providing it has either unique or competitive services (or cheaper usage fees) to offer.

Duration: The required project budget has to be estimated in advance for the duration of a project (usually three years). Thereafter it is not possible to apply for new funds covering any additional costs, though it is possible to shift the granted money freely around within the project if necessary.

Additional information: The information provided is valid for DFG-funded projects only. However, regardless of the DFG funding program (from individual grants to coordinated programs) funds can be requested to use core facilities (or research infrastructures) and pay usage fees. However, many German universities have their own core facilities (e.g. imaging, mass spectroscopy, and sequencing) and are likely to be competitive in service.

Boulin fellowship for visitors to EMBL facilities, CORBEL and iNEXT options to support visits if certain criteria are met. Listed on https://www.embl.de/services/core_facilities/almf/visiting-the-almf/index.html.

Hungary

Granting institution: Balassi Institute (financed by the Hungarian Government)

Name of grant: Campus Hungary

No funding mechanisms are provided that can be used by national researchers for covering user access costs to EuBI Nodes. The Campus Hungary scholarship is a “general purpose” scholarship for students and university lecturers/researchers traveling to universities or research institutions in European and non-European countries for a maximum duration of 3 months. It is not restricted to visits to core facilities. In our experience >50% of the applicants received the travel grants they applied for.

Eligibility: Students, university researchers, university lecturers

Requirements (What can be covered by the grant): travel costs, accommodation, per diem

Budget: 800-900 EUR/month for students, 1070-1340 EUR/month for university lecturers/researchers, depending on the country of destination. Shorter stays than one month are financed per day, with a higher daily allowance. There are no access fees included in this grant.

European access: It is meant for national and international travel.

Duration: Grants can be applied for duration of 1 day up to 3 months. There have been several calls in the last two years. In the framework of the last call travels are possible until June 30, 2015. It is not clear yet if there will be calls on a regular basis in the future.

Norway

Research Council of Norway provides funding mechanisms that can be used by national researchers for covering user access costs to Euro-BioImaging Nodes.

Eligibility: Researchers from universities, research institutes and university hospitals

Requirements: The Research Council of Norway has a broad range of calls, and all are more or less restricted to specific scientific fields. Many of the calls are highly relevant for the different types of infrastructures that will be offered by Euro-BioImaging nodes. For most calls all types of costs can be covered, and we are not aware of any limitations regarding the country where the infrastructure is situated. On the other side, there are no money ear-marked for access to Euro-BioImaging or other ESFRI infrastructures.

Budget: As far as we know there are no existing caps for access fees inside the granted budgets, and the size of the grants will vary considerably. However, it will for each application be the responsibility of the scientific evaluators to assess to what extent the stipulated costs in the budget are too high (or low) to reach the scientific objectives of the application.

European Access: We are not aware of any limitations regarding the country where the infrastructure is situated. However, the scientific evaluators may (at least in theory) have an opinion about the choice of

research infrastructure if the costs are unreasonably high compared to the technological quality/benefits of the chosen infrastructure.

Duration: For most grants there is a limit for the total duration of the project. However, inside this total time limit the same infrastructure can be accessed repeatedly.

Regional Liaison Committees between Health Authority and University

provides funding mechanisms that can be used by national researchers for covering user access costs to Euro-BioImaging Nodes.

In Norway the health care on hospital level is organized in four health regions, and for each region most of the money granted for research are channelled through the regional liaison committee between the regional health authority and the university in the region.

Eligibility: The rules differ somewhat between the four regions. Typically researchers in the hospitals and universities may apply, however, in some regions the researchers from the university are only eligible if they have a collaboration partner in an hospital.

Requirements: Some types of grants only cover salaries (for PhD students, post doc fellows, hospital doctors or other scientific personnel). However some types of grants also cover costs for access to infrastructures. All calls are restricted to medical and biomedical research.

Budget: As far as we know there are no existing caps for access fees inside the granted budgets, and the size of the grants will vary considerably. However, it will for each application be the responsibility of the scientific evaluators to assess to what extent the stipulated costs in the budget are too high (or low) to reach the scientific objectives of the application.

European Access: We are not aware of any limitations regarding the country where the infrastructure is situated.

Duration: For most grants there is a limit for the total duration of the project. However, inside this total time limit the same infrastructure can be accessed repeatedly.

The Norwegian Cancer Society

Eligibility: Researchers from universities and from hospitals.

Requirements: Some types of grants only cover salaries (for PhD students, post doc fellows, hospital doctors or other scientific personnel). However some types of grants also cover costs for access to infrastructures. All calls are restricted to cancer research.

Budget: As far as we know there are no existing caps for access fees inside the granted budgets, and the size of the grants will vary considerably. However, it will for each application be the responsibility of the scientific evaluators to assess to what extent the stipulated costs in the budget are too high (or low) to reach the scientific objectives of the application.

European Access: We are not aware of any limitations regarding the country where the infrastructure is situated.

Duration: For most grants there is a limit for the total duration of the project. However, inside this total time limit the same infrastructure can be accessed repeatedly.

Israel

Ministry of Science Technology and Space

Currently, no existing funding mechanisms that can be used by national researchers for covering user access costs to Euro-BioImaging Nodes. More information might follow.

Italy

Ministry for Education, University and Research (MIUR)

The Medical and Biological Imaging Italian Nodes receive an annual contribution to improve the user access conditions. We use this contribution both for personnel and for the implementation of new technologies, for covering (in part) maintenance contracts, for consumables.

There is not yet a specific scheme dedicated to cover the travel and accommodation expenses for users' access to Nodes.

Researchers willing to access the Nodes may use their own grants (budget for missions covering the travel and accommodation expenses) or funds available for short time research missions in the context of specific COST actions (grants for 1-2 months). National grants are normally funded by the National Research Council (CNR), the MIUR, Regional Governments, Foundations (either charity or non-profit organizations for the support to research in specific fields) through periodic calls.

Poland

Ministry of Science and Higher Education

The ministry does not have a specific tool to fund user access to Euro-BioImaging Nodes – there is no access grants envisioned.

Access to Euro-BioImaging Nodes could be covered by grants, which have been awarded to researchers as a result of open calls for proposals (organised mainly by the National Science Centre and the National Centre for Research and Development). Each year research institutions get also so-called statutory funding from the Ministry of Science and Higher Education. The main objective of this money is to enable research institutions to continuously perform their research activities. A part of this money is also devoted to support research infrastructure, potentially to fund access users as well.

Portugal

Fundação para a Ciência e a Tecnologia (FCT)

University of Coimbra (partly funds Medical Imaging Infrastructure)

Funding is included in research grants. No specific funding mechanisms to cover only access costs.

In the case of the Medical Imaging Node prices of user access are lowered as a function of the % amount of government funding

Eligibility: PI holding a research project grant of FCT.

In the case of Medical Imaging, any National or International Entity holding a Ethical Clearance (Hospitals, Clinical Trial Units, Research Departments, Individual PIs from a Research Lab)

Requirements: All costs can be included and there are no restrictions regarding scientific field. Consumable/reagent costs must be included as service costs if it is charged by the host Node.

Budget: € 2.000-10.000. In the case of medical imaging grants, a given grant can spend up to 100.000 euros for user access (big grants with a lot of patients, undergoing, MR and PET imaging).

European access: No country restrictions.

Duration: No restriction.

Slovakia

Ministry of Education, Science, Research and Sport of the Slovak Republic

The funding mechanism is in development phase. It was decided to be prepared and tested in 2015 as a proof-of concept study for intra-national access to the node(s) services. After successful demonstration it can be updated for international Access since 2016.

Spain

Access funding to be used by researchers will mostly be via appropriations included in their grants of the projects provided by funding bodies. This approach as proof of concept may be revised in the new four year Spanish R+D+I Plan expected to be drafted in 2016.

Punctual support through national grants is under consideration, but no permanent support is envisioned so far.

Sweden

Swedish Council of Research (VR)

provide funding mechanisms that can be used by national researchers for covering user access costs to Euro-BioImaging Nodes.

Eligibility: All senior researchers at a Swedish university or at any other Swedish government agency with a responsibility to carry our research.

Requirements: No restrictions. This is part of VR's ordinary project funding, covering all types of project costs.

Budget: 1.5 MSEK (160 kEUR) - 4 MSEK (430 kEUR) (typically 1 MSEK/year)

European Access: The funds are not restricted to national access, provided that the requested technology is not available within Sweden.

Duration: No limits.

The interest for applying for project funding covering access to international research infrastructure has so far been limited.

The Netherlands

Funding organization: The Netherlands Organization for Scientific Research (NWO)

NWO provides funding mechanisms that can be used by national researchers for covering user access costs to EuBI Nodes.

- Eligibility: In general the following researchers can apply for funding at NWO:

a) Researchers from the following knowledge institutions can submit proposals:

Dutch universities; NWO and KNAW institutes; the Netherlands Cancer Institute;

The biodiversity centre NCB Naturalis; the Max Planck Institute for Psycholinguistics in Nijmegen; researchers from the DUBBLE Beamline at the ESRF in Grenoble; Advanced Research Centre for NanoLithography (ARCNL).

b) Researchers from the following knowledge institutions can submit a proposal provided that the institution cooperates with a university in the project for which a grant is being applied for, apparent from a contribution to the project by the university in terms of personnel or material: Royal Netherlands Meteorological Institute; UNESCO-IHE Institute for Water Education.

- Requirements: For open calls in the Life-Sciences division consumables, and fees can be requested up to 50.000 Euro in the context of research project funding. For Career calls consumables and fees can in principle be requested up to the total grant amount.

- Budget: Total budget of the Open grants is 300.000 Euro, but mainly for hiring new scientific staff. Career calls are 250.000, 800.000 or 1.500.000 Euro

- European access: Yes, the material costs but not the staff costs could be spent outside NL.

- Duration: Yes, within the project (3-4 years) there is no specific limitation.

- Additional information: NWO is currently harmonizing its grant repertoire between the different councils. That means that access for various science disciplines will become somewhat easier.

We have now call for access to high-end research infrastructure called "technology hotels". Maximum 50k. See: <https://www.zonmw.nl/en/research-and-results/life-sciences-health/programmas/programme-detail/enabling-technologies-hotels/>

United Kingdom

Funding Organization: Biotechnology and Biological Sciences Research Council (BBSRC)

BBSRC provides funding mechanisms that can be used by national researchers for covering user access costs to Euro-BioImaging Nodes

- Eligibility: The applicable funding mechanisms for this kind of access costs would be to include such costs on a grant application, which would be submitted to the Responsive mode scheme or other relevant initiatives run by BBSRC. Responsive mode is one of BBSRC's main funding mechanisms with three rounds per year. Applicants must meet BBSRC eligibility criteria in order to apply to Responsive mode (or other

BBSRC initiatives). The scheme is open to applications from across BBSRC remit. Access to a facility without a research aim associated would be unusual, therefore meaning that funding pump-priming work could be problematic.

- Requirements: In order for node access to be included in a BBSRC grant application, the work would be noted as subcontracted to the particular facility on the application. The facility would need to have a user access model in place. The premise of such access would be a non-collaborative arrangement including acknowledgement of the facility in any outputs from the research carried out at the specific facility/node. Access fees, consumables, and travel and subsistence costs can all be covered by this mechanism, although all costs must be fully justified in any grant proposal.

- Budget: For Responsive mode, grant applications of up to £1.6M are allowed, while for other initiatives within BBSRC the funding limit for grants may vary. There are no caps on the access fees which can be applied for within such an application.

- European Access: As part of a grant application to BBSRC requesting access to a European facility (such as a Euro-BioImaging node), a case needs to be made as to why an equivalent facility is not available within the UK that can be accessed.

- Duration: Repeated access to a node through this mechanism would be fine, although all costs must be fully justified. Access to the facility must be within the period of the grant award. Responsive mode grants can be awarded for up to 5 years, while duration of grants will vary for BBSRC initiatives.

- Additional information: There are a number of projects based in the UK who have user access models for specific facilities, where the costs for such access can be included in grant applications to BBSRC (as noted above). These include ARCHER, the UK Supercomputing Service, where time can be costed on to grants for use. The Central Laser facility based at Harwell in Oxfordshire has numerous facilities, including the OCTOPUS imaging cluster. Access for OCTOPUS is allocated through an internal peer review process, with some access allocated to specific consortiums to distribute to certain parts of the bioscience community.

Annex 2: active COST Actions (imaging-related or potentially useful depending on the objective of the request for access).

Actions in grey will end during 2018 and can therefore be used only by current members (others can not join these Actions anymore).

IMAGING / MICROSCOPY RELATED ACTIONS:

1. [CA16103 | Magnetic Resonance Imaging Biomarkers for Chronic Kidney Disease | 04 April 2017 - 03 April 2021](#)
2. [CA16101 | MULTI-modal Imaging of FOREnsic SciEnce Evidence - tools for Forensic Science | 02 March 2017 - 01 March 2021](#)
3. [CA16122 | Biomaterials and advanced physical techniques for regenerative cardiology and neurology | 15 March 2017 - 14 March 2021](#)
4. [CA16118 | European Network on Brain Malformations | 30 March 2017 - 29 March 2021](#)
5. [CA16124 | Brillouin Light Scattering Microspectroscopy for Biological and Biomedical Research and Applications | 28 February 2017 - 27 February 2021](#)
6. [CA15124 | A new Network of European BiImage Analysts to advance life science imaging \(NEUBIAS\) | 03 May 2016 - 02 May 2020](#)
7. [CA15209 | European Network on NMR Relaxometry | 30 September 2016 - 29 September 2020](#)
8. [BM1401 | Raman-based applications for clinical diagnostics \(Raman4clinics\) | 12 December 2014 - 11 December 2018](#)
9. [CM1403 | The European upconversion network - from the design of photon-upconverting nanomaterials to biomedical applications | 19 November 2014 - 18 November 2018](#)
10. [TD1402 | Multifunctional Nanoparticles for Magnetic Hyperthermia and Indirect Radiation Therapy \(RADIOMAG\) | 13 November 2014 - 12 November 2018](#)

ACTIONS IN THE BIOMEDICAL FIELD, WHICH COULD BE SUITABLE FOR SPECIFIC PROJECTS:

1. [CA16212 | Impact of Nuclear Domains On Gene Expression and Plant Traits | 28 November 2017 - 27 November 2021](#)
2. [CA16205 | European Network on Understanding Gastrointestinal Absorption-related Processes | 24 October 2017 - 23 October 2021](#)
3. [CA16225 | Realising the therapeutic potential of novel cardioprotective therapies | 19 October 2017 - 18 October 2021](#)
4. [CA16203 | Stem cells of marine/aquatic invertebrates: from basic research to innovative applications | 02 October 2017 - 01 October 2021](#)
5. [CA16115 | A European Network for Connective Tissue Calcifying Diseases | 07 April 2017 - 06 April 2021](#)
6. [CA16125 | European network for translational research in children's and adult interstitial lung disease | 06 April 2017 - 05 April 2021](#)
7. [CA16107 | EuroXanth: Integrating science on Xanthomonadaceae for integrated plant disease management in Europe | 16 March 2017 - 15 March 2021](#)
8. [CA16119 | In vitro 3-D total cell guidance and fitness | 16 March 2017 - 15 March 2021](#)

9. CA16110 | Control of Human Pathogenic Micro-organisms in Plant Production Systems | 06 March 2017 - 05 March 2021
10. CA15223 | Modifying plants to produce interfering RNA | 27 October 2016 - 26 October 2020
11. CA15216 | European Network of Bioadhesion Expertise: Fundamental Knowledge to Inspire Advanced Bonding Technologies | 21 October 2016 - 20 October 2020
12. CA15214 | An integrative action for multidisciplinary studies on cellular structural networks | 19 October 2016 - 18 October 2020
13. CA15204 | European Platform for Outcomes Research into Perioperative Interventions during Surgery for Cancer | 05 October 2016 - 04 October 2020
14. CA15203 | Mitochondrial mapping: Evolution - Age - Gender - Lifestyle - Environment | 12 September 2016 - 11 September 2020
15. CA15138 | European Network of Multidisciplinary Research and Translation of Autophagy knowledge (TRANSAUTOPHAGY) | 22 April 2016 - 21 April 2020
16. CA15111 | European Network on Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (EUROMENE) | 21 April 2016 - 20 April 2020
17. CA15114 | Anti-Microbial Coating Innovations to prevent infectious diseases (AMICI) | 19 April 2016 - 18 April 2020
18. CA15135 | Multi-target paradigm for innovative ligand identification in the drug discovery process (MuTaLig) | 18 April 2016 - 17 April 2020
19. CA15129 | Diagnosis, Monitoring and Prevention of Exposure-Related Noncommunicable Diseases (DiMoPEX) | 11 April 2016 - 10 April 2020
20. CA15120 | Open Multiscale Systems Medicine (OpenMultiMed) | 05 April 2016 - 04 April 2020
21. CA15110 | Harmonising standardisation strategies to increase efficiency and competitiveness of European life-science research (CHARME) | 21 March 2016 - 20 March 2020
22. BM1407 | Translational research in primary ciliary dyskinesia - bench, bedside, and population perspectives (BEAT-PCD) | 11 May 2015 - 10 May 2019
23. MP1404 | Simulation and pharmaceutical technologies for advanced patient-tailored inhaled medicines (SimInhale) | 04 May 2015 - 03 May 2019
24. BM1406 | Ion Channels and Immune Response toward a global understanding of immune cell physiology and for new therapeutic approaches (IONCHAN-IMMUNRESPON) | 31 March 2015 - 30 March 2019
25. FA1408 | A European Network for Foodborne Parasites (Euro-FBP) | 30 March 2015 - 29 March 2019
26. CM1406 | Epigenetic Chemical Biology (EPICHEM) | 24 March 2015 - 23 March 2019
27. BM1404 | European Network of Investigators Triggering Exploratory Research on Myeloid Regulatory Cells (Mye-EUNITER) | 27 November 2014 - 26 November 2018
28. FA1306 | The quest for tolerant varieties - Phenotyping at plant and cellular level | 22 May 2014 - 21 May 2018
29. BM1309 | European network for innovative uses of EMFs in biomedical applications (EMF-MED) | 16 April 2014 - 15 April 2018
30. BM1306 | Better Understanding the Heterogeneity of Tinnitus to Improve and Develop New Treatments (TINNET) | 11 April 2014 - 10 April 2018