Euro-BioImaging

European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences

WP1 Project Management

Task 1.4
Meetings

Deliverable 1.5
Steering Committee Meeting

Task leader
EIBIR/ EMBL

August 2012

Euro-BioImaging 4th Steering Committee Meeting

Date: Tuesday, July 10th, 2011, 10.00-16.00, Venue: NH-Hotel, Vienna Airport

Minutes and Summary

All presentation slides are attached to this summary.

AGENDA

10:00 Welcome
10:15 Proof-of Concept Studies: update, 1st results on evaluation, feedback from WPs
10:45 1st Draft Euro-BioImaging Criteria for Nodes: *Presentation and Discussion*
12:15 *Lunch*
13:15 Preparation and timeline of Euro-BioImaging open call
14:00 Update on national imaging initiatives
14:45 Industry Board: Update and next steps/formalisation
15:15 Update on external relations
15:40 Conclusions and next steps

List of Participants

Organisation	Last Name	First Name
ABO	Eriksson	John
AIAQS	Almazan	Cari
CEA	Clement	Olivier
CNR	Alberto	Luini
CNRS	Choquet	Daniel
EIBIR	Hierath	Monika
EIBIR	Schönberg	Stefan
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EMBL	Ellenberg	Jan
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EORTC	Lejeune	Stephane
ETHZ	Szekely	Gabor
FCRB	Donoso	Luis
FMI	Gasser	Susan

Organisation	Last Name	First Name
Fraunhofer	Hahn	Horst
Helmholtz	Lohmann	Karin
IMG	Hozak	Pavel
Imperial	French	Paul
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LMU	Nikolaou	Konstantin
MPG	Glenk	Anja
Nencki	Szumowski	Marcin
NWO	Martens	Frans
OVGU	Speck	Oliver
UHEI	Gretz	Norbert
UMCU	Klumperman	Judith
UNIVDUN	Swedlow	Jason
UPF	Vallespin	Barbara
UU	Langström	Bengt
WWU	Waerzegge	Yannic

1. Proof-of-Concept studies

Stefan Schönberg briefly summarized the Euro-BioImaging Proof-of-Concept studies, highlighting the major objectives, the outcome regarding number of user applications and approved PCS, first feedback from PCS facilities, and the timeline of the next steps regarding the evaluation of the PCS.

The online surveys for PCS users and facilities will close on July 13th. WP12 together with the central project management will distribute the data sets for each technology to the individual Work Package Chairs and Technology Coordinators. **Based on the results, the technical WPs will develop the technology-specific infrastructure models and criteria for the future Euro-BioImaging nodes by September 1st, 2012. The criteria will be published October 15th, 2012.**

The deadline for PCS facilities and users for feedback via the online survey is on Friday July 13th, 2012.
WP 12 reported on the status of July 10th: 20 PCS facilities and 61 PCS users have filled in the online survey according to WP12 feedback. PCS facility providers and users shall further be encouraged to fill in the online surveys on time. A reminder will be sent by Project Managers immediately after the meeting.

For discussion on PCS, please see 2.7 below.

2. First Draft Euro-BioImaging Criteria for Nodes: *Presentation and Discussion*

Jan Ellenberg presented the current version of the General Criteria, which will be valid for all Euro-BioImaging nodes independent from the technology. He explained the process of their development during the last weeks, first, internally in the Euro-BioImaging Consortium and afterwards with the national imaging communities by centrally coordinated communication via the National Coordinating Persons in each country.
The current draft still needs optimization in wording as the feedback from the NCPs had demonstrated. A significant part of comments so far had been addressed to topics, which are not part of the general criteria such as the future cost model or industry relationship and will be taken into consideration when they become relevant.

Discussion

2.1 Euro-BioImaging nodes –: What is the difference between national networks of facilities and a European infrastructure for imaging?
The difference of the national and the European level of imaging infrastructure was discussed. The priority of national imaging infrastructure is to serve the national research community, better coordinate networking of existing imaging facilities, and – most importantly – address their national and regional funders with one voice. Existing and planned national imaging infrastructure (such as in FR, DE) foresee physical access to single-sited facilities in biological and medical imaging as well as coordinated support for users to access networks (multi-sited facilities) – in particular in the field of innovative medical imaging technologies – to serve as many national users as possible.
Based on the ESFRI definition for large-scale research infrastructures Euro-BioImaging will become a pan-European distributed research infrastructure of international significance which provides open access to world-class imaging technology platforms flanked by highest-level service, user training and data management.
Euro-BioImaging will comprise the best imaging facilities of each of its Member States for which transnational user demand is demonstrated and which are of national but also European significance in their domain.

Single-sited node for the user: Users expect a clear, transparent and easy-to-use access policy to the infrastructure
For the construction and operation of Euro-BioImaging the user request and perspective is most important. The user will expect a clearly defined and straightforward access policy and administrative structure, which will allow for starting to use the imaging technology as fast and effectively as possible. The current access policy draft foresees a 2-step process:
After positive approval of their research project, users are granted access to the physical nodes, for which in many cases they cross national boundaries ("transnational access").

Could a node comprise a network of imaging facilities? Can several institutions form one legal entity and set up a Euro-BioImaging node together?
Nodes are typically expected to present a single sited service concept that integrates all necessary aspects, so the user is served in the best possible way. This could involve that several institutions collaborate to set up such a node as a single legal entity. A network of imaging facilities would only be considered, if the typical single user access case would involve travel between different sites to carry out a single research project and if the complementary technologies offered by these sites cannot be integrated to serve the user better. Even in such cases, access needs to be coordinated through one single (potentially newly established) legal entity.

Why do nodes have to constitute a single legal entity?
The international legal framework of Euro-BioImaging will require that each node becomes a direct contractual partner of the international infrastructure and in this way guarantees to apply the concept of open and transparent access to all its users.

Evaluation of Euro-BioImaging nodes:
All nodes will be regularly evaluated for their performance. Therefore each Euro-BioImaging node requires to be a reviewable entity for the European-level infrastructure.

Number of nodes per country
The number of nodes per country (successful evaluation assumed) and their capacity is in the decision power of national funding authorities and all member states of the future Euro-BioImaging infrastructure.

Summary
As a general rule nodes shall be single-sited for the user.

If several institutions set up one node together, it will be crucial that the imaging platform of this node, which is accessed by the user, should be single-sited. For technologies, where a typical single user access would necessitate movements between more than one site, a node comprising a small number of physical sites integrated into a single legal entity can be considered.

After Steering Committee discussion the General Criteria for Euro-BioImaging nodes state: *It is expected that the applying nodes will be single-sited facilities for the user at one location. Several institutions can collaborate to put together the complete package needed for the node[1]. The successful node applicants will become direct legal partners of the future pan-European Euro-BioImaging infrastructure that will be negotiated with the participating member states. Nodes have to constitute a single legal entity.*

1: [1] A single-sited node that gives physical access to users can be operated by one or by several institutions which are in the same location, e.g. an imaging facility could be run by a University department jointly with a research institution, or an imaging facility could provide not just access to the imaging instrument, but also excellent support with the needed fluorescent reporters available in a neighboring chemistry department. However, the user access to the combined service package is expected to be integrated into a single facility, where the projects are conducted. In exceptional cases, where a typical single user access would necessitate movements between more than one site, a node comprising a small number of sites integrated into a single legal entity can be considered.

2.2 How many imaging technologies will one Euro-BioImaging node offer and how will the node applications be evaluated if an applicant plans to offer access to more than one technology?

In general, Euro-BioImaging expects two kinds of nodes to apply. Firstly, single technology flagships would offer an innovative technology at European leading level. If one institution plans to offer two or even more innovative technologies as flagship capabilities as a future Euro-BioImaging node, it will be requested to submit a detailed application for each technology, which will be evaluated independently by the relevant experts in the field. Secondly, multimodal technology nodes would provide excellence by the integration of multiple imaging technologies at one site without all of them being innovative or European leading. This is especially relevant to build up infrastructure in the new member states.

2.3 Review criteria: What are the measures for technological and scientific excellence of applicants?

- All eligibility criteria must be fulfilled by node applicants. The review criteria are not obligatory to be included in the application. However it is strongly recommended in order to strengthen the proposal.
- The review of the excellence of the node will be mainly based on the demonstration of excellent research which has or will be enabled by the node (*see LOIs from users*) as well as the track record of the applicant.
- Regarding review criteria, Member States will receive the results of all their node applicants for taking the final decision regarding Euro-BioImaging construction and participation.

It will be critical for the applicant to demonstrate how the planned infrastructure node will enable excellent science. This could be achieved by requesting the applicant to highlight the five most promising LOIs coming from potential future users. The applicants will furthermore be asked to demonstrate scientific support from the scientific environment of their facility, which can further strengthen the application especially in a particular field of imaging applications to research.

Quality control of node performance
It was suggested to request from the node applicant a defined strategy how the applicant foresees to keep the facility state-of-the-art. The strategy shall consider general access performance and technology-specific aspects.
Upgrade and maintenance costs are in the host country responsibilities, information on this long-term related funding will however not be requested in the application for the open call which focuses on construction.

2.4 What is the definition of "External user"?
For Euro-BioImaging, external users are physically from outside the institution - "from off-campus". Users from the same umbrella organization (e.g. CNRS in France) but who are physically from another institution (e.g. node in Bordeaux, user from Marseille) are regarded as external. All external users will apply via the Euro-BioImaging web access portal, and their applications will be forwarded to the facilities most suitable for the user after approval by scientific experts. International users from outside Europe are also eligible to apply for accessing the Euro-BioImaging infrastructure. The ESFRI mandate includes international users.

2.5 Are research collaborations regarded as open access?
Pre-existing research collaborations between a user and the facility cannot be counted as open access in Euro-BioImaging. However, research collaborations which develop during Euro-BioImaging user access with the node hosting institution, are welcome, and IPR issues etc. will be further dealt with in bilateral agreements between the two legal entities of the user and the facility, independently from the Euro-BioImaging infrastructure.

2.6 Data management infrastructure: how will the data management infrastructure look like?
For data management, two different types of support and access for users are foreseen. First, data storage and analysis support will be required locally at each node for the direct support of users who are producing imaging data while using the Euro-BioImaging infrastructure.

Secondly, Euro-BioImaging WP11 is currently discussing and developing concepts for central image analysis software platforms, image data repositories, and cloud computing for image processing. WP11 announced to present first concepts soon (both WP11 Chairs were not present at the Steering Committee Meeting).
Data management is in principle considered as a node worth technology, but it was discussed that the data infrastructure concept has to be tested by feasibility studies similar to the Euro-BioImaging PCS (provide pan-European open access under service conditions) before they are included in the next open call.

This will also apply for training, HTA, Clinical Trials topics, which were not offered in the first Euro-BioImaging Proof-of-Concept Studies in the first half of 2012. These applications are also node worth technologies, yet need to be added at a later stage, after RI models have been developed and tested. WP10 announced that it will prepare an operational model for PCS in mid August 2012.

2.7 Discussion & Voting: Shall feasibility studies for open user access be a requirement for including a given imaging technology in an open call?

The Proof-of-Concept Studies provided

- enormous visibility for the technologies offered and huge support by the community
- an unexpected appraisal by funders and policy-makers at all levels, that emphasized the importance to demonstrate feasibility even before implementation
- concrete use case data which is extremely valuable to support funding proposals for imaging infrastructure, also at the regional and national level

The Proof-of-Concept Studies

- tested –in a pilot phase- the concept that open access can work for a given imaging technology under “real life” conditions
- demonstrated the previously underestimated severity of bottlenecks such as sufficient staff capacity for user management, support, sample preparation
- provided data on access policies to the different technologies,
- provided data on user and provider (dis)satisfaction
- …

The information and data of the Euro-BioImaging PCS is most valuable for developing the functional infrastructure model for a given technology with open access for users coming from other countries. Therefore, each WP must provide a valid technology concept based on surveys, test runs, at least analogous to the performed proof-of-concept studies, infrastructure model for the given technology as well as additional information available in the Work Package.

VOTE: it was unanimously agreed that the
*" 1st **Call** focuses on nodes that will provide physical open access to imaging technologies and provide evidence of feasibility (e.g. PCS)"*

2.8 Funders' support – what is the minimum involvement of funders and node applicant needed for being eligible in the open call?
The applications coming from the same country should be aligned with the national infrastructure strategy by previous communication in the national imaging initiative. The

minimum of funders' support, which needs to be demonstrated is a funder's LOI stating that the applicant and funder are in contact with each other, and that the funder in general would support the applicant to become a Euro-BioImaging node.

Funding will be needed not only for construction (as already happened in some countries), but funding will also be required for operation, maintenance and update as well as transnational user access.

Based on the discussion in this meeting ("the funders will never give any power over their funding decisions to anyone"), the wording of the funders' LOIs in the General Criteria was amended:

*"V. The applicant demonstrates the **support of funders** for the participation in Euro-BioImaging by:*
*a) Letter of **Investment** from funder: "APPLICANT has the required funding for the capacity upgrade as described below" (letter attached, stating EUR XY for construction and EUR XY for XY years operation); if relevant investments have already been made the funder certifies that the investment was made for participation in Euro-BioImaging.*
*b) Letter of **Commitment** from funder: "…the funder supports the node APPLICATION and is committed to invest in the capacity upgrade as described starting in the next 24 months after publication of the results of the Euro-BioImaging call for nodes. The funder certifies that the investment will be made for participation in Euro-BioImaging."*
*c) Letter of **Intent** from funder: "…the funder supports this node APPLICATION and intends to develop funding instruments to invest in the capacity upgrade as described below for participation in Euro-BioImaging…"*
*d) Letter of **Consideration**: " … The submitted node APPLICATION is in principle suitable and invited to apply for national funding support using the existing funding instruments XY …that are subject to a national evaluation and would allow the applicant to participate in Euro-BioImaging…"*

2.10 General criteria - Next steps

The Euro-BioImaging Steering Committee is invited to send final input on the General Criteria until July 25th, 2012 to the PMT. In parallel, representatives of various funding organizations will be invited to send their feedback in order to align the criteria along their expectations for the selection and implementation process of the Euro-BioImaging nodes.

3. Preparation and timeline of Euro-BioImaging open call

In 2013, the first open call will be published for institutions to apply for becoming a future Euro-BioImaging node. The evaluation of the node applications will be based on the general and technology-specific criteria as published in October 2012. The applications will be evaluated by an independent evaluation board.
The first call focuses on nodes that will provide physical open access to imaging technologies and have developed and tested an infrastructure model. Additional imaging technologies may be added in future calls after the *evidence of feasibility has been provided (see above 2.7),* corresponding criteria have been established, and published by Euro-BioImaging.

Decision-process for applicants to become Euro-BioImaging nodes

1. Independent evaluation board of European and international science and technology experts evaluates all applications according to the published criteria for nodes.
2. Nodes are eligible, if they meet the requirements and will be reviewed for European significance by the review criteria.
3. Funders decide if they invest into their successful applicant(s) for constructing and operating the Euro-BioImaging node.
4. The Euro-BioImaging governing board representing all participating countries decides on inclusion of nodes into the European infrastructure.

Nomination of independent evaluation board

1. Broad nomination of candidates (European and international science and imaging technology experts) by Euro-BioImaging Steering Committee, External Advisory Board and National Coordinating Persons
2. **Shortlisting in Euro-BioImaging Steering Committee**
3. Nomination by Euro-BioImaging External Advisory Board

4. Industry Board: Update and next steps/formalisation

On behalf of the two Chairs of the Euro-BioImaging Industry Board (Patrick Schwarb and Horst Hahn), Susan Gasser presented the role and advisory function of the Euro-BioImaging Industry Borad , a summary of previous industry board meetings, a summary of the board's position on Euro-BioImaging. The industry board is working on a position paper on Euro-BioImaging with support from the PMT, which shall be published in autumn 2012.

Due to the important discussion on the general criteria, which took much longer time than originally anticipated, the next two topics on the agenda were skipped.
The originally prepared slides are included.

Cancelled:

5. Update on national imaging initiatives

Brief updates had been planned on

a) Meeting of National Coordinating Persons representing the national medical imaging communities, which took place in Vienna, April 20, 2012. Countries represented: AT, BE, CH, CZ, DE, FR, IL, IT, NL, PL, NO, SE, UK
b) Meeting of National Coordinating Persons representing the national biological imaging communities, which took place at ELMI 2012 (Leuven June 6th, 2012). 19 countries represented: DE, ES, SE, CZ, IT, DK, IE, FR, NL, HR, UK, LU, CH, PL, PT, GR, EE, FI, BE)
c) Meeting of UK biological and medical imaging communities on 2nd and 3rd of July 2012 in London.
d) General update on national initiatives represented by members of the Steering Committee.

Cancelled:

6. Update on external relations: European-level activities of BMS RI Coordinator group

A brief update on the European-level activities of the ESFRI BMS RI Coordinators' group as listed below had been planned by Antje Keppler.

Feb – Mar 2012: Drafting and publication of BMS RI position paper on Horizon 2020
Mar 2012: Meeting with representatives from the Danish Agency for Science and Technology at ICRI2012 in Copenhagen
Apr 2012: Face-to-face meetings with MEPs in Brussels
Jun 18th, 2012: Lunch debate with 23 research attachés from 17 countries
Jun 19th, 2012: Breakfast debate with 8 MEPs at the European Parliament
Jun 2012: Six amendments suggested by the BMS RIs tabled by MEP Vicky Ford for the EP report on Horizon 2020

7. Next steps and important dates

July 30th: End of Reporting Period 1
September 1, 2012 RI models for each technology developed (WP 6,7,8,9,10)
October 2012: Publication of Criteria for Nodes
November 2012: 1st draft of Business Plan (including finance plan) available
January 21/22, 2013: 4th Stakeholder Meeting, ACV, Vienna
January 22, 2013: 2nd Meeting of External Advisory Board, Vienna
January 23, 2013: 5th Steering Committee Meeting, Vienna Airport