

## Best practices and recommendations for effective and cost-efficient call management in bioeconomy related ERA-NETs

**Covering the issues:** (A) Electronic systems for submission, evaluation and matchmaking, (B) Evaluation and ranking, (C) Selection of applications, funding decision and negotiation, and (D) Project monitoring.

**Project deliverable:** this is D3.1 of the PLATFORM project.

**Background.** A dedicated event on call management organised by the FP7 project *Platform of Knowledge Based Bio-Economy relevant ERA-NETs* (PLATFORM) brought together ERA-NET call officers, most of them with 2-8 years of experience in (transnational) call management. Prior to the event a survey among bioeconomy relevant ERA-NETs had been conducted to get a picture of the differences and similarities in the way the ERA-NETs work, and help to identify areas to discuss. In this master class, organised by the WP3 of PLATFORM on June 17-18, 2013 in Brussels, practices for different aspects of the call cycle were presented and the factors required for proper call management were discussed. This expert-driven process resulted in a high level of agreement and a set of recommendations for call organisation, proposal evaluation and ranking, project selection and funding, and monitoring. This document is the summary report of the topics selected by the PLATFORM partners as the most relevant for mutual learning and of the discussions of these topics in the master class.

**Dissemination** to partners of the PLATFORM project, wider community of bioeconomy ERA-NET actors, ERA-LEARN and further ERA-stakeholders.

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### Core Statement

The bioeconomy ERA-NET community stresses the importance of sufficient flexibility in the evaluation and selection procedures, e.g. in the freedom to use different models for ERA-NET calls, such as multiple topics or different participation rules for sub calls, and different modes for evaluation outcomes (barrels / same score possibility / full ranking list). This would foster a larger impact of the investment provided through national funds and EC top-up funding on building the ERA.

## A. Support tools for matchmaking and handling of applications and evaluation

Regarding electronic submission and evaluation systems (ESS) and management tools there is no one-size-fits-all-model. Existing models are either tailor-made or adjusted from existing National Funding Organisations. There are both ESS service providers and (at least one) open source system available; in addition, a simple web-based drop-box system may be used (protected by user-key and password).

### ***Recommendations for the ERA-NET community***<sup>1</sup>

- Simple ESS systems and profiles are recommended.
- It is recommended that for a single call one of the many ESS providers should be contracted, while for multiple calls the adaptation and tailor-made modification of the open source ESS of ICT-AGRI would be a very adequate and sustainable solution.
- Electronic databases, in particular those built in open source systems might be prone to security attacks, but one should consider the risk inherent to the technical security issues in perspective of the low value the data would have to professional cyber criminals and the low chance of researchers trying to gain competitive advantage by breaking into the database. A web-based drop-box is also considered safe. Submission and proposal handling by E-mails is not considered sufficiently secure.
- More importantly, the confidentiality of proposal data should be guaranteed during the assessment phase within the ERA-NET: confidentiality of data is a relevant issue to be addressed and adequate confidentiality regulations must be well defined and lived up to.

### ***Recommendations for the ERA-NET environment***<sup>2</sup>

- A list of ESS systems should be provided on ERA-LEARN (e.g. PTJ system PTERAS; Open Source system, etc.) and more information of existing open source models and/or service providers is needed.
- The community should get ready for the new ERA-NET scheme (ERA-NET COFUND). On a practical level, there is a need for a budgetary tool that calculates distribution of NFO's budgets and of the EC top-up to support the process of making the final funding recommendations after ranking. ERA-SysBio Plus used a system based on Excel which they have made available through the ERA-LEARN toolbox<sup>3</sup> (contact Bernhard Gillessen).
- Development of a single cost efficient meta-data system available for all ERA-NETs would be beneficial for all actors.

## B. Evaluation and ranking of applications

### ***Recommendations for the ERA-NET community***

- Transparent communication of National Regulations regarding eligibility is required.
- Guidelines for Evaluation and Selection have to be thoroughly thought through and clearly formulated and structured.

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<sup>1</sup> Recommended to be considered in ERA-LEARN toolbox, based on empirical grounds and defined best practice

<sup>2</sup> Recommended to be considered by the EC, ERA-LEARN and in forthcoming discussions/conferences

<sup>3</sup> <http://netwatch.jrc.ec.europa.eu/web/lp/learning-platform/toolbox/call-implementation/funding-decisions/funding-decisions>

- There is absolute need for a clear *Code of Conduct on Conflicts of Interest* .
- There is absolute need for clear instructions to External Reviewers (ER) and Review Panel (RP) on the selection criteria and about scoring. It is doubtful whether the ranking of proposals can be sufficiently justified, due to inter-person differences in the use of scores and due to low comparability of proposals in many calls.
- Ranking lists, in theory, show a linear progression of quality among proposals, however, in practice, ranking within nearest neighbours do not necessarily represent a (measurable) sequence of quality. They may rather represent an intellectual artefact when comparing equally good proposals.
- There is practical need for a limited range of scores in order to avoid artefacts in the ranking.
- Review Panel evaluation remains desirable in most cases (particularly for the basic sciences).
- The ESF provides further guidance for Peer Review<sup>4</sup>.
- Because in most calls the amount of funds applied for is much higher (often three-fold or more) than the available funds, a two-step submission and selection process (pre- and full proposals) is the preferred model. This reduces disappointment on the applicants' side and reduces workload for all actors: applicants, agencies, external reviewers, the review panel and the call office.
- Frequently a success rate of at least 25% for full proposals is aimed for. Anything below this makes a cost-benefit balance negative. A two-step procedure enables to reduce the number of full proposals being submitted. Finally, the number of expected proposals determines whether a pre-proposal stage is needed.
- The result of the pre-proposal assessment could be employed as a non-binding recommendation in case national regulations don't allow a rejection without external peer review or without a full evaluation.
- A rebuttal step (after review of full proposals, but before the panel meeting) is recommended because it adds value to the quality of assessment and transparency. It is essential that applicants write a rebuttal only on arguments, not on scores (scores might change during the panel meeting and their disclosure might be prone to abuse).
- Access to the expert database of the Commission Services is possible.
- To divide the workload in the search for External Referees, some ERA-NETs agreed to do it proportional to the proposals: countries that had most applicants involved in proposals were expected to provide most ER names (and account for financial obligations accordingly).
- To pay fees to the External Experts and Review Panel members would value their indispensable contribution to the quality assurance of the evaluation process. Even only symbolic fees paid to evaluators, as a token of expressing gratitude, are therefore highly recommended, in order to maintain the (in principle exploiting) system of scientists to volunteer as referees.

### ***Recommendations for the ERA-NET environment***

- Access to the EUREKA database is to be explored. If possible, access rules should be shared.
- Advertising the possibility to use the expert database of the Commission Services is recommended.<sup>5</sup>

<sup>4</sup> <http://www.vr.se/download/18.2ab49299132224ae10680001647/European+Peer+Review+Guide.pdf>

<sup>5</sup> <http://netwatch.jrc.ec.europa.eu/web/lp/learning-platform/toolbox/call-implementation/evaluation/procedures/centralised-evaluation-carried-out-by-common-expert-panel>

## C I. Selection of recommended applications and funding decision

### ***Recommendations for the ERA-NET community***

- Funding recommendation should be based on best practice, identified as a two-step evaluation with a final panel ranking, in which panel experts have read most or all proposals.
- Variable geometry in the provision of funds often leads to the rejection of even highly ranked projects. Ranking in barrels instead of a prescriptive ranking list is better suited for transnational calls with distributed pots as it allows optimizing the use of available funding. Therefore a grouping in barrels is the preferred mode of the evaluation outcome.
- Another rationale for preferring barrels over a fully ranked list is that ranking often suffers from artificial hierarchy among more or less equally ranked proposals. A barrel mode is therefore more convenient. It divides proposals into different categories (barrels), in which proposals within a quality category are equally ranked.
- In the ERA-NET Plus scheme the more top-up funding goes to the gap-filling, the better a ranking list can be served. To optimize top-up funding, one should take this into account, and balance it against the argument of grant distribution in ratio to the countries funds contribution.

### ***Recommendations for the ERA-NET environment***

#### *Problem: The single binding ranking list in the new ERA-NET scheme (H2020)*

- A two-step evaluation with a final panel ranking, in which panellists know most or all projects, was identified best practice. It is absolutely important to aim for the highest quality of the evaluation process, but scoring up to a fully ranked list is considered to introduce artificial hierarchy.
- Final ranks (with minute differences) tend to be arbitrary, due to (i) different individual use of scores and (ii) a poor comparability of projects.
- Variable geometry in the provision of funds often leads to the rejection of even highly ranked projects. The barrel mode is the preferred mode of the evaluation outcome, because it allows optimizing the funding recommendations.
- A possible solution would require the following characters: (i) to avoid any loss of, and keep the highest quality of evaluation; (ii) to reduce unnecessary (and doubtful) hierarchy in the ranking and allow for equally ranked proposals; (iii) to consolidate the dichotomy of “ideal nuances of scientific quality” versus “the pool of proposals considered cutting edge/excellent”.

#### *Reflections from the experts’ brainstorming session on how to solve the problems that would occur from the current proposed EC regulations of the ERA-NET Plus scheme:*

- It is virtually impossible for a Review Panel to provide a rational basis for distinguishing between proposals of which the overall quality is very much alike. This leads to an artificial ranking of neighbouring applications which does not reflect the actual scientific appraisal of the proposals. Experience shows that there is no rational basis to rank one proposal over the other among a category that is defined narrowly enough. E.g. among ‘very good’ proposals any further distinction is often arbitrary .
- Like the EC, the national procedures for proposal selection aim for excellence, and the intention of national research funding organisations is to provide funds for the best transnational project proposals. Therefore, any loss and/or concessions to the quality of the evaluation of the research proposals are to be avoided.

- It is top-priority that national funds and the top-up funding must be effectively used in order to benefit the ERA.

Options that provide solutions to the problems of binding ranking lists:

- Ranking proposals on equal ranks; as this would reduce the controversy of artificial hierarchy and benefit the optimization of using the funds available.
- Creating multiple parallel calls with different scope or participation possibilities instead of one rigid format; as this would allow for desired flexibility in ERA-NET Plus implementation.
- An approach with an over-all and subtopic ranking lists where the allocation of national money starts at the top-ranked projects; top-up funding can be used to cover topics that otherwise would not be funded.

These options are constrained by EC documents that already state that there can only be one call with one single and binding ranking list in ERA-NETs in Horizon 2020.

## CII. Project negotiation

### ***Recommendations for the ERA-NET community***

- Clear communication by national funding organisations about maximum funding in total as well as per project is necessary to avoid budget cuts at a late stage. Funders should publish funding ceilings and the type of project costs they expect to fund. Transparency is important here.
- Avoiding any cut-back of project budget during funding negotiations is considered best practice (as long as the funding requests are appropriate and considered necessary), because doing so would be a form of putting aside the outcomes of an evaluation and as such it would be disrespectful to “reduce” a positively evaluated proposal. If necessary, any revised proposal should be re-evaluated by (part of) the Review Panel.
- The partners within a project should start according to the work plan and thus, if needed, political power must be mobilised to streamline the timeline of national funding decision procedures.
- ERA-NETs should inform applicants timely that they will have to negotiate their Consortium Agreement themselves within the project. It is also recommended to point out that templates for Consortium Agreements are available on the DESCA website and from ERA-LEARN / NETWATCH. Specific templates may be added.

## D. Joint project monitoring

### ***Recommendations for the ERA-NET community***

- In general a trust-based system for following-up the projects funded by the ERA-NETs during their lifetime should be aimed for, in particular in view of the peer-based evaluation system. Research organisations deserve to be trusted and reporting requirements should be done only at the absolutely required minimum. E.g., project management is an integral part of the application and has been evaluated at the start of the project. Funding organisations should trust that the project coordinator implements this as proposed, and only a very light, if any, monitoring of this aspect is required.

- The financial management is usually placed at the national level through national contracts, and the consequently financial reporting should remain as well at the national level
- Scientific progress monitoring is beneficial at the transnational level as it will depend on the performance of the consortium as a whole.
- The assessment of the project performance should not be overregulated, and in case of intermediate reviews it should be kept in mind that the aim is rather a help the project to perform well then to judge and compare. Forms, if any, should be straightforward to fill in and only contain questions for information that is really required. Funders should aim for minimal bureaucracy and researchers should only have to spend a minimum of time to administrative burdens.
- The organisation of seminars where project coordinators present results and explain deviations from the plans in the presence of reviewers and contact points of the national funding organisations is highly recommended. This is a much more inspiring alternative for mid-term and end term progress reporting, and it provides networking opportunities among the community. The topics of the projects of a thematic ERA-NET will generally be of interest to the scientific community of that area, so the seminars could be open to a wider public, e.g. by organising it within a larger conference.
- Financing of monitoring and the ex-post evaluation is considered to be a bottleneck and needs to be addressed. This also relates to the discussion about the development of self-sustained ERA-NETs.

#### ***Recommendations for the ERA-NET environment***

- Like for proposal submission, there is an interest in a common electronic systems for progress reports with access functionalities for national officers to monitor and upload assessments, and, optionally, for external referees to review and provide progress evaluation reports. This could be developed as an on-line database for the ERA-NET community (free access for ERA-NETs); existing models like the one developed for ICT-AGRI (Meta Knowledge Base) should be considered.
- There is a strong support for the idea to develop a database with key project information for all projects granted within the calls of all ERA-NETs. Up till now, this data is scattered and incomplete. Some ERA-NETs produced factsheets of the projects they fund; others publish it in a book and/or at websites. Some ERA-NETs only provide project titles, while others publish summaries, or even progress updates. Currently, a book on bioeconomy ERA-NET Actions is in preparation which contains, among other information, lists of projects funded in ERA-NET calls. This could serve as a start point for making the data available on-line, at least of projects from bioeconomy ERA-NET calls. Next steps would be extending the information with summaries and extending the calls covered by such a database.
- There is no joint “impact assessment tool” for individual ERA-NETs. ERA-NETs perform different kinds of impact assessments individually. Creating a legacy of what has been achieved in the various ERA-NETs and to emphasise the good aspects for future collaborative funding initiatives would be highly valued.