



Transnational Funding Activities in the NEURON Area

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ERA-NET NEURON



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This Survey is part of Work Package 5
National Programme Opening of the NEURON project,
Work Package Leader is FWF, Austria.

INTRODUCTION

The **ERA-Net scheme** (ERA – European Research Area) is a funding instrument initiated by the European Commission in its 6th Framework Programme. It supports networking of funding organisations in order to initiate coordination of national or regional funding programmes.

NEURON (Network of EUROpean funding for Neuroscience research) is one of the ERA-Net projects. It was funded as a pilot Specific Support Action (SSA) in 2003-2004 and is continued as a Coordination Action (CA) 2007-2010. The ERA-Net NEURON aims to link national research funding programmes and funding activities from 11 European countries, Israel, and Canada, in the field of disease-related neurosciences, neurology and psychiatry. It is currently constituted by the following 18 partners:

- Austria, FWF, Austrian Science Fund
- Canada, CIHR, Canadian Institutes of Health Research
- Canada, FRSQ, Fonds de recherche en santé du Québec
- Finland, AKA, Academy of Finland
- France, CNRS, Centre National de la Recherche Scientifique
- France, INSERM, National Institute for Health and Medical Research
- France, ANR, National Funding Agency for Research
- Germany, PT-DLR, Project Management Agency in the German Aerospace Centre, on behalf of the German Federal Ministry of Education and Research (BMBF)
- Israel, CSO-MOH, Chief Scientist Office, Ministry of Health
- Italy, MOH, Ministry of Health
- Luxembourg, FNR, Fonds National de la Recherche
- Poland, CBiR, Centre of Research and Development, on behalf of the Ministry of Science and higher Education, MNiSW
- Romania, ANCS-MECT, Ministry of Education and Youth
- Romania, NCPM, National Center for Programme Management, on behalf of the ANCS-MECT
- Spain, ISCIII/FCSAI, Instituto de Salud Carlos III., Fund for Health Research
- Spain, MICINN, Ministry of Science and Innovation
- Sweden, SRC, Swedish Research Council
- United Kingdom, MRC, Medical Research Council

One of the objectives of ERA-Nets is exchanging information about the work of their network partners. This procedure of information gathering is crucial to provide the basis for discussions leading to the final aim of launching joint transnational calls.

The NEURON Coordination Action defines two different, yet interrelated, tasks with respect to the collection of data on individual partner's programmes:

- The focus of **task 1.1** (within Work Package 1, led by PT-DLR, Germany) lies on data acquisition about **national** programmes and national regulations, e.g. the basic principles of funding, selection criteria, fundable scientific areas, types of funding instruments, eligibility, evaluation and monitoring, and financial issues.

The results of a survey that was conducted during Summer 2007 are presented in the report "European Funding Programmes for Neuroscience Research" by Rainer Girgenrath and Marlies Dörlöchter, published in December 2008.

- The focus of **task 5.1** (within Work Package 5, led by FWF, Austria) lies on data acquisition about **transnational** funding activities of the NEURON partners, e.g. the general state of and the experience with transnational programmes, transnational financial issues (different funding pot models), and the scientific disciplines covered by existing transnational programmes. In particular, experience with other ERA-Nets, is an important issue. Obviously, information exchange on existing transnational funding programmes in the neuroscience field is another crucial point.

This report here summarises the results of a survey that was developed in the first half of 2007. Data acquisition was conducted between May 2007 and September 2008. The report summarises information from 12 different NEURON partner organisations representing 10 different countries (see “Methods” for details).

The collected information was analysed in an attempt to show common features or differences among the funding organisations partaking in the survey. Data analysis, combined with follow-up discussions in a workshop (see “Methods” for details) paved the road for the first transnational call in ERA-Net NEURON which was published in January, 2008.

METHODS

A draft questionnaire was presented at the NEURON kick-off meeting in Berlin, January 2007. The structure and the content of this questionnaire was then refined following thorough discussions with all partners concerning the topics which had to be covered. As these data served as the basis for all downstream processes leading to the first transnational call (cooperation model, Memorandum of Understanding, joint call text), much effort was spent to define questions which address all relevant items.

In brief, this questionnaire aimed to collect data in **3 different thematic areas**:

1. General conditions for transnational funding in the partner organisations (strategy, experience with financial contribution models)
2. Description of already existing transnational funding programmes (scientific areas, target groups, eligibility, administrative and legal aspects, financial issues)
3. Description of already existing transnational funding programmes in the neuroscience field (*analogous to 2.*)

The questionnaire was sent out to all partners and 12 returned the respective data: FWF (AT), AKA (FI), ANR (FR), CNRS (FR), BMBF (DE), CSO-MOH (IL), FNR (LU), MNiSW (PL), ANCS-MECT (RO), ISCIII (ES), MICINN (ES), and MRC (UK). Contact persons in the partner organisations are internal programme managers or scientific officers. Many of them have a scientific background and training, but are no longer active in research. Within their funding bodies they are affiliated to departments which are responsible either specifically for neuroscience research funding or for international relations and European partnership.

Preliminary data analysis of selected items from this questionnaire served as a basis for the first **workshop “Cooperation Models”** held in Helsinki, June 2007. In this workshop, several topics like the application procedure, review procedure, and financial contribution models were actively discussed. In particular, the pros and cons were analysed based also on the extensive experience available from other ERA-nets. This workshop was continued in Paris, October 2007. In this meeting, those topics which were primarily relevant for the first joint call (application, evaluation, budget items etc.) were discussed in detail and a broad consensus was achieved.

The **result section of this survey** presents the compiled and condensed answers to the individual questions. Wherever possible, data interpretation is added. At the beginning of each paragraph the respective part of the questionnaire is depicted.

Please note that selected questions contained in the questionnaire are not part of this survey, as data analysis proved to be difficult because of the highly heterogenous nature of the respective answers. This, in particular, refers to some of those questions which allowed to enter answers as free-text. Nevertheless, data contained in these answers were used for summaries and interpretations of data from related questions, wherever possible.

RESULTS

Section I. General conditions for transnational funding

In this section, several aspects related to the general philosophy of each funding organisation with respect to transnational funding were addressed. In addition, the experiences and the legal framework concerning the different financial contribution models available were compared.

➤ Joint funding – basic practice

1.1.1 Do you practice joint funding with other organisations in your country? (yes/no)

If yes, please specify other organisations.

1.1.2 Do you practice joint funding with organisations in other countries? (yes/no)

If yes, please specify country.

The basic idea behind these two questions was to get an overview of already existing networking activities, both national and transnational, of the different partner organisations.

All 12 partners already practice joint funding with organisations **in other countries** (question 1.1.2), from bilateral to multilateral (as in other ERA-Nets or EUROCORES). In rare cases, joint funding is concentrated on a regional level, as in the case of Luxembourg (France, Belgium), whereas in most cases, joint funding already was practiced with widespread EU- and non EU-countries. Selected partners also described existing programmes in the field of neurosciences, like the cofunded Polish-German Cooperation in Neuroscience and the Israeli-German programme in neuroscience.

In contrast, only 9 of the 12 partners practice joint funding with other organisations **in their own countries** (question 1.1.1), with Israel, Luxembourg, and Poland being the exceptions. On this national level, joint funding mainly occurs with different ministries, whereas only selected partners list other organisations in this context (like France, Germany, UK, or Finland).

Tab. 1. Basic practice of joint funding.

Partner	1.1.1	1.1.1 Examples / Remarks	1.1.2	Q1.1.2 Examples / Countries
FWF (AT)	yes	NANO-Initiative (FWF-FFG)	yes	ERA-nets; EUROCORES; CERC3
AKA (FI)	yes	ministries, private foundations, National Technology agency Tekes	yes	EU countries, USA, Canada, Brazil, Argentina, Chile, India, Japan, China, Egypt, Russia and other countries
ANR (FR)	yes	with AFM (association funding myopathy and rare diseases), InCA (institute funding cancer research).	yes	with UK, Germany, for bilateral; with Spain, Germany, for trilateral; UK, DE, ES, NW, NL, SW, PO, IT, IL, TK, FI, Portugal for ERA-nets, USA, HU, Taiwan, China, Mexico
CNRS (FR)	yes	ANR; CEA; Inserm; Institut Pasteur; Institut Curie; Ministry of Research; OSEO-ANVAR; IFREMER; IRD; INCA; FIST; APHP; RTRA; PRES; CTRS	yes	Algeria; Argentina; Australia; Austria; Bolivia; Brazil; Canada; Chile; China; Czech Republic; Denmark; Egypt; Estonia; Finland; Germany; Greece; Hong Kong ; Hungary; Iran; Israel; Italy; Japan; Kenya; Lebanon; Luxembourg; Morocco; Netherlands; Nigeria Poland; Romania; Russia; Slovenia; South Africa; Spain; Sweden; Switzerland; Syria; Taiwan; Tunisia; United Kingdom; Uruguay; USA; Venezuela; Vietnam

BMBF (DE)	yes	Polish-German cooperation in neuroscience	yes	With the Polish Ministry of Science and Higher Education (MNiSzW): cofunding of bilateral projects in neuroscience. With the Israeli Ministry of Science, Culture and Sports (MOST): German funding of a joint programme in neuroscience; ERA-nets
CSO-MOH (IL)	no		yes	ERA-nets
FNR (LU)	no		yes	Belgium, France
MNiSW (PL)	no	Monopoly position of Ministry of Science and Higher Education	yes	EUREKA; Polish-German Cooperation in Neuroscience; Funding by the European Union (Framework Programmes, EURATOM programme); European Molecular Biology Organisation (EMBO);
ANCS-MECT (RO)	yes	Nat. Centre for Programmes Management (CNMP), Executive Unit for Financing Res. In Universities (UEFISCSU), Management Agency for Scientific Res., Innovation and Technology Transfer (AMCSIT)	yes	bilateral: Bulgaria, Cyprus, China, France, Greece, India, Italy, Japan, Slovenia, USA, Turkey, Ukraine, Hungary multilateral: ERA-nets
ISCI (ES)	yes	With the Ministry of Education and Science and the Ministry of Industry, Tourism and Trade.	yes	With France, Germany, Italy, Israel, Turkey
MICINN (ES)	yes	National calls, especially for research infrastructures, where the MICINN offers joint funding and the collaboration of the receiving institutions is expected.	yes	ERA-nets; EUROCORES
MRC (UK)	yes	Wellcome Trust, DFID, BBSRC, EPSRC, Charities	yes	European and Developing Countries Clinical Trials Partnership (EDCTP)
Total	Y:9 N:3		Y:12	

➤ Transnational funding instruments – demand from scientific community

1.1.4 Is there a concrete demand for transnational funding instruments from your scientific community?

If yes, please specify the type of demand (if it has been documented or monitored by surveys/ workshops/ proposals/ initiatives etc?) What types of funding instruments are preferred?

Two-thirds of the partners declared that there is a concrete demand from their national scientific communities for instruments of transnational funding (**Fig. 1**).

For example, in **Spain (MICINN data)**, these instruments are both well demanded by some sectors of the Spanish scientific community and well accepted when proposed from the funding bodies. Transnational collaborative research projects are preferred. Large research infrastructures for common use and programmes for training and mobility are also well appreciated.

In **Finland (AKA data)**, preparatory workshops of the research programmes indicate specific needs related to international collaboration and specific countries. Naturally, this depends on the type of programme and its thematic areas.

The 4 partners which do not recognise a specific demand from their scientific communities are: ANR (FR), BMBF (DE), CSO-MOH (IL), and MRC (UK).

Interestingly, data for **France** vary depending on the research organisation, as CNRS declares that there is increasing demand for transnational funding instruments. Due to the European projects, some of the French teams would like to involve more European partners and to get more flexibility in transnational fundings.

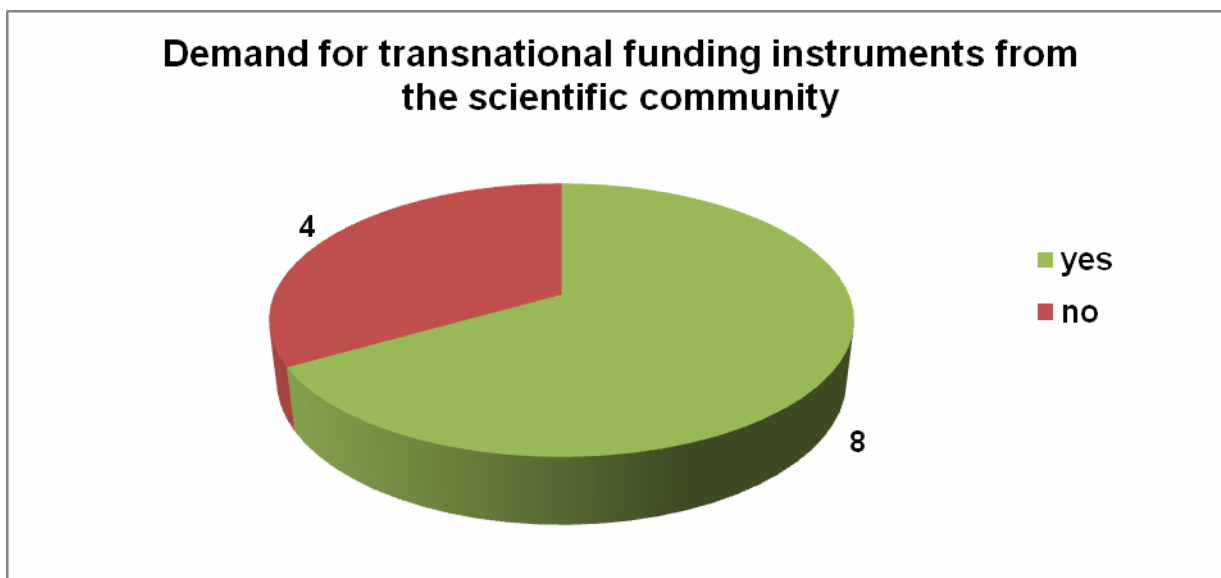


Fig. 1. Numbers of partners which declare a specific demand from their national scientific communities to provide instruments of transnational funding.

➤ Joint funding – financial contribution models

One of the central aims of an ERA-Net is the development of joint transnational calls. Due to different national regulations of the partner organisations, this task is far from being trivial. A long list of items, covering the selection of scientific topics, administrative procedures, and legal frameworks as examples, has to be discussed and finally agreed on in a common consensus. Naturally, the question of how to fund those transnational research networks which have been top-ranked in scientific terms is a central issue.

For this purpose, several **financial contribution models** are available, which have been used by other ERA-Nets. For this survey, **4 main types** of these so-called “pot-models” have been used in this survey and the partners have been asked to describe their experiences with those models.

***Please note** that the 2 main groups (A. and B.) correlate with the definitions for “common pot” and “virtual pot” in the diagram at the NETWATCH site (http://netwatch.jrc.ec.europa.eu/nw/index.cfm/static/mapping.html#1_3). However, the definition “virtual common pot” also used at this site corresponds to definition “B.1 jointly funded national projects” in this survey. (Confusingly enough, the NETWATCH site actually uses both terms, “virtual pot” and “virtual common pot”, for the same model.)*

A. common pot: all the funds from the participating funding organizations are put to a common pot. A prerequisite is a trans-national agreement, which fixes the national contributions. This model is based on the “no juste retour” principle, as it will fund all excellent projects irrespective of the country of origin, meaning that there is no “money back guarantee” for the participating organisations.

- **A.1 real common pot:** all the funds are put to a common pot, which is managed by a single secretariat via a central bank account. All projects are managed according to jointly agreed administrative procedures.
- **A.2 virtual common pot:** as in A.1, all the funds are put to a common pot, but which is “virtual” as each country manages its own national sub-projects according to national administrative procedures. Nevertheless, we can define this pot as “common” as money which is not spent for national sub-projects (because the number of granted ones is low) will be allocated to a common bank account, and redistributed to the other participating organisations. **Example:** EURYI award.

B. virtual pot: countries and regions pay for their own participants and there are no transnational flows of national funding.

- **B.1 jointly funded national projects:** each country funds its own approved sub-projects with a **fixed** maximum amount of money, and there is no allocation to a common pot.

Example: EUROCORES (ESF)

- **B.2 open funding:** each country funds its own approved sub-projects with a **variable*** amount of money, and there is no allocation to a common pot. This model guarantees not only the highest degree of independence but also flexibility as each country can adapt its budget to the number of excellently rated projects. Thus, all approved projects can be funded.

*Each participating organisation reserves a budget for national sub-projects for the call (all national budgets add up to the total call budget), but is ready to fund **all approved** national sub-projects with the required amount of money, at least until either the initial total call budget is reached or the actual total budget needed to fund all approved sub-projects (matter of negotiation).

1.2.1 Does your organisation have experiences concerning research projects or programmes funded by one of the 4 models described above (shared either between different national funding organisations or between national and foreign research funding bodies)?

Please specify “Yes” or “No” (replace the “O” by “X”). In the case of “Yes” please describe your experiences in a concise manner. Please note that this question is aiming at your general strategy and not at individual programme-specific descriptions (see below).

A. Common pot

- | | | |
|------------------------|---------------------------|--------------------------|
| A.1 real common pot | <input type="radio"/> Yes | <input type="radio"/> No |
| A.2 virtual common pot | <input type="radio"/> Yes | <input type="radio"/> No |

B. Virtual pot

- | | | |
|--------------------------------------|---------------------------|--------------------------|
| B.1 jointly funded national projects | <input type="radio"/> Yes | <input type="radio"/> No |
| B.2 open funding | <input type="radio"/> Yes | <input type="radio"/> No |

C. Other

- | | | |
|--|---------------------------|--------------------------|
| | <input type="radio"/> Yes | <input type="radio"/> No |
|--|---------------------------|--------------------------|

The vast majority (11 of 12) of partner organisations has experience with the model “**jointly funded national projects**”, B.1 (**Fig. 2**). This is not surprising as this option is the least stringent of the four, and therefore most compatible with pre-existing national regulations and legal frameworks. This model, when strictly followed, provides a very low degree of flexibility, as the national budgets are fixed before the evaluation process and there is no possibility to increase them, irrespective of the number of national sub-projects reaching a high rank after the review process. This may lead to situations where the whole transnational consortium – although top-ranked - will not be granted because of the fact that one individual project partner can not be funded by the respective national funding organisation.

Therefore, the model “**open funding**” (B.2) represents a valuable “extension” in the way that it guarantees that all approved sub-projects will be funded. 7 of 12 partners have used this model before. Still, certain partners were hesitating to use the “open funding” model for NEURON calls. **Therefore, a mixture of the models B.1 and B.2 was finally employed in NEURON calls (see also question 1.2.4).**

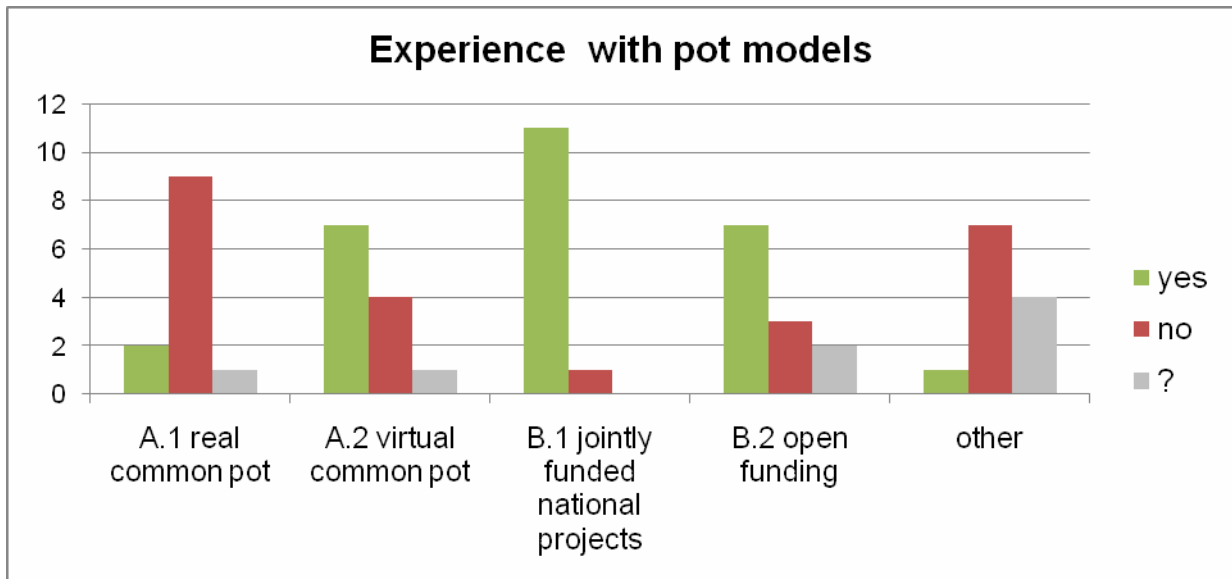


Fig. 2. The previous experience of the partner organisations with different financial contribution models for joint transnational activities. Numbers of organisations are shown.

1.2.2 Are there any regulations hindering your organization in participating in common-pot funding?
(If yes, please specify)

For several funding organisations, the participation in **common pot funding** actually is not a matter of consideration or discussion but is hindered by specific national regulations. In summary, these 5 partners are: ANR, BMBF, CSO-MOH, FNR, and MNiSW (**Fig. 3**). Based on this information, the funding models involving common pot aspects had to be excluded from further considerations related to the organisation of the NEURON joint calls.

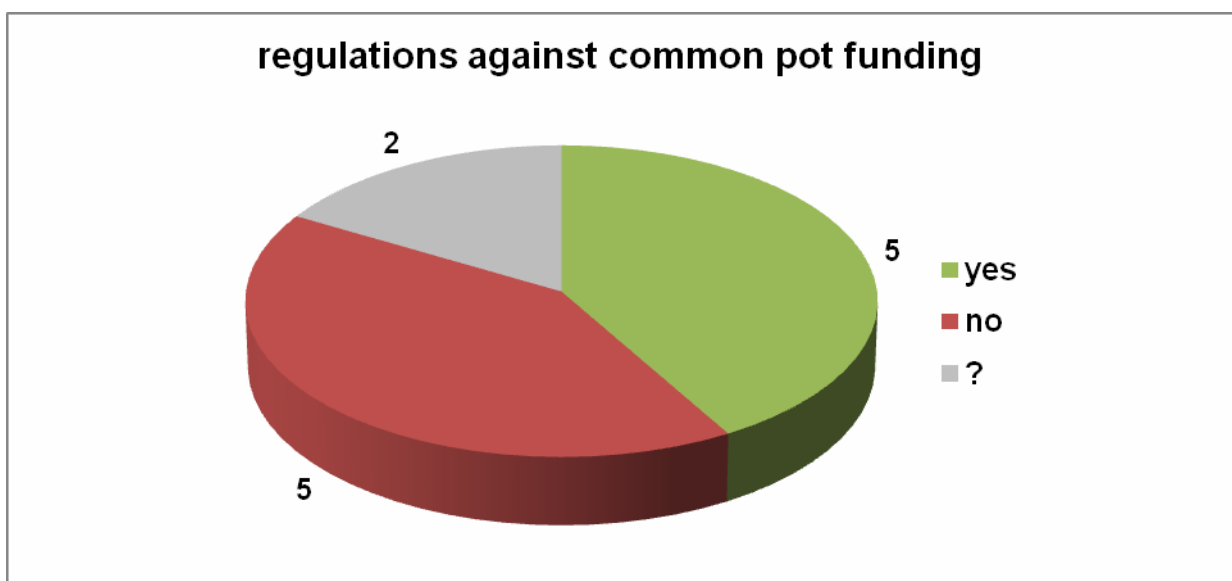


Fig. 3. Numbers of organisations where national regulations hinder the participation in common pot funding models.

In order to finally select a financial contribution model suitable for the implementation of the NEURON transnational calls, partners have been asked to declare their preferences related to this question. The results are summarised in **Fig. 4**.

2 models (B.1 and B.2) have been selected by 6 partners, each. As mentioned above, certain partners shared reservations with respect to the open funding model. As a consequence, a mixture of the models B.1 and B.2 was finally used for the first call, meaning that certain partners were ready to extend their initially earmarked budget contributions in case that it was necessary to fund all of their national sub-projects which are ranked in the excellent range.

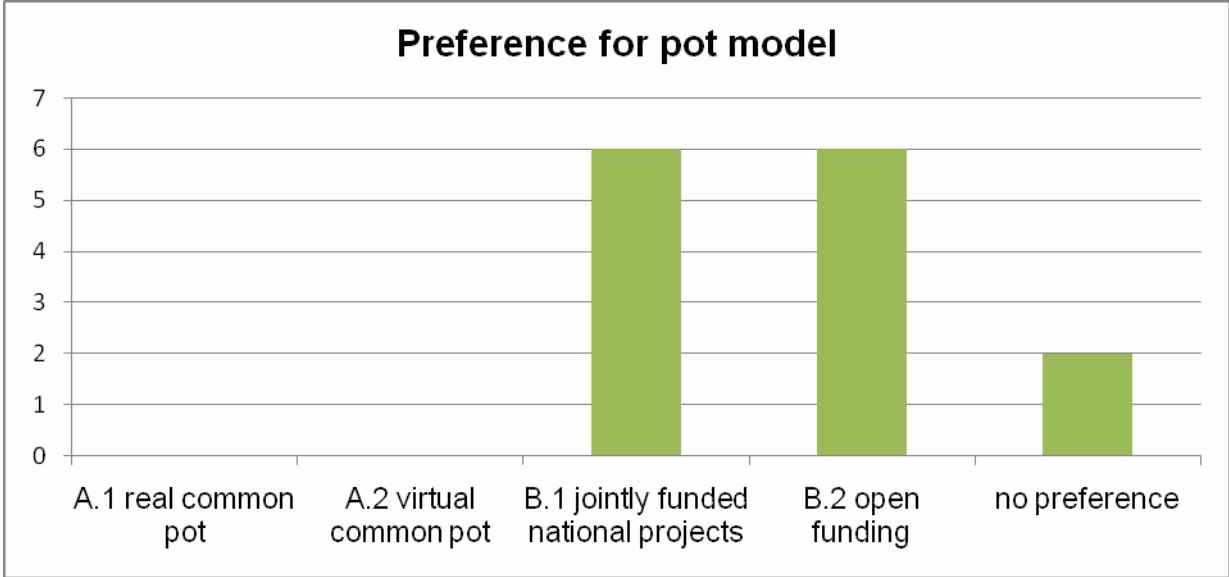


Fig. 4. Numbers of organisations expressing a clear preference for the participation in the different funding models.

Section 2. Previous / existing transnational funding programmes

The focus of this section was the description of already existing transnational funding programmes. The main objective of this part was to analyse different aspects of these programmes (scientific areas, target groups, eligibility, administrative and legal aspects, financial issues) in order to extract best practices.

Please note that in the questionnaire, the questions related to the data on transnational funding programmes were spread over two different sections (“2. existing transnational funding programmes” and “3. existing transnational funding programmes in the neuroscience field”). For the analysis of the data, however, it turned out that it makes sense to combine the corresponding answers. First, the nature of the questions was practically identical, and second, data on programmes in the neuroscience field was quite limited, with many NEURON partners lacking specific information, at all.

The results served to direct and focus the follow-up discussions between the partners with respect to the development of the joint calls.

➤ Transnational funding programmes – scientific fields

2.1.1 What are the main scientific fields where your organisation has participated in transnational programmes before?

Please select from the list below and indicate the total number of corresponding programmes. Note that for matters of simplicity, this question aims at the number of programmes and not at the number of calls launched.

Examples:

- *Natural Sciences: NSF Material and World Network, ERA-Net Chemistry, ERA-Net Nanoscience*
- *Not disciplinary restricted: ESF EUROCORES, EURYI award.*

Discipline	Number of programmes
Natural Sciences	
Technical Sciences	
Human Medicine	
Agricultural Sciences, Veterinary Medicine	
Social Sciences	
The Humanities	
Not disciplinary restricted	

This question aimed at the generation of a concise overview about the scientific areas where each partner organisation has participated in joint transnational funding activities.

The results are summarised in **table 2**. For matters of simplicity, the world of scientific research was divided into only 6 broad fields: natural sciences, technical sciences, human medicine, agricultural sciences + veterinary medicine, social sciences, and the humanities. In addition, the questionnaire asked to enter the number of programmes which are not restricted to specific disciplines.

Table 2 differentiates those partners which participated in joint funding activities across all disciplines (ANR and ANCS-MECT), across several disciplines (like FWF, FNR, MNiSW, and MICINN), and finally those which are highly selective in this respect (BMBF, CSO-MOH, ISCIII, and MRC).

Tab. 2. Previous transnational funding programmes according to scientific fields.

Partner	NatSci	TechSci	HumMed	AgricSci VetMed	SocSci	Hum	Not disciplinary restricted	Total
FWF (AT)	4		1				3	8
AKA (FI)								<i>n.i.</i>
ANR (FR)	3	1	3	2	2	1	2	14
CNRS (FR)								<i>*see legend</i>
BMBF (DE)			2**					2
CSO-MOH (IL)			2					2
FNR (LU)	5		1			1	1	8
MNiSW (PL)	7	9	2				2	20
ANCS-MECT (RO)	5	6	4	3	4	3	1	26
ISCI3 (ES)			2					2
MICINN (ES)	X		X	X				0
MRC (UK)			9					9
Total	24	16	26	5	6	5	9	91

Legend:

- *Natural Sciences (NatSci)*
- *Technical Sciences (TechSci)*
- *Human Medicine (HumMed)*
- *Agricultural Sciences and Veterinary Medicine (AgricSci, VetMed)*
- *Social sciences (SocSci)*
- *The Humanities (Hum)*

“X” indicates the participation in programmes of these fields without presenting exact numbers.

“n.i.”: numbers not indicated.

*CNRS (FR) indicated a total number of 322 programmes, without further categorisation.

** for BMBF only programmes by the division for Health Research are indicated.

➤ **Selection of priority areas – role of the industry**

2.1.2 Does the industry play a role in the selection of these funding priority areas?

If yes, describe this process.

Naturally, the selection of funding priority areas *per se* is tightly coupled to the general funding strategy of an organisation, thereby differentiating those having a focus on **top-down** and those having a focus on **bottom-up research programmes**. The report “European funding programmes for neuroscience research” by Rainer Loose and Marlies Dorlöchter demonstrates the whole spectrum of the partner organisations in this respect, from 100 % bottom-up (as in the case of FWF, AT) to 100 % top-down (as in the case of BMBF, DE). Please refer to the figure 1 in that report for details.

This said, not all partners select funding priority areas, as in the case of FWF. As a consequence, the role of the industry in this process may not be a relevant question for all partners. Still, the compiled results of this question demonstrate that 3 (AKA, ANCS-MECT, and ISCIII) of the 12 partners involve the industry in this selection process (**Fig. 5**).

- AKA: The board of the Academy of Finland has one permanent position for an industrial expert. Councils may also have academic members affiliated in the industry. Industry members may also be invited to preparatory workshops of the research programmes.
- ANCS-MECT: The industry was significantly represented in the first national foresight exercise in order to establish the funding priority areas of the National Strategic Plan for Research and Development for 2007-2013.
- ISCIII: In the context of the Article 169 initiative “Ambient Assisted Living” there was political interest to improve the National Health System capacities for technology R&D with the industry.

In summary, the influence of the industry in the selection of funding priority areas is obviously not a major determinant for the activities of the NEURON partners. Interestingly, this result is only to some extent correlatable to the general question whether in NEURON joint calls, projects in basic research vs. applied research shall be encouraged.

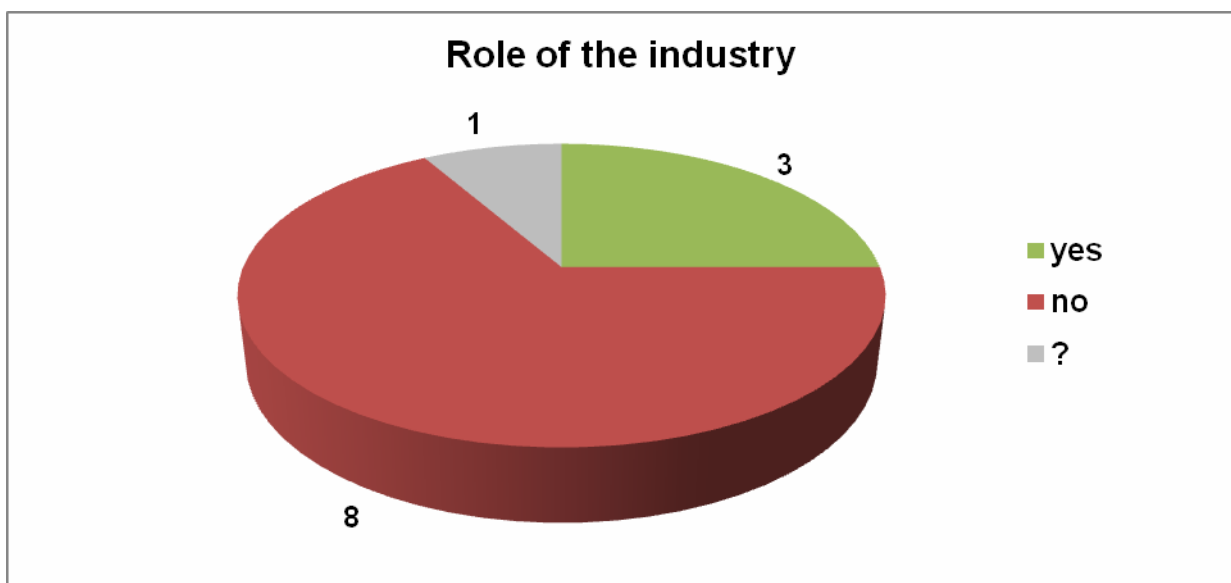


Fig. 5. The role of the industry in the selection of funding priority areas.

➤ Target groups of transnational calls

2.1.3 Are there specific target groups which are addressed by transnational cooperation calls?

Please select from the list below (replace the “O” by “X”).

- | | | |
|----------------------------------|---------------------------|--------------------------|
| 1. Individual Researchers | | |
| 1.1 in general | <input type="radio"/> Yes | <input type="radio"/> No |
| 1.2 young investigators | <input type="radio"/> Yes | <input type="radio"/> No |
| 1.3 female investigators | <input type="radio"/> Yes | <input type="radio"/> No |
| 1.4 others (e.g. minorities,...) | <input type="radio"/> Yes | <input type="radio"/> No |
| 2. Research Units | <input type="radio"/> Yes | <input type="radio"/> No |
| 3. Center-to-Center Cooperations | <input type="radio"/> Yes | <input type="radio"/> No |
| 4. Other | <input type="radio"/> Yes | <input type="radio"/> No |

When launching transnational calls for proposals, what are the specific target groups which shall be addressed? In order to analyse this topic, the NEURON partner organisations were asked to select their primary recipients from **4 main groups** (individual researchers (IR), research units, center-to-center cooperations, and other). The first group was sub-divided into IR’s in general (without further definition), young investigators, female investigators, and others.

The collected answers are summarised in **Table 3**. Not surprisingly, most partners (10 of 12) address **individual researchers** in general and **research units** (several research groups from different countries participating in a joint project). More surprisingly, 8 of 12 partners participate in programmes which specifically approach **young investigators**, which may be regarded as a good percentage. In sharp contrast, only 1 partner (ISCIII) specifically addresses **female investigators** by transnational calls. This may indicate that programmes for female investigators are mainly confined to the national level, if there are any at all. For example, the FWF and BMBF run specific programmes for the support of female researchers, but those are restricted to the national level. Finally, the funding of **center-to-center cooperations** on a transnational level is provided only in France (ANR, CNRS), Germany (BMBF), Finland (AKA), and Romania (ANCS-MECT).

Tab. 3. Target groups addressed by transnational cooperation calls.

Partner	1.1 Individual researchers; IR (general)	1.2 IR-Young investigators	1.3 IR-Female investigators	1.4 IR- Others	2. Research units	3. Center-to-center cooperations	4. Other
FWF (AT)	x	x			x		
AKA (FI)	x	x			x	x	
ANR (FR)	x				x	x	x
CNRS (FR)	x	x		x	x	x	x
BMBF (DE)	x	x			x	x	
CSO-MOH (IL)							
FNR (LU)	x	x			x		
MNiSW (PL)	x	x			x		
ANCS-MECT (RO)					x	x	x
ISCIII (ES)	x	x	x		x		x
MICINN (ES)	x	x			x		
MRC (UK)	x						
Total	10	8	1	1	10	5	4

➤ Selection of specific transnational programmes

2.2.1 and 3.2.1 Please specify the names of existing programmes, web-links (if possible), and the number and the names of partner countries/organisations.

In this part of the questionnaire, the NEURON partners were asked to name and describe up to 3 specific transnational programmes which may be considered as being representative and which may serve as models for “best practices”. The intention was to gather respective information, both from other existing ERA-Nets and from other multi- or bilateral funding cooperations.

In part 2 of the questionnaire, there was no restriction concerning the scientific discipline, as in some organisations no transnational programmes in the neuroscience field may have been conducted before. The focus in part 3 was the description of transnational programmes in the neuroscience field. The data shown here represent a summary of the answers to both of these questions (2.2.1 and 3.2.1).

The list of transnational programmes selected by the partners for detailed description is shown in **Table 4**. First, several ERA-Nets have been included in this list: ERA-Pathogenomics was selected by 4 partners, ERA-Chemistry, ERA-Plant Genomics, and E-RARE by 3 partners, ERA-AGE by 2 partners. This selection does not imply that other partners do not participate in these or other ERA-Nets.

In the field of **neuroscience**, 5 different programmes have been described in more detail. These programmes represent bilateral or trilateral cooperations of funding organisations. For example, the programme NEURO was organised by the Academy of Finland, the Institute of Neuroscience, Mental Health and Addiction (Canada) and National Natural Science Foundation of China (NSFC). One call was launched in 2005, without any further calls being planned. Examples for bilateral cooperations in the field of neurosciences are DISMED, a German-Israeli-Medical research cooperation in neuroscience, and the German-Polish bilateral cooperation in health research with specific focus on neuroscience.

Tab. 4. List of transnational funding programmes selected by the partners for detailed description.

Partner	Programme	Web-link	Neuro science
FWF (AT)	ERA-Chemistry	http://www.erachemistry.net/	
	ERA-Pathogenomics	www.pathogenomics-era.net	
AKA (FI)	NEURO	www.aka.fi/neuro	x
	ADDICTION	www.aka.fi/addiktio	x
	ERA-Plant Genomics	www.erapg.org	
ANR (FR)	E-RARE	http://www.e-rare.eu/cgi-bin/index.php	
	ERA-Pathogenomics	http://www.pathogenomics-era.net	
	ERA-Plant Genomics	http://www.erapg.org	
	EUROTRANS-BIO	http://www.eurotransbio.net/	
CNRS (FR)	SEE-ERA-Net	http://www.see-era.net/	
	Nanosci-ERA	http://www.nanoscience-europe.org/	
	ERA-Chemistry	http://www.erachemistry.net/	
	ATIP Neurobiology	http://www.cnrs.fr/infoslabos/atip/lifeatip.htm	x
BMBF (DE)	DISMED: German-Israeli-Medical research cooperation in neuroscience	http://www.gesundheitsforschung-bmbf.de/de/569.php	x
	DE-PL: German-Polish bilateral cooperation in health research (neuroscience)	http://www.gesundheitsforschung-bmbf.de/en/1326.php	x
	E-RARE	http://www.e-rare.eu/cgi-bin/index.php	
CSO-MOH (IL)	ERA-Pathogenomics	www.pathogenomics-era.net	
	ERA-AGE	http://era-age.group.shef.ac.uk/	
FNR (LU)	ERA-AGE	http://era-age.group.shef.ac.uk/	
	ERA-MATERA	http://projects.tekes.fi/opencms/opencms/Projects/MATERA/frontpage.html	
MNiSW (PL)	ERA-Chemistry	http://www.erachemistry.net/	
	ERA-MATERA	http://projects.tekes.fi/opencms/opencms/Projects/MATERA/frontpage.html	
	MNT-ERA Net	http://www.mnt-era.net/MNT/	
	DE-PL: German-Polish bilateral cooperation in health research (neuroscience)	http://www.gesundheitsforschung-bmbf.de/en/1326.php	x
ANCS-MECT (RO)	Bilateral cooperations	http://www.mct.ro/	
	ERA-Nets	http://www.mct.ro/	
ISCIII (ES)	E-RARE	http://www.e-rare.eu/cgi-bin/index.php	
	ERA-Net PRIOMEDCHILD	http://www.priomedchild.eu/	
	EDCTP-European and Developing Countries Clinical Trials Partnership	http://www.edctp.org/	
MICINN (ES)	ERA-Pathogenomics	www.pathogenomics-era.net	
	ERA-Plant Genomics	www.erapg.org	
	SysMo-Systems Biology of Microorganisms	http://www.sysmo.net/	
MRC (UK)	not indicated	not indicated	

➤ **Transnational programmes: grant size and eligible costs**

2.2.2 and 3.2.2 For each funding instrument, give a description of the average size of grants, of the length of the funding period and the possibility of extension.

2.2.3 and 3.2.3 What are eligible costs (salaries, consumables, equipment, travel,...).

2.2.4 and 3.2.4 Is it possible to fund permanent and/or non-permanent staff? If yes, please specify type of staff (full professors, assistant professors, postdocs, pre-docs, technicians,...)

These 3 questions aimed at creating an overview of the basic features related to the transnational programmes which were selected by the funding organisations for detailed description.

Table 5 displays the compiled data. In order to determine the **average grant sizes** and the **average funding periods**, all available data from the different programmes was summarised and averaged. The average funding period was calculated as 3.27 years. Therefore, a period of 3 years was regarded as the most suitable funding period for the development of the NEURON calls. Usually, an **extension of money** is not possible, only 2 organisations provide such an option.

Referring to the **eligible costs**, basically all partners are able to fund salaries, consumables, equipment, and travel costs. In contrast, only 2 partners (CNRS and FNR) confirm the possibility to fund permanent staff (like full professors) in transnational programmes.

Tab. 5. Average grant sizes, funding periods, and eligible costs of specific transnational programmes selected by the partners for detailed description.

Partner	average grant size* (€per year)	funding period* (years)	extension of money §	eligible costs §					
				salaries	consumables	equipment	travel	permanent staff	non-permanent staff
FWF (AT)	67.000	3	0	1	1	1	1	0	1
AKA (FI)	85.000	4	0	1	1	1	1	0	1
ANR (FR)	100.000	3	0	1	1	1	1	0	1
CNRS (FR)	n.i.	4	n.i.	1	1	1	1	1	1
BMBF (DE)	150.000	3	1	1	1	1	1	0	1
CSO-MOH (IL)	17.000	3	n.i.	n.i.	n.i.	n.i.	n.i.	n.i.	n.i.
FNR (LU)	67.000	3	n.i.	1	1	1	1	1	1
MNiSW (PL)	80.000	3	n.i.	1	1	1	1	n.i.	n.i.
ANCS-MECT (RO)	n.i.	4	n.i.	1	1	1	1	0	1
ISCIll (ES)	n.i.	3	n.i.	1	1	1	1	n.i.	1
MICINN (ES)	55.000	3	1	1	1	1	1	0	1
MRC (UK)	n.i.	n.i.	n.i.	n.i.	n.i.	n.i.	n.i.	n.i.	n.i.
Total	average: 77.625	average: 3.27	2	10	10	10	10	2	9

*Each value is the average across all programmes described by each partner.

§1=yes; 0=no. Note that "1" was selected in cases when at least one of the described programmes offered this possibility.

n.i.: not indicated

➤ **Transnational programmes: proposal processing**

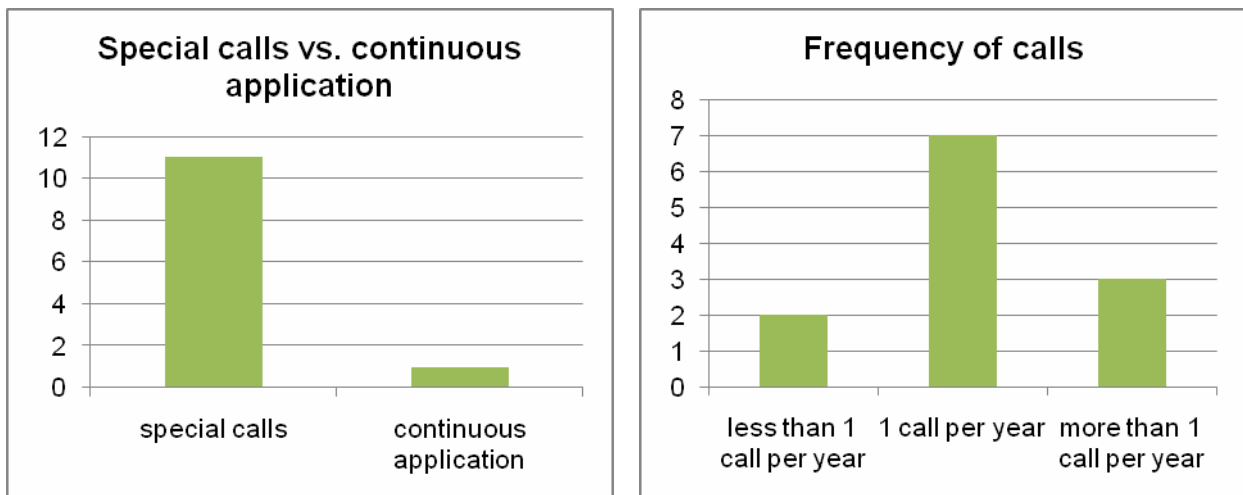
2.3.1 and 3.3.1 Briefly describe the procedure of proposal processing.

- a. Do you have special calls or can funds be applied continuously?**
- b. How many calls do you have per year?
What are the deadlines for the calls?**
- c. Do you have mainly 1-step (full proposal) or 2-step (first: outline proposal, and then: full proposal) procedures concerning proposal processing?**
- d. In what language are the applications required?**
- e. How much time does it take from application to decision?**

The scope of this part of the questionnaire was to gather insight into the general organisation of joint calls, and specific features of the **application procedure**, as worked out by selected transnational programmes.

Note that the maximum number of hits per item is 11 for the following figures, as no data was available from the MRC (UK), here.

To a major extent, projects have to be submitted at fixed deadlines in transnational cooperation calls, there are only very special examples which allow submission throughout the year (**Fig. 8**). On average, transnational programmes launch 1 joint call per year (**Fig. 9**).

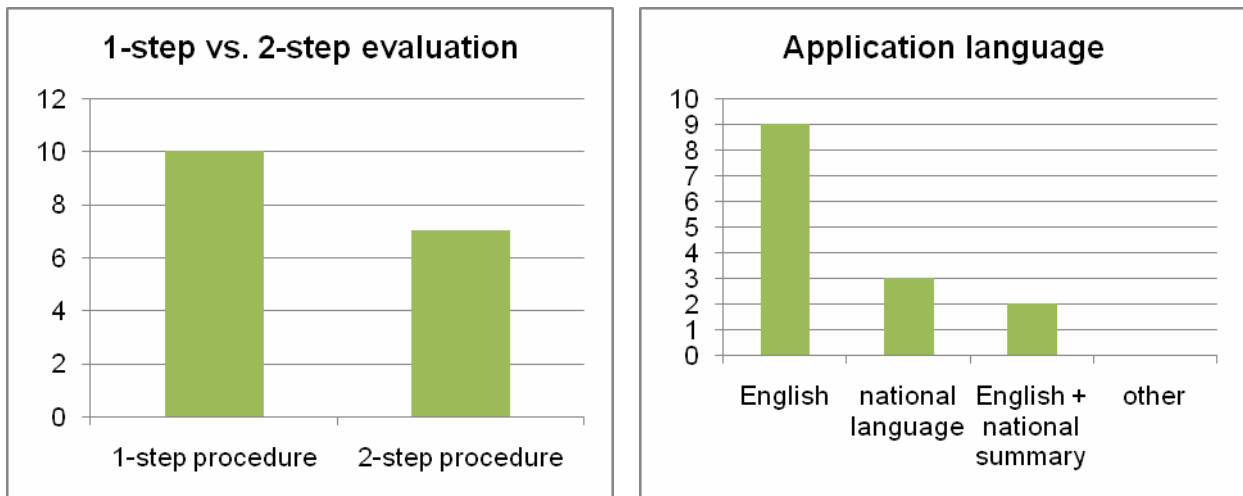


Figs. 8 (left) and 9 (right). Details of proposal processing in selected transnational programmes. The total numbers of NEURON partners per individual option are indicated.

Fig. 8. Organisation of special calls with fixed deadlines compared to continuous application without deadlines. **Fig. 9.** Frequency of calls launched per transnational programme.

One of the major questions when organising a joint call addresses the point whether a **1-step or a 2-step evaluation procedure** shall be applied. In the latter option, applicants first submit a concise outline proposal which undergoes peer-review. Based on the results of this evaluation, the respective consortium is asked to submit a full proposal, or not. Advantages of this procedure are the reduced workload for the applicants, at least for those which are not asked to proceed to the full proposal stage. Second, the pre-proposals can be efficiently filtered in order to significantly reduce the number of full proposals, thereby reducing the workload for the reviewers. On the other hand, the 1-step procedure (full proposals only) is less time-consuming.

In the transnational programmes selected by the NEURON partners, the 1-step procedures are slightly favoured over the 2-step procedures (10 to 7; **Fig. 10**). Obviously, both types have been used and there seems to be no general rejection of one of them.



Figs. 10 (left) and 11 (right). Details of proposal processing in selected transnational programmes. The total numbers of NEURON partners per individual option are indicated.

Fig. 10. Utilisation of 1-step (full proposal only) versus 2-step (outline proposal and full proposal) evaluation procedures. **Fig. 11.** Languages used for applications.

In transnational programmes, English is the most common language prescribed for the application texts (**Fig. 11**). Some organisations demand the text to be written in the national language, whereas others require a project summary to be submitted in addition to the English text.

The time period which is needed to process the proposals from application date to the final decision is usually between 6 and 12 months (**Fig. 12**). Only in selected programmes, this period can be reduced to less than 6 months.

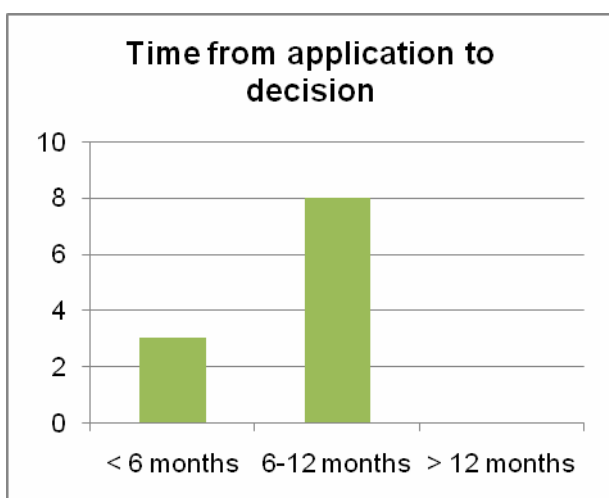


Fig. 12. Details of proposal processing in selected transnational programmes. Analysis of the average time period needed from the submission of the application until the final decision. The total numbers of NEURON partners per individual option are indicated.

➤ **Transnational programmes: evaluation procedure**

2.3.2 and 3.3.2 Briefly describe the evaluation procedure. What are the evaluation criteria?

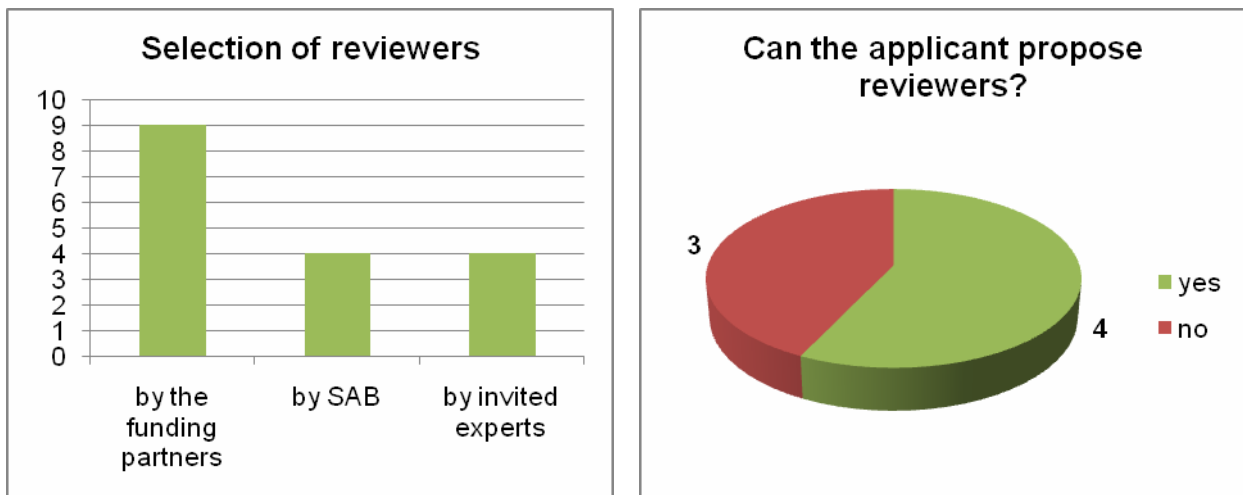
- a. Is there a scientific peer review for the applications?**
- b. How are the reviewers chosen?
Who chooses them?
Can the applicant propose reviewers?**
- c. Is there a fixed or variable pool of reviewers?**
- d. Are the reviewers paid for the evaluation and how much?**
- e. What are the evaluation criteria?**

Obviously, one of the major challenges when developing a joint transnational call is the organisation of the evaluation procedure. For this purpose, it was essential to gain an overview of the experiences and the specific procedures developed by the different funding organisations with respect to this topic.

Note that the maximum number of hits per item is 11 for the following figures, as no data was available from the MRC (UK), here.

The **selection of the reviewers** is mostly performed by the scientific officers of the funding organisations themselves (**Fig. 13**). In contrast, approx. a third of the partners forward this responsibility to the members of a scientific advisory board (SAB) which had been preinstalled by the respective steering committee or to external experts specifically invited for this task.

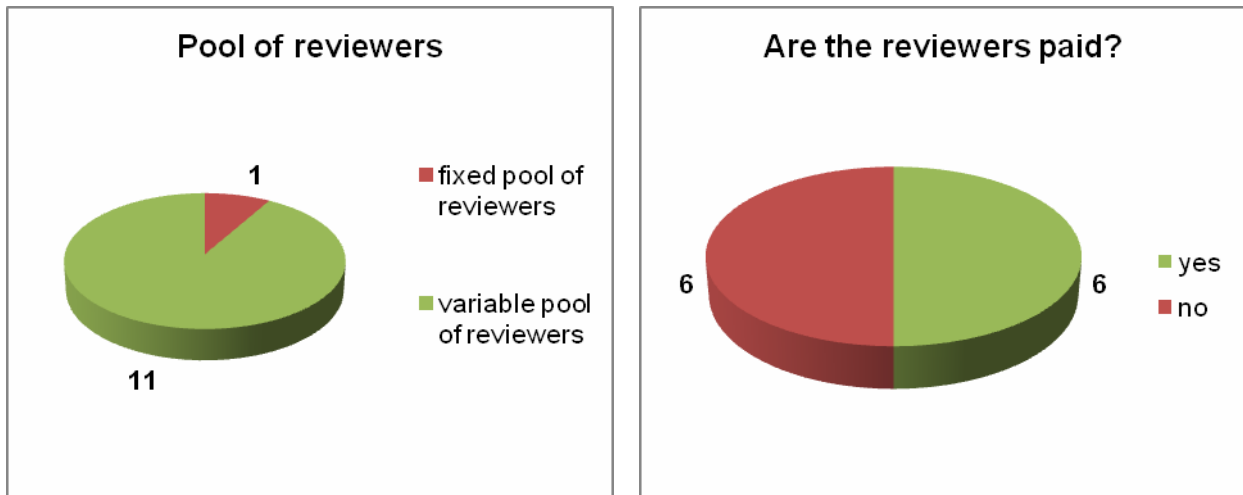
The possibility for the applicant to propose reviewers (irrespective of their de facto utilisation for the review process) is provided by 4 partners (**Fig. 14**).



Figs. 13 (left) and 14 (right). Details of the evaluation procedure in selected transnational programmes. The total numbers of NEURON partners per individual option are indicated.

Fig. 13. Comparison of who selects the reviewers for the evaluation in transnational calls: the scientific officers of the funding organisations, members of the Scientific Advisory Board (SAB), or experts specifically invited for this task.

Fig. 14. The possibility for the applicant to propose reviewers (irrespective of their de facto utilisation for the review process).



Figs. 15 (left) and 16 (right). Details of the evaluation procedure in selected transnational programmes. The total numbers of NEURON partners per individual option are indicated.

Fig. 15. Utilisation of fixed vs. variable pools of reviewers for the evaluation procedure.

Fig. 16. Payment of the reviewers for their work.

The vast majority of funding organisations used **variable pools of reviewers** for the organisation of each individual evaluation process, only CNRS (FR) used both fixed and variable pools (**Fig. 15**). Still, the utilisation of a fixed pool was only mentioned for one programme (ATIP Neurobiology from molecular to cognitive neurosciences) and even in this case the fixed pool is complemented by a variable pool responsible for specific topics.

In half of the programmes described, the reviewers get paid for their work (**Fig. 16**). The values range from € 25 to € 90 for reviewing individual applications and from € 200 to € 500 for the evaluation of project consortia.

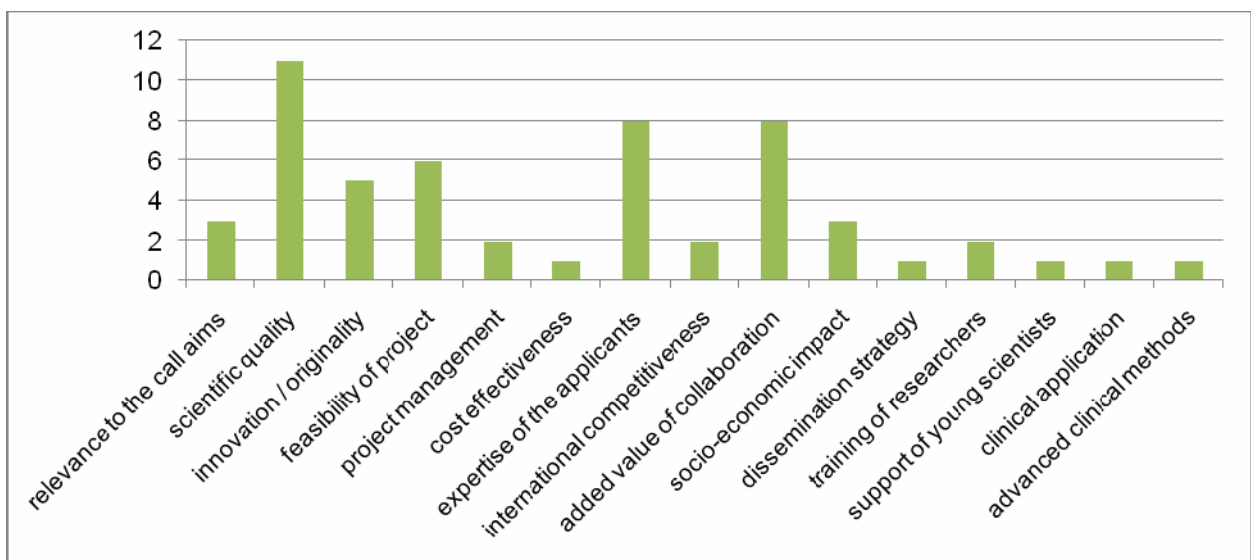


Fig. 17. Details of the evaluation procedure in selected transnational programmes. List of evaluation criteria mentioned by the NEURON partners to be used for the evaluation of transnational proposals. The total numbers of NEURON partners per individual option are indicated.

Another crucial task when organising a joint call is the **selection of review criteria** which the reviewers shall refer to in their statements. Therefore, the NEURON partners were asked to list the review criteria which were used for the selected transnational joint calls. The compiled data is shown in **Fig. 17**.

One single criterion, the **scientific quality** of the application, was mentioned in all of the filled questionnaires. Corresponding to the nature of a joint transnational application, another important factor to evaluate is the **added value of the collaboration** (cited by 8 of 11 partners), meaning to differentiate between true and artificial research networks. The **scientific expertise** of the applicants received the same number of hits.

On the other hand, some of the criteria were cited less frequently than initially expected. Surprisingly, only 3 partners mentioned the **relevance** of the project **to the aims of the call** as important criterion. The **international competitiveness** of the application was listed by only 2 partners, which may be partially explained by the overlap with the expertise of the applicants, although the latter explicitly addresses the quality of human resources. Also surprisingly for funding organisations, which usually administrate tax payers money, the criteria of **project management** and especially **cost effectiveness** were cited only 2 and 1 times, respectively.

Certain sub-groups of criteria were mentioned only by specific funding organisations, maybe revealing core themes of their funding philosophies. For example, the aspect of **training of researchers** was cited by AKA (FI) and FWF (AT). Interestingly, the **involvement of young scientists** was a specific criterion for certain programmes, described by the BMBF (DE). Finally, the **clinical relevance** and the contribution to clinical application, as well as the employment of state-of-the-art methods and advanced technologies in clinical research was again listed by the BMBF as important criterion.

➤ Transnational programmes: decision-making process

2.3.3 and 3.3.3 What kind of decision-making process does your organisation have for these funding instruments?

- a. Who decides on funding and how is this process organised?**
- b. What kind of feedback does the applicant receive from the evaluation and decision-making?**

In general, there are several strategies to organise the decision-making process in joint transnational calls. Normally, as the first step, remote experts are asked to formulate written reviews about a certain number of joint applications, based on the review criteria defined by the consortium of funding organisations.

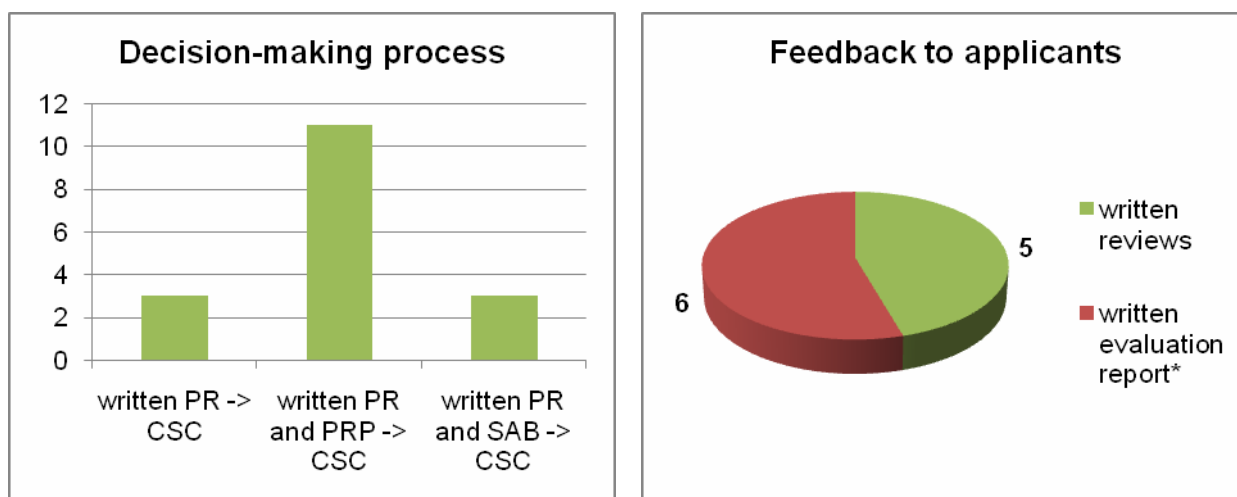
Concerning the follow-up procedure, the NEURON partners described **3 different options** in this part of the questionnaire, summarised in **Fig. 18**.

All of the NEURON partners selected the option “**written PR and PRP -> CSC**”, which means that in addition to requesting the written peer reviews (PR), a peer-review-panel meeting (PRP) is organised, where the applications can be discussed and compared at the round table. The ranking list which is generated by the PRP is then forwarded to the Call Steering Committee (CSC), which usually is composed of scientific officers as representatives of the funding organisations.

The option “**written PR -> CSC**” was selected by 3 partners. In this procedure, the decision is solely based on the written reviews, without organising a panel meeting. Naturally, the influence of the CSC on the decision-making process is higher, as it is the task of the CSC to compare the applications and to create the final ranking list.

Finally, the option “**written PR and SAB -> CSC**” was again selected by 3 partners. In this procedure, the Scientific Advisory Board, a board of experts in the field which usually was installed prior to organising the joint call, takes over the tasks of the PRP. The potential disadvantage here is the fact that (normally) none of the reviewers who have produced the written evaluations are present in this SAB. This situation, on the other hand, may also have positive effects, as there is no possibility that certain reviewers are positively biased towards their “own” applications.

With respect to the **feedback** that the applicant may receive from the evaluation and decision-making procedure, the NEURON partners mentioned 2 principal types of: either the complete written reviews are forwarded to the applicants or a written evaluation report is first created by the scientific officer and then sent to the applicant. Both options were almost equally selected by the NEURON partner organisations (**Fig. 19**). ***Note** that this answer summarises reports of different detailedness, ranging from elaborate reports with detailed recommendations to a few short comments.



Figs. 18 (left) and 19 (right). Details of the decision-making process in selected transnational programmes.

Fig. 18. see text for details; PR: Peer-Review; PRP: Peer-Review-Panel; SAB: Scientific Advisory Board; CSC: Call Steering Committee.

Fig. 19. Comparison of 2 kinds of feedback that the applicant can receive from the evaluation and decision-making procedure; see text for details.

The total numbers of NEURON partners per individual option are indicated.

Note that the maximum number of hits per item is 11 for these figures, as no data was available from the MRC (UK), here.

➤ Transnational programmes: project monitoring

2.3.4 and 3.3.4 How are the final results (or the outcomes of the research) processed and evaluated?

The topic of monitoring is, in general, one of those where the amount of data available seems to be limited. This may, in part, be due to the fact that the runtime of many ERA-Nets is too short in order to analyse respective experiences. On the other hand, it seems that this topic addresses questions which still have the potential of being further developed. The detailed features of project monitoring could fill a complete questionnaire. The scope of this survey here was simply to analyse the basic question whether project monitoring takes place on the **national level** of the individual funding organisations, or on the **level of the transnational programme**, or on both.

The compiled answers of the NEURON partners are shown in **Fig. 20**. As expected, all partners declared that the project leaders are asked to submit (at least) end-reports to the national funding organisation after the project runtime. Some partners also request interim reports at certain stages of the project runtime.

In sharp contrast, only 2 partners mentioned transnational programmes which do request reports from the project leaders to the consortium of the funding bodies. One of the examples mentioned was the **ERA-Net Nanoscience**, which asked the project coordinators of the first call to present their data in a mid-term conference, which was also attended by reviewers. Thus, there was no request for a written report but for an oral presentation. Of course, this example is definitely not the only one related to this question and it was beyond the scope of this survey to get a comprehensive list of monitoring activities.

Taken together, it seems that the topic of project monitoring, especially on the level of the networks of the funding organisations, is still underdeveloped. Future discussions will be needed to address this matter in a comprehensive way.

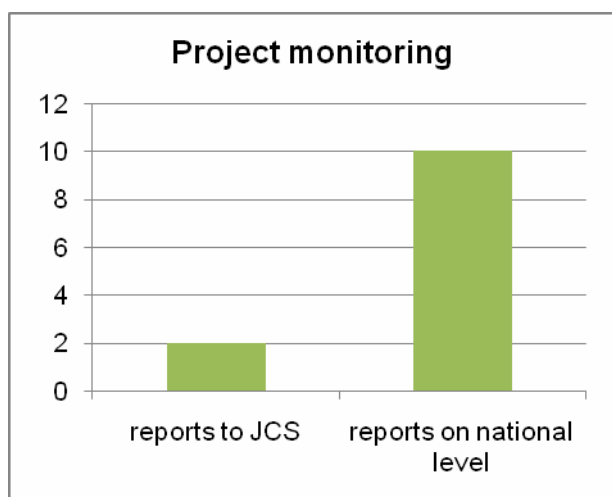


Fig 20. Comparison of 2 general types of project monitoring: reports to the Joint Call Secretariat (JCS; being representative for all structures built in common by the funding partners of a transnational programme), vs. reports which are requested solely on the national level by the national funding organisation.

The total numbers of NEURON partners per individual option are indicated.

Note that the maximum number of hits per item is 10 for this figure, as no data was available from the MRC (UK), and from ANR (FR) here.

Acknowledgement

I want to thank my colleagues of the ERA-Net NEURON and also my colleagues at the FWF for support in the creative process of developing the questionnaire “Transnational funding activities in the NEURON area”.

In addition, I would like to thank all colleagues from different funding organisations for supporting me with their data, namely, Mika Tirronen (AKA, FI), Veronique Briquet-Laugier and Patrick Chaussepied (ANR, FR), Anne-Laure Rey and Bernard Bioulac (CNRS, FR), Marianne Kordel-Boedigheimer (PT-DLR representing BMBF, DE), Nava Levine and Benny Leshem (CSO-MOH, IL), Frank Glod (FNR, LU), Marta Oseka (MNiSW, PL), Olguta Iordache (ANCS-MECT, RO), Rafael De Andres Medina (ISCIII, ES), Julio Barbas (MICINN, ES), and Graham Cadwallader (MRC, UK).

My special thanks to Marlies Dorlöchter (PT-DLR representing BMBF, DE) for carefully reading the manuscript and suggesting many constructive modifications.