ESF Member Organisation Forum on
"Indicators of Internationalisation"
3rd Workshop, SNSF, Wildhainweg 21
Bern, Switzerland
7-8 November 2011

MINUTES

I Presentations

All the presentations can be founded under: http://www.esf.org/activities/mo-fora/evaluation-indicators-of-internationalisation.html

Annamaria Inzelt (IKU, Budapest): Update of the ESF MO Forum on Indicators of Internationalisation
In the plenary session common with the Evaluation of Publicly Funded Research Forum, Annamaria Inzelt summarized the findings of the experts about the study for Research Funding Organisations (rationales for developing Indicators of Internationalisation, specific questions of the Funding organisations...) . She also underlined the relevance of this bottom-up process starting from users need and the value of the interactive process between indicators users and indicators designers which has been chosen by the forum.
Annamaria also presented the work achieved since the Paris forum

- templates with a short description of the indicators selected in Paris have been prepared by the experts. Empty columns were to be filled in by MOs with i) interest for each indicator and use, ii) the feasibility of data collection and source of data,
- templates were sent by MOs (10 contributions received, despite the short time to prepare them) and analysed by the experts during a working session (Rome, September 12th), resulting in a first classification of the indicators regarding their feasibility and availability of the data, and the selection of 3 indicators for a first test of availability and comparability of data,
- collection of data for 6 indicators by MOs (3 for Funding Organisations, 3 for Performing Organizations) and analysis by the experts. (8 contributions arrived.)

II Organisation of the session specific to Internationalisation Indicators Forum

The session for the Indicators Forum has been organised in 2 successive parts:

- the first one on the indicators for Funding Organisations, introduced by Annamaria Inzelt,
- the second one on the indicators for Performing Organisations introduced by Peter van den Besselaar.

The experts presented the properties of the data provided by the MOs and the difficulties which had been reported by MOs or observed by them. They proposed further developments with indicators. During the discussion, clarifications were given and decisions were made about the indicators to keep in the study. This is described in the next section.

Annamaria Inzelt: Selecting relevant indicators for Funding Agencies (presentation on the ESF mo-fora Web site)

Peter van den Besselaar: Internationalisation Indicators: research Performing Organisations (presentation on the ESF mo-fora Web site)

III Results of the session: selected indicators for Funding Organisations

Six indicators have finally been selected. For 4 of them (F1, F2, F3, F6) the source of data is the organisation. Therefore MOs are asked to provide figures for these 4 indicators when data is available.
For 2 other indicators (F4, F5) the source is an international database and the experts will test their feasibility.
These data and their analysis by the experts will then allow to confirm the choice of the indicators and to set the recommendations of the forum to develop and produce indicators of internationalisation for research funding organizations.
Two other indicators (F7 and F8) have been left aside and considered as *blue sky indicators*: as the objective for using such indicators is clear, the definition of the indicators and of the data to collect needs more work which is not possible in this forum.
Indications for preparing data are in re.

Code	F1
Indicator	Budget for Joint research Programmes (JRP)
Measure	• Amount of financial resources for JRP • Total budget of the organisation
Type of breakdown	• By field of science using OECD 6 large fields (with a possibility to break Natural Sciences into 2 to separate Biological sciences (1.5) from the others) • By country • By year of funding decision, that is not splitting the approved budget between the years when it is paid[1] • By type of programme: i) programme co-developped [2] with a foreign organisation, ii) own or national programmes requiring international collaboration of applicants
Data expected for January 2012	Confirm the data already sent or send some data (data for 2010 + historical data if available) Give the list of the type of programmes included with a short explanation if necessary [3] Comment on the availability of collecting the data for type ii) programmes
Comments	• As the funds are broken by scientific field, there would be big differences between years and scientific fields, • For these 2 reasons, calculating a moving average would be relevant.

Code	F2
Indicator	Budget for attracting researchers from abroad
Measure	• Amount of financial resources for attracting researchers from abroad. • Total budget of the organisation

[1] It was considered as the most relevant option and the easiest to record (though this is not true for FWF, where collecting the year of paying is easier)
[2] Definition of JP: two or more organisations develop, launch and manage together a program. Common source is not a criteria for joint programming because matching funds are also can facilitate joint programmes.
[3] You may confirm or extend AKA's list: ERA-NET calls, Article 185 projects, ESF Eurocores calls, Joint calls for projects based on bilateral agreements, Nordic Center of Excellence programmes (Nordforsk), Nordic Top-level Initiative (Nordforsk)

Type of breakdown	• By field of science (OECD 6 large fields + 1.5) • By country of origin (ie country of the previous institution the researchers were working at) • By year of funding decision, not splitting the approved budget between the years when it is paid)[4] • By type of programmes: i) programmes dedicated to attract researchers ii) more general programmes including the possibility to use part of the funds for attracting researchers from abroad)
Data expected for January 2012	Confirm the data already sent or send some data Comment on the 2 types of programmes and the availability of the figures for type ii)
Comments	• A choice between *foreign researchers* or *researchers working abroad and coming* (maybe back) in the country was done and we selected the second[5] • Variability between year / fields would deserve a moving average indicator • It may be impossible to identify the budget to attract researchers in type ii) programmes (general). If this is confirmed, we may have to keep only the programmes dedicated to attracting researchers

Code	F3
Indicator	Evaluation
Measure	• % of reviewers and panelists from abroad among all reviewers and panelists[6] involved in ex ante selection of research proposals[7]
Type of breakdown	• By the country of the institution there are employed by • By field of science (OECD 6 large fields + 1.5) • By year
Data expected for January 2012	Confirm the data already sent or send some data
Comments	Some organisations have difficulties to have 2 separate counts (reviewers / panelists partly because the same researchers are acting as reviewers and as panelists. Others may want to show that the ratios are very different for reviewers and for panelists.

Code	F4
Indicator	International co-authored papers
Objectives	*Measure the internationalisation of researchers funded as a proxi for the impact of funding on the internalisation of national researchers and performing organisations*

[4] It was considered as the most relevant option and the easiest to record (though this is not true for FWF, where collecting the year of paying is easier)

[5] In the HRM indicators and questions it is also the incoming researchers who are counted (see question MOB-OBS-MS1 and MS2 in Deloite EC -DGR *Monitor human resources policies and practices in research List of Indicators*)

[6] A reviewer receives the documents and sends back his /her evaluation report; panelists work together and the panel generally provides a decision or a ranking of candidates

[7] We do not include other evaluation as evaluation of research fields, or of specific funding schemes

Measure	• Number of published papers with reference to the funding organisation and with one or more addresses abroad • Number of published papers with reference to the funding organisation and with non foreign address • Number of papers with one or more addresses abroad published in the country • Number of papers with no foreign address published in the country)
Type of breakdown	• By field of science (WoS subject categories or WoS large disciplines) • By the country of foreign address • By year
Data expected for January 2012	**No data expected from the MOs**. The experts will achieve a pilot study to see which useful information is available in WoS
Comments	• The attribution issue can be solved when funders ask the researchers to acknowledge the source of funds, when researchers do it and when it is correctly recorded in the database. The pilot study will answer to these questions • Time lag issue: Papers will be recorded the year they are published. The objective is not to follow the publications associated to a programme, but to measure how internationalised are funded researchers • Breaking down by country should be at least between European / non European as a minimum criterion

Code	F5
Indicator	International co-patenting
Measure	• Number of patents resulting from research funded by the organisation where one or more inventors has an affiliation abroad • Number of patents resulting from research funded by the organisation
Type of breakdown	• By the country of address • By year
Blue sky indicator	**No data expected from the MOs**. The experts will achieve a pilot study to see if enough information is available in international databases to calculate a proxy of this indicator.
Comments	• Though some organisations are not (yet) interested in this indicator, following this type of output of funded research is relevant • The issue of recording the inventor or the owner or the applicant is to be further examined • Attribution could be searched in the references of the patent, provided that the origin of funds is acknowledged.

Code	F6
Indicator	International Mobility
Measure	• Number of researchers whose mobility from abroad to a national institution whose mobility has been funded by the organisation • Number of researchers whose mobility from a national institution to an institution located abroad whose mobility has been funded by the organisation

Type of breakdown	• By direction of mobility • By type of mobility i) temporary mobility (2 weeks to 3 months length), ii) mobility (for 3 months and more) • By country of the institution they were previously working at before arriving (for incoming mobility) • By country of destination (for outgoing mobility) • By year (moves that happened at a point of time in the year) • By type of programmes i) programme dedicated to mobility, ii) more general programmes including the possibility to use a part to fund mobility
Data expected for January 2012	Provide figures for the available data (year 2010 + historical data if easily available) Comment on the feasibility of breakdown Comment on whether mobility funded through general programmes is traceable or not
Comments	As for indicator F2, it may be impossible to identify the mobilities funded through general programmes. If this is confirmed, will only count the mobilities funded by specific mobility programmes (for example fellowship programmes)

Title	F7
Indicator	Openness of programmes
Objective	*This indicator should provide information on the openness of programmes*
Blue sky indicator	It will not be developed in this forum

Title	F8
Indicator	Budget spending abroad
Measure	Amount of funds paid to researchers and research groups working abroad
Type of breakdown	• By country • by fields of science
Blue sky indicator	It will not be developed in this forum

IV Results of the session: selected indicators for Performing Organisations

Nine indicators have finally been selected. For 7 of them (P1 to P5, P7 and P8) the source of data is the organisation. For the bibliometric indicator (P6) the organisations are suggested to use the bibliometry tool they usually refer to.
MOs are asked to provide figures for these 8 indicators when data is available. For indicator P9 (International use of own infrastructures), MOs are expected to choose a small number of infrastructures and to suggest a measure of their use by foreign researchers.
These data and their analysis by the experts will then allow to confirm the choice of the indicators and to set the recommendations of the forum to develop and produce indicators of internationalisation for research performing organizations.

Code	P1
Indicator	Evaluation: Reviewers and panelists from abroad involved in ex post research evaluation
Measure	• Number of reviewers and panelists[8] from abroad involved in ex post evaluation • Total number of reviewers and panelists involved in ex post evaluation (denominator)
Type of breakdown	• By level of evaluation: persons, research units or divisions, whole organisation • By field on science (OECD 6 main fields + 5.1) • By country of the institution they are employed by • By year
Data expected for January 2012	Confirm the data already sent or send some data Comment on the feasibility of breakdown
Comments	The choice was made to consider reviewers and panelists working abroad and therefore leave out foreign reviewers and panelists working in the country.

Code	P2
Indicator	Recruitment of researchers from abroad
Measure	• Number of researchers recruited from abroad • Total number of researchers recruited by the organisation (denominator)
Type of breakdown	• By type (4 types: permanent / PhD student / post-doc / other non permanent) • By field of science (OECD 6 main fields + 5.1) • By country of the institution they were previously working at before arriving • By year
Data expected for January 2012	Confirm the data already sent or send some data Comment on the feasibility of breakdown
Comments	• Only the recruitment of PhD students *employed* by the organisation is considered (the general case is a recruitment by a University) • Fore permanent researchers, breaking down by position may be relevant, but the definition of the different levels is not common to all organisations. For the moment, we decided to merge the different levels of permanent staff.

Code	P3
Indicator	Recruitment committees
Measure	• Number of members in the recruitment committees who are working abroad • Total number of members in the recruitment committees (denominator)
Type of breakdown	• By type (4 types: permanent / PhD student / post-doc / other non permanent) • By field of science (OECD 6 main fields + 5.1) • By country of origin • By year

[8] A reviewer receives the documents and sends back his /her evaluation report; panelists work together and the panel generally provides a decision or a ranking of candidates

Data expected for January 2012	Confirm the data already sent (check the foreign status of members included in the figures) or send some data
Comments	• The indicator counts committee members *working abroad* instead of committee members with a *foreign nationality.* **Therefore, local foreigners are not counted** • For some organisations (INRA for example), only committees for permanent recruitment will be available • For permanent researchers, breaking down by position may be relevant, but the definition of the different levels (recruited by each committee) is not common to all organisations. For the moment, we decided to merge the different levels for permanent staff recruitment.

Code	P4
Indicator	Foreign staff
Measure	• Number of foreign **permanent** researchers of the organisation • Total number of permanent researchers of the organisation (denominator)
Type of breakdown	• By field of science (OECD 6 main fields + 5.1) • By nationality • Present staff (year N) and staff for years N-5 and N-10
Data expected for January 2012	Send some data
Comments	• This indicator is related to the stock while P2 measures the flow. • It counts researchers with a *foreign nationality*. The choice here is different from P2 and P5 because the information of the workplace preceding the recruitment is often not available any more in HR databases is not fully relevant after some time • Here again we did not keep a breakdown by position (also because researchers who were recruited in a position may have a promotion afterwards)

Code	P5
Indicator	International Mobility
Measure	• Number of researchers from a foreign organisation who came to the organisation • Number of researchers from the organisation who went to a foreign organisation
Type of breakdown	• By field of science (OECD 6 main fields + 5.1) • By country of origin / destination • By type of mobility i) temporary mobility (2 weeks to 3 months length), ii) mobility (3 months and more) • By status (permanent, PhD student, post-doc, other non permanent) • By year
Data expected for January 2012	Send some data Comment of those mobilities which are traceable by the central administrative level Comment on breakdown

Comments	• For the outgoing mobility, only those who are paid by the organisation may be known (ie leaving researchers will escape to the counting) • These counts include the researchers counted in indicator P2.

Code	P6
Indicator	International co-authored papers
Measure	• Number of papers published by researchers from the organisation which also have at least one signature from abroad • Total number of papers from the organisation (denominator for the preceding) • Number of foreign author addresses in the papers from the organisation • Total number of addresses in the papers from the organisation (denominator for the preceding)
Type of breakdown	• By Thomson Subject categories or by larger categories depending on the organisation rules • By country • By year
Data expected for January 2012	Send some figures extracted from WoS or Scopus
Comments	• Database is WoS or other database • Integer counts are preferred to fractional counts because we want to count the proportion of foreign signatures not the parts (partial counts) of papers attributed to foreign authors addresses • The denominator is the one MO use (not that we sent in the template in June 2011)

Code	P7
Indicator	Budget coming from abroad
Measure	• Financial resources coming from abroad • Total budget of the organization (denominator)
Type of breakdown	• By fields of science (OECD 6 main fields + 1.5) • By country (including an item EU for EU funds) • By year
Data expected for January 2012	Send some figures for year 2010 + historical data if easily available

Code	P8
Indicator	Budget for Joint research programmes or projects (JRPP)
Measure	• Financial resources for JRPP: marginal costs • Financial resources for JRPP: full costs • Total budget of the organisation (denominator)
Type of breakdown	• By field of science (OECD 6 main fields + 5.1) • By country • By year
Data expected for January 2012	Send some figures Comment on the feasibility of full costs

Comments	• Joint Research Programme: Two or more organisations develop, launch and manage together a program. Common source is not a criteria for joint programming. Matching funds are also can facilitate joint programmes. Programmes where the institution pays all the costs may also be counted here (as programmes with developing countries) • Joint Research Project: Two or more RPOs in different countries are jointly conducting a certain research program for the mutual benefit of the parties. At least one of the programme functions (management, calls, project selection, funding) is shared between more than a single country (or by regions belonging to more than one country) • The issue of *marginal* versus *total* costs is tricky. As salaries for non permanent researchers are often part of the programme budget, it is desirable to include all salaries. But this relies of information which is (at least presently) much more difficult to collect

Code	P9
Indicator	International users of own infrastructures
Objective	The objective is to measure the openness of own infrastructures and of infrastructures co-owned with other national organisations. The measure has to be specific to each type of infrastructure
Type of breakdown	• By main scientific domain • For each main scientific domain, by category Main scientific domains and categories are taken from the *European Portal on Research Infrastructures services* www.riportal.eu/public/index.cfm?fuseaction=ri.search
Data expected for mid-January 2012	Blue sky indicator. It will not be developed in this forum. However examples of measures of the international use for some infrastructures owned by the organisation will be collected. Choose preferably infrastructures included in the *European Portal on Research Infrastructures services* and suggest a measure which is feasible for these specific infrastructures

V Next steps and time line

Valerio Vercesi (INFN): Progress report and action plan (presentation on the ESF mo-fora Web site)

Time line

Scientific paper on FAS by December 2011
Data handed to the chairs and experts: **mid-January 2012**
Feedback and questions by February
Meeting experts in **February 2012:** data analysis and table of contents of report
First draft of the report **May**

- Introduction
- Framework
- Scientific paper on FAs
- Scientific paper on RPOs
- Details on the different indicators

Next workshop:

Host: The research Council of Norway
Location: Oslo, Norway
Date: 07-08 May 2012