



ERA-MIN 2

RESEARCH & INNOVATION PROGRAMME ON RAW MATERIALS
TO FOSTER CIRCULAR ECONOMY

Acronym: ERA-MIN 2

Title: Implement a European-wide coordination of research and innovation programs on raw materials to strengthen the industry competitiveness and the shift to a circular economy

Grant Agreement number: 730238

Funding scheme: ERA-NET COFUND

Start date: 1st December 2016

Duration: 60 months

DELIVERABLE D3.1

LIST OF SCIENTIFIC EVALUATION BOARD MEMBERS

WP 3: Evaluation and proposal selection for the co-funded call

Task 3.1: Selection of the Scientific Evaluation Board

Task Leader: ANR

Lead beneficiary: ANR

Type: Report

Dissemination level: Public

Author(s): Massimiliano Picciani, Olivier Spalla

Due date: Month 15

Actual submission date: M17



ERA-MIN 2 comprises a progressive, pan-European network of 21 public research funding organisations from 18 countries/regions (Argentina, Belgium-Flanders, Brazil, Chile, Finland, France, Germany, Ireland, Italy, Poland, Portugal, Romania, Slovenia, South Africa, Spain, Spain-Castilla y León, Sweden and Turkey).

Built on the experience of the EU project ERA-MIN (2011-2015), **ERA-MIN 2** aims to enhance and strengthen the coordination of research and innovation programmes in the field of non-energy, non-agricultural raw materials (construction, industrial and metallic minerals) to support the European Innovation Partnership on Raw Materials, the EU Raw Materials Initiative and further develop the raw materials sector, in Europe and globally, through funding of transnational research and innovation (R&I) activities.

ERA-MIN 2 will support demand driven research on primary and secondary resources, and substitution of critical raw materials under a circular economy approach, to give the opportunity to the R&I community to apply to world-wide coordinated funding, gaining access to leading knowledge and new markets, while reducing fragmentation of R&I funding across Europe and globally. This will be achieved through one EU co-funded call for R&I proposals in 2017 and two additional calls, in 2018 and in 2019, designed and developed specifically for the non-energy, non-agricultural raw materials sector.

Publishable summary:

The present report resumes the activities done for the Task 3.1 – *Selection of the Scientific Evaluation Board*, in the framework of the Work Package 3 - *Evaluation and proposal selection for the co-funded call*, for the Joint Call 2017 of ERA-MIN 2.

This task was aimed at identifying the international experts who would assess pre-proposals and full-proposals submitted in the scope of the ERA-MIN Joint Call 2017. Statistics on the composition of the Scientific Evaluation Board (SEB) are presented.

Note: the disclosed information regarding the names of the SEB members and the external reviewers was duly consented before the publication of the present document.

Content

| | | |
|-----|--|----|
| 1 | Introduction | 4 |
| 2 | Scientific Evaluation Board Composition | 5 |
| 2.1 | Proposal of SEB members by the ERA-MIN 2 partners | 5 |
| 2.2 | SEB composition in stage 1 evaluation (pre-proposals)..... | 6 |
| 2.3 | SEB composition in stage 2 evaluation (full-proposals) | 8 |
| 2.4 | External Reviewers | 10 |
| 3 | Statistics on the SEB composition and the external reviewers pool..... | 13 |
| 4 | Conclusions | 15 |



1 INTRODUCTION

The main objective of the Task 3.1 was the selection of the members of the Scientific Evaluation Board (SEB) who would scientifically assess the proposals submitted in both stages of the ERA-MIN 2017 Joint Call: Stage 1 – pre-proposals submission and Stage 2: full-proposals submission. This task was part of the Work Package 3 - *Evaluation and proposal selection for the co-funded call*.

The co-task leaders were three funding organisations: ANR, MINECO and MIZS.

In the Description of Action (DoA), Annex 1 of the ERA-MIN 2 Grant Agreement, the following requirements for the SEB were specified:

- 1) To be composed of 10 to 30 members from the EU or the rest of the world, nominated by the Call Steering Committee (CSC) considering the advice of the Advisory Board;
- 2) The members had to be selected taking into consideration their impartiality, the fact that were free from conflicts of interests and were under confidentiality agreements in accordance with the relevant Horizon 2020 guidance.

The Joint Call Secretariat (JCS) endured all possible efforts to obtain an equal representation of academic institutions and industrial companies as well as to respect gender equity among the SEB members.

In an initial phase of the SEB composition, a large list of experts was collected with the propositions from all the research funding organisations (RFO), which are the ERA-MIN 2 partners and members of the CSC, and from the Advisory Board. The SEB members were thus selected following a voting process by all the CSC members, including the selection of the SEB Chair and Vice-chair, whom had the responsibility to report on the overall evaluation process.

The remaining experts from the list were considered as a first reservoir in case of difficulties in both stages of the evaluation, such as last minute withdrawals or reported potential conflict of interests.

2 SCIENTIFIC EVALUATION BOARD COMPOSITION

2.1 PROPOSAL OF SEB MEMBERS BY THE ERA-MIN 2 PARTNERS

In order to compose a SEB that fulfils the DoA requirements, the RFO of the CSC used a voting process, as used in other ERA-NETs. It aimed at involving all ERA-MIN 2 partners in the constitution of an internationally recognized and high-quality SEB.

Therefore, during January 2017 each RFO proposed up to 10 expert candidates, indicating for each his/her CV, and important information's such as country, sector (public vs private), and main and secondary research field of expertise.

After the list of experts was compiled, each RFO gave a score, between 0 and 5, to all the suggested SEB candidates. A ranking list was obtained by comparing the average note that each SEB member candidate scored. The top list candidates were initially selected to be part of the SEB, while the remaining candidates were considered as a reserve list to replace a SEB member in case of resignations.

Considering the number of pre-proposals submitted (94) during stage one of the Call, the JCS and ANR estimated the correct size of the SEB to be about 25 to 30 members. Therefore, 30 top-list members were contacted in order to check whether they were available for SEB duties or not; only 22 experts were available, hence, the next 14 top list candidates were contacted with only 7 being available to become a member of the SEB.

During the voting process, it was also asked to each RFO to express a preference for the Chair and the Vice-chair. Mr. Patrice Christmann (France), internationally recognized expert in the raw materials field, was selected as the Chair, while Mrs. Francesca Beolchini (Italy), former ERA-MIN evaluator, was appointed as the Vice-Chair.

Further SEB adjustments were required, due to 5 withdrawals as a result of work schedule overlaps, impossibilities and/or conflicts of interests.

Therefore, four other experts were invited as SEB members to guarantee the presence of experts from non-EU countries as well as to compensate the lack of competences in some topics.

All available SEB members were asked to sign the Confidentiality Agreement and uploaded it to the Electronic Submission System (ESS) and to verify any possible conflict of interest (CoI) with the proposals allocated to them.

The reported Col's were listed for further reference during the SEB meeting where the discussion of the full-proposals took place.

2.2 SEB COMPOSITION IN STAGE 1 EVALUATION (PRE-PROPOSALS)

The SEB composition, resulting from the aforementioned procedure, is presented in Table 1. It was composed by 26 members, 6 were female, 9 were from the private and private/public sectors, and 5 were from non-EU Member States countries.

All SEB members performed the scientific assessments of the submitted 94 pre-proposals if no potential Col was reported, taking into consideration their field of expertise. Their evaluation reports and the resulting ranking list were communicated to the RFO at the CSC meeting in Angers, France (28th June 2017) in the presence of the Chair and the Vice-chair.



Table 1: List of SEB members for Stage 1. *Members from non-EU countries are highlighted in light yellow.* (*) - SEB member name is not disclosure because informed consent was not given.

| Title | Surname | Name | Country | Gender | Sector |
|-------|-------------------------|-------------|-------------|--------|----------------|
| Dr | Andersson | Charlotte | Sweden | F | private/public |
| Pr. | SEB member 1 (*) | | Germany | M | public |
| Mr | Christmann | Patrice | France | M | private |
| Prof. | Beolchini | Francesca | Italy | F | public |
| Prof. | La Marca | Floriana | Italy | F | public |
| Dr | SANI | Daniela | Italy | F | public |
| Prof. | Courtney | Ronan | Ireland | M | public |
| Pr. | Blanpain | Bart | Belgium | M | public |
| Dr | SEB member 2 (*) | | Spain | M | private/public |
| D | de Grado | Aurelio | Spain | M | private |
| Prof. | Streicher-Porte | Martin | Switzerland | M | public |
| Pr. | Placido Martins | Luís | Portugal | M | private |
| Pr. | Weihed | Pär | Sweden | M | public |
| Pr | WELLMER | Friederich | Germany | M | public |
| Dr | Savage | Steven | Sweden | M | private/public |
| Pr | COTE | Gerard | France | M | public |
| Dr | Kimbel | Serge | France | M | private |
| Dr. | Dobnikar | Meta | Slovenia | F | public |
| Prof | Martins | Rodrigo | Portugal | M | public |
| Dr | CUESTA-LOPEZ | SANTIAGO | Spain | M | public |
| Prof. | Triantafillou | Thanasis C. | Greece | M | public |
| D.Sc | Monte | Marisa | Brazil | F | public |
| Pr | Matheos | Sergio | Argentina | M | public |
| Dr | Thomas | Chistian | France | M | private |
| Mr. | Tchernobilsky | André | Brazil | M | private |
| Prof. | Arol | Ali İhsan | Turkey | M | public |

The competences of the SEB members in Stage 1 were in line with the topics of the Joint Call and of the submitted pre-proposals, as shown in Figure 1.

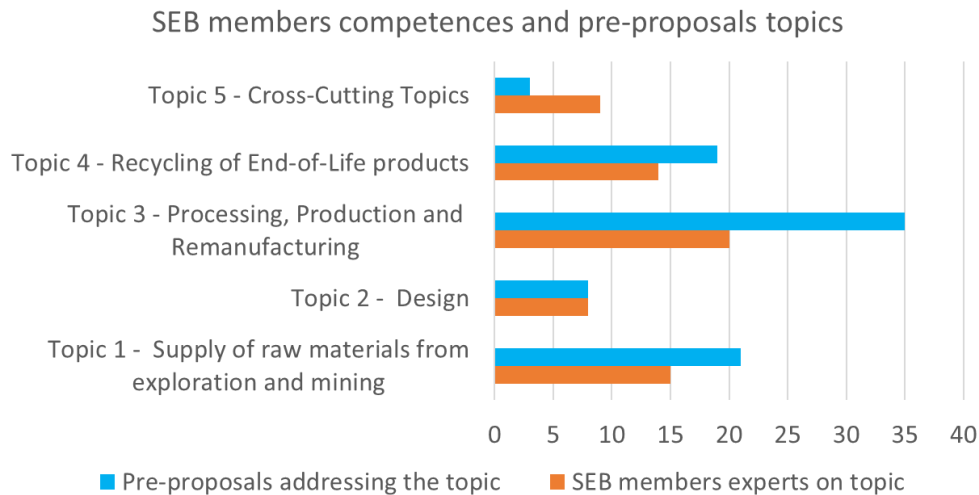


Figure 1: Histogram comparing the SEB members competences with the main topics addressed by the submitted pre-proposals in Stage 1 evaluation.

2.3 SEB COMPOSITION IN STAGE 2 EVALUATION (FULL-PROPOSALS)

The SEB members from Stage 1 were contacted in order to check whether they were available to comply with the SEB duties for Stage 2, which were two-fold: to perform a remote scientific assessment of the 35 submitted full-proposals and being present at the SEB meeting, scheduled for the 11th and 12th of December 2017 in Lisbon.

The Chair (Mr. Patrice Christmann) and the Vice-chair (Mrs. Francesca Beolchini) confirmed their availability. However, 5 of the SEB members from Stage 1 were not available to be present at the SEB meeting in Lisbon. As a result the SEB for Stage 2 was therefore composed of 21 members.

The SEB composition for Stage 2 is presented in Table 2.

Table 2: List of SEB members for Stage 2. *Members from non-EU countries are highlighted in light yellow.*

| Title | Surname | Name | Country | Gender | Sector |
|-------|------------------------|-------------|-------------|--------|----------------|
| Dr | Andersson | Charlotte | Sweden | F | public/private |
| Mr | Christmann | Patrice | France | M | private |
| Prof. | Beolchini | Francesca | Italy | F | public |
| Prof. | La Marca | Floriana | Italy | F | public |
| Dr | SANI | Daniela | Italy | F | public |
| Prof. | Courtney | Ronan | Ireland | M | public |
| D | de Grado | Aurelio | Spain | M | private |
| Prof. | Streicher-Porte | Martin | Switzerland | M | public |
| Pr. | Placido Martins | Luís | Portugal | M | private |
| Pr. | Weihed | Pär | Sweden | M | public |
| Pr | WELLMER | Friederich | Germany | M | public |
| Dr | Savage | Steven | Sweden | M | public/private |
| Pr | COTE | Gerard | France | M | public |
| Dr. | Dobnikar | Meta | Slovenia | F | public |
| Dr | CUESTA-LOPEZ | SANTIAGO | Spain | M | public |
| Prof. | Triantafillou | Thanasis C. | Greece | M | public |
| D.Sc | Monte | Marisa | Brazil | F | public |
| Pr | Matheos | Sergio | Argentina | M | public |
| Dr | Chistian | Thomas | France | M | private |
| Mr. | Tchernobilsky | André | Brazil | M | private |
| Prof. | Arol | Ali İhsan | Turkey | M | public |

The Chair and the Vice-chair performed the allocation of 4 full proposals to each SEB member: 2 proposals as principal rapporteur and another 2 proposals as secondary rapporteur. The proposals allocation was done by the Chair, with the insights of the vice-chair, taking into account the scientific skills and competences of each evaluator and the proposal content.

Conflicts of interest already detected in Stage 1 were taken into account during Stage 2 proposal allocation and during the meeting in Lisbon.

The competences of the SEB members in Stage 2 were in agreement with the topics of the submitted full-proposals, as shown in Figure 2.

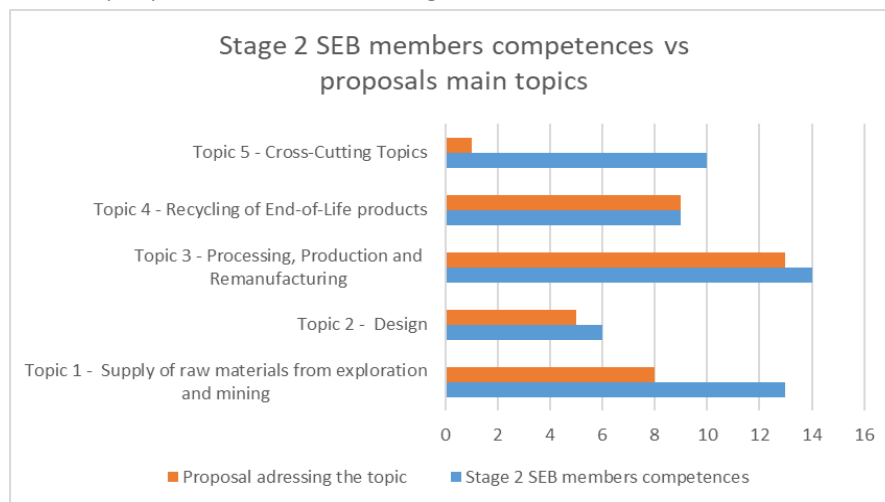


Figure 2: Histogram comparing the SEB members competences with the main topics addressed by the full- proposals in Stage 2 evaluation.

2.4 EXTERNAL REVIEWERS

After selecting the 21 SEB members for Stage 2 evaluation, the remaining candidates from the initial experts list served as a reservoir to find external reviewers to scientifically assess the full-proposals during Stage 2.

The JCS contacted the remaining candidates in order to check their availability to perform a remote scientific assessment of up to 3 full-proposals. Fifty experts were available to act as external reviewers.

The principal rapporteurs of the SEB were asked by the JCS to indicate up to 5 reviewers per proposal from the list of available external reviewers, using a scale from 1 to 5, in which score 1 meant the first option and a score of 5 meant the low preference. Then,

the Chair and the Vice-chair made the final allocation of two external reviewers to each full-proposal considering the rapporteur's choices as much as possible.

When allocating the proposals to reviewers, the main criterion was the match of the expertise of the reviewer with the proposal content and afterwards, if possible, the reviewers were chosen from countries not involved in the proposal consortium.

At the end of the evaluation process, 35 external reviewers were involved and each expert has scientifically assessed remotely, one, two or three proposals, and each proposal has been reviewed by, at least, 2 external reviewers.

Three SEB members, who couldn't be present at the Lisbon meeting, were available to act as external reviewers for full-proposals that were not assessed by them in Stage 1.

The external reviewers also signed the declaration of confidentiality and upload it in the ESS and reported any possible conflict of interest with the proposals allocated to them. For example: one of the external reviewers reported CoI in all of the 4 allocated proposals, and, as a consequence, did not perform any assessment.

The final list of external reviewers involved in the remote scientific assessment of the proposals during Stage 2 is provided in the Table 3.

Table 3: List of External Reviewers. *Experts from non-EU countries are highlighted in light yellow. * - Expert name is not disclosure because informed consent was not given.*

| Expert information | | | | | |
|--------------------|-------------------------|--------------|--------------|--------|---------|
| Title | Surname | Name | Country | Gender | Sector |
| Prof. | Altundoğan | HamdiSoner | Turkey | M | public |
| Dr | Andreiadis | Eugen | France | M | public |
| Dr. | Archibald | Laurence | UK | M | private |
| Dr | Expert 1 (*) | | France | M | public |
| Dr | Blet | Vincent | France | M | public |
| Prof. | Bobos | Iuliu | Portugal | M | public |
| Dr | Bouyer | Etienne | France | M | public |
| Mr | Craven | Peter | South Africa | M | Private |
| Pr | Csaki | Ioana | Romania | F | public |
| Dr | Constant | Xavier | France | M | private |
| Prof. | Deveci | Hacı | Turkey | M | public |
| Dr | GÓMEZ-FERNANDEZ | Fernando | Spain | M | public |
| Dr | Guyonnet | Dominique | France | M | Public |
| Prof. | Karapinar | Nuray | Turkey | M | public |
| Dr | KLADIS | Anastasios | Greece | M | private |
| Dr | Llorens González | Teresa | Spain | F | private |
| Professor | Mark | Tyrer | UK | M | public |
| Dr. | Expert 2 (*) | | Spain | M | private |
| Pr. | MateosAquilino | Veronica | Spain | F | private |
| Dr. | MenéndezAguado | JuanMaría | Spain | M | public |
| DR | MEYER | Daniel | France | M | public |
| Prof. | Mirão | José | Portugal | M | public |
| Dr | Nieto | Emilio | Spain | M | private |
| Prof | Noronha | Fernando | Portugal | M | public |
| Dr | Parat | Fleurice | France | F | Public |
| prof. | Peryt | Tadeusz | Poland | M | Public |
| Pr | Pop | Petru Adrian | Romania | M | public |
| Dr | POPESCU | Ioana | Romania | F | public |
| Dr | Sempere | Thierry | France | M | public |
| Prof. | Expert 3 (*) | | Poland | F | public |
| Dr | Videla Leiva | Álvaro | Chile | M | public |
| Dr | Westerlund | Karl | Sweden | M | private |
| Prof | Martins | Rodrigo | Portugal | M | private |
| Pr. | Blanpain | Bart | Belgium | M | public |
| Pr. | Expert 4 (*) | | Germany | M | public |

3 STATISTICS ON THE SEB COMPOSITION AND THE EXTERNAL REVIEWERS POOL

In respect to the requirements listed in the DoA concerning the SEB composition, the following statistics about all the SEB candidates proposed by the RFO (initial experts list) are presented in Table 4.

Table 4: Distribution of all the proposed SEB candidates by gender, sector and competences.

| | Candidates | | SEB members stage 1 | | SEB members stage 2 | | External experts | |
|-----------------------|------------|-----|---------------------|-----|---------------------|-----|------------------|-----|
| Total | 162 | | 26 | | 21 | | 35 | |
| Male | 119 | 73% | 20 | 77% | 15 | 71% | 29 | 83% |
| Female | 43 | 27% | 6 | 23% | 6 | 29% | 6 | 17% |
| public | 123 | 76% | 17 | 65% | 14 | 67% | 25 | 71% |
| private | 35 | 22% | 6 | 23% | 5 | 24% | 9 | 26% |
| public/private | 4 | 2% | 3 | 12% | 2 | 10% | 1 | 3% |
| Topic1 | 78 | | 15 | | 9 | | 19 | |
| Topic2 | 32 | | 8 | | 6 | | 0 | |
| Topic3 | 79 | | 20 | | 14 | | 18 | |
| Topic4 | 77 | | 14 | | 11 | | 19 | |
| Topic5 | 45 | | 9 | | 8 | | 6 | |

After a first analysis the following aspects can be highlighted:

- Regarding gender equity: only 27% of the candidates were female; this proportion was kept in the composition of the SEB but decreased sharply to 17% in the pool of external reviewers;
- Only about 22% of the proposed candidates were from the private sector; this proportion suffered a slightly increased in the SEB (23% in Stage 1, up to 24% in Stage 2 and 26% in the external reviewers pool)
- The scientific skills of the SEB members and of the external reviewers were proportional to the topics addressed by the pre-proposals (Figure 1) and of the full-proposals (Figure 2) as the topics with more SEB members and external reviewers represented are also those with more proposals submitted.

Furthermore, the distribution of candidates, SEB members and external reviewers per country can be observed in Table 5. It is important to note that two experts of the SEB were from countries not participating in the call, namely Switzerland and Greece.

Moreover, there were three external reviewers also from countries not participating in the call, namely: Greece, Hungary and United Kingdom.

Table 5: Distribution of the candidates, SEB members, and external reviewers per country.

| | <i>candidates</i> | <i>SEB members stage 1</i> | <i>SEB members stage 2</i> | <i>External experts</i> |
|--------------|-------------------|----------------------------|----------------------------|-------------------------|
| Argentina | 1 | 1 | 1 | 0 |
| Austria | 2 | 0 | 0 | 0 |
| Belgium | 8 | 1 | 0 | 1 |
| Brazil | 7 | 2 | 2 | 0 |
| Chile | 10 | 0 | 0 | 1 |
| France | 31 | 4 | 3 | 8 |
| Germany | 13 | 2 | 1 | 1 |
| Greece | 2 | 1 | 1 | 1 |
| Hungary | 1 | 0 | 0 | 0 |
| Ireland | 1 | 1 | 1 | 0 |
| Italy | 8 | 3 | 3 | 0 |
| Netherlands | 1 | 0 | 0 | 0 |
| Norway | 1 | 0 | 0 | 0 |
| Poland | 8 | 0 | 0 | 2 |
| Portugal | 16 | 2 | 1 | 4 |
| Romania | 11 | 0 | 0 | 3 |
| Slovenia | 1 | 1 | 1 | 0 |
| SPAIN | 19 | 3 | 2 | 6 |
| South Africa | 0 | 0 | 0 | 1 |
| Sweden | 4 | 3 | 3 | 1 |
| Switzerland | 4 | 1 | 1 | 0 |
| Turkey | 8 | 1 | 1 | 3 |
| UK | 4 | 0 | 0 | 2 |
| USA | 1 | 0 | 0 | 0 |

4 CONCLUSIONS

A total of 61 independent international experts were selected for the evaluation process of the co-funded ERA-MIN Joint Call 2017, the JCS and the task co-leaders have done all efforts to ensure an equal representation of academic institutions and industrial companies as well as to respect gender equity.

In Stage 1 of the evaluation of pre-proposals, the SEB composition, including the Chair and Vice-chair, included a total of 26 experts, of which 5 were from 4 non-EU Member States countries (Argentina, Brazil, Switzerland and Turkey), 6 (23 %) were female and 9 (35 %) were from private and private/public sector. The fields of expertise of the SEB members addressed the 5 main call topics. The SEB members were in sufficient number to assess the proposals submitted in each of the five main call topics.

In stage 2 of the evaluation of full-proposals, the SEB composition decreased to 21 experts, which was aligned with the decrease in the number of proposals. Moreover, the competences of the SEB members were in line with the topics addressed by the full-proposals. The number of experts from non-EU countries as well as the number of female experts was kept but the experts from private and private/public sector decreased to 7.

After the statistical analysis it is clear that the balance in public vs private sector and in gender equity was highly dependent on the expert nominations by the RFO and the Advisory Board.

In the case of the balance between public vs private sector, while checking the availability of the candidates, it became clear that it was harder to reach and to persuade the experts from the private sector to be a part of the evaluation process, either as a SEB member or as an external reviewer.

This difficulty was also observed in the proposal's consortiums, in which the percentage of industries and companies was lower than of the academic institutions.

In respect to gender equity, in 162 candidates only 43 were female, corresponding to 27%. This percentage slightly decreased to 23% in Stage 1 and increased to 29% in Stage 2, mainly due to the fact that the 5 SEB members that weren't available to attend the SEB meeting in Lisbon were all male. From the 35 external reviewers, 3 were from 3 non-EU Member States countries (Turkey, Chile and South Africa), 6 (17%) were female and 25 (71%) were from the public sector.

The SEB composition will be complemented and re-equilibrated for the further two Joint Calls (in 2018 and in 2019) in terms of the balance between public vs private sector and the gender equity, in accordance to the specific call topics and the content of the submitted proposals.