IPBG Selection Guidelines

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1. Objectives of the IPBG programme

The aim of the “Industrial Partnership Block Grant” (IPBG) programme is to foster the cooperation between Luxembourg based companies active in R&D and public research institutions in Luxembourg.

The specific objectives of the programme are to:

- Support knowledge transfer between higher education institutions and Luxembourg based companies active in R&D;
- Prepare young scientists not only for an academic career, but also help in acquiring the necessary skills and competences for the private job market;
- Provide PhD and Postdoc students with an excellent, stimulating research training experience within the context of mutually beneficial research collaboration, between public research institutions and Luxembourg-based industrial partner organisations.
- Promote the development of industrial research capacity in Luxembourg through the recruitment of early stage researchers and the concomitant implementation of partnerships between companies and public research organisations.
2. Evaluation criteria and scoring

Each proposal is assessed according to the following selection criteria:

1. **Excellence and coherence of the proposed collaborative research programme**
   - Scientific/technological excellence and novelty of the collaborative research programme, e.g.
     - Contribution to the state-of-the-art
     - Competitive advantage in relation to leading groups
   - Coherence of the collaborative research programme, e.g.
     - Integration and added value of the individual research axes and planned projects with regard to the intended research programme
     - Added value of the involved institutions with regard to the intended public-private synergies
   - Feasibility of the research programme
     - Leadership competence of the programme directors from research institution and industry
     - Scientific track record of the supervisors (in relation to career stage)
     - Competence in PhD supervision (in relation to career stage)
     - Quality of the collaborative research environment (e.g. infrastructure, placement)
     - Efficiency of the planned resources, e.g. justification for the requested number of PhD/postdoctoral positions

2. **Excellence of the PhD/Postdoctoral collaborative training programme and environment across the organisations involved in the Partnership.**
   - Quality and appropriateness of scientific training, e.g. in the framework of individual personalised projects
   - Quality of non-scientific training and potential to develop skills and knowledge of PhD/Postdoc candidates
   - Support to career development of training candidates
   - Strategic approach to international, inter-sectoral and/or interdisciplinary mobility

3. **Quality of management of the collaborative training programme, supervision of the students, governance of the partnership and employability perspectives.**
   - Doctoral/postdoctoral research environment and management; cohort building
   - Supervision and selection of students
   - Industrial placement and employability perspectives in the academic and non-academic job market
   - Governance of the partnership
4. Outcomes, tech-transfer and possible applications of the multiannual collaborative programme

- Expected scientific impact
- Expected economic impact, including possible applications and technology transfer activities
- Expected societal and environmental impact, if applicable
- Opportunities for public outreach activities regarding the collaborative research programme
• The scoring system for each individual criterion is used to underline the reasoned comments and arguments provided. It is based on the following scale:

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<thead>
<tr>
<th>Score</th>
<th>Mark</th>
<th>Explanation</th>
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| Excellent  | A+   | **Criteria 1**: An outstanding proposal with a substantial contribution to the state-of-the-art. The consortium composition is an excellent fit to the collaborative research programme. The research programme will be coherently addressed by the proposed set of research and tech-transfer activities. Excellent recruitments and ambitious PhD/postdoc projects are expected. The feasibility is ensured due to the excellent track record of all the supervisors and the solid planning of activities.  
**Criteria 2**: PhD/postdoctoral training is exemplary, “best practice” and internationally highly competitive. The research and training activities will provide for an outstanding doctoral training environment.  
**Criteria 3**: All aspects of the management of PhD/postdoctoral training are convincingly addressed according to best international practice.  
**Criteria 4**: The outcomes, tech-transfer and possible applications of the research programme are outstanding and convincingly planned. The career perspectives of the PhD/postdocs candidates are excellent. |
| Very good  | A    | **Criteria 1**: A proposal of high international calibre submitted by a well composed consortium. The expected scientific and economic impact of the research programme and the individual PhD/postdoc projects is significant. Based on the involved competences and the planned resources, the proposed research programme is feasible. The majority of supervisors are recognized scientists in the relevant scientific field(s)), altogether they have a proven track record of PhD/postdoctoral supervision.  
**Criteria 2**: The research and training activities will support an effective doctoral training environment; all necessary ingredients for a successful programme are fulfilled.  
**Criteria 3**: The major aspects regarding the management of PhD/postdoctoral training are convincingly addressed and documented.  
**Criteria 4**: Relevant outcomes are to be expected. The career perspectives of the PhD/postdoc candidates are very good. |
<table>
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<tr>
<th>Criteria 1</th>
<th>Criteria 2</th>
<th>Criteria 3</th>
<th>Criteria 4</th>
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<tr>
<td>Good B</td>
<td>The research programme is reasonable. The consortium is composed of supervisors and organisations with a satisfactory track record (scientific and PhD/postdoctoral supervision) and satisfactory experience within the relevant field(s) of research. It will be a challenge to attract highly talented PhD/postdoc candidates, due to the limited ambition of the programme.</td>
<td>The training environment is good, but some aspects of the training environment need improvement.</td>
<td>Management practices of PhD/postdoctoral training are good, but some aspects could be improved.</td>
</tr>
<tr>
<td>Fair or poor C</td>
<td>A proposal of limited or low-calibre interest where the expected scientific impact of the research programme and of the individual PhD/postdoc projects is not high. The scientific and supervision track records of the supervisors are limited or unclear from the provided documents. The contribution by the collaborating partners is not convincing.</td>
<td>The training environment is not sufficiently stimulating nor well developed.</td>
<td>The implementation of a training framework is either not satisfying or unclear.</td>
</tr>
<tr>
<td></td>
<td>The career perspectives of the PhD/postdoc candidates are acceptable.</td>
<td>The career perspectives of the PhD/postdoc candidates are only fair.</td>
<td>The career perspectives of the PhD/postdoc candidates are only fair.</td>
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3. Supervisor evaluation criteria

Within the IPBG evaluation process, each supervisor of a PhD is evaluated and ranked according to the following criteria:

- Track record of programme director and supervisors
  - Scientific impact of research activities to date in relevant field(s) of science (in relation to career stage), e.g. quality and quantity of scientific output, invitations as keynote speakers, other scientific achievements (simple quantitative bibliometric indicators e.g. h-index may be considered but shall not be used as main measure of scientific quality).
  - PhD supervision competence (in relation to career stage), e.g. numbers of PhDs supervised, time-to-completion, future career, etc. Other experience in supervision or participation in supervision training including industrial experiences
4. Actors in the selection process

The general implementation of the selection process is managed by the FNR. In the implementation, the FNR is assisted by an IPBG selection committee only.

The IPBG selection committee is constituted by a group of senior scientists from various scientific domains with strong industrial linkage and with experience in the management of PhD/postdoctoral training. The IPBG selection committee coordinates and supervises the evaluation of the IPBG proposals through all selection stages and ensures the quality of the peer-review process as well as the quality of the retained proposals.

Before accessing a given proposal, selection committee members have to sign a confidentiality agreement.
5. Selection process

The selection process consists of the following stages:

Stage 1: Eligibility check

The FNR checks whether all formal requirements are respected:

- proposals must be submitted in electronic format via the online submission system before the deadline,
- proposals must be complete (i.e. all of the requested components and forms must be included) and must respect the requested format and maximum length,
- proposals have to be written in English,
- host institutions must be eligible for FNR funding
- Industrial partners must be eligible for submission

Stage 2: Proposal allocation to the members of the IPBG panel and review

Each proposal is attributed remotely to several IPBG selection committee members with the appropriate scientific and technical background and remains under the responsibility of these members until the conclusion of the selection process.

Guidelines for writing reviews

- Strengths/weaknesses should be presented in a structured way;
- The formulation of the comments should reflect objectivity;
- Balanced feedback with constructive criticism should be given, supported by examples;
- Remaining questions and uncertainties should be raised during the remote review phase
- The overall ratings should match with the written comments

The IPBG selection committee members draft remotely a review, including strengths and weaknesses of the proposal and an overall conclusion. Potential questions to further clarifications with regard to the submitted programme should be also included. These reviews will be anonymized and will be sent to the applicants by the FNR.

Stage 4: On-site interview panel

The on-site interview panel is composed of the same experts that have already remotely reviewed the proposals. One of the IPBG selection committee members will act as chair of the panel meeting.

The on-site visits are organized by the respective consortium, preferably with visits at the industry partners. During the on-site interview session, each team presents its proposal to the FNR on-site interview panel and addresses the issues raised in the written reviews. In this evaluation stage, a particular emphasis is given to the open questions raised in the reviews, the collaborative research training strategy, placement and employability of the future students.
Stage 6: Funding recommendation by IPBG selection committee

Following the on-site interview panels, the IPBG selection committee meets for the final funding recommendation. On the basis of the on-site presentations, discussions and the remote reviews, the panel discusses the submitted proposals and ranks them according to the fulfilment of the selection criteria. It recommends which proposals shall receive funding, respecting the available budget. Furthermore, for each proposal retained the list of supervisors eligible for funding and the number of PhD/postdoctoral grants awarded to the consortium is indicated.

Stage 7: FNR Funding Decision

The selection committee chair drafts a first version of the selection committee synthesis and circulates it among all selection committee members for final agreement.

Guidelines for writing the on-site interview panel synthesis

- The synthesis should address the selection criteria and should be kept coherent throughout;
- The validity of factual information that has a major influence on the funding decision should be checked;
- Criticism should be constructive and supported with examples;
- In the case of a positive funding result, recommendations to improve the quality of the proposal may be included;
- The main argument(s) that lead to a positive or negative funding decision should be highlighted.

The FNR board validates the funding recommendation, which is then communicated to the applying consortium.