An integrated management approach to guide peer review at the FNR
Frank BINGEN
Outline

• 1st generation of programmes
  – Selection criteria for peer review

• 2nd generation of programmes
  – Programme Cycle Management: an integrated management approach
  – Logical framework
  – Streamlining selection criteria for peer review
Criteria
1. Scientific Quality
2. Socio-economic value
3. Cost-effectiveness
4. Consistency with the objectives and priorities set out in the programme
5. Realistic nature of the project within the Luxembourg context
6. Mobilization of national resources
7. Budget breakdown

Specific criteria
1. Creation of new skills in Luxembourg
2. International cooperation
3. Perspectives for the project beyond FNR involvement
Various origins of criteria
– Law of establishment of FNR
– Specific criteria as ad-hoc response to short term problems

No a priori weighting of criteria \(\rightarrow\) implicit weighting of criteria by peers
(all criteria formally on the same level, even though implicitly scientific quality has always been considered the most important)

Criteria without added value by peer review

Exact objectives of certain criteria unclear to peers

Peers were unable to evaluate certain criteria

\(\rightarrow\) Lack of coherence
2nd generation of programmes

- Integrated management approach to define new programmes
- Use of the *logical framework* as tool for management by objectives
- Peer review as tool for
  - selection and evaluation of projects
  - evaluation of programmes (extended peer review)

→ Overall coherence of management
Programme cycle management - An integrated management approach

- Extended peer review & evaluation experts
- Extended peer review

- Evaluation
- Programming (Foresight)
- Implementation
- Identification
- Financing
- Formulation
Project cycle management - An integrated management approach

- Formulation
- Selection & Financing
- Implementation
- Evaluation (Programme description)
- Programming

Peer review when necessary

Projects: Steps in red managed by researchers
Logical Framework

- Management tool used within Project Cycle Management
- Planning, implementation and evaluation of projects and programmes
- Links objectives with purpose, results and activities
- Indicators show how results will be achieved and measured
### Summary of key aspects of a project/programme:

- **why** a project/programme is carried out (*Intervention Logic*)
- **what** the project/programme is expected to achieve (*Intervention Logic, Indicators*)
- **how** the project/programme is going to achieve it (*Activities, Means*)
- **which external factors** are crucial for its success (*Assumptions*)
- **where** to find the information required to assess the success of the project/programme (*Sources of Verification*)

#### Format of a Logical Framework Matrix

<table>
<thead>
<tr>
<th>Description / intervention logic</th>
<th>Indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall objective</td>
<td>Impact Indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td>Outcome Indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results</td>
<td>Output Indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities</td>
<td>Means</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Logical Framework – intervention logic

- **Overall Objectives**: High level objectives to which the project / programme contributes
- **Project/programme Purpose**: The project’s/programme’s central objective (there should be one only)
- **Expected Results**: The products of the undertaken activities
- **Activities**: Actions/tasks executed as part of the project / programme to produce the results
Drop-down logic of Logical Framework

NATIONAL PLAN (Foresight)
- Overall objective
- Foresight purpose
- Results
- Activities

FNR PROGRAMME
- Overall objective
- Programme purpose
- Results
- Activities

Researcher’s PROJECT
- Overall objective
- Project purpose
- Results
- Activities
### Logical Framework of an FNR Programme (ex.: Education & Labour Market)

<table>
<thead>
<tr>
<th>Description / intervention logic</th>
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</tr>
</thead>
</table>
| **Foresight objectives**         | **Impact Indicators (Programme)** | • Changed/new laws and regulations  
                                         • Survey of greater public |            |
| Contribute to evidence-based policy making | • Policy changes inspired by research results  
                                          • Public awareness |            |            |
| **Thematic Programme objective** | **Output/Outcome Indicators (Programme)**  
                            PhDs, Publications, Number of international collaborations, etc. | • Statistics from monitoring reports  
                                                                • Survey of researchers | Openness of decision makers, administration and private sector to research results |
| Advancement of knowledge, people and institutions in domain |            |            |            |
| **Programme Management objectives** | **Outcome Indicators (Programme Management)**  
                            Satisfaction of stakeholders (e.g. Ministry, researchers, experts) etc. | • Survey by independent body |            |
| State of the art management |            |            |            |
| **Results** | **Output Indicators (Programme Management)** |            |            |
| Activities |            |            |            |
### 2nd generation of programmes – Selection criteria for peer review

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
<th>Old Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coherence with programme theme</td>
<td>Yes/No</td>
<td>• Consistency with the objectives and priorities set out in the programme</td>
</tr>
<tr>
<td>Scientific Quality/Original. of project</td>
<td>Very High</td>
<td>• Scientific quality</td>
</tr>
<tr>
<td>Quality and efficiency of project plan</td>
<td>High</td>
<td>• Cost-effectiveness&lt;br&gt;• Budget breakdown</td>
</tr>
<tr>
<td>Intended outcomes and impacts</td>
<td>Medium</td>
<td>• Socio-economic value&lt;br&gt;• Perspectives for the project beyond FNR involvement</td>
</tr>
</tbody>
</table>

→ Rational for the choice of remaining criteria  
→ Removing criteria which a peer cannot evaluate  
→ Removing criteria which are inappropriate on a project level  

• Creation of new skills in Luxembourg  
• International collaboration  
• Realistic nature of the project within Luxembourg context  
• Mobilization of national resources
Conclusion

• Integrated management increased organisational performance by
  – Aligning project, programme and foresight objectives
  – Coherent monitoring
  – Continuous feedback in the process to match objectives

• Advantages for peer review
  – Logical link between programme objectives and selection criteria
  – Getting rid of superfluous criteria not to be addressed through peer-review
  – Coherent criteria for peers: ask the right questions to right people at the right time
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