Project no.
ERAC-CT-2005- 01621

Project acronym
FENCO-ERA

Project title
Promotion of an Integrated European and National R&D Initiative for Fossil Energy Technologies towards Zero Emission Power Plants

Instrument: Coordination Action

Thematic Priority: ERA-NET: Energy Technology

Evaluation procedure with common criteria

Organisation name of Work package leader: CERTH / ISFTA, Greece

Start date of project: 01/06/2005 Duration: 66 months

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

FENCO-ERA
Report

Contents

1. Introduction

This deliverable aims to provide an overview of the evaluation practices adopted by the FENCO-ERA Partners providing also input to the **Deliverable D 3.1: Comparison of R&D Programmes for Carbon Abatement Technologies**. In addition, how the national and joint evaluation of the submitted project proposals based on common criteria will be carried out in the upcoming 1st Joint Call are addressed. This common approach for the application procedure and the evaluation method was agreed by the participants in the 3rd FENCO-ERA workshop "Procedure and Theme Finding Laboratory" held in Vienna (16-17 April 2007) as a way to prepare and implement a cooperation between FENCO-ERA partners for a Joint call and evaluation process.

2. Comparison of the selection procedures on national levels

The selection procedures at national level will cover two steps: (i) the call for proposals and (ii) the evaluation process of the proposals.

The input of this mapping is based on the answers gathered in the database developed by WP2 "Information exchange on national R&D fossil fuel programmes" (Table 1). Lithuania, Hungary, the Czech Republic, Latvia, and Slovakia are excluded from this analysis due to the lack of fossil R&D related programmes.

The specific features and important stages of each national selection procedure will be incorporated in this paper. This mapping aims to identify the common characteristics and different approaches in order to facilitate the design of a common selection procedure for joint and future trans-national R&D activities in the field of European Fossil ERA.

Table 1: Overview of the States' Fossil fuel RD&D Programmes based on the FENCO-ERA Database

State	***Programme***
Austria	AFI - Technology platform for clean fossil fuels
Denmark	Public Service Obligation (PSO) programme 2007
France	Captage et stockage du CO2 (ANR)
Germany	COORETEC
Greece	Operational Programme for Competitiveness 2000-2006 (ORC), Measure 4.5 "Collaborations for research and technological Development in sectors of national priority"
The Netherlands (SenterNovem)	Energy Research Strategy (EOS) New Gas / Clean Fossils
Norway	CLIMIT
Portugal	Climate Change National Programme (PNAC), Energy Programme
Spain	The Spanish National Research and Technological Development Plan (2004-2007)
United Kingdom	Carbon Abatement Technologies

3. Form and frequency of calls

Six of the ten programmes involved in FENCO-ERA apply competitive approaches to the selection of projects with a clear structure, timetable and end-dates, once or twice a year (Table 2). In general, competition favours quality, and diversity in applications and project execution as well as offers transparent and fair decision making. But the rigidity of procedures may exclude the weaker consortium in terms of capabilities or resources, which may need special attention. In Germany, there is a possibility to submit applications throughout the whole year without a fixed closing date. The remaining three programmes (AT, FR, NL) define topics for research and then put out restricted periodic invitations to tenders.

It appears that the majority of the programmes use one type of call for proposals rather than several, so as to ensure simplicity and consistency of administration. Only NL and UK adopt a mixture of types of call for proposals, according to the different needs of funding. For example, a biannual, fixed-term call for proposals is employed for R&D projects while a continuously open call is used for demonstration projects.

The choice between open and fixed-term calls for proposals should be considered. Open calls permit programmes to respond immediately to emerging research needs and secondly, they avoid a work overload at the call deadline. However, open calls may weak competition at undesirable levels and also reduce volumes of applications to the point that the programme management can not support a suitable spread of projects.

On the other hand, fixed term calls for proposals increase competition among applicants and assure consistent and efficient processing of proposals but may not correspond well to research opportunities.

Table 2: Form of the call and frequency

State	***Selection method***	***Frequency of calls (months)***
Austria	Call for tender	6
Denmark	Call for proposals	12
France	Call for tender	12
Germany	Continous open call	Open call
Greece	Call for proposals	12
The Netherlands (SenterNovem)	Call for tender	4
Norway	Call for proposals	Open call for demo, 6 for R&D
Portugal	Call for proposals	12
Spain	Call for proposals	12
United Kingdom	Call for proposals	Open call for demo, 6 for R&D

4. Application procedure

The large majority of fossil fuel R&D programmes apply the single-step procedure and only UK use a two-stage approach. Denmark adopts both a two-stage application procedure and a one-stage procedure, depending on the nature of the projects (Table 3).

Table 3: Stages of application process

State	
Austria	Single stage
Denmark	Single stage for smaller projects Two stages for larger integrated projects
France	Single stage
Germany	Single stage*
Greece	Single stage
The Netherlands (SenterNovem)	Single stage
Norway	Single stage
Portugal	Single stage
Spain	Single stage
United Kingdom	Two stages

**Discussion starts with proposers on the basis of abstracts before submission of full proposals*

A two-step procedure has a double advantage. It gives applicant more time to prepare high quality proposals in terms of partnership and content. It also allows the programme manager to assist consortia through the preparation process, offering them targeted assistance and guidance. The success rate is thus usually higher. Conversely, because this procedure entails greater effort, it is more advisable for more complex collective research programmes where grants are substantial.

A single-step procedure has the advantage of being simpler to administer by the programme manager (shortening the selection time and the overall management). It is more suitable for simpler and smaller collective research programmes and when grants are lower.

5. Methods of evaluation

The project evaluation is based on the selection of the evaluators as well as the evaluation procedures and criteria applied. In most programmes each proposal is considered by at least two evaluators but it is also possible that three or more individual evaluators are involved. Typically, evaluators are selected from an established database of experts (Table 4). External experts are used from 9 of the 10 programmes for the evaluation of the proposals.

Different roles are performed by:

1 The programme management agency; which usually assists the applicants over the submission phase providing only general information about the call or administrative support (completing forms, providing legal statements etc.). In addition, the management agency may be responsible for carrying out the eligibility check, assessing proposal content and budget up to the technical evaluation.

2 The programme owner; which is responsible for the proposal selection and takes the final funding decision but often implementing the recommendations of the programme managers / external experts.

3 The external evaluators; which are usually selected jointly by the programme manager and programme owner. The independent evaluators are selected based on their backgrounds/ experience - technological,

scientific and economic - to contribute particularly to the technical assessment of proposals. In-house experts are chosen within the programme owner and management staff and are involved in all evaluation phases including the technical element, like in Germany.

Table 4: Methods of evaluation

State	
Austria	International experts committee from sciences, industry, authority
Denmark	Panel of experts supporting Energinet.dk
France	Scientific evaluation/selection committee
Germany	Evaluation of proposals by Project Management Group (PMG).
Greece	Panel of experts
The Netherlands (SenterNovem)	External evaluation Committee
Norway	External experts (quite similar to EU evaluations)
Portugal	Evaluation panel of international experts
Spain	Two technical evaluations for each project. An internal by public staff of the Ministry, and an external by experts from public organizations through web access
United Kingdom	Assessors drawn from a panel of experts

6. Evaluation criteria

In general, criteria used for the selection of projects are often the same from programme to programme. The main proposal evaluation criteria are:

- relevance to the programme objectives
- scientific quality of the proposal
- innovation potential;
- quality & experience of consortium
- quality of approach / work plan
- quality of dissemination activities
- socio-economic impacts and, finally;
- project management quality

7. Application and evaluation procedure for the FENCO-ERA 1st Joint Call

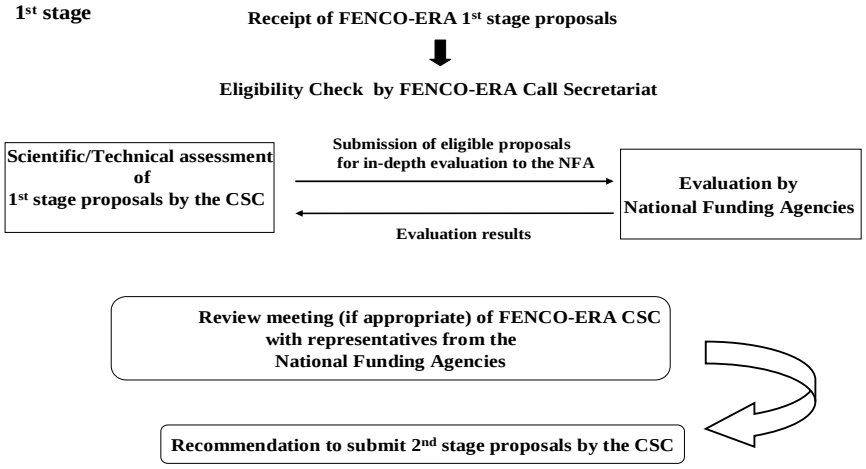
7.1. One or two-step approach

Calls for project proposals may take a one- or two-step approach for the submission of project proposals. Although a one-stage application and evaluation procedure tend to be simpler to administer and faster to conclude the FENCO-ERA participants expressed the opinion that a two stage process would be most

appropriate to the FENCO-ERA 1st Joint Call in order to minimize the work load, time and efforts on the applicants and the NFA as well as to facilitate a consistent and efficient processing of proposals.
The 1st stage proposals intend to show the suitability for national funding, the quality of the research plan within the scientific scope of the call as well as the added value of the proposed collaborative approach while the 2nd stage enable the most promising projects to submit a full research plan.

7.2. Evaluation procedure and criteria

For the FENCO-ERA 1st Joint Call agreed rules for evaluation and evaluators have been adopted. Forming the FENCO-ERA Call Steering Committee (CSC), which consists of the FENCO-ERA Management Board (MB) and representatives of all National Funding Agencies (NFAs) participating in this Joint Call, giving recommendations to the participating National Funding Agencies is considered as one possibility to cope with the current different evaluation procedures and to build cooperation in evaluation. In addition, the evaluation by the CSC can allow identifying projects with added value higher than the sum of national added value. The evaluation of proposals will also be conducted by the respective National Funding Agencies. This assures the eligibility of the proposals from the national perspectives but also entails the risk of the interpretation of the evaluation criteria both by different assessors within a country and by assessors from different countries. The various steps involved in the proposal evaluation and selection process are summarised in diagram 1.



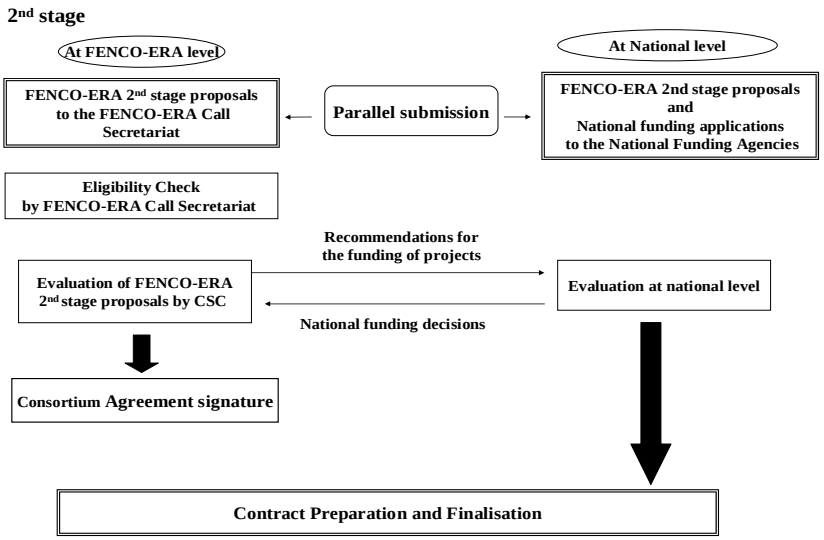


Diagram 1: Evaluation procedure in the 1st FENCO-ERA Joint Call

7.2.1 Evaluation of 1st stage proposals

In the first phase of the evaluation the role of the CSC is to provide the relevant NFAs with an assessment of the quality of the 1st stage proposals with regard to the scientific/technical content. The quality of the proposal is to be measured against the following evaluation criteria:

Evaluation Criteria	**Points**
Suitability for national funding	*(Y / N)*
*Project **compatibility** with the thematic topics of the call and **significance** of contribution to the call research area*	*1 - 5*
Technological/Scientific Innovation *(Technical approach and feasibility of the project, innovation potential, benefit for the consortium, state of intellectual property – patents)*	*1 – 5*
Social and Economic perspective *(Potential for commercial exploitation, business strategy of the project - strengths and weaknesses, trans-national added value, social and environmental benefits)*	*1 - 5*
Consortium and Project Management *(Quality of consortium – complementarities, scientific excellence and experience of the consortium, project management capacity, consortium agreement plan, dissemination/IPR)*	*1 - 5*
Resources *(Human resources, financial capability of the consortium and financial commitment of the partners)*	*1 - 5*

Guidance notes further explaining the meaning of these criteria are provided in FENCO-ERA Common Evaluation Form (Annex 1)

1st step: The members of the CSC will independently conduct a formal check of the 1st stage proposals.
Result: Submission of eligible proposals for in-depth evaluation to the NFAs.

2nd step: At this stage, the NFAs will evaluate these 1st stage proposals based on common evaluation criteria. In addition, the roles of the national project partners and the suitability for national funding have to be taken into account for the national evaluation procedure.
Result: FENCO-ERA Common Evaluation Form using the specific scale for sub-criteria (5=Excellent, 4=Very good, 3=Good, 2=Fair, 1=Poor).

3 rd step: FENCO-ERA CSC receives the evaluation results from the respective NFA. A review meeting of FENCO-ERA CSC members with representatives from the NFA (as appropriate) will produce a final assessment of the 1st stage proposals.
Result: Invitation to submit a second stage-proposal or rejection, including a reserve list. The Call Secretariat will communicate this in writing to the consortium coordinator.

7.2.2 Evaluation of 2nd stage proposals

- Applicants who pass the 1st stage evaluation will be invited to submit a 2nd stage proposal providing a more detailed description of the Work Packages as well as a budget breakdown.
- The FENCO-ERA 2nd stage proposals will be submitted to the Call Secretariat by the project's coordinator.
- In parallel, the project's partners will send the national funding applications to the respective NFA together with the FENCO-ERA 2nd stage proposal. Each project coordinator is responsible that each NFA has received the final version of the 2nd stage proposal.
- After a formal eligibility check by the Call Secretariat the CSC will receive the eligible 2nd stage proposals. The evaluation of both FENCO-ERA 2nd stage proposals and national applications will be carried out according to the following criteria:

Evaluation Criteria	Points
*Project **compatibility** with the thematic topics of the call and **significance** of contribution to the call research area*	*1 - 5*
Technological/Scientific Innovation *(Technical approach and feasibility of the project, innovation potential, benefit for the consortium, state of intellectual property – patents)*	*1 – 5*
Social and Economic perspective *(Potential for commercial exploitation, business strategy of the project - strengths and weaknesses, trans-national added value, social and environmental benefits)*	*1 - 5*
Consortium and Project Management *(Quality of consortium – complementarities, scientific excellence and experience of the consortium, project management capacity, consortium agreement plan, dissemination/IPR)*	*1 - 5*
Resources *(Human resources, financial capability of the consortium and financial commitment of the partners)*	*1 - 5*

Guidance notes further explaining the meaning of these criteria are provided in FENCO-ERA Common Evaluation Form (Annex 1)

1st step: Each 2nd stage proposal is evaluated independently by at least two members of the CSC, who fill in individual FENCO-ERA Common Evaluation Forms giving marks and providing comments to accompany each of their marks. The same scale for sub-criteria (5=Excellent, 4=Very good, 3=Good, 2=Fair, 1=Poor) will also be used at this stage.

Result: The Call Secretariat will provide all individual evaluation statements to the CSC members before an evaluation panel meeting.

2nd step: At the meeting the CSC will prepare one joint evaluation statement for each proposal (FENCO-ERA Common Evaluation Form) based on the discussions and the individual evaluations.

Result: Based on the final ranking list in priority order of the 2nd stage proposals, the CSC will give recommendations to the NFAs.

3rd step: The participating NFAs will decide on the final national funding of the project based on the recommendations of the FENCO-ERA CSC.

Result: Based on the feedback from the NFAs, the CSC will settle a definitive list of 2nd stage proposals: Approved for funding, Reserve list, or Reject. At the end of this process the Call Secretariat will communicate this decision to the project coordinator.

The above procedure aims to confirm that both the objectives of FENCO-ERA as well as the research priorities of the participating NFA are fulfilled.

8. Conclusions

Each programme has its specific practices how the programs calls are defined and organized, in more specifically, the form of the calls, the evaluation process of proposals and the recruitment of evaluators.

The co-operation model that will be adopted by the partners concerning the level of integration will define the required changes to the national administrative routines. However the existing differences among the rules of the FENCO-ERA partners appear not to be major barriers to achieve a coordination of evaluation practices. This has already been demonstrated by the adaptation of the National Funding Agencies' rules to comply with the procedure of the 1st FENCO-ERA Joint Call which is based on common evaluation criteria and evaluation of proposals both at national and FENCO-ERA level.

9. References

1. Good practices for the management of Multi Actors and Multi Measures Programmes (MAPs) in RTDI policy, March 2004.
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3. The Joint Baltic Sea Research Programme – Best Practice, Possibilities and Barriers, BONUS-ERA.Net, 2005.
4. Crue Flooding ERA-Net: Good Practice Guide for Research Programme Identification, Promotion and Validation, October 2007
5. WoodWisdom-Net Report No. 1/2006 Overview on barriers that hinder Transnational Cooperation and models for future Cooperation.
6. CISTRANA, Best Practice in Multinational Programme Collaboration: Report on CISTRANA Workshop Cologne, 18 January 2006.

Annex 1: FENCO-ERA Common Evaluation Form

Project Acronym:
Project Full Title:
Proposal No:

1. Evaluation summary

The evaluation results of the following pages should be summarised here. Comments for the evaluation criteria should reflect the quality of the submitted proposals.

Evaluation Criteria	Points
Suitability for national funding (only for 1st stage proposals)	*(Y / N)*
Project **compatibility** with the thematic topics of the call and **significance** of contribution to the call research area	*1 - 5*
Technological/Scientific Innovation (Technical approach and feasibility of the project, innovation potential, benefit for the consortium, state of intellectual property – patents)	*1 – 5*
Social and Economic perspective (Potential for commercial exploitation, business strategy of the project - strengths and weaknesses, trans-national added value, social and environmental benefits)	*1 - 5*
Consortium and Project Management (Quality of consortium – complementarities, scientific excellence and experience of the consortium, project management capacity, consortium agreement plan, dissemination/IPR)	*1 - 5*
Resources (Human resources, financial capability of the consortium and financial commitment of the partners)	*1 - 5*
Comments:	
Score:	

Call Steering Committee Recommendation (for 2nd stage proposals)

Should the CSC recommend that the proposal should be considered for funding	**Yes**	**No**

Criterion 1. Suitability for national funding

The evaluators should consider: ➢ Relevance to national programmes, strategies and eligibility of the topic with the relevant funding agency ➢ The level of funding available as determined by the rules of the relevant national funding agency	
Comments:	
Yes/No	

Criterion 2. Project **compatibility** with the thematic topics of the call and **significance** of contribution to the call research area

The extent to which: ➢ The work plan (including milestones, deliverables) is clearly address real current problems/ scientific issues in line with the technology priorities of the Call ➢ The proposal shows awareness of the state-of-the-art of the relevant scientific/ technical fields ➢ Extra benefit is demonstrated from the collaboration, for example, increased knowledge transfer, added value of cooperation and contribution to the integration in the European Research Area	
Comments:	
Score:	

Criterion 3. Technological/Scientific Innovation

(Technical approach and feasibility of the project, Innovation potential, Benefit for the consortium, State of intellectual property – patents)

The extent to which: ➢ The proposed technical approach (methodology, work plan) is of high quality and appropriate to enable the project to achieve its objectives ➢ The project identifies a significant new problem and/or a significant new approach ➢ The milestones and deliverables are clear, achievable and realistic ➢ The timeliness and novelty of the research aspects of the project are highlighted and explained in an industrial and/or academic context. ➢ The proposed approach includes arrangements for managing and mitigating potential technical and scientific risks related to the successful implementation of the project ➢ Extra benefit and synergies are demonstrated from the collaboration, for example, increased knowledge
Comments:

Score:	

Criterion 4. Social and Economic Perspective

(Potential for commercial exploitation, Business strategy of the project - strengths and weaknesses, Trans-national added value, Social and environmental benefits)

The extent to which: ➢ The project will produce a broad base of knowledge and the timescale over which potential benefits in terms of scientific and technological applications and in terms of economic and sustainability impact are expected to accrue ➢ The proposed work plan aims to meet European economic or societal needs and to contribute to the development of the scientific or technological field and how likely is it to achieve useful impacts ➢ The outputs can be achieved only through collaborative arrangements
Comments:

Score:	

Criterion 5. Consortium and Project Management

(Quality of consortium – complementarities, scientific excellence and experience of the consortium, Project management capacity, Consortium agreement plan, Dissemination/IPR)

The extent to which:	
➢ There is a appropriate plan for the management of the administrative, technical and financial resources ➢ The partners demonstrate scientific/technological excellence in the specific research field and are well suited to the tasks assigned to them with respect to their individual technical capacity ➢ The consortium members have a complementary and sufficient mix of skills and expertise to carry out the project successfully ➢ The organisational structure and decision-making mechanisms of the project are demonstrably clear and appropriate to the complexity and scale of the project ➢ The consortium has the technical capacity for dissemination and utilisation of results and well-defined appropriate plans are identified to promote the dissemination and exploitation of the results and the knowledge gained during the implementation of the project	
Comments:	
Score:	

Criterion 6. Resources

(Human resources, financial capability of the consortium and financial commitment of the partners)

The extent to which:	
➢ The proposal provides for the resources (personnel, equipment, financial*)* required for success ➢ The overall financial plan is balanced and justified compared to the scale and complexity of the project ➢ The required financial support is necessary and fits within the limits set by the participating national funding agencies	
Comments:	
Score:	