

**Invitation to a**

# **JOINT CALL FOR PROPOSALS**

**Topic:**

**Integrated biorefinery concepts**

**8<sup>th</sup> Joint Call for Research and Development Proposals  
of the ERA-NET Bioenergy**

***Deadline for submission of pre-proposals: 28.04.2014***

## Summary

The ERA-NET Bioenergy wishes to fund collaborative projects on integrated biorefineries. Ca. 7.6 Mio € are available for this 8<sup>th</sup> call from funding bodies in Germany, the Netherlands, Poland and the UK. Consortia must include *at least 2* partners from two different countries, and must aim to provide optimal value by a complete, integrated utilisation of raw material from sustainable biomass. Projects must be scientifically challenging or innovative to warrant public investment.

Bioenergy will be a significant provider of renewable energy in the future. However, biomass is used for food, feed, material as well as energy, and these different end uses currently compete with or are perceived to compete with each other in many cases. With the planned shift from a fossil-based to a bio-based economy, such tendencies are expected to become even more prevalent.

It is therefore vital to find the best systems for certain conditions, i.e. specific combinations of available resources and products in demand, and biorefineries are seen as one key concept to achieve this.

The ERA-NET Bioenergy is a network of national funding organisations which support bioenergy projects. It was funded by the European Commission under FP6 between October 2004 and December 2010, but is now self-sustained (membership model). Further ministries or R&D funding agencies from other European countries are always welcome to join the network or individual calls.

ERA-NET Bioenergy has so far funded seven calls: on small-scale combustion, on cleaning of product gas from biomass gasification, on short rotation coppice, on clean biomass combustion, on sustainable forest management and optimised use of ligno-cellulosic resources (together with WoodWisdom-Net, an ERA-Net on wood material science), on biogas and energy crops, and on small-scale heat and power production from solid biomass.

The purpose of the ERA-NET is to provide additional value compared to national funding by supporting transnational research and knowledge exchange, and to thus increase the use of biomass for energy.

The approach of ERA-NET Bioenergy differs from e.g. the Framework Programmes in that our focus is on medium-sized consortia (typically, three to eight partners) with excellent individual merits as well as complementarity.

### Key call dates

<b>Call opens</b>	<b>10 February 2014</b>
<b>Deadline for submitting <u>pre-proposals</u></b>	<b>28 April 2014, 1pm CET</b>
<b>Letters to applicants/invitation to phase 2</b>	<b>16 June 2014</b>
<b>Deadline for submitting <u>full proposals</u></b>	<b>01 September 2014, 1pm CET</b>
<b>Expected project start</b>	<b>Early 2015</b>
<p><b>This call is published on the ERA-NET Bioenergy web page and on the web pages of the participating national programmes.</b>  <b>See: <a href="http://www.ernetbioenergy.net">www.ernetbioenergy.net</a></b></p>	

## 1. Scope and background

### Scope

Only integrated biorefineries.

Biorefining is defined as the sustainable processing of biomass into a spectrum of marketable products (food, feed, materials, chemicals) and energy (fuels, power, heat).<sup>1)</sup>

An integrated biorefinery concept maximises the overall added value of one plant system by way of fractionation of the raw materials, integration of mass and energy flows and of processes, by (ideally) *using all components* of a raw material for a *range of different products / intermediates*, and by *working with closed loops*<sup>2)</sup>.

What happens in a biorefinery?

The complete, integrated utilisation of raw material made up of biomass components for the production of chemicals and/or materials and bioenergy in one location.

Concepts may focus on different materials or energy uses, but in all cases, the integrated production of a range of different products/intermediates (chemicals, compound materials, bioenergy incl. transport biofuels) is a pre-requisite. Ideally, all components of the raw material are fully utilised. Energetic uses must be an aspect of any biorefinery concept relevant to this joint call, but they do not have to be the major component with regard to value added.

### Position of call within the European landscape

The promotion of cascading uses and the biorefinery concept is vital to realise the bio-based economy, because while Europe strives to decrease its dependency on fossil-based raw materials, using bio-based ones instead will put greater pressure on the available resource base.

It is therefore not only important to maintain and increase the amount of renewable resources that can be harvested on a sustainable basis, but also to use the available biomass as efficiently as possible. This is the key of the biorefinery concept. The ERA-NET Bioenergy call will thus support national as well as EU strategies. Care is also taken to align it with on-going initiatives in related areas, such as BESTF and FACCE. Initiatives starting up at the moment, especially the Public-Private-Partnership (PPP) Bio-Based Industries and the Collaborative Working Group (CWG) on integrated biorefineries, will also be contacted and kept informed for mutual benefit and mutual support.

## 2. Aim of the call

The aim of the call is to fund innovative, collaborative pan-European, projects on integrated biorefinery concepts. Ca. 7.6 Mio € are available for this call. Projects must have at least 2 partners from two different countries (although it may be easier for applicants to show the added European value of their proposed work if more than two countries are involved), with the project's benefits shared between all parties.

This 8<sup>th</sup> call provides funding for new collaboration opportunities for companies, research and technology organisations and academic researchers in the abovementioned countries. Partners from other countries are welcome to join consortia on their own resources. Project outputs will be beneficial to all countries involved. Projects should contribute to increasing the economic competitiveness of integrated biorefinery concepts through measures as described in the following chapter.

<sup>1</sup> IEA Bioenergy (2012): "Bio-based chemicals – Value-added products from biorefineries", Task 42 report, <http://www.iea-bioenergy.task42-biorefineries.com/publications/reports/> (accessed 08/08/2013).

<sup>2</sup> bridge 2020 (2013): "Bio-based and renewable industries for Development and Growth in Europe", [http://bridge2020.eu/wp-content/uploads/2013/06/BRIDGE\\_SIRA\\_Full\\_download.pdf](http://bridge2020.eu/wp-content/uploads/2013/06/BRIDGE_SIRA_Full_download.pdf), accessed 08/08/2013.

### 3. Joint call topic

#### **Focus of the Joint Call**

**Improving economic feasibility, resource efficiency and sustainability of biorefinery concepts:** using all components of the feedstock to make multiple products (chemicals, heat and fuel) and thus to improve especially the LCA of biofuel production. Value should be added to energy-producing biorefineries by increasing the diversity of feedstocks, improving substrate utilisation and enhancing the value/diversity of co-products and residues.

Funding is available for innovative industrially relevant research and development projects, which should cover one or more of the following topics:

- Enhancing the ability to use residues, side streams and wastes in biorefinery systems, particularly for energy. The estimated energy output should be calculated and clearly shown in the proposal.
- Upgrading of residues and co-products from current biorefinery systems to improve the overall economics of biofuel/bioenergy production
- Complete assessment of biorefinery concepts which combine different conversions processes (e.g. biological and chemical)
- Improving robustness of microbial communities in order to allow for more flexibility regarding raw materials or pre-treatment
- Enhanced microbial strain development to meet the needs of an integrated biorefinery
- Algae biorefineries: Production of carbohydrates and lipids as well as valuable substances such as vitamins, PUFAs (e.g. DHA, EPA) or carotenoids, in combination with the use as a renewable energy source. Specific focal areas in this area are:
  - o Decrease production costs– especially high energy costs for harvesting and downstream processes. -- optimise the individual processes along the whole value chain,
  - o Link process steps in optimal way
  - o Identify optimal growth conditions for different algae species (only in combination with products (i.e. not purely development of reactors or fundamental research))
  - o Develop intelligent nutrient cycles and sustainable water and light management systems (only in combination with products (i.e. not purely development of reactors or fundamental research))

**Please note that some specific points may be out of scope of a certain national programme!  
You should *always check with all relevant funding organisations before handing in a proposal.***

## 4. Instructions for applicants

### General

- Proposals are expected to address one or more of the abovementioned points under chapter 3, “Joint call topic”.
- Please note that individual national funding organisations may be limited in the kind of project they could support.
- These restrictions, as well as other important national regulations, can be found in Annex I at the end of this document.
- In case of any further questions, please contact your national funding organisation prior to submitting a proposal.

### Consortium

Proposals are invited from transnational consortia involving large companies, SMEs, research organisations and/or stakeholder associations depending on national funding conditions.

Proposals must include partners from **at least two of the countries** involved in the call. The partners should cooperate and the results of the project should be dependent on the work of the partners. Project outputs are expected to provide benefits to all partner countries.

As projects are expected to be market-oriented, **it is strongly recommended that one or more industrial partners** participate in the consortium. If industry participation is not feasible due to the scope/outlay of the envisaged work, the reasons for this decision should be explained in the proposal. Note that detailed exploitation and dissemination plans are an important feature of every proposal.

Partners from countries which are not members of ERA-NET Bioenergy are also encouraged to join a consortium (as additional partners; the minimum number of two partners from ERA-NET Bioenergy countries remains). These so-called “third country” partners must finance their activities from other sources, as the ERA-Net Bioenergy members will not provide such funds, and projects must ensure that the exploitation of results focuses on the ERA-NET Bioenergy partner countries.

The proposal must address the added value derived from international cooperation, in comparison to national projects. This should be evident in the layout and execution of the work packages.

The number of partners per consortium is not limited, but the manageability of the consortium must be demonstrated. Consortia also need to be balanced between countries both in terms of number of partners and distribution of budget, such that all project partners contribute to and benefit from an equitable and balanced cooperation.

The project partners are required to sign a consortium agreement in order to agree on Intellectual Property Rights (IPR) and other relevant issues dealing with responsibilities within the project and exploitation of results. **The consortium agreement must be signed before the first payment can be made.**

The ERA-NET Bioenergy does not provide direct information on potential partners in their countries.

### Funding arrangements

Research will be **funded from national sources and subject to national funding rules**.

Each participating funding agency has made separate arrangements for funding the national participants. The amount of public funding available for individual projects depends on the relevant national rules. Additional co-financing from stakeholders is expected following national and European rules for R&D funding. The total funding budget is limited. For details please contact your national funding agency.

### Project duration

The maximum project duration will be three (3) years. Projects are expected to start in early 2015, and the end date should be the same for all partners in a consortium.

### **Deadline for submission**

Pre-proposals must be received via e-mail by the central **Call Secretariat (Mr. Matté Brijder, [matte.brijder@rvo.nl](mailto:matte.brijder@rvo.nl))** by **April 28 2014, 13:00 CET** at the latest.

In case you do not get a confirmation that your proposal was received, you should immediately contact Mr. Brijder!

It is the responsibility of each applicant to ensure their documents are submitted on time.

### **Structure of submission**

#### Pre-proposal:

- The pre-proposal consists of one common document following the structure of the template available from February 10 2014 on [www.eranetbioenergy.net](http://www.eranetbioenergy.net).
- A non-confidential abstract is required (to be used for later publication of successful proposals).

#### Full proposal:

- On June 16 2014, only consortia whose pre-proposals pass the first evaluation stage will be invited to submit full proposals.
- These full proposals should follow the structure of the template which will be available on the ERA-NET Bioenergy website from June 16.
- The deadline for submitting full proposals will be **1<sup>st</sup> September 2014, 13:00 CET**.
- Some national funding bodies may also require specific national documents (application forms or similar) from "their" applicants at this stage. Such national documents are NOT submitted centrally, but directly to the relevant ministry or agency. Please consult the relevant National Annexes at the end of this document for further details.
- All proposals should be written using the Times New Roman, font size 11.

### **Proposal evaluation**

Proposals will be evaluated against the following criteria:

- Contribution to the goals of the call
- Technical and scientific quality; innovation
- Quality of the consortium
- Project Management
- Outputs and exploitation

Feedback will be given to **pre-proposals** which will indicate whether applicants can proceed to the full proposal stage either unchanged, with suggested modifications, cannot unless modifications are made or cannot proceed.

The full criteria for **full proposals** can be found under Annex II. Evaluation of full proposals will be by an international evaluation jury, selected by the funding organisations involved in the call. The international evaluation jury will provide recommendations for funding. The final decisions will be taken by the ERA-NET Bioenergy partners.

The evaluation of full proposals will take place in September and October 2014 and the funding decisions will be communicated in late 2014. Projects are expected to start in early 2015.

Beyond these instructions above, your participating national funding agency's guidelines should be followed.

### **Project monitoring and expected deliverables**

In addition to the standard requirements of your funding agency, ERA-NET Bioenergy requires the following:

1. Participation in and presentation at two joint ERA-NET status seminars (mid-term and final seminar).
2. Depending on the project duration, *at least* one common interim report following the template which will be provided in due time. This interim report will be available to the funding organisations involved, but will not be made public. Be aware that national regulations will apply to interim reports. Care will be taken by all funding bodies to minimise the bureaucratic workload for the consortia.
3. A common publishable and public Final Report (written in English), describing the main activities and outcomes of the work including an exploitation plan stating how the results of the project will be implemented. Confidential results will be presented in a separate confidential report. National guidelines have to be followed as well. Detailed requirements for this report will be distributed to successful applicants once the projects have started.
4. An abstract of the main results of the project, to be published in a “joint call brochure” after the end of the projects.

## Participating countries / National contact points

### **Germany**

Fachagentur Nachwachsende Rohstoffe (FNR)  
Tina Hausmann  
+49-3843-6930-172  
[t.hausmann@fnr.de](mailto:t.hausmann@fnr.de)  
[www.fnr.de](http://www.fnr.de)

### **The Netherlands**

NEA Netherlands Enterprise Agency  
Matté Brijder  
+ 31 88 602 7954  
[matte.brijder@rvo.nl](mailto:matte.brijder@rvo.nl)  
<http://english.rvo.nl/>

### **Poland**

Polish National Centre for Research and Development  
Karolina Janczykowska  
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### **United Kingdom**

BBSRC  
Dr Ian Stanton  
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Technology Strategy Board  
Merlin Goldman  
+ Tel.  
[Merlin.Goldman@tsb.gov.uk](mailto:Merlin.Goldman@tsb.gov.uk)



## Annex I: Specific National Rules

### Germany

Funding quota of German participants can be up to 100 % for universities or research organisations. In the case of companies, funding quota will be decided on a case-by-case basis depending on the size of the company, type of research/development, risk associated with the research activities, commercial perspective of exploitation, typically up to max. 50%. In this case, overhead costs can be considered for companies.

In case of small and medium enterprises, an additional bonus of 10-20 % funding quota can be awarded.

There is no obligation regarding the number of companies to be involved from Germany, but company participation is recommended for dissemination and exploitation of results.

The relevant national R&D programme for German project partners is the BMEL's "Nachwachsende Rohstoffe" ("Renewable Resources") managed by FNR.

Each member of the consortium must clearly present their goals and work within the project, global and local (country-specific), the financial and time tables and the points of actual collaboration with the international partners.

**Please note:** At the pre-proposal stage, German partners in a consortium have to provide concise additional information by way of the "FNR-Zusatzinfo", also available on [www.eranetbioenergy.net](http://www.eranetbioenergy.net).

The German project partners of positively evaluated full proposals will, at a later stage, be invited by FNR to submit national application forms (AZA or AZK using the electronic proposal assistant "easy" (see <https://foerderportal.bund.de/easyonline/> for details) – the usual FNR funding rules apply) within three weeks after notification. At the pre-proposal stage of ERA-NET Bioenergy calls, no "easy" forms have to be completed.

The total budget available for the call in Germany is limited to 2-3 Mio €. The total requested funding of German partners in a consortium should not exceed 0,5M €.

German applicants must take note of the following specifications of FNR's programme:

- Trans-genetic organisms for biogas cannot be funded (as the short-term applicability in Germany is highly unlikely).
- German applicants in the area of algae biorefineries are strictly required to consult FNR before handing in a proposal.
- Food, feed and pharmaceutical products are not in the focus of FNR's programme. Therefore, feed cannot be the focus of the German part of a project. Food ingredients and pharmaceutical products are feasible only in case of algae biorefineries and only if they are not the main product.
- Municipal waste cannot be the focus of the R&D executed by the German partners of a project.

**Funding commitment: 2 – 3 Mio €**

**Contact person:** For *topic-specific questions* during the application phase:  
→ Tina Hausmann, [t.hausmann@fnr.de](mailto:t.hausmann@fnr.de), +49-3843-6930-172

For *general questions* (ERA-Net regulations, international collaboration):  
→ Karen Görner, [k.goerner@fnr.de](mailto:k.goerner@fnr.de), +49-3843-6930-162

## The Netherlands

### Requirements for Participants

Partners: NL Agency and the Ministry of Economic Affairs

The total budget available for the call in the Netherlands is limited to 500.000 €.

- At least two companies must take part in the project;
- Companies must accept dissemination and exploitation of results;
- Grants will be provided as aid for industrial research or experimental development;
- Funding for Dutch participants is limited to 40% of the eligible project costs in the case of industrial research and 25% in the case of experimental development;
- In the case of small and medium enterprises an additional 10% funding quota may be awarded;
- For eligible project costs we also refer to the Framework decision on subsidies of the Ministry of Economic Affairs;
- In general, the subsidy amounts to a maximum of €500.000 per project;
- At least 40% of the total project costs must be funded by companies;
- Projects must aim for the cascaded use of biomass;
- For projects with Dutch participation, energetic uses must be a **major** component of any biorefinery concept relevant to this joint call, with regard to value added
- Projects with Dutch participation must lead to a reduction of at least 20% of the feedstock costs, regarding the production of electricity, heat, gas and/or transportation fuels from biomass.
- All projects must contribute to the goals of the Top Sector Energy (reduction of CO<sub>2</sub>, increase in sustainable energy production at the lowest possible cost). Those projects which contribute to solving societal challenges will be given priority;
- No grants are provided to aquatic biomass projects
- Admission criteria include:
  - Contribution to the use and production of sustainable energy in the Netherlands;
  - Contribution to the Dutch Economy;
  - Level of innovation, compared to the international state of the art;
  - Quality of the project plan and the participating partners;
- For Dutch participants most of the regulations in the Framework decision on subsidies of the Ministry of Economic Affairs will apply, with the exception of Article 6.

**Funding commitment: 500.000€**

**Contact person:** Matté Brijder  
NEA Netherlands Enterprise Agency  
+ 31 88 602 7954  
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<http://english.rvo.nl/>

## Poland

At the “Invitation for Pre-Proposals Stage” there is no need for additional national application forms. The transnational application to the central call office is sufficient. Only the Polish project partners of positively evaluated projects will then, in a second stage, be invited to submit national application forms.

All proposals must be aligned with National regulations, inter alia:

- *The Act of 30 April 2010 on the Principles of Financing Science*, published in Journal of Laws No. 96 item 615, 2010;
- *The Act of 30 April 2010 on the National Centre for Research and Development*, published in Journal of Laws No. 96 item 616, 2010;
- *The Regulation of the Minister of Science and Higher Education of 28 October 2010 on criteria and rules on granting state aid and “de minimis” aid by the National Centre for Research and Development*, published in Journal of Laws No. 215 item 1411, 2010.

## Funding Rules

Funding quota of Polish participants can be up to 100% for research organisations. In case of entrepreneurs, funding quota will be decided on a case-by-case basis depending on the size of the company, type of research/development, risk associated with the research activities and commercial perspective of exploitation. Organisations must be registered in Poland.

Type of activity	Funding quota			Research organisations
	Entrepreneurs			
	Large	Medium	Small and micro	
Industrial Research	Up to 65%	Up to 75%	Up to 80%	Up to 100%
Experimental development	Up to 40%	Up to 50%	Up to 60%	Up to 100%

## The eligible costs shall be the following:

1. **personnel costs (W)** - researchers, technicians and other supporting staff to the extent employed on the research project;
2. **costs of instruments and equipment (A)** - to the extent and for the period used for the research project; if such instruments and equipment are not used for their full life for the research project, only the depreciation costs corresponding to the life of the research project, as calculated on the basis of good accounting practice, shall be considered eligible;
3. **costs for buildings and land (G)** - to the extent and for the duration used for the research project; with regard to buildings, only the depreciation costs corresponding to the life of the research project, as calculated on the basis of good accounting practice shall be considered eligible; for land, costs of commercial transfer or actually incurred capital costs shall be eligible;
4. **cost of contractual research, technical knowledge and patents (E)** - bought or licensed from outside sources at market prices, where the transaction has been carried out at arm’s length and there is no element of collusion involved, as well as costs of consultancy and equivalent services used exclusively for the research activity; this cost type cannot account for more than **70%** of all eligible costs of a project; the subcontracting can be obtained from consortium partner only in justified case, this need will be verified by a national experts panel;
5. **other operating costs (Op)** - including costs of materials, supplies and similar products incurred directly as a result of the research activity;
6. **additional overheads (O)** - incurred indirectly as a result of the research project, up to 25% of other direct costs excluding costs of contractual research and technical knowledge and patents (E):  

$$O = (W + A + G + Op) \times \text{max } 25\%.$$



All eligible entities invited to submit Polish proposal are obliged to use the rate of exchange of The European Central Bank dated on the day of opening the call.

**Funding commitment: 500 000€**

**Contact person:** **Karolina Janczykowska**,  
Section of Management of Applied Research Programmes INFOTECH,  
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+48 515 061 554  
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## United Kingdom

### **INDUSTRIAL PARTICIPANTS (Partner: Technology Strategy Board)**

Industrial participants can be funded by the Technology Strategy Board (TSB) – please contact Merlin Goldman from the National call secretariat.

### **APPLICANTS FROM ACADEMIA (Partner: BBSRC)**

The BBSRC is pleased to provide in principle support for the 8<sup>th</sup> Joint Call for Research and Development Proposals of the ERA-NET Bioenergy.

Eligible academics are encouraged to apply for funding for collaborative research in the European Research Area. Subject to all conditions of eligibility and peer review being fully met, the budget earmarked by BBSRC for this call is up to £3M. Work undertaken by UK academics must fall with BBSRC's remit.

### **Specific priorities for Collaborative Research Proposals**

The call covers the area of integrated biorefining. Under this call, research using feedstocks from material that could be used for human food or animal feed is excluded (unless they have already fulfilled their food purpose). If applicants are in any doubt, please contact the National Call Secretariat for further clarification (see below). Proposals should be for a maximum of three years duration.

### **Eligibility**

UK Universities, Independent Research Organisations and Institutes that receive strategic funding from BBSRC are eligible to apply. Full details of eligibility conditions can be found on the BBSRC website:

<http://www.bbsrc.ac.uk/funding/apply/eligibility-overview.aspx>

The BBSRC will fund the UK academic partner of any successful transnational collaboration.

### **Specific national regulations and guidelines**

PhD students will not be funded as part of a standard collaborative research proposal.

Funding will be awarded on the basis of full economic cost as described on the BBSRC website. UK applicants who are invited to prepare a full proposal will also be required to complete a BBSRC proforma alongside their full application to ensure their proposal complies with full economic cost requirements. Applicants are encouraged to clearly justify all the requested resources. Further details, and a copy of the proforma, will be provided when full proposals are invited.

BBSRC has a very restricted budget available for equipment and other capital items. Applicants requesting items of equipment costing over £10k in their full proposals will be required to follow the guidelines as set out on the BBSRC website.

<http://www.bbsrc.ac.uk/funding/apply/research-equipment-guidance.aspx>

**Funding commitment: 3 M£ (for indication 3.64 Mio EUR)**

**National Call Secretariat** Dr Ian Stanton

Funding organisation: Biotechnology and Biological Sciences Research Council - BBSRC

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## Annex II: Evaluation criteria

Evaluation criteria for full proposals

Indicator 1	Contribution to the Call	Unsatisfactory	Poor	Below Average	Good	Very good
1	<b>Contribution to the goals of the call</b> How well does the proposal align with the call topic?	0	4	8	16	20
<b>Maximum</b>						<b>20</b>

Indicator 2	Technical/scientific quality	Unsatisfactory	Poor	Below Average	Good	Very good
1	<b>Novelty</b> Does the proposed project produce a step forward in knowledge and technology?	0	3	6	12	15
2	<b>Quality of the proposed R&amp;D</b> Are the issues to be addressed significant and relevant within this field? Will the proposal as written be able to address these issues? Are worthwhile challenges identified in the proposal?	0	5	10	20	25
3	<b>Quality of the approach - methodology</b> Clarity, adequacy and consistency of the approach. Is there enough technical detail in the methodology? Is the approach clear, adequate to the problem and consistent?	0	4	8	16	20
<b>Maximum</b>						<b>60</b>

Indicator 3	Qualification of Consortium	Unsatisfactory	Poor	Below Average	Good	Very good
1	<b>Competence concerning the topics addressed</b> Does the consortium have the necessary competence and experience to achieve the results proposed?	0	3	6	12	15
2	<b>Co-operation and complementarity of partners</b> Are the partners clearly complementary in their roles and do they fit together? Is the balance between the partners appropriate? Is there added value in the co-operation including why specifically the international co-operation improves the quality of the results? Is there a true co-operation of all partners (e.g. not simply separate work packages)? Will external stakeholders be engaged?	0	3	6	12	15
3	<b>Availability of technical and human resources</b> Are appropriate technical and human resources available within the consortium or if not, have they been requested within the proposal?	0	3	6	12	15
<b>Maximum</b>						<b>45</b>

Indicator 4	Project management	Unsatisfactory	Poor	Below Average	Good	Very good
1	<b>Quality of project management</b> Are suitable plans and structures in place to ensure the project will operate effectively over its run time? Is there sufficient detail in the project plan (milestones, work packages,...)? Are arrangements in place to ensure effective & efficient communication between the partners?	0	4	8	16	20
<b>Maximum</b>						<b>20</b>

Indicator 5	Outputs and exploitation	Unsatis- factory	Poor	Below Average	Good	Very good
1	<b>Potential outputs and expected results</b> Are any cost reductions and efficiency improvements likely to result from the proposed work?	0	6	12	24	30
2	<b>Plans for implementation and exploitation</b> Are realistic and appropriate plans in place for effective implementation and subsequent exploitation of the outputs?	0	5	10	20	25
<b>Maximum</b>						<b>55</b>