

**Proposal submission forms for
financial support from the EC for:**

Concerted Actions & Thematic Networks

Including guidelines on how to complete the proposal submission form



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For guidelines see in relevant "Guide for Proposers"

**Proposal submission forms for
financial support from the EC for either a:**

Concerted Action,

Or a

Thematic Network

If possible, these forms should be prepared using the Proposal Preparation Tool (ProTool), which is available via the Commission Internet site <http://www.cordis.lu/fp5>, by E-mail or on CD-ROM. Use of the Proposal Preparation Tool is preferred by the Commission. However applicants may also use the forms in the Guide for Proposers. Using the ProTool, forms may be submitted electronically, or printed out and returned on paper.

Information on the Proposal

Proposal Full Name				
Proposal Acronym ⁵		Proposal No ⁶		
Call Identifier ³				
Research Programme(s) ²				
Thematic Priorities ²				

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Post stamp

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Reception date

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Concerted Action or Thematic Network Proposal Form – Form A2



EUROPEAN COMMISSION
RESEARCH DIRECTORATES
GENERAL
CONCERTED ACTION OR
THEMATIC NETWORK FORMS

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Proposal Acronym ⁵

Proposal No ⁶

A2.

Proposal Summary ²²

Objectives (maximum 1000 characters)

Description of the work (maximum 2000 characters)

Milestones and expected results (maximum 500 characters)

Concerted Action or Thematic Network Proposal Form – Form A3



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Proposal Acronym ⁵		Proposal No ⁶	
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A3. Participant Profile/Information (1 form per participant) ²³

Legal information on the participating organisation

Participant Role ²⁴		Participant No ²⁵		Link to Contractor No ²⁶	
Registration No with the European Commission's Research Programmes ²⁷					
Organisation Legal Name ²⁸					
Short Name ²⁹			Legal Registration No ³⁰		
Activity Type ³¹		Legal Status ³²		If 'PRC', Specify ³³	
Business Area ³⁴ (NACE)		User/Supplier ³⁵ (U / S)			

Organisation details ³⁶

Annual turnover ³⁷		Annual Balance Sheet Total ³⁸		Number of employees ³⁹		
Is Your Organisation independent ⁴⁰ ?					Y	N
If No, please indicate legal name(s) of owner(s) who own 25 % or more ⁴¹						

Is Your Organisation affiliated to any other participant(s) in the proposal ⁴² ?					Y	N
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If Yes, please indicate Participant No, Short Name(s) and character of affiliations(s) (D / I) ⁴³					

Address of the main department carrying out the work ⁴⁴

Department/ Institute Name ¹⁰					
PO Box ¹¹					
Street Name and Number					
Post Code ¹²			Cedex ¹³		
Town/City					
Country Code ¹⁴		Country Name ¹⁴			

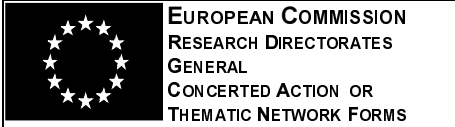
Authorised person ⁴⁵

Title (Dr, Prof., ...)		Gender ⁸	F	M
Family Name				
First Name				
Telephone No ¹⁵		Fax No ¹⁵		
E-mail				

I certify that the above information is accurate and that my organisation has agreed to participate in this proposal.

Date (DD/MM/YYYY)	
Signature of authorised person	

Concerted Action or Thematic Network Proposal Form – Form A4



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Proposal Acronym ⁵ Proposal No ⁶

A4. Cost Summary in euro ⁴⁶

Participant Role ²⁴	Participant No ²⁵	Linked to Contractor No ²⁶	Participant Short Name ⁴⁷	Number of person/months ⁴⁸	Personnel Costs ⁴⁹	Travel and Subsistence ⁵⁰	Computing ⁵¹	Subcontracting ⁵²	Other Specific project Costs ⁵³	Overhead Costs ⁵⁴	Total Costs ⁵⁵	Requested Contribution from the Community ⁵⁶
CO	1											
TOTAL ⁵⁷												

EN E 1 FP5THN

How to complete the proposal submission forms

Introduction

Proposals for a **Concerted Action or a Thematic Network** can be submitted by either a **single contractor** (the contractor) together with a body of members, or proposals can be submitted by a **consortia of contractors** (one being the co-ordinator) together with a body of members.

This document provides guidance on how to complete the attached administrative forms. These forms will be an integral part ('Part A') of your proposal for a concerted action or a thematic network project.

The forms may be submitted either electronically or on paper. You are strongly advised to submit the forms electronically.

Submitting electronically:

You must use the Proposal Preparation Tool, which can be downloaded free-of-charge from the Internet site:

<http://www.cordis/lu/fp5>

This tool provides on-line help facilities, and provides instructions for entering and submitting the required information electronically. **If you choose to submit electronically there is no need to read the remainder of these notes.**

Submitting on paper:

There is a front page (A0) and four forms numbered A1, A2, A3 and A4. You should detach and complete these forms, or you may use photocopies of them providing the quality is good. Alternatively, you can download the forms from the World Wide Web at the address given above. When you have completed the form, please keep a photocopy for your own file.

The forms are designed to collect the administrative information on the consortium or contractor making the proposal. This information is necessary for the Commission services to evaluate the proposal. A minimal amount of extra information is requested for statistical purposes only.

In addition to the administrative information provided in part A, a proposal must also contain parts B and C, describing the content and the management of your proposed project. Incomplete proposals will be ineligible and will not be evaluated. The lay-out and structure of parts B and C are described in the Guide for Proposers for the relevant call.

How to complete the forms

The forms should be completed as follows:

For single participant proposals for concerted actions and thematic networks:

- The principal contractor fills in forms A0, A1, A2, A3 and A4 form
- The members fill in one A3 form each.

For multi participant proposals for concerted actions and thematic networks:

- The co-ordinator fill in forms A0, A1, A2, A3, and A4;
- The principal contractors fill in one A3 form each.
- The members fill in one A3 form each.

Subcontractors and other participants are not required to fill the A3 form and should not appear separately on the A4 form.

Explanatory notes are appended to each form.

Forms A0 to A4 may be machine-read at the Commission, so to minimise the possibilities of your proposal details being read incorrectly, we would kindly ask you to read and follow these notes carefully.

Please fill in the forms by typewriter. A photocopy of the original may be used if the quality is good.

Please keep Forms A0 to A4 as clean as possible and do not fold, staple or amend them with correction fluid.

Please enter your data only in the white space on the forms, do not type outside the boundaries or the data is likely to be truncated in the Commission's database. For questions requiring a choice between different boxes, please enter X in the appropriate space. You may find it easier to do this by hand in black ink, rather than try to line up a single typed character.

When appropriate when completing the form, please replace the characters listed below by the corresponding double characters:

Ø	OE	Ä	AE	Ö	OE
ø	oe	ä	ae	ö	oe
Æ	AE	Ü	UE	Å	AA
æ	ae	ü	ue	å	aa
ß	ss				

For numbers, (amount, durations, percentages, person-months), please round to the nearest whole number. Do not insert any character or space to separate the digits in a number.

Please remember to indicate the proposal short name (acronym) and proposal number (if a number has been allocated before submission) at the top of the form (part A) where indicated, and on every page of the other parts (part B and C), including any annexes.

All costs must be given in euro (and not kilo euro) and must exclude value added tax (VAT).

Where to send the form

For multi participant proposals the contractors and members should send their completed A3 form to the proposal co-ordinator. They should confirm their organisation's agreement to participate in the proposal either by signing this form, or by providing a letter of commitment to the co-ordinator before the deadline.

The proposal co-ordinator should check that the forms have been filled in correctly and that there is consistency between the information in the various forms and the rest of the proposal. If submitting the proposal on paper, the co-ordinator has to sign form A1 before sending it.

If it is submitted electronically, electronic signature must be provided. The co-ordinator has to have in his position either the original signatures of the participants who would contribute to the funding of a project (i.e. potential contractors and members) or the commitment letters from the participants stating that the co-ordinator is authorised to submit the proposal on behalf of the consortium and that the proposal is agreed to by the partners.

The co-ordinator (contractor for single participant proposals) should then send the original (with original signatures – or the signed declaration) and the required number of copies to the European Commission. The number of copies is specified in the Guide for Proposers and the address is specified in the Call for Proposals.

Additional information

The notes accompanying the forms are intended to help you complete them correctly. However, you should also read the other parts of the Guide for Proposers, and other documents provided in the information pack, where you will find more complete descriptions of the principles used to implement the programme. Specifically, the following documents are essential to submit a proposal:

- The call for proposals published in the Official Journal,
- The Guide for Proposers for the call,
- The proposal submission form for the type of action you apply for,
- The work programme for the relevant Community programme,
- The evaluation manual with its programme specific annexes.

Other sources of information which contain relevant information are:

- The model contracts for concerted actions and thematic networks,
- The rules for participation and dissemination of research results of the fifth framework programme.

Copies of these documents can be requested from the information desk of the Commission services mentioned in the Guide for Proposers for the call or be downloaded from the WWW at the following address: <http://www.cordis.lu/fp5>.

How to complete the administrative forms (Part A - Forms A0 to A4).

Proposal Information and Administrative Overview Forms (A0, A1)

1. ‘Proposal information and administrative overview forms’ (A0 and A1)

These forms are to be completed by the proposal co-ordinator on behalf of the consortium for multi participant proposals, and by the contractor for single participant proposals.

2. Thematic Priorities of the Research Programmes

The thematic priorities addressed by your proposal as indicated in the list in Annex 1 of Appendix 1, the proposal submission forms: “Structure of the thematic priorities of the 5th Framework Programme 1998-2002 (indirect actions)”. The list is organised so that the first three digits indicate the programme (in bold) and the two or three last digits indicate the thematic priorities. You should use all five or six digits as identifier of the thematic priorities. If more than one thematic priorities is addressed, indicate them in priority order, so that the main priority addressed by the proposal is mentioned first.

3. Call Identifier

The call identifier is the reference number given in the call you are addressing, as indicated in the publication of the call in the Official Journal.

4. Type of Action

This details the type of action you are applying for. You should use the following code:

CA: Concerted Action

TN: Thematic Network

5. Proposal Acronym

Provide a short title or acronym of no more than 20 characters, to be used to identify the proposal. The same acronym should appear on each page of the proposal in order to prevent errors during its handling.

6. Proposal No

The proposal number you were given at pre-registration by the Commission services, where this service was applicable. If you have not received a proposal number, you should leave this field blank. In this case, the Commission services will allocate a proposal number after reception. This number will be communicated to you on the acknowledgement of receipt form.

7. Contact person for the proposal

The name and contact details for the person responsible for the proposal who acts as a contact on behalf of the consortium after the evaluation of the proposal, normally the proposal coordinator.

8. Gender (F(emale) / M(ale))

This information is required for statistical purposes only. Please indicate with a cross as appropriate.

9. Organisation Legal Name

You must use the complete legal name of the organisation. If applicable, name under which the participant is registered in the official trade registers.

10. Department / Institute Name

Name of the unit (department or institute) in the organisation, which will be carrying out the work and for which the contact person is working. The address details given in the following fields must be for the department/institute and not the legal address of the organisation.

11. P. O. Box

If applicable, indicate number of Post Office Box for surface mail delivery.

12. Post Code

If applicable, enter numerical (alphanumeric for United Kingdom and The Netherlands) post code without being prefixed by the country identifier, e.g. 1000 and not B-1000 or SW1H 9AS and not UK-SW1H 9AS.

13. Cedex

If applicable, indicate Cedex for surface mail delivery.

14. Country Code / Name

Use the relevant country code as indicated in the list in Annex 2 of Appendix 1, the proposal submission forms: "Country Codes". For any country not included in the list in Annex 2, please indicate the full name of the country in the "Country Name" and leave the "Country Code" blank.

15. Telephone No and Fax No

Please give the telephone and fax numbers in the following format, for example (a European Commission telephone number in Brussels, Belgium): (32-2)2988888 (32 being the country code number; 2 the area code number for international calls; 2988888 the subscriber's number).

16. Proposal Abstract

The proposal abstract should be a very short and precise presentation of the main features of the proposal. Why is it proposed and what problem is it solving? What are the objectives? How will the objectives be achieved? What results are expected? This proposal abstract will be used together with the proposal summary description in form A2 in the evaluation process and in communications about the proposals to the interested parties (Commission services and programme committees etc.). Please use plain typed text, avoiding formulae and other special characters. If the proposal is written in a language other than English, please include in form A1 an English version of the abstract.

17. Project Duration

Project duration in months.

18. Total estimated Eligible Costs

The total estimated eligible costs of the project in euro as in form A4.

19. EC Contribution requested

The total contribution requested for the project from the European Community in euro, as in form A4.

20. Keywords

If applicable, the keywords to be filled in these fields will be defined in the Guide for Proposers, Section V, "Call specific information", for the calls according to the needs of the specific programmes.

21. Similar Proposal

If you have previously submitted the same proposal or one similar in content to any European Community programme, you should indicate the details here. In the field programme name, you should use the code in the list of research areas / thematic priorities in Annex 1 of Appendix 1, the proposal submission forms if the programme is a fifth framework programme, in all other cases, write the name of the programme.

Proposal Summary Form (A2)

22. Proposal Summary

The **proposal summary form, (A2)** should be filled in by the co-ordinator only, for single participant proposals by the principal contractor. You should not use more than 3,500 characters. The proposal summary should, at a glance, provide the reader with a clear understanding of the proposal objectives and how the objectives will be achieved, and their relevance in the context of the objectives of the specific programme. This summary may be used as an alternative to the proposal abstract, as the description of the proposal in the evaluation process and in communications to the programme management committees and other interested parties. It must therefore be short and precise. Please use plain typed text, avoiding formulae and other special characters. If the proposal is written in a language other than English, please include in form A2 an English version of the proposal summary.

Participant Profile / Information Form (A3)

23. Form A3

Form A3 should be filled in by principal contractors (including the co-ordinator) and members only. Make sure that the form is signed by a person in your organisation authorised to sign the proposal. Keep a photocopy or an electronic copy of the completed form for your own files before sending it to your proposal co-ordinator.

24. Participant Role

The role for the participant as defined by the consortium for this proposal. This role should also be used on form A4. The following codes should be used for role:

CO: co-ordinator for multi participant proposals and for single participant proposals, the principal contractor;

CR: principal contractor for multi participant proposals (other than the co-ordinator);

MB: member (where applicable).

25. Participant No

Only applicable to multi participant proposals. The number allocated by the consortium to the participant for this proposal. The co-ordinator of a multi participant proposal is always number one. Members should have numbers following the contractor to whom they are linked, if they are linked to a specific contractor.

26. Linked to Principal Contractor No (Participant No)

Only for members: Indicate the number of the principal contractor, to whom the member is linked.

27. Registration No with the European Commission's Research Programmes

In case the organisation has already received a registration under the fifth Framework Programme, please enter it here, and only give the organisation details if they have changed since the registration number is received.

28. Organisation Legal Name

If applicable, name under which the participant is registered in the official trade registers.

29. Short Name

The short name chosen by the participant for this proposal. This should normally not be more than 20 characters and the same should be used for the participant in the A4 form

30. Legal Registration No

If applicable, please provide the organisation's legal national registration number or code found in, e.g. the Chambers of Commerce register or the business register.

31. Activity Type

Indicate the principal activity of your organisation. Please use one of the following codes:

- REC:** Research;
- HES:** Higher Education;
- OTH:** Others

32. Legal Status

Please use one of the following codes:

- GOV:** Governmental;
- INO:** International Organisation;
- JRC:** Joint Research Centre;
- PUC:** Public Commercial Organisation;
- PRC:** Private Commercial Organisation including Consultant;
- EEI:** European Economic Interest Group;
- PNP:** Private Organisation, Non Profit.

33. Legal Status : 'If 'PRC', Specify'

If you are a Private Commercial Organisation (PRC), please indicate the type of organisation (e.g.: SA, LTD, GmbH, independent person,...).

34. Business Area (NACE)

For statistical purposes, the Commission services need to classify the principal economic activity of each participant. This is done for the programmes in the 5th Framework programme according to the 2-digit or 3-digit NACE Rev. 1 classification, listed in Annex 3 of Appendix 1, the proposal submission forms. (NACE is "Nomenclature générale des activités économiques dans les Communautés européennes"). You should identify the principal economic activity of your organisation, or, in the case of a larger organisation, of the executive division of your organisation making the proposal.

35. User/Supplier

Please indicate whether the participant is principally a user (i. e. a participant in the project who participates as a user of the project's result) or a supplier (i. e. a participant in the project who provides the solution or result to solve the users problem) in this project.

36. Organisation details

This section is for statistical information only. The fields should be filled by all private organisations and other participants who have an analytical accountancy system, but public research institutions, like universities only have to fill field 40 (see the notes to the fields in this section).

37. Annual turnover

This field is for statistical information only. It should be filled in by all participants which are able to provide the figures, but normally not for universities. Information from the most recent accounting year should be used. The figures should be given for the organisation as a whole and not just for the subsidiary company or the department carrying out the work. The following codes for intervals should be used:

- T1:** $0 \leq$ EUR 7 million (Annual turnover less than or equal to EUR 7 million)
- T2:** $>$ EUR 7 million or \leq EUR 40 million (Annual turnover more than EUR 7 million or less than or equal to EUR 40 million)
- T3:** $>$ EUR 40 million (Annual turnover more than EUR 40 million).

If not applicable (e.g. for universities) please write **N/A**.

38. Annual Balance sheet Total (i.e., total of assets or total of liabilities)

This field is for statistical information only. It should be filled in by all participants which are able to provide the figures, but normally not for universities. The figures should be given for the organisation as a whole and not just for the subsidiary company or the department carrying out the work. Information from the most recent accounting year should be used. The following codes for intervals should be used:

- B1:** $0 \leq$ EUR 5 million (Annual balance sheet total less than or equal to EUR 5 million)
- B2:** $>$ EUR 5 \leq EUR 27 million (Annual balance sheet total more than EUR 5 million or less than or equal to EUR 27 million)
- B3:** $>$ EUR 27 million (Annual balance sheet total more than EUR 27 million)

If not applicable (e.g. for universities) please write **N/A**.

39. Number of employees

This field is for statistical information only. All participants should fill it in. The figures should be for the legal organisation as a whole - not only for the department carrying out the work. The contribution of part-time staff should be accounted as the equivalent number of full-time staff – as full-time equivalents. Please indicate the number of full-time equivalent employees according to the following classification:

- S1:** 0 employee
- S2:** 1 – 9 employees
- S3:** 10 – 49 employees
- S4:** 50 – 249 employees
- S5:** 250 – 499 employees
- S6:** 500 – 1999 employees
- S7:** 2000+ employees

40. Independence

Is 25% or more of the capital or the voting rights owned by one enterprise or jointly par several enterprises falling outside the definition of an SME (except public investment corporations, venture capital companies and institutional investors, provided no control is exercised either individually or jointly)?

If the organisation is not independent, you should provide the name(s) of the company(ies) which own(s) 25 % or more of the organisation.

An SME (small and medium-sized enterprise) is defined as an entity that has less than 250 full time equivalent employees, has an annual turnover not exceeding EUR 40 million, or an annual balance sheet total not exceeding EUR 27 million, and is not controlled by 25% or more by a company which is not an SME (on the issue of control, see note 42).

41. Owners

Please provide the legal name(s) of the organisation(s) controlling the organisation by 25% or more (on the issue of control, see note 42).

42. Affiliation

An organisation is affiliated to another organisation if:

It is under the same direct or indirect control as another organisation, or

It directly or indirectly controls another organisation, or

It is directly or indirectly controlled by another organisation.

Control:

Company A controls company B if:

- A, directly or indirectly, holds more than 50% of the share capital of B, *or*,
- A, directly or indirectly, holds more than 50% of the shareholders' voting rights of company B, *or*,
- A has, directly or indirectly, the decision-making powers within company B.

It should be noted that Company A's holding a simple majority of the share capital, or the voting rights, of Company B may be sufficient to create a controlling relationship.

43. Affiliated Organisations

Please provide the participant number, short name(s) of the organisation(s) to which your organisation is affiliated and use the codes below to describe the character of the affiliation(s):

D: Direct control;

I: Indirect control.

44. Department carrying out the work

Provide here the name and address of the department carrying out the work

45. Authorised Person

This is a person with authority to commit the organisation to participate to a concerted action or a thematic network project.

Cost Summary in euro Form (A4)

46. Cost Summary in euro, form A4

For single participant proposals the A4 form should be filled by the contractor. For multi participant proposals the A4 form should be filled in by the co-ordinator based on the budget distribution agreed by the consortium. It should only contain the eligible costs. All figures should be in euro and not kilo euro. For more detailed information on eligible costs categories for the concerted actions and thematic networks please refer to the notes below and to section 3 of the Guide for Proposers.

47. Participant short name

The short name chosen by the participant in this proposal from form A3.

48. Number of person/months

Number of person-months for the participants. If applicable person-months allocated to subcontractor(s) shall be included in the number of person months for the participant, but also indicated in parentheses.

49. Personnel costs

For a Concerted Action or Thematic Network project only costs for administration, management and coordination are eligible costs and can be charged to the project; the costs of non-professional administrative and secretarial staff should not be charged but should be included in the overhead costs.

Personnel costs shall be charged in respect of the actual time undertaken by the participant.

For specific programme INCO see Annex 4 of Appendix 1.

50. Travel and subsistence

The amount for travel and subsistence costs of personnel working on the project, calculated on the basis of the usual practices of the participant. These costs may include the costs of attendance at meetings of some or all of the participants; travel costs related to visits to other participants; short-term exchanges between participants (not exceeding two months); and visits to meetings, organised by participants, by experts invited by the co-ordinator. The prior agreement of the Commission will be required at the contract stage for any destination outside the territory of a Member State, an Associated state or a third country where a contractor or member is established.

51. Computing

The costs for using own computing facilities or services (to be established in accordance with usual applicable rules, including, for instance, recorded computer usage).

52. Subcontracting

Costs for all subcontracting specific to the project (goods, supplies and services). Such costs must be in accordance to usual market costs.

53. Other specific costs

Other significant specific project costs necessary to carry out the work, and which do not fall under any of the other defined cost categories or under overheads, may be charged under this category. Costs under this category will be subject to prior written agreement from the Commission at the contract stage.

54. Overhead costs

For concerted actions and thematic networks, up to 20 % of all cost categories except subcontracting can be charged as overheads.

Note: Other methods of overhead calculation used in other Community funded actions are not applicable to concerted actions or thematic networks.

55. Total costs

The sum of all the cost categories.

56. Requested contribution from the Community

This will normally be equal to 100% of the additional eligible costs.

As a rule, EC contributions can only be requested by participants from Member States and Associated States. For participants from countries, which do not qualify for EC funding, the percentage for EC contribution is set to zero (0).

For cases where participants from other countries may receive EC funding, please refer to the relevant Guide for Proposers for details on which countries can receive EC contribution.

For the specific programme INCO see Annex 4 of Appendix 1.

57. Total

The sum of each cost category from the rows above.

Appendix 1

Annex 1

Structure of the research programmes
of the fifth framework programme
1998-2002 (indirect actions)
and their thematic priorities according
to their workprogrammes

**Structure of the research programmes of the fifth framework programme 1998-2002:
(indirect actions):**

1. 5th EC Framework programme

1.1. *First activity*

1.1.1. Quality of Life and Management of Living Resources

1.1.2. User-friendly Information society

1.1.3. Competitive and Sustainable Growth

1.1.4. Energy, Environment and Sustainable Development

1.2. *Second activity*

1.2.1. Confirming the International Role of Community Research

1.3. *Third activity*

1.3.1. Promotion of Innovation and Encouragement of SME participation

1.4. *Fourth activity*

1.4.1. Improving the Human Research Potential & the Socio-Economic Knowledge Base

2. Euratom Framework Programme

2.1 *Nuclear Energy*

**Structure of the thematic priorities of the fifth framework programme 1998-2002:
(indirect actions):**

- 1. **EC Framework programme**
- 1.1. **First activity**
- 1.1.1. **Quality of Life and Management of Living Resources**
- 1.1.1.-1. Key action Food, Nutrition and Health
- 1.1.1.-1.1 Development of safe and flexible and new and/or improved manufacturing processes and technologies
- 1.1.1.-1.1.1. Novel and improved biological raw materials for high quality food
- 1.1.1.-1.1.2. Advanced and optimised food technologies, packaging systems and process control
- 1.1.1.-1.1.3. Quality monitoring and traceability throughout the food chain
- 1.1.1.-1.2 Development of tests to detect and processes to eliminate infectious and toxic agents throughout the food chain
- 1.1.1.-1.2.1. Improved understanding and control of contamination conditions.
- 1.1.1.-1.2.2. Rapid detection tests for pathogens, xenobiotics and hormones.
- 1.1.1.-1.2.3. New and safer methods of food production and distribution.
- 1.1.1.-1.2.4. New methodologies for assessing microbial, chemical and allergenic risks and exposures.
- 1.1.1.-1.3. Research into the role of food in promoting and sustaining health
- 1.1.1.-1.3.1. Role and impact of food on physiological functions, physical and mental performance
- 1.1.1.-1.3.2. Particular nutritional needs of defined population groups.
- 1.1.1.-1.3.3. Links between diet and chronic diseases and disorders including the genetic factors involved.
- 1.1.1.-1.3.4. Consumer attitudes and reactions with regard to food products, food processing and labelling.
- 1.1.1.-2. Key action Control of Infectious Diseases
- 1.1.1.-2.1. Development of improved or novel mono-component, multi-component and combined vaccines
- 1.1.1.-2.1.1. Discovery phase and preclinical development of vaccines.
- 1.1.1.-2.1.2. Development of European networks for clinical and field trials of vaccines.
- 1.1.1.-2.1.3. Underlying mechanisms ("transdisease vaccinology")
- 1.1.1.-2.2. Strategies to identify and control infectious diseases
- 1.1.1.-2.2.1. Comprehensive approaches for the treatment of, and protection against, human and animal infectious diseases.
- 1.1.1.-2.2.2. Antimicrobial drug resistance and changes in virulence.
- 1.1.1.-2.2.3. Diagnostic tests for humans and animals.
- 1.1.1.-2.2.4. Risk assessment and transmission.
- 1.1.1.-2.3. Aspects of public health and care delivery systems
- 1.1.1.-2.3.1. Organisational and economic aspects of public health.
- 1.1.1.-2.3.2. Surveillance, monitoring and evaluation methodologies in prevention and cure.
- 1.1.1.-2.3.3. Methodologies for product safety surveillance in the market place.
- 1.1.1.-3. Key action The "Cell factory"
- 1.1.1.-3.1. New and innovative health-related processes and products
- 1.1.1.-3.1.1. Development of new diagnostics, therapeutic substances and strategies.
- 1.1.1.-3.1.2. New and improved technologies for biological productions.
- 1.1.1.-3.1.3. Novel in-vitro testing as alternatives to animal testing.
- 1.1.1.-3.2. Energy – efficient bioremediation and waste biotreatment processes
- 1.1.1.-3.2.1. New bioprocesses for preventing industrial pollution, treating, upgrading, and/or recycling bioaccumulable wastes and industrial by-products.
- 1.1.1.-3.2.2. Bioassays and biosensors.
- 1.1.1.-3.2.3. Biodegradation of recalcitrant chemicals.
- 1.1.1.-3.2.4. Biodiversity and ecological dynamics of natural and introduced populations.
- 1.1.1.-3.2.5. Development of methods and strategies to ensure the safety of new biomolecules or bioprocesses, and for the identification of recombinant organisms and their residues in the environment and their impact on human and animal health.
- 1.1.1.-3.3. New biological and biotechnological processes and products from cell factories
- 1.1.1.-3.3.1. Exploiting the cellular and molecular characteristics of organisms
- 1.1.1.-3.3.2. High value-added products and processes involving / derived from micro-organisms, plants and animals.

- 1.1.1.-3.3.3. Functional biomolecules and biocatalysts.
- 1.1.1.-3.3.4. Identification and sustainable use of metabolic and genetic diversity as a source of new valuable products.
- 1.1.1.-4. Key action Environment and Health
- 1.1.1.-4.1. Diseases and allergies related to or influenced by the environment, their prevention and treatment
- 1.1.1.-4.1.1. Analysis and quantification of the impact of environmental factors on human health.
- 1.1.1.-4.1.2. Assessment of the relative importance of, and the interactions between, factors impinging on health.
- 1.1.1.-4.1.3. Development of an integrated approach to risk management - taking into account environmental and public health aspects
- 1.1.1.-4.2. Diagnosis, risk assessment and risk management processes to reduce causes and harmful environmental health effects
- 1.1.1.-4.2.1. Development of methods to assess environmental hazards including mixed exposures, cumulative and low dose effects
- 1.1.1.-4.2.2. Improvement of predictive toxicity testing and mechanism-based risk assessment consistent with the aim of the reduction and eventual replacement of animal testing.
- 1.1.1.-4.2.3. Improved methods and technologies for long and short-term exposure and effects assessment including bio-markers (and bio-indicators) of environmental exposure, and susceptibility to environmental agents.
- 1.1.1.-5. Key action Sustainable Agriculture, Fisheries and Forestry
- 1.1.1.-5.1. New and sustainable systems of production, including breeding methods and exploitation in agriculture, fisheries and aquaculture
- 1.1.1.-5.1.1. Sustainable agriculture
- 1.1.1.-5.1.2. Sustainable fisheries and aquaculture
- 1.1.1.-5.2. The integrated production and exploitation of biological materials for non-food users
- 1.1.1.-5.2.1. Bulk chemicals (lubricants, paints, detergents, solvents)
- 1.1.1.-5.2.2. Non-wood fibre composites
- 1.1.1.-5.2.3. Bioplastics and biopolymers
- 1.1.1.-5.2.4. Speciality chemicals (biological control products, cosmetics, food ingredients, drugs and vaccines)
- 1.1.1.-5.2.5. Biofuels
- 1.1.1.-5.3. Sustainable and multi-purpose utilisation of forest resources; the integrated forestry-wood chain
- 1.1.1.-5.3.1. Multifunctional management of forests
- 1.1.1.-5.3.2. Strategies for the sustainable and multipurpose utilisation of forest resources; the forestry-wood chain
- 1.1.1.-5.4. Support for common policies – development of methods of control, surveillance and protection including protection of land and prevention of soil erosion. Pre-legislative research designed to provide a scientific basis for Community legislation.
- 1.1.1.-5.4.1. Community agriculture and the international context
- 1.1.1.-5.4.2. CAP measures and related activities including socio-economic aspects
- 1.1.1.-5.4.3. Monitoring and enforcement of the CFP
- 1.1.1.-5.4.4. Social and economic basis of the CFP
- 1.1.1.-5.5. New tools and models for the integrated and sustainable development of rural and other relevant areas
- 1.1.1.-5.5.1. Analysing rural situations, changes and trends
- 1.1.1.-5.5.2. Conceptualising integrated development of rural and other relevant areas
- 1.1.1.-5.5.3. Assessing rural and coastal development performance and policies
- 1.1.1.-6. Key action The Ageing Population and Disabilities
- 1.1.1.-6.1. Age-related illnesses and health problems
- 1.1.1.-6.2. Determinants of health ageing
- 1.1.1.-6.3. Demography and epidemiology of ageing
- 1.1.1.-6.4. Coping with functional limitations in old age
- 1.1.1.-6.5. Health and social care services to older people
- 1.1.1.-7. Chronic and degenerative diseases, cancer, diabetes, cardiovascular diseases and rare diseases
- 1.1.1.-7.1. Aetiology, pathophysiology, progress and outcome of diseases
- 1.1.1.-7.2. Evaluation of therapies through multinational, large scale studies/trials
- 1.1.1.-7.3. Optimised use of databases, registries, reagents and sample banks
- 1.1.1.-8. Research into genomes and diseases of genetic origin

- 1.1.1.-8.1. Interpretation of the meaning of genome information
- 1.1.1.-8.2. Acquisition of, access to and interpretation of genomic and functional data
- 1.1.1.-8.3. Development of novel expression systems, model organisms, mutant, transgenic and hybrid organisms
- 1.1.1.-8.4. Development and application of underpinning biochemistry, biophysical, statistical and computational approaches
- 1.1.1.-9. Neurosciences
- 1.1.1.-9.1. Cell communication including mechanisms of learning and memory
- 1.1.1.-9.2. Brain theories, computational neuroscience and neuroinformatics
- 1.1.1.-9.3. Brain development, disorders and repair and their clinical, epidemiological and social implications
- 1.1.1.-9.4. Behaviour, cognition and functional mapping of the brain
- 1.1.1.-10. Public health and health services research
- 1.1.1.-10.1. Public health research, health services research and health and safety
- 1.1.1.-10.2. Fighting drug related problems
- 1.1.1.-11. Research relating to the persons with disabilities
- 1.1.1.-11.1. Determinants of impairment, disability and handicap
- 1.1.1.-11.2. Methodologies for the assessment of quality of life
- 1.1.1.-11.3. Innovative technological research for the rehabilitation and assistance
- 1.1.1.-11.4. Health and social care delivery
- 1.1.1.-12. Biomedical ethics and bioethics in the context of respect for fundamental human values
- 1.1.1.-12.1. Ethical aspects of scientific and technological developments
- 1.1.1.-12.2. Ethical framework for life sciences
- 1.1.1.-12.3. Public policies, law and bioethics
- 1.1.1.-12.4. Bioethics infrastructures and methodologies
- 1.1.1.-13. Socio-economic aspects of life sciences and technologies
- 1.1.1.-13.1. Development of indicators and knowledge bases relevant to public policy decision making and regulation; technology evaluation and assessment, public perception and information
- 1.1.1.-13.2. Analysis of the links between life sciences and technologies and policies in the field of industry, agriculture, fisheries, food, environment, sustainable development, public health
- 1.1.1.-13.3. Analysis of social and economic driving forces and of barriers to development and exploitation of new opportunities in the bioindustries
- 1.1.1.-14. Support for research infrastructures
- 1.1.1.-14.1. Biological collections
- 1.1.1.-14.2. Biological information resources
- 1.1.1.-14.3. Clinical research facilities
- 1.1.1.-14.4. Pre-clinical research facilities
- 1.1.1.-14.5. Facilities for aquaculture and fishery research
- 1.1.2. **User-friendly information society (IST)**
- 1.1.2.-1. Key action Systems and services for the citizen
- 1.1.2.-1.1. RTD spanning key action 1
- 1.1.2.-1.1.1. New models for providing services to citizens
- 1.1.2.-1.2. Health
- 1.1.2.-1.2.1. Personal health systems
- 1.1.2.-1.2.2. Clinical, biological, managerial and imaging systems for health professionals
- 1.1.2.-1.2.3. New generation tele-medicine services
- 1.1.2.-1.3. Persons with special needs, including the disabled and the elderly
- 1.1.2.-1.3.1. Systems and services for independent living
- 1.1.2.-1.4. Administrations
- 1.1.2.-1.4.1. Systems enhancing the efficiency and user-friendliness of administrations
- 1.1.2.-1.4.1. On-line support to democratic processes
- 1.1.2.-1.5. Environment
- 1.1.2.-1.5.1. Intelligent environmental monitoring and management systems
- 1.1.2.-1.5.2. Environment risk and emergency management systems
- 1.1.2.-1.6. Transport and tourism
- 1.1.2.-1.6.1. Intelligent infrastructure and mobility management
- 1.1.2.-1.6.2. Systems for intelligent vehicles
- 1.1.2.-1.6.3. Systems and services for tourism

1.1.2.-2.	<u>Key action New Methods of Work and Electronic Commerce</u>
1.1.2.-2.1.	RTD spanning key action 2
1.1.2.-2.1.1	New perspectives for work and business
1.1.2.-2.1.2.	Corporate knowledge management
1.1.2.-2.2	Flexible, mobile and remote working methods and tools
1.1.2.-2.2.1	Workplace design
1.1.2.-2.2.2	Team work
1.1.2.-2.2.3	Dynamic networked organisations
1.1.2.-2.3	Management systems for suppliers and consumers
1.1.2.-2.3.1	Digital design and life-cycle management for products and services
1.1.2.-2.3.2	New market mediation systems
1.1.2.-2.3.3	Enhanced consumer-supplier relationships
1.1.2.-2.4	Information and network security and other confidence-building technologies
1.1.2.-2.4.1	Identification and authentication
1.1.2.-2.4.2	Secure electronic financial transactions
1.1.2.-2.4.3	Digital object transfer
1.1.2.-3	<u>Key action Multimedia Content and Tools</u>
1.1.2.-3.1	RTD spanning key action 3
1.1.2.-3.1.1	Social and business models for multimedia content
1.1.2.-3.2	Interactive publishing, digital content and cultural heritage
1.1.2.-3.2.1	Authoring and design systems
1.1.2.-3.2.2	Content management and personalisation
1.1.2.-3.2.3	Access to scientific and cultural heritage
1.1.2.-3.2.4	Digital preservation of cultural heritage
1.1.2.-3.3	Education and training
1.1.2.-3.3.1	Open platforms and tools for personalised learning
1.1.2.-3.3.2	The flexible university
1.1.2.-3.3.3	Advanced training systems
1.1.2.-3.4	Human language technologies
1.1.2.-3.4.1	Multilinguality in digital content and services
1.1.2.-3.4.2	Natural interactivity
1.1.2.-3.5	Information access, filtering, analysis and handling
1.1.2.-3.5.1	Multi-sensory forms of content
1.1.2.-3.5.2	Media representation and access: new models and standards
1.1.2.-4	<u>Key action Essential Technologies and Infrastructures</u>
1.1.2.-4.1	RTD spanning key action IV
1.1.2.-4.1.1	Convergence and integration: scenarios and analyses
1.1.2.-4.2	Technologies for management of information processing, communications and networks, including broad-band, together with their implementation, interoperability and application
1.1.2.-4.2.1	Concurrent systems
1.1.2.-4.2.2	Real-time systems
1.1.2.-4.2.3	Network integration, interoperability and interworking
1.1.2.-4.2.4	Technologies for network management and service-level interworking
1.1.2.-4.2.5	All-optical and terabit networks
1.1.2.-4.3	Technologies and engineering for software, systems and services, including high-quality statistics
1.1.2.-4.3.1	Component-based software engineering
1.1.2.-4.3.2	Engineering of intelligent services
1.1.2.-4.3.3	Methods and tools for intelligence and knowledge sharing
1.1.2.-4.3.4	Information management methods
1.1.2.-4.4	Real-time and large-scale simulation and visualisation technologies
1.1.2.-4.4.1	Real-time simulation and visualisation technologies
1.1.2.-4.4.2	Large scale shared virtual and augmented environments
1.1.2.-4.5	Mobile and personal communications and systems, including satellite-related systems and services
1.1.2.-4.5.1	Re-configurable radio systems and networks
1.1.2.-4.5.2	Terrestrial wireless systems and networks
1.1.2.-4.5.3	Integrated satellite systems and services
1.1.2.-4.5.4	Advanced tools and technologies for wireless communications
1.1.2.-4.6	Interfaces making use of the various senses
1.1.2.-4.6.1	Adaptable multi-sensory interfaces

1.1.2.-4.7	Peripherals, sub-systems and microsystems
1.1.2.-4.7.1	Peripherals technologies
1.1.2.-4.7.2	Subsystems technologies
1.1.2.-4.7.3	Microsystems
1.1.2.-4.8	Microelectronics
1.1.2.-4.8.1	Microelectronics and opto-electronics design
1.1.2.-4.8.2.	Application competencies
1.1.2.-4.8.3	Processes, equipment and materials
1.1.2.-4.8.4	Advanced opto-electronics and microelectronics
1.1.2.-5	<u>Cross programme themes</u>
1.1.2.-5.1	Cross programme actions
1.1.2.-5.1.1	CPA1: Integrated applications platforms and services
1.1.2.-5.1.2	CPA2: Dependability in services and technologies
1.1.2.-5.1.3	CPA3: Design-for-all for an inclusive information society
1.1.2.-5.1.4	CPA4: New indicators and statistical methods
1.1.2.-5.2	Cross-programme clusters
1.1.2.-5.2.1	CPCO: Open Cross-programme clusters
1.1.2.-6	<u>Generic activities: Future and emerging technologies</u>
1.1.2.-6.1	FET O: Open domain
1.1.2.-6.2	Proactive Initiatives
1.1.2.-6.2.1	FET P1: Quantum information processing and communications
1.1.2.-6.2.2	FET P2: Universal information ecosystems
1.1.2.-6.2.3	FET P3: Nanotechnology information devices
1.1.2.-7	<u>Support for research infrastructures: research networking</u>
1.1.2.-7.1	RN1: Broad-band interconnection of national research, education and training networks, and testbeds
1.1.2.-7.2	RN2: Testbeds for advanced networking and application experiments
1.1.2.-8	<u>IST support measures</u>
1.1.2.-8.1	Take-up Measures
1.1.2.-8.2	Concerted actions and thematic networks
1.1.2.-8.3	Accompanying measures
1.1.2.-8.2	Technology stimulation projects to encourage and facilitate SME participation
1.1.2.-8.2	Training Fellowships
1.1.3.	Competitive and Sustainable Growth
1.1.3.-1	<u>Key Action Innovative Products, Processes and Organisation</u>
1.1.3.-1.1	Efficient production, including design, manufacturing and control
1.1.3.-1.1.1	Integrated « product –service » design
1.1.3.-1.1.2	Advanced production and construction technologies
1.1.3.-1.1.3	Safe and reliable extended life of products and industrial systems
1.1.3.-1.2	Intelligent production
1.1.3.-1.2.1	Design of products and production-service systems
1.1.3.-1.2.2	Intelligent manufacturing and processing
1.1.3.-1.2.3	Monitoring and optimal use of industrial systems
1.1.3.-1.3	Eco-efficient processing and design
1.1.3.-1.3.1	Eco-efficient design of products and processes
1.1.3.-1.3.2	Cleaner processes products and eco-efficient technologies
1.1.3.-1.3.3	Product recovery and waste recycling
1.1.3.-1.4	Organisation of production and work
1.1.3.-1.4.1	New methods of organisation, work and human capital improvement
1.1.3.-1.4.2	Adaptation of enterprises and human oriented production
1.1.3.-1.4.3	Knowledge, learning and management of change
1.1.3.-2	<u>Key Action Sustainable Mobility and Intermodality</u>
1.1.3.-2.1	Socio-economic scenarios for mobility of people and goods
1.1.3.-2.1.1	Quantitative tools for decision-making
1.1.3.-2.1.2	Driving forces in transport
1.1.3.-2.1.3	Policies for sustainable mobility
1.1.3.-2.2	Infrastructures and their interfaces with transport means and systems
1.1.3.-2.2.1	Infrastructure development and maintenance
1.1.3.-2.2.2	Environment

1.1.3.-2.2.3	Safety
1.1.3.-2.2.4	Security
1.1.3.-2.2.5	Human factors
1.1.3.-2.3	Modal and intermodal transport management systems
1.1.3.-2.3.1	Traffic management systems
1.1.3.-2.3.2	Transport and mobility services
1.1.3.-2.3.3	Second generation satellite navigation and positioning systems
1.1.3.-3	<u>Key Action Land Transport and Marine Technologies</u>
1.1.3.-3.1	Critical technologies for road and rail transport
1.1.3.-3.1.1	Efficient, clean and intelligent road and rail transport vehicle technologies
1.1.3.-3.1.2	Innovative and safe road and rail transport vehicle concepts
1.1.3.-3.1.3	Human/vehicle interaction
1.1.3.-3.2	Critical marine technologies
1.1.3.-3.2.1	Efficient, safe and environmentally friendly ships and vessels
1.1.3.-3.2.2	Maximising interoperability and vessel performances
1.1.3.-3.2.3	Innovative technologies for the monitoring, exploration and sustainable exploitation of the sea
1.1.3.-4	<u>Key Action New Perspectives in Aeronautics</u>
1.1.3.-4.1	Reducing aircraft development cost and time to market
1.1.3.-4.1.1	Advanced design systems and tools
1.1.3.-4.1.2	Manufacturing
1.1.3.-4.1.3	Product quality control
1.1.3.-4.2	Improving aircraft efficiency
1.1.3.-4.2.1	Aerodynamics
1.1.3.-4.2.2	Structures and materials application
1.1.3.-4.2.3	Propulsion
1.1.3.-4.2.4	Systems and equipment
1.1.3.-4.2.5	Configurational and interdisciplinary aspects
1.1.3.-4.3	Improving environmental friendliness of aircraft
1.1.3.-4.3.1	Low pollutant emissions
1.1.3.-4.3.2	External noise
1.1.3.-4.3.3	Cabin environment
1.1.3.-4.4	Improving operational capability and safety of aircraft
1.1.3.-4.4.1	Air traffic management (ATM) related air borne systems
1.1.3.-4.4.2	Operational Maintenance
1.1.3.-4.4.3	Accident prevention
1.1.3.-4.4.4	Accident survivability
1.1.3.-5	<u>RTD Activities of a Generic Nature : materials and their technologies for production and transformation and new and improved materials and production technologies in the steel field</u>
1.1.3.-5.1	Cross-cutting generic materials technologies
1.1.3.-5.2	Advanced functional materials
1.1.3.-5.3	Sustainable chemistry
1.1.3.-5.4	Expanding the limits and durability of structural materials
1.1.3.-5.5	Iron and steel production
1.1.3.-5.6	Steel casting, rolling and downstream treatment
1.1.3.-5.7	Steel utilisation
1.1.3.-6	<u>RTD Activities of a Generic Nature : Measurements and Testing</u>
1.1.3.-6.1	Instrumentation
1.1.3.-6.2	Methodologies for measurements and testing
1.1.3.-6.3	Support to the development of certified reference materials (CRMs)
1.1.3.-7	<u>Support to Research Infrastructures</u>
1.1.3.-7.1	Support activities to medium and large scale facilities
1.1.3.-7.2	Setting up of virtual institutes
1.1.3.-7.3	Reference databases
1.1.3.-7.4	Measurement and quality management infrastructures

1.1.4. Energy, Environment and Sustainable Development

Part A. Environment and Sustainable Development

1.1.4.-1. Key action Sustainable Management and Quality of Water

1.1.4.-1.1. Integrated management and sustainable use of water resources at catchment scale
1.1.4.-1.1.1. Strategic planning and integrated management methodologies and tools at catchment scale

1.1.4.-1.1.2. Socio-economic aspects of sustainable use of water

1.1.4.-1.1.3. Operational management schemes and decision support systems

1.1.4.-1.2. Ecological quality of freshwater ecosystems and wetlands

1.1.4.-1.2.1. Ecosystem functioning

1.1.4.-1.2.2. Ecological quality targets

1.1.4.-1.3. Treatment and purification technologies

1.1.4.-1.3.1. Management of water in the city

1.1.4.-1.3.2. Waste water treatment and re-use

1.1.4.-1.4. Pollution prevention

1.1.4.-1.4.1. Abatement of water pollution from contaminated land, landfills and sediments

1.1.4.-1.4.2. Combating diffuse pollution

1.1.4.-1.5. Surveillance, early warning and communication systems

1.1.4.-1.5.1. Pollution surveillance and control

1.1.4.-1.5.2. Improved flood and drought forecasting

1.1.4.-1.6. Regulation of stocks and technologies for arid and semi-arid regions and generally water-deficient regions

1.1.4.-1.6.1. Water resources use and management

1.1.4.-1.6.2. Prevention and mitigation of saline water intrusion

1.1.4.-1.6.3. Technological development and management tools

1.1.4.-2. Key action Global Change, Climate and Biodiversity

1.1.4.-2.1 To understand, detect, assess and predict global change processes

1.1.4.-2.1.1. Atmospheric composition change

1.1.4.-2.1.2. Stratospheric ozone depletion

1.1.4.-2.1.3. Climate change prediction and scenarios

1.1.4.-2.1.4. Climate variability and abrupt climate changes

1.1.4.-2.2. To foster better understanding of terrestrial (including freshwater) and marine ecosystems and their interactions

1.1.4.-2.2.1. Ecosystem vulnerability

1.1.4.-2.2.2. Interactions between ecosystems and the carbon and nitrogen cycles

1.1.4.-2.2.3. Assessing and conserving biodiversity

1.1.4.-2.3. Scenarios and strategies for responding to global issues

1.1.4.-2.3.1. Mitigation and adaptation to global change

1.1.4.-2.3.2. Reconciling the conservation of biodiversity with economic development

1.1.4.-2.3.3. Fighting land degradation and desertification

1.1.4.-2.3.4. Compatibility between EU and international environmental policies and links with trade

1.1.4.-2.4. European component of the global observing systems

1.1.4.-2.4.1. Better exploitation of existing data and adaptation of existing observing systems

1.1.4.-2.4.2. Development of new long-term observing capacity

1.1.4.-3. Key action Sustainable Marine Ecosystems

1.1.4.-3.1. Improved knowledge of marine processes, ecosystems and interactions

1.1.4.-3.1.1. Better assessment of naturally occurring mechanisms of ecosystem functioning

1.1.4.-3.1.2. Assessment of sedimentary systems for the sustainable management and use of the shelf, slope and deep-sea floor

1.1.4.-3.1.3. Transport pathways and impacts of pollutants, key elements and nutrients in the marine environment

1.1.4.-3.2. Reducing the anthropogenic impact on biodiversity and the sustainable functioning of marine ecosystems, and facilitating the development of safe, economic and sustainable exploitation technologies

1.1.4.-3.2.1. Reversing the trend in loss of marine biodiversity

1.1.4.-3.2.2. Reducing the effects of anthropogenic activities on the marine environment and recovering degraded marine systems

1.1.4.-3.2.3. Technologies for safe, sustainable and economic exploitation of marine resources

1.1.4.-3.3. Monitoring and managing coastal processes and the coastal zone

1.1.4.-3.3.1. Integrated studies on land-ocean interaction

- 1.1.4.-3.3.2. Coastal zone changes
- 1.1.4.-3.3.3. Coastal protection against flooding and erosion
- 1.1.4.-3.3.4. Coastal processes monitoring
- 1.1.4.-3.4. Operational forecasting of environmental constraints of offshore activities
- 1.1.4.-4. Key action City of Tomorrow and Cultural Heritage
- 1.1.4.-4.1. Sustainable city planning and rational resource management
- 1.1.4.-4.1.1. Improving urban governance and decision making
- 1.1.4.-4.1.2. Improving the quality of urban life
- 1.1.4.-4.1.3. Waste reduction and its life cycle management
- 1.1.4.-4.1.4. Economic development, competitiveness and employment
- 1.1.4.-4.2. Protection, conservation and enhancement of European cultural heritage
- 1.1.4.-4.2.1. Improved damage assessment on cultural heritage
- 1.1.4.-4.2.2. Development of innovative conservation strategies
- 1.1.4.-4.2.3. Foster integration of cultural heritage in the urban setting
- 1.1.4.-4.3. Development and demonstration of technologies for safe, economic, clean, effective and sustainable preservation, recovery, renovation, construction, dismantling and demolition of the built environment, in particular for large groups of buildings
- 1.1.4.-4.3.1. Revitalisation of city centres and neighbourhoods
- 1.1.4.-4.4. Comparative assessment and cost effective implementation of strategies for sustainable transport systems in an urban environment
- 1.1.4.-4.4.1. Strategic approaches and methodologies in urban planning towards sustainable urban transport
- 1.1.4.-4.4.2. Comparative assessment and demonstration of new transport technologies and related infrastructure

Part B Energy

- 1.1.4.-5 Key action Cleaner Energy Systems, including Renewable Energies
- 1.1.4.-5.1 Large scale generation of electricity and/or heat with reduced CO₂ emissions from coal, biomass and other fuels, including combined heat and power
- 1.1.4.-5.1.1. Cleaner fuels by substitution and treatment
- 1.1.4.-5.1.2. More efficient energy conversion processes or cycles, including combustion efficiency
- 1.1.4.-5.1.3. More efficient gas turbines
- 1.1.4.-5.1.4. Optimisation of CHP systems
- 1.1.4.-5.2 Development and demonstration, including for decentralised generation, of the main new and renewable energy sources, in particular, biomass, wind and solar technologies, and of fuel cells
- 1.1.4.-5.2.1. Biomass (including waste) conversion systems
- 1.1.4.-5.2.2. Wind energy optimisation
- 1.1.4.-5.2.3. Cost efficient photovoltaic
- 1.1.4.-5.2.4. Solar thermal concentrating systems
- 1.1.4.-5.2.5. Other renewable energies
- 1.1.4.-5.2.6. Efficient, reliable and cost effective fuel cell systems
- 1.1.4.-5.3. Integration of new and renewable energy sources into energy systems
- 1.1.4.-5.3.1. Integrating renewable energy sources into the grid and stand alone systems
- 1.1.4.-5.3.2. Hybrid systems
- 1.1.4.-5.3.3. Improving the acceptability of renewables
- 1.1.4.-5.4. Cost effective environmental abatement technologies for power production
- 1.1.4.-5.4.1. Reduction of local and global environment degrading emissions
- 1.1.4.-6 Key action Economic and Efficient Energy for a Competitive Europe
- 1.1.4.-6.1 Technologies for the rational and efficient end use of energy
- 1.1.4.-6.1.1. Spatial integration
- 1.1.4.-6.1.2. Building sustainability
- 1.1.4.-6.1.3. Efficient space heating, cooling, ventilation, lighting systems and domestic appliances, and integration of renewables into buildings
- 1.1.4.-6.1.4. Transport combustion optimisation with cleaner hydrocarbon and alternative transport fuels
- 1.1.4.-6.1.5. Hybrid and electric drivelines, and energy storage and conversion devices
- 1.1.4.-6.1.6. Proving innovative public and private transport means
- 1.1.4.-6.1.7. Efficient cross-sectoral technologies and better managed industrial processes

- 1.1.4.-6.2. Technologies for the transmission and distribution of energy
- 1.1.4.-6.2.1. Assuring electric power flow reliability and stability and increasing power line efficiency
- 1.1.4.-6.2.2. Interconnection and load shaping
- 1.1.4.-6.2.3. More efficient and safer transport of gas
- 1.1.4.-6.2.4. Cost effective heating and cooling distribution
- 1.1.4.-6.3. Technologies for the storage of energy on both macro and micro scale
- 1.1.4.-6.3.1. Optimising power quality, by means of energy storage, for stand-alone renewable and hybrid systems and for transport
- 1.1.4.-6.3.2. Stability related electrical energy storage
- 1.1.4.-6.3.3. Intermittent storage of energy, including heat and cold storage
- 1.1.4.-6.3.4. Safer, lighter and more energy-efficient gas storage
- 1.1.4.-6.3.5. Reliable high capacity microstorage
- 1.1.4.-6.4. More efficient exploration, extraction and production technologies for hydrocarbons
- 1.1.4.-6.4.1. Cost effective and more efficient exploration and production of hydrocarbons
- 1.1.4.-6.4.2. Deepwaters, marginal fields and new frontiers, including Arctic
- 1.1.4.-6.4.3. Reduced environmental impact and improved safety in exploration and production
- 1.1.4.-6.5. Improving the efficiency of new and renewable energy sources
- 1.1.4.-6.5.1. Cost effective wind turbine components
- 1.1.4.-6.5.2. Cost effective components for photovoltaic module systems and solar thermal concentrating systems
- 1.1.4.-6.5.3. Cost effective components for biomass and waste
- 1.1.4.-6.5.4. Other renewable energy sources
- 1.1.4.-6.6. The elaboration of scenarios on supply and demand technologies in economy/environment/energy (E3) systems and their interactions, and the analysis of the cost effectiveness (based on whole life costs) and efficiency of all energy sources
- 1.1.4.-6.6.1. Technological change anticipation
- 1.1.4.-6.6.2. Prospective and policy impact analysis
- 1.1.4.-6.6.3. Market changes and technology absorption
- 1.1.4.-7. RTD activities of a generic nature
- 1.1.4.-7.1. The fight against major natural and technological hazards
- 1.1.4.-7.2. The development of generic Earth observation satellite technologies
- 1.1.4.-7.3. Socio-economic aspects of environmental change in the perspective of sustainable development
- 1.1.4.-8. RTD activities of a generic nature
- 1.1.4.-8.1. Socio Economic aspects of energy within the perspective of sustainable development: Tools for technology assessment
- 1.1.4.-8.1.1. Acceptability and choices
- 1.1.4.-8.1.2. Innovation
- 1.1.4.-8.1.3. Externalities
- 1.1.4.-8.2. Socio Economic aspects of energy within the perspective of sustainable development: Methodologies for global systems analysis
- 1.1.4.-8.2.1. Economy-environment-energy modelling framework
- 1.1.4.-8.2.2. Matching technology implementing potentials
- 1.1.4.-9. Support for research infrastructures
- 1.2. *Second activity***
- 1.2.1. **Confirming the International Role of Community Research****
- 1.2.1.-1. Co-operation with certain categories of third countries
- 1.2.1.-1.1. States in the pre-accession phase
- 1.2.1.-1.2. NIS and CEECs not in the pre-accession phase
- 1.2.1.-1.3. Mediterranean partner countries
- 1.2.1.-1.4. Research for development
- 1.2.1.-1.5. Emerging economies and industrialised countries
- 1.2.1.-2. Training for researchers
- 1.2.1.-3. Co-ordination

1.3. Third activity

1.3.1. Promotion of Innovation and Encouragement of SME Participation

- 1.3.1.-1. Promotion of Innovation
- 1.3.1.-1.1. Studies and Good Practices
- 1.3.1.-1.2. New approaches to technology transfer
- 1.3.1.-2. Encouraging SME participation
- 1.3.1.-2.1. A single complementary entry point
- 1.3.1.-2.2. Joint support and assistance instruments
- 1.3.1.-2.3. Economic and technological intelligence
- 1.3.1.-3. Joint Innovation/SME activities
- 1.3.1.-3.1. European support network for the promotion of research, technology transfer and innovation
- 1.3.1.-3.2. Electronic information services and other means of dissemination
- 1.3.1.-3.3. Intellectual property
- 1.3.1.-3.4. Access to private innovation financing
- 1.3.1.-3.5. Mechanisms to facilitate the setting-up and development of innovative firms
- 1.3.1.-4. Co-ordination and support activities
- 1.3.1.-4.1. Support activities relating to Innovation
- 1.3.1.-4.2. Support activities relating to SME Participation

1.4. Fourth activity

1.4.1. Improving the Human Research Potential & the Socio-Economic Knowledge Base

- 1.4.1.-1. Training and Mobility of Researchers
- 1.4.1.-1.1. Research Training Networks
- 1.4.1.-1.2. Marie Curie Fellowships
- 1.4.1.-2. Access to Research Infrastructures
- 1.4.1.-3. Promotion of S/T Excellence
- 1.4.1.-3.1. High-level Scientific Conferences
- 1.4.1.-3.2. Distinctions for high-level research work
- 1.4.1.-3.3. Raising Public Awareness
- 1.4.1.-4. Key action Socio-Economic Knowledge Base
- 1.4.1.-5. Development of S/T Policies
- 1.4.1.-5.1. Strategic Analysis of Specific Political Issues
- 1.4.1.-5.2. Common Basis of Science, Technology and Innovation
- 1.4.1.-6. Accompanying measures for the programme
- 1.4.1.-7. Indicative breakdown of funds for the programme
- 1.4.1.-8. Indicative timetable for the programme

2. Euratom Framework Programme

2.1 Nuclear Energy

2.1.1. Key action Controlled Thermonuclear Fusion

- 2.1.1.-1. Fusion physics (theoretical, modelling and experimental work), physics of production, fuelling, heating and confinement of fusion plasmas, and of particle and energy removal.
- 2.1.1.-2. Physics and technology of higher-power plasma heating systems (using high frequency waves or neutral particles, non-inductive plasma current drive methods, and plasma fuelling and exhaust systems).
- 2.1.1.-3. Advanced plasma diagnostics, data acquisition, exploitation and interpretation.
- 2.1.1.-4. Technologies for a future experimental reactor (including e.g. superconductors, remote handling).
- 2.1.1.-5. Long-term technology R&D (including e.g. low-activation materials, tritium breeding blankets, safety and environmental aspects, conceptual reactor reference design studies).
- 2.1.1.-6. Analysis of Socio-economic aspects of fusion
- 2.1.2. Key action Nuclear Fission
- 2.1.2.-1. Operational safety of existing installations

- 2.1.2.-2 Safety of the fuel cycle
- 2.1.2.-3 Safety and efficiency of future systems
- 2.1.2.-4 Radiation protection
- 2.1.3. RTD activities of a generic nature
- 2.1.3.-1 Radiation protection and health
- 2.1.3.-2 Environmental transfer of radioactive material
- 2.1.3.-3 Industrial and medical uses and natural sources of radiation
- 2.1.3.-4 Internal and external dosimetry
- 2.1.4. Support for research infrastructures

Appendix 1

Annex 2

Country Codes

Appendix 1 – Annex 2 – Country Codes

CODE	COUNTRY	CODE	COUNTRY
B	Belgium	GD	Grenada
DK	Denmark	GE	Georgia
D	Germany	GH	Ghana
EL	Greece	GM	The Gambia
E	Spain	GN	Guinea
F	France	GQ	Equatorial Guinea
IRL	Ireland	GT	Guatemala
I	Italy	GW	Guinea-Bissau
L	Luxembourg	GY	Guyana
NL	Netherlands	HN	Honduras
A	Austria	HR	Croatia
P	Portugal	HT	Haiti
FIN	Finland	HU	Hungary
S	Sweden	ID	Indonesia
UK	United Kingdom	IL	Israel
AD	Andorra	IN	India
AE	United Arab Emirates	IQ	Iraq
AF	Afghanistan	IR	Iran
AG	Antigua and Barbuda	IS	Iceland
AL	Albania	JM	Jamaica
AM	Armenia	JO	Jordan
AO	Angola	JP	Japan
AR	Argentina	KE	Kenya
AU	Australia	KG	Kyrgyzstan
AZ	Azerbaijan	KH	Cambodia
BA	Bosnia and Herzegovina	KI	Kiribati
BB	Barbados	KM	The Comoros
BD	Bangladesh	KN	Saint Kitts and Nevis
BF	Burkina Faso	KP	North Korea
BG	Bulgaria	KR	South Korea
BH	Bahrain	KW	Kuwait
BI	Burundi	KZ	Kazakhstan
BJ	Benin	LA	Laos
BN	Brunei	LB	Lebanon
BO	Bolivia	LC	Saint Lucia
BR	Brazil	LI	Liechtenstein
BS	The Bahamas	LK	Sri Lanka
BT	Bhutan	LR	Liberia
BW	Botswana	LS	Lesotho
BY	Belarus	LT	Lithuania
BZ	Belize	LV	Latvia
CA	Canada	LY	Libya
CD	Democratic Republic of the Congo	MA	Morocco
CF	Central African Republic	MC	Monaco
CG	Congo	MD	Moldova
CH	Switzerland	MG	Madagascar
CI	Côte d'Ivoire	MH	Marshall Islands
CL	Chile	ML	Mali
CM	Cameroon	MM	Myanmar
CN	China	MN	Mongolia
CO	Colombia	MR	Mauritania
CR	Costa Rica	MT	Malta
CU	Cuba	MU	Mauritius
CV	Cape Verde	MV	Maldives
CY	Cyprus	MW	Malawi
CZ	Czech Republic	MX	Mexico
DJ	Djibouti	MY	Malaysia
DM	Dominica	MZ	Mozambique
DO	Dominican Republic	NA	Namibia
DZ	Algeria	NE	Niger
EC	Ecuador	NG	Nigeria
EE	Estonia	NI	Nicaragua
EG	Egypt	NO	Norway
ER	Eritrea	NP	Nepal
ET	Ethiopia	NR	Nauru
FJ	Fiji	NZ	New Zealand
FM	Micronesia	OM	Oman
GA	Gabon	PA	Panama

Appendix 1 – Annex 2 – Country Codes

CODE	COUNTRY
PE	Peru
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PW	Palau
PY	Paraguay
QA	Qatar
RO	Romania
RU	Russia
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SG	Singapore
SI	Slovenia
SK	Slovakia
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	São Tomé and Príncipe
SV	El Salvador
SY	Syria
SZ	Swaziland
TD	Chad
TG	Togo
TH	Thailand
TJ	Tajikistan
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania
UA	Ukraine
UG	Uganda
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City
VC	Saint Vincent and the Grenadines
VE	Venezuela
VN	Vietnam
VU	Vanuatu
WS	Samoa
YE	Yemen
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZW	Zimbabwe
807 ¹	Former Yugoslav Republic of Macedonia

¹ Provisional code

Appendix 1

Annex 3

NACE codes for business activities

NACE codes for business activities

Division	Description
<i>Section A</i>	<i>Agriculture, hunting and forestry</i>
01	Agriculture, hunting and related service activities
02	Forestry, logging and related service activities
<i>Section B</i>	<i>Fishing</i>
05	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
<i>Section C</i>	<i>Mining and quarrying</i>
10	Mining of coal and lignite; extraction of peat
11	Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying
12	Mining of uranium and thorium ores
13	Mining of metal ores
14	Other mining and quarrying
<i>Section D</i>	<i>Manufacturing</i>
15	Manufacture of food products and beverages
16	Manufacture of tobacco products
17	Manufacture of textiles
18	Manufacture of wearing apparel; dressing and dyeing of fur
19	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
21	Manufacture of pulp, paper and paper products
22	Publishing, printing and reproduction of recorded media
23	Manufacture of coke, refined petroleum products and nuclear fuel
24	Manufacture of chemicals and chemical products
25	Manufacture of rubber and plastic products
26	Manufacture of other non-metallic mineral products
27	Manufacture of basic metals
28	Manufacture of fabricated metal products, except machinery and equipment
29	Manufacture of machinery and equipment n.e.c.
30	Manufacture of office machinery and computers
31	Manufacture of electrical machinery and apparatus n.e.c.
32	Manufacture of radio, television and communication equipment and apparatus
33	Manufacture of medical, precision and optical instruments, watches and clocks
34	Manufacture of motor vehicles, trailers and semi-trailers
35	Manufacture of other transport equipment
35.1	Building and repairing of ships and boats
35.2	Manufacture of railway and tramway locomotives and rolling stock
35.3	Manufacture of aircraft and spacecraft
a	<i>Manufacture of helicopter</i>
b	<i>Manufacture of aeroplanes for the transport of goods or passengers, for use by the defence forces, for sports or other purposes</i>
c ¹	<i>Manufacture of parts and accessories of the aircraft of this class</i>
Division	Description

¹ Includes: major assemblies such as fuselages, wings, doors, control surfaces, landing gear, fuel tanks, nacelles, airscrews, helicopter rotors and propelled rotor blades, motors and engines of a kind typically found on aircraft, parts of turbojets and turbopropellers

Appendix 1 – Annex 3 – NACE codes for business activities

d ²	<i>Others</i>
36	Manufacture of furniture; manufacturing n.e.c.
37	Recycling
<i>Section E</i>	<i>Electricity, gas and water supply</i>
40	Electricity, gas, steam and hot water supply
41	Collection, purification and distribution of water
<i>Section F</i>	<i>Construction</i>
45	Construction
<i>Section G</i>	<i>Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods</i>
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles
52	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
<i>Section H</i>	<i>Hotels and restaurants</i>
55	Hotels and restaurants
<i>Section I</i>	<i>Transport, storage and communication</i>
60	Land transport; transport via pipelines
61	Water transport
61.1	Sea and coastal water transport
e	<i>Transport of passenger or freight over water</i>
f	<i>Operation of excursion, cruise or sightseeing boats</i>
g	<i>Operation of ferries, water taxis, etc.</i>
62	Air transport
h	<i>Transport of passenger or freight by airlines</i>
63	Supporting and auxiliary transport activities; activities of travel agencies
63.1	<i>Cargo handling and storage</i>
63.2	<i>Other supporting transport activities</i>
i	<i>Operation of terminal facilities such as harbours and piers, waterway locks etc.</i>
j	<i>Airport and air-traffic control activities</i>
63.3	Activities of travel agencies and tour operators; tourist assistance activities n.e.c.
63.4	Activities of other transport agencies
k	<i>Forwarding of freight</i>
64	Post and telecommunications
<i>Section J</i>	<i>Financial intermediation</i>
65	Financial intermediation, except insurance and pension funding
66	Insurance and pension funding, except compulsory social security
67	Activities auxiliary to financial intermediation
<i>Section K</i>	<i>Real estate, renting and business activities</i>
70	Real estate activities
Division	Description
71	Renting of machinery and equipment without operator and of personal and household goods
72	Computer and related activities

² This includes: manufacture of gliders, hang-gliders, manufacture of dirigibles and balloons, manufacture of spacecraft and spacecraft launch vehicles, satellites, planetary probes, orbital stations, shuttles, manufacture of aircraft launching gear, deck arresters, etc., manufacture of ground flying trainers. However 35.3 should **exclude**: manufacture of parachutes, military ballistic missiles, ignition parts and other electrical parts for internal combustion engines, instruments used on aircraft, and air navigation systems.

Appendix 1 – Annex 3 – NACE codes for business activities

73	Research and development
1	<i>Research and experimental development on natural sciences and engineering</i>
m	<i>Research and experimental development on social sciences and humanities</i>
74	Other business activities
<i>Section L</i>	<i>Public administration and defence; compulsory social security</i>
75	Public administration and defence; compulsory social security
<i>Section M</i>	<i>Education</i>
80	Education
<i>Section N</i>	<i>Health and social work</i>
85	Health and social work
<i>Section O</i>	<i>Other community, social and personal service activities</i>
90	Sewage and refuse disposal, sanitation and similar activities
91	Activities of membership organisations n.e.c.
92	Recreational, cultural and sporting activities
93	Other service activities
<i>Section P</i>	<i>Private households with employed persons</i>
95	Private households with employed persons
<i>Section Q</i>	<i>Extra-territorial organisations and bodies</i>
99	Extra-territorial organisations and bodies

Appendix 1

Annex 4

Special conditions for the Participation to and
Financing in the programme

*Confirming the international role of Community
Research*

Financial contribution of the Community in the programme
Confirming the international role of Community Research

Relating to notes: 53, 54 and 64

Research entities participating to a shared cost action may benefit from special conditions regarding the Community's financial contribution:

- Participants from non-associated CEECs (except those in pre-accession phase) and NIS using the Additional Cost method of calculation will be allowed to charge those personnel costs normally paid by their recurrent budget (permanent scientific staff). As a consequence, the percentage for overhead shall be limited to 10%.
- Participants from non-associated CEECs (except those in pre-accession phase), NIS, MPCs and DCs shall calculate the allowable costs of equipment without taking into account a depreciation period, provided the equipment remains in the premises of the participant during and after the completion of the project
- Funding of participants from non-associated CEECs (except those in pre-accession phase), NIS, MPs and DCs using the Full Cost or the Full Cost - Flat Rate methods of calculation may exceed 50% of the eligible total costs, in order to ensure the quality of their materials and research equipment.

CEEC = non-associated Central/East European Countries; NIS = New Independent States (of the former Soviet Union); DC = Developing Country; MPC = Mediterranean Partner Country. For a list of the countries in the different groupings, see box 4 in Section III of the Guide to Proposers.