

Brussels, 9 December 2014

COST 133/14

# **DECISION**

Subject: B.1. "COST Action Proposal Submission, Evaluation, Selection and Approval"

The "COST Action Proposal Submission, Evaluation, Selection and Approval" lays down the rules and procedure for the submission, evaluation, selection and approval of COST Action proposals. These rules replace the document 4113/13 and will be completed by accompanying guidelines. These rules will enter into force as from 1 January 2015.

The Committee of Senior Officials has approved the present document by written procedure on 9 December 2014.



# **COST Action Proposal Submission, Evaluation, Selection and Approval**

The COST Committee of Senior Officials ("CSO") having regard to

COST 132/14, "Rules for the Participation in and Implementation of COST Activities",

in accordance with its role as General Assembly of the COST Association,

#### Whereas:

- (1) COST Member Countries have established an International not-for-profit Association, the COST Association, integrating the governance, management and implementation functions of COST.
- (2) COST contributes to the objective of strengthening the scientific and technological bases of the European Research Area by promoting the networking of researchers, engineers or scholars encouraging them to share, create and apply knowledge, thereby encouraging Europe to become more competitive.
- (3) COST is open to all fields in science and technology and wishes to foster multi- and interdisciplinary, aiming to enable breakthrough scientific developments leading to new concepts and products.
- (4) The set of "COST Implementation Rules" should provide a coherent, comprehensive and transparent frame to ensure efficient and harmonised implementation of activities, as well as ease access for all potential stakeholders, by promoting and facilitating participation from a wide range of researchers, engineers or scholars from universities, research centres, companies, in particular small and medium-sized enterprises (SMEs), as well as other relevant legal entities.
- (5) For the benefit of the COST participants the set of COST Implementation Rules should be robust, stable and consistent and should focus on best interest of research communities and foster mutual trust in their networking activities.
- (6) COST should provide funding for activities of relevance for fulfilling COST mission and achieving COST objectives, more particularly for COST Actions, the COST networking instrument.
- (7) COST should further encourage participation of young talents and next generation leaders in science and technology, promote working opportunities for Early Career Investigators and gender balance.
- (8) COST should reinforce its Inclusiveness Policy with the aim to identify and strengthen scientific excellence, to support integration of scientific research communities and increase the participation of researchers, engineers or scholars from identified Inclusiveness Target Countries in COST activities.





- (9) COST funds networking activities in the field of science and technology destined only for peaceful purposes; any funding of activities related to sensitive technology development, armament or defence oriented research should be avoided. COST should support activities carried out in compliance with fundamental ethical principles.
- (10) COST should establish rules and procedures to govern the submission, evaluation, selection and approval of proposals for COST Actions and other activities where appropriate.
- (11) COST should protect EU financial interests and ensure sound financial management. COST is aware that the EU auditing procedures apply.

Has adopted the present rules for "COST Action Proposal Submission, Evaluation, Selection and Approval" on 9 December 2014, in accordance with the "Rules for Participation in and Implementation of COST activities". This Decision will enter into force on 01 January 2015.

# **Subject Matter and Scope**

COST strives to implement transparent, efficient and simple evaluation and selection procedures.

This decision lays down the rules and procedure for the submission, evaluation, selection and approval of COST Action proposals. These rules derive from the basic principles laid down in the "Rules for Participation in and Implementation of COST Activities".

These rules are further detailed and explained in the COST Vademecum and in the related Guidelines.

#### **Definitions**

For the purpose of this Decision, the following definitions shall apply as follows:

- 1. <u>COST Member Country</u>: means any country that joined the COST Association as a Full Member following the approval of the COST Association Statutes.
- 2. <u>COST Cooperating State</u>: means any State that was admitted to the COST Association as Cooperating Member.
- 3. <u>COST Inclusiveness Target Countries (ITC)</u>: means COST Member Countries that fulfil the Horizon 2020 widening eligibility conditions being either an EU Member State or an Associated Country to the EU Framework Programme.
- 4. <u>COST Near Neighbour Countries (NNC)</u>: means countries approved by the Committee of Senior Officials to benefit from dedicated support for the integration of their researchers, engineers or scholars in COST activities.

COST 132/14 "Rules for Participation in and Implementation of COST Activities"





- 5. <u>International Partners Countries (IPC)</u>: means all those countries that are neither COST Member Countries, nor Cooperating State nor COST Near Neighbour Countries.
- 6. <u>EU Agencies</u>: means an organisation governed by European public law, with its own legal personality, established in the EU to accomplish specific tasks of a legal, technical and/or scientific nature in a given policy field and to support the EU Member States but distinct from the EU institutions.
- 7. <u>European RTD Organisation</u>: means any intergovernmental scientific research organisation that is responsible for infrastructures and laboratories whose members are countries, and the majority of which are COST Member Countries or Cooperating State.
- 8. <u>International Organisation</u>: means any organisation with a European or international membership, scope or presence, with its own legal personality, governed by international public law or recognised as of general interest, in particular promoting scientific and technological cooperation, which should have an added value in the fulfilment of COST Mission.
- 9. <u>COST National Coordinator (CNC)</u>: means the individuals appointed by the COST Member Countries and Cooperating State in charge of confirming the acceptance of the Action Memorandum of Understanding by nominating the Management Committee members of their country and the evaluators for the Review Panels pool of Experts.
- 10. <u>Scientific Committee (SC)</u>: means the committee composed of independent, internationally renowned, high-level experts, one per COST Member Country and Cooperating State, appointed by the CSO.
- 11. Open Call for proposals: means the official announcement/publication with the description of the objectives and criteria required for COST Action proposals to be evaluated and selected. The Open Call allows submitting proposals on a continuous basis; the publication indicates the Collection Dates.
- 12. <u>Collection Date</u>: means the date when the proposals for new COST Actions submitted during a certain period are gathered and sent for evaluation.
- 13. <u>Main Proposer:</u> means the coordinator of the network of proposers who submits a proposal for a COST Action in response to the Open Call.
- 14. <u>Funding Scheme</u>: means the mechanism governing the administrative and financial management of a COST Action grant.
- 15. <u>COST Action</u>: means the COST pan-European networking instrument allowing researchers, engineers or scholars from COST Member Countries and Cooperating State to develop jointly their ideas and new initiatives in a field or topic of common interest.
- 16. <u>Action's Memorandum of Understanding (MoU)</u>: means the agreement accepted by a minimum of five different COST Member Countries and/or Cooperating State describing the Action objectives. This document has to be accepted by any additional COST Member Country or Cooperating State joining the Action.





- 17. <u>COST Action Grant Agreement (AGA)</u>: means the agreement between the COST Association and the Grant Holder that governs the administrative and financial implementation of the COST Action.
- 18. <u>Grant Holder:</u> means the legal entity responsible for the administrative and financial implementation of the COST Action.
- 19. <u>Action Participant</u>: means any researcher, engineer or scholar who participates actively in a COST Action.
- 20. <u>Early Career Investigator (ECI)</u>: means a researcher in the time span of up to 8 years after the date of obtaining the PhD/doctorate (full-time equivalent).
- 21. Management Committee (MC): means the group of researchers, engineers or scholars, representing the COST Member Countries (or Cooperating State) that have accepted the MoU. They are in charge of the coordination, implementation, and management of an Action's activities as well as supervising the appropriate allocation and use of the COST funding with a view to achieving the Action's scientific and technological objectives. They are nominated by their respective CNC.

# General provisions

The present rules and procedure allow researchers, engineers or scholars to submit proposals to jointly develop their own ideas and new initiatives across all fields of science and technology aiming at break-through scientific developments leading to new concepts and products.

The objective of the rules and procedure described herein is to enhance the scientific excellence and transparency through an accessible bottom-up opportunity with rigorous peer review on a competitive basis.

COST Action proposals are submitted for evaluation and selection following the publication of the Open Call. They shall aim at addressing the COST mission and policies.

COST Action proposals shall guarantee that the proposed Action objectives will be achieved by means of COST networking support using national R&D funding and resources.

# 1. Basic principles

The present rules reflect the basic principles governing the submission, evaluation, selection and approval of proposals for COST Actions which shall ensure fairness, transparency, openness, excellence and inclusiveness.

COST makes the best endeavours to avoid conflict of interest.

All those involved in the submission, evaluation, selection and approval of proposals must commit to confidentiality.





# 2. Obligation of confidentiality

Each person involved in the submission, evaluation, selection and approval procedure (independent External Expert, Review Panel Member, Scientific Committee Member, CNC and CSO Member) must:

- Treat confidentially any information and documents, in any form (i.e. paper or electronic), disclosed in writing or orally in relation to the performance of the evaluation;
- Not disclose, directly or indirectly, confidential information or documents relating to proposals or applicants, without prior written approval of the COST Association;
- Not discuss any proposal with others, including other evaluators or staff not directly involved in evaluating the proposal, except during formal discussions at dedicated Review Panels and Scientific Committee meetings;
- Not disclose any detail of the evaluation process and its outcomes or of any proposal submitted for evaluation for any purpose other than fulfilling their tasks as evaluator;
- Not disclose the names of other experts participating in the evaluation;
- Not communicate with proposers on any proposal during or after the evaluation until the approval by the CSO.

# 3. COST Open Call

The COST Open Call allows submitting proposals on a continuous basis; two cycles of evaluation are organised annually.

COST shall publish on its website the official announcement of the Open Call indicating the Collection Dates, the description of the procedure and complete schedule, and criteria required for COST Action proposals to be evaluated and selected.

The objective of the COST Open Call is to enhance the scientific, technological or social excellence and transparency of COST through an accessible bottom-up opportunity with rigorous peer review. Proposals will be evaluated on a competitive, taking into account the available funds for the particular Collection Date.

The Proposal is prepared by a Main Proposer acting on behalf of a network of researchers who see an opportunity for advancing scientific, technological or social knowledge through the international coordination support offered by COST.

The Open Call is a one-stage submission process where proposals may be submitted at any time using a dedicated secured online tool. Proposals are gathered at a Collection Date, those submitted after that date will be considered for the upcoming collection. Login and proposal data are only valid during one collection and are not transferable to the following collection.





The Open Call follows the subsequent phases:

- Proposal Submission by a Main Proposer on behalf of a network of proposers;
- Proposal Evaluation by independent External Experts and ad-hoc Review Panels;
- Proposal Selection by the Scientific Committee;
- Proposal Approval by the CSO.

# 4. Experts Composition and Role

Three different groups of experts will intervene throughout the procedure towards selection of the best proposals, the Scientific Committee, ad-hoc Review Panels and independent External Experts.

### 4.1 The Composition and Role of the COST Scientific Committee

The Scientific Committee shall be composed of 36 high-level experts (one from each COST Member Country and 1 from Cooperating State) with international renowned expertise, recognized merit in their professional career (science, technology, research management, innovation, industry or other). The Scientific Committee will be appointed by and report to the CSO.

The Scientific Committee shall elect among its members the Chair and the Vice-Chair. The mandate of the Scientific Committee Chairmanship and members will be two years, with a possible renewal for another two years for the members only.

The Scientific Committee shall guarantee that the present rules and procedures are observed all throughout the process. Specifically, the Scientific Committee is in charge of:

- a) Examining and validating the list of names and corresponding expertise, of the independent External Experts to be assigned to each proposal; providing recommendations on future engagement of independent External Experts based on ex-post analysis of their performance;
- b) Examining membership and validating the ad-hoc Review Panels constituted for each Collection Date (number and composition);
- c) Identifying, among the list of proposals presented by the Review Panels, those that respond best to COST mission and policies;
- d) Establish the short list of proposals that shall be presented to the CSO for approval.

#### 4.2 The Composition and Role of the Review Panels

From four (4) to six (6) ad-hoc Review Panels shall be constituted after each Collection Date based on the number and topics of received proposals from a pool of active researchers, engineers or scholars, previously nominated by the COST National Coordinators.

The pool of active researchers, engineers or scholars will be created through the nomination by the COST National Coordinators of up to 3 experts in up to six science and technology fields (Annex 1), each COST Member Country has the right to nominate up to 18 experts. The experts must register in the COST Expert Database (e-COST). The mandate of the Review Panel experts will be of a maximum of 2 years.





The Review Panels will be in charge of checking the quality of the independent External Expert evaluation outcome and resolving potential differences in their opinions.

As the outcome of their work, the Review Panels prepare a short list of proposals with their validated consensus report and marks for examination and selection by the Scientific Committee. The short list of proposals will be ranked by their overall consensus mark.

In addition, the Review Panels will be in charge of preparing a report of their review work to the Scientific Committee including the trends and composition of the proposals presented, the identification of proposals that indicate emerging issues or potentially important future developments.

# 4.3 The Role of the External Experts

Independent External Experts are in charge of the remote peer-review evaluation. They are identified, selected and assigned to proposals through a matching of scientific and technological key words chosen by the network of proposers themselves with those from the COST Expert Database. Whenever possible, each External Expert will evaluate at least three proposals. The assignment of External Experts is then examined and validated by the Scientific Committee.

# 5. Proposal Submission

Proposals are prepared by a network of proposers, represented by a Main Proposer, who see an opportunity for advancing scientific, technological or social knowledge through the trans-European coordination and networking support offered by COST. The network of proposers must be composed by researchers, engineers and scholars affiliated to legal entities from at least five different COST Member Countries and/or Cooperating State.

Proposals contravening fundamental ethical principles or not fulfilling the conditions described in the set of COST Implementation Rules shall be excluded from the evaluation.

Proposals can be registered and submitted at any time during the year via a secured on-line tool designated for this purpose (e-COST). The on-line tool allows the Main Proposer to access, edit and submit the proposal until the chosen Collection Date. Only the last submitted version of a proposal is considered for evaluation.

The maximum length of a proposal is 15 pages. The template of the proposal is available in the SESA Guidelines<sup>2</sup>.

The proposals must be written in English, as no translation is provided and peer reviewers come from different countries.





### 6. Eligibility Criteria

To be eligible, a proposal for a COST Action must:

- Represent a network of proposers from at least 5 COST Member Countries or Cooperating State with researchers, engineers or scholars having a registered e-COST profile<sup>3</sup>:
- Be coordinated by a Main Proposer in a COST Member Country or Cooperating State<sup>4</sup>;
- Be anonymous, hence not contain any reference to the names and/or institutions of the participants in the network of proposers;
- Address science and technology challenges destined only for peaceful purposes;
- Respect word or page limits as described in the SESA Guidelines;
- Be written in English, the working language of the COST Association;
- Not be identical with another submitted proposal.

Proposals can be declared as non-eligible at any point of the process should any breach of the above eligibility criteria be identified during the evaluation.

#### 7. Evaluation Criteria

The identity of the Main Proposer and of the network of proposers will be kept anonymous. Proposals will be evaluated on the basis of the following evaluation criteria:

S&T EXCELLENCE	IMPACT	IMPLEMENTATION			
<ul> <li>Soundness of the challenge</li> </ul>	<ul> <li>Scientific, technological and/or socio-economic impact</li> </ul>	Coherence and effectiveness of the work plan			
<ul> <li>Progress beyond the state-of the-art and innovation potential</li> </ul>	<ul> <li>Measures to maximise impact</li> </ul>	<ul> <li>Appropriateness of management structures and procedures</li> </ul>			
<ul> <li>Added value of networking</li> </ul>	<ul> <li>Level of risk and level of potential innovation/breakthroughs</li> </ul>	Network as a whole			
Total Mark for the section: 25 points	Total Mark for the section: 20 points	Total Marks for the section: 20 points			

**TOTAL MARK AWARDED: 65 points** 

**OVERALL THRESHOLD: 45 points** 

Proposals failing to achieve the overall threshold shall not be funded.

<sup>&</sup>lt;sup>4</sup> COST 135/14 "International Cooperation and Specific Organisations Participation"



<sup>&</sup>lt;sup>3</sup> European Commission, EU Agencies and European RTD Organisations can be part of the network of proposers. When NNC and/or IPC are part of the initial proposal, the network of proposers must explain in the proposal the interest of the participation of such stakeholders to the Action



#### 8. Selection

The Scientific Committee will establish the final list of selected proposals discriminating among the equal ranked proposals by the COST mission and policies. Particular attention shall be paid to the Inclusiveness Policy (geographical, age, gender) and the contribution to the Innovation Union goals (industrial, SME participation). The Scientific Committee shall strive towards a balanced COST Action portfolio ensuring the coverage of all science and technology fields.

The methodology for selection shall be established by the Scientific Committee and be made publicly available subject to previous CSO approval.

### 9. Proposal Evaluation and Selection

Proposals shall be evaluated and selected against the following three steps procedure.

### **Step 1 – External Remote Evaluation**

Each proposal shall be evaluated by a minimum of 3 independent External Experts in the field or topics of the proposal as indicated/chosen by the network of proposers themselves. The evaluation shall be performed remotely and each independent External Expert shall submit an evaluation report for each proposal he/she evaluates.

Further to the individual evaluation, a consensus shall be sought between the independent External Experts (remotely).

The consensus shall not be imposed; independent External Experts may maintain their views on the proposal. Eventual differences in opinion of the experts resulting in a non-consensual decision will be handled and arbitrated by the Review Panel.

### Step 2 – Revision by ad-hoc Review Panels

Further to the evaluation performed by the independent External Experts, the ad-hoc Review Panels carry out a quality check, convene how to manage differences in opinions, arbitrate and establish a ranked list of proposals having passed the overall threshold.

Review Panels shall be in charge of:

- a) Reviewing and validating the evaluation consensus reports and marks of the proposals for which the independent External Experts achieved consensus.
- b) For proposals without consensus, resolving the differences in opinions between the External Experts, using one of the following options:
  - Choose one or the average of two individual marks as the review consensus mark and produce the consensus report.





- In exceptional cases, ask for one or two additional independent External Experts to remotely evaluate the proposal. In this case the Review Panel shall make use of the additional evaluation reports to prepare the final consensus report and mark.
- c) After validation of consensus reports and marks, rank the proposals above the threshold.
- d) For the proposals above the threshold, identify those that indicate emerging issues or potentially important future developments.

At their meeting, the Review Panels shall prepare their report to the Scientific Committee.

The result of the evaluation shall be made available to the Main Proposer and the network of proposers via e-COST.

# Step 3 – Proposal Selection

Following the two steps of evaluation and revision by independent External Experts and ad-hoc Review Panels respectively, the Scientific Committee shall meet in order to agree on the selection of proposals.

The Scientific Committee shall select among the ranked list of proposals received from the Review Panels by discriminating among proposals with the same marks, taking into account the COST mission and policies (see section 8).

The Scientific Committee shall receive also, ahead of the meetings, the information of the identity of the network of proposers and other information considered relevant on the proposals, such as:

- Aggregated information on the network of proposers (breakdown, expertise, geographic, age and gender distribution);
- Plans to involve relevant participants or targeted stakeholders; openness to additional, unexpected participants.

The Scientific Committee shall submit the final ranked list of selected proposals to the CSO for approval.

### 10. Proposal Approval

The final decision on approval and funding for new COST Actions shall be taken by the Committee of Senior Officials (CSO) on the basis of the results of the evaluation and selection steps described above and taking into account the available budget. The CSO reserves the right not to approve Actions selected through the procedure.

The draft of a successful proposal approved by the CSO shall form the basis of the Action's Memorandum of Understanding (MoU). The start of the COST Action is described in the "COST Action Management, Monitoring and Final Assessment" rules<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> COST 134/14 "COST Action Management, Monitoring and Final Assessment"





#### 11. Redress of the Evaluation

In order to contribute to the fairness and transparency of the COST evaluation process, the COST Association shall establish a redress procedure. The Main Proposer shall thereby have the possibility to submit a request for assessment of the evaluation and potential redress.

Redress shall be allowed only in case of potential procedural shortcomings and factual errors, i.e., whenever:

- a) The network of proposers considers that the evaluation has not been carried out in accordance with the procedures set out in the current document;
- b) The network of proposers deems that the evaluation report bears a factual mistake.

Requests for redress dealing with the scientific judgment by the independent External Experts or of the Review Panels shall not be admissible.

The proposal selection by the Scientific Committee shall not be open to redress.

The redress procedure shall be designed to ensure a prompt and fair feedback to requests and is available in the SESA Guidelines<sup>6</sup>.

#### 12. Conflict of Interest

COST expects ethical behaviour from all participants in COST Activities in accordance with the principles established in the "COST Code of Conduct".

COST strives to avoid any conflict of interest in its evaluation, selection and approval procedure.

Actors involved in the evaluation, selection and approval of proposals cannot take any benefit from any Action approved under the particular Collection Date they participated to.

Under no circumstances the proposers should contact any of the actors involved in the evaluation, selection and approval procedure regarding their proposal. Any attempt to do so may lead to immediate exclusion of the proposal from the evaluation, selection and approval process.

The present rules shall apply to all players concerned by the submission, evaluation, selection and approval of COST Action proposals (CNC, independent External Experts, Review Panel Member, Scientific Committee Member, and CSO Member).

#### **Conflict of Interest Definition and Cases**

A Conflict of Interest with regard to the submission, evaluation, selection, and approval procedure is the risk that professional judgement or actions regarding a person's duties and responsibilities will

<sup>&</sup>lt;sup>6</sup> COST Action Proposal Submission, Evaluation, Selection and Approval (SESA) Guidelines





be unduly influenced by that person's professional or private interests. Each individual shall have only one role in the evaluation selection and approval of a COST Action.

A Conflict of Interest can be real, potential or perceived.

### 1. Cases of Real Conflict of Interest

The person involved in the evaluation or selection procedures (independent External Expert, Review Panel Member, Scientific Committee Member):

- Has been involved in the preparation of the proposal;
- Has been involved in any previous evaluation step in the same Collection Date.

# 2. Cases of Potential Conflict of Interest

The person involved in the evaluation or selection procedures (Independent External Expert, Review Panel Member, Scientific Committee Member):

- Was aware of the preparation of the proposal;
- Has a professional or personal relationship with a proposer;
- Stands to benefit directly or indirectly if the proposal is accepted or rejected.

### 3. Cases of Perceived Conflict of Interest

The person involved in the evaluation or selection procedures (Independent External Expert, Review Panel Member, Scientific Committee Member):

- Feels for any reason unable to provide an impartial review of the proposal.

# **Declaration of Conflict of Interest**

Before performing any evaluation, any person involved in the evaluation or selection procedures (independent External Expert, Review Panel Member, and Scientific Committee Member) shall sign a declaration stating/accepting he/she:

- Is not aware of any conflict of interest regarding the proposal(s) to be evaluated/selected;
- Will inform immediately the COST Association of any conflict of interest discovered during the evaluation process;
- Will maintain the confidentiality of the procedure.





# Table of incompatibilities

This tables presents cases where a position is incompatible with an evaluation, selection and approval step.

Steps	Main proposer	Independent	Review	Scientific
	and network of	External	Panel	Committee
	proposers	Expert	Member	Member
Step 1 Evaluation (External Experts)	X		X	X
Step 2 Revision (Review Panel)	X	X		X
Step 3 Selection (Scientific Committee)	X	X	X	
Final approval (CSO)	X	X	X	X

X = incompatible

Any individual having participated in the submission, evaluation, selection or approval of Action proposals shall observe these rules of conflict of interest. Furthermore, regarding their participation to COST Actions, the following shall apply:

- Independent External Experts cannot participate in an approved Action if they evaluated the corresponding proposal; ad-hoc Review Panel Members cannot participate in any approved Action of the collection date where they were involved in the revision.
- As a principle, CNC and Scientific Committee Members, as well as CSO members cannot participate in any Action.

### Consequences

The first duty of any person involved in the evaluation or selection procedures is to declare a Conflict of Interest.

Failure to declare the Conflict of Interest may have the following consequences:

- Notification to the COST Association Director;
- Notification to the respective CNC for Review Panel Members;
- Notification to the CSO for Scientific Committee Members;
- Removal of the expert from the COST Expert Database.

All cases of Conflict of Interest shall be recorded and, for nationally nominated evaluators (Review Panel Members and Scientific Committee Members), reported to the COST National Coordinator.

- 1. If the Conflict of Interest is confirmed/identified before the evaluation starts:
- The evaluator cannot participate to the evaluation/selection procedure in the ongoing collection and is replaced.





- 2. If the Conflict of Interest is confirmed/identified during the evaluation:
- The evaluator must stop evaluating/selecting in the ongoing collection and is replaced;
- Any comments and marks already given by the evaluator shall be discarded.
- 3. If the Conflict of Interest is confirmed/identified after the evaluation has taken place, the COST Association shall examine:
- The potential impact and consequences of the Conflict of Interest and take appropriate measures.

The COST Association has the right to take the lead in any resolution process of a Conflict of Interest situation at any moment of the evaluation.

### **Final Provisions**

The present rules shall be binding in their entirety and directly applicable to all COST Actions.

Any change or derogations to the current rules are subject to the approval of the CSO.





**ANNEX I** 

List of Fields and Sub-Fields of Science and Technology<sup>7</sup>

### **Natural Sciences**

Mathematics (research on methodologies of pure and applied mathematics, statistics and probability: mathematics and statistics applied to other fields of science are excluded)

Computer and Information Sciences

Physical Sciences (excluding engineering and nano-technology applications to be found under each engineering category)

Chemical sciences

Earth and related Environmental sciences

Biological sciences (excluding medical, clinical and agricultural applications)

### **Engineering and technology**

Civil engineering

Electrical engineering, electronic engineering, Information engineering

Mechanical engineering

Chemical engineering

Materials engineering

Medical engineering (excluding biomaterials and physical characteristics of living material as related to medical implants, devices, sensors)

Environmental engineering (excluding environmental biotechnology)

Environmental biotechnology

Industrial biotechnology

Nano-technology

Other engineering and technologies

### **Medical and Health Sciences**

Basic medicine

Clinical medicine

Health Sciences

Medical biotechnology

Other medical sciences

# **Agricultural sciences**

Agriculture, Forestry, and Fisheries (excluding agricultural biotechnology)

Animal and dairy science (excluding animal biotechnology)

Veterinary science

Agricultural biotechnology

Other agricultural sciences

<sup>&</sup>lt;sup>7</sup> Science and Technology Fields and Sub-Fields correspond to the Organization for Economic Cooperation and Development (OECD) Fields of Science used for international and European R&D statistics (source: OECD Document DSTI/EAS/STP/NESTI(2006)19/FINAL)





# **Social Sciences**

Psychology

Economics and business

Educational sciences (excluding institutional and economic aspects)

Sociology

Law

Political Science

Social and economic geography

Media and communications

Other social sciences

# Humanities

History and Archeology

Languages and literature

Philosophy, Ethics and Religion (excluding philosophy and ethics applied to other fields of science)

Arts (arts, history of arts, performing arts, music)

Other humanities