



# THE NATIONAL PLAN FOR RESEARCH, DEVELOPMENT AND INNOVATION 2007-2013, PNII

# The Program HUMAN RESOURCES The Subprogram "Young research teams"

**Information package**<sup>1</sup>





<sup>1</sup> Unauthorised translation. Only the Romanian version of the pack has legal validity.

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# **RESEARCH PROJECTS FOR YOUNG RESEARCH TEAMS** Call Number: PN-II-RU-TE-2011-2

## 1. Goal

Support young researchers with doctorates in the sciences who are in the phase in which they are ready to start or in the process of consolidating a research team, after having established an independent research program, obtaining significant results in their field. The subprogram is also open to those who are working abroad and who are interested in leading high level research projects in Romanian institutions.

### 2. Objectives

- developing the leadership abilities of young researchers and their capacity to manage research grants;
- creating, for young researchers, an additional chance to obtain a stable research position in R&D units and institutions in Romania;
- affirming the prestige of Romanian research, by quantifying its internationally recognized results;
- indentifying, supporting and promoting the development of research groups in order to allow them to reach the critical mass necessary to be competitive in the international arena;
- attracting high quality national and international human resources for the development of scientific research in Romania;
- > implement the principle "the funds go with the performance".

## 3. Expected results

The funding for these projects seeks:

- to obtain excellent scientific results reflected in an increase in the number of publications of high international impact, as well as an increase in the number of patented technologies, applied in the industry;
- to increase the research capacity, including through the increase in the number of full-time researchers, encouraging their formation and development in a medium of high scientific quality;
- to attract and involve researchers working abroad in projects with an impact on the international visibility of Romanian scientific research;
- ➤ to increase the capacity to successfully apply for European and international research funds.

#### 4. Eligibility criteria

- a) The Project leader has a doctorate. Persons who have successfully defended their doctorate can also apply, provided that the diploma is presented before the date of the signing of the funding contract. If the doctoral diploma is not officially recognized in Romania, its recognition must be obtained before the signing of the funding contract;
- b) The Project leader satisfies the minimal eligibility standards presented in Appendix 1. The information necessary to verify these standards must be filled out in the online proposal submission platform;
- c) The Project leader is less than 40 years old on the date on which the project was submitted;
- d) The Project must be implemented in a Romanian R&D unit or institution, including in a higher education institution, referred to below as the host institution. The host institution cannot be an enterprise, in the sense of the state aid legislation;
- e) The host institution is not in the state of payment default; it does not have its accounts blocked following a court order; it has not made false declarations concerning the information required by the UEFISCDI in view of selecting the contractors; it has not broken the terms of a different contract signed previously with a contracting authority.
- f) The project leader is employed full time in the host institution, with a permanent position, or with a fixed term contract covering at least the duration of the project, or has the agreement of the host institution for his or her employment at least for the duration of the contract; in case the funding is awarded, the employment contract must be signed by the project leader and the host institution before the signing of the funding contract;
- g) A given person can submit, as a project leader within the first competition of the year 2011, a single proposal of the PD type (postdoctoral research projects), of TE type (research projects for supporting the establishment of young independent research groups) or of PCE type (exploratory research projects). In case more than one proposal is submitted by the same project leader, all of them will be declared ineligible;
- h) A given person can be the leader of a single project of TE or PD type, or of a postdoctoral fellowship funded through European cohesion funds (POSDRU), ongoing at any given time. Persons who are already leading TE type project can submit proposals to obtain funding through PCE type projects. These can unfold in parallel with the TE type project. Persons who are already leading TE type projects in the last 12 months of the contract can submit project

proposals for a new project of TE or PD type, which will start after the end of the TE contract;

i) It is forbidden to submit proposals which seek to fund activities which are have already obtained funding from the state budget.

#### 5. Duration

The duration of the project is of minimum 12 months and maximum 36 months.

#### 6. Budget

The ceiling for the funding awarded for a project with a duration of 36 months is 750,000 lei, with the exception of projects whose project leader comes from abroad, in which case the award ceiling is 920.000 lei The maximum amount awarded for projects which are shorter than 36 months is calculated proportionally to the duration, with reference to the 36 months maximum duration.

A project leader is considered to come from abroad, and may benefit from the abovementioned exception, if he or she satisfies the following criteria simultaneously:

- a. was employed or was a recipient of a scholarship or fellowship from an entity in a different country, with a fixed term or permanent contract, over a cumulated period of at least 2 of the last 5 years AND
- a. the last employment, scholarship or fellowship contract ended not more than 12 months before the deadline for proposal submission for the present call.

Documentele justificative corespunzătoare vor fi încărcate în format electronic (scanat) pe platforma de depunere online a cererilor de finanțare.

#### **Eligible expenses**

expenses with the salaries (including all corresponding state and social contributions); for each person, expenses with the salaries, including all corresponding state and social contributions, for any given project, cannot exceed 12,500 lei / lună;

> *inventory expenses* necessary for the project, including equipment, consumables, material expenses, publication, information/bibliography expenses or for access to the research infrastructure of third parties, etc.;

> *mobility expenses* corresponding to national or international travel of the team members, for documentation periods, participation in high level scientific conferences, workshops and communications in the field of the project; travel expenses for national or international collaborators

as wall as for participants to scientific events organized within the project may also be financed;

 $\succ$  *indirect expenses* (overhead) - indirect expenses are calculated as a percentage of direct expenses: salaries, inventory and mobility. As a rule, indirect expenses will not exceed 25% of the direct expenses. In exceptional cases, the host institution can request a larger overhead (but not larger than 50%), in agreement with the project leader. The justification of this request is done in the project proposal, section C5.

The funding contract will specify the budget breakdown over the budget categories. During the duration of the project funds can be redirected between the following budget categories: salaries, inventory and mobility, in the limit of 15% of the total budget, without any prerequisite approval, in agreement with the provisions of the funding contract.

The budget allocated to projects being contracted as a result of the present call of the TE subprogram for the entire duration of the contracts, is of maximum 75.000.000 lei.

#### **Budget cuts**

In case of large cuts in the budget of the National Plan for years subsequent to the year in which the contracts were signed, if the reduction of the budgets of the contracted projects becomes necessary, this reduction will be implemented as follows:

- If the necessary reduction, for a program or subprogram, for the totality of the ongoing projects, is less than 20% of the budget of the program or subprogram for that year, then the project budgets will be reduced uniformly with the given percentage.
- if the necessary reduction exceeds 20%, then the reductions will be differentiated, based on the grade level of the projects, as follows:
  - 1. For projects in the first 18 months after the date of the signing of the contracts, the grade level will be equal to the level obtained at the initial evaluation, prior to the selection of the projects, between 0 and 100 points.
  - 2. For projects for which more than 18 months have passed, there will be an exceptional, intermediate evaluation, through which each project will obtain a grade level between 0 and 100 points. These evaluations will take into consideration the performance indicators below. The final level will be obtained as the mean of the initial evaluation grade level and the exceptional intermediate evaluation grade level.
  - 3. The budget reduction will be obtained as a percentage of the initial budget for the given year, where the percentage will be obtained as a linear relationship with the level obtained, depending on the available budget.

The exceptional intermediate evaluation will take into consideration the following performance indicators:

	Names of indicators	UM
Result	Cumulated relative impact factor of works published or accepted	
indicators	for publication	
	Number of works in international collaboration, published or	Num.
	accepted for publication in the international scientific	
	mainstream	
	Number of researchers from abroad integrated in the national	Num.
	R&D system	
Result	Number of articles published in journal indexed AHCI or ERIH	Num.
indicators (for	category A or B	
the humanities		
only)		
Result	Number of chapters published in collective volumes, in major	Num.
indicators (for	international languages, at prestigious foreign publishing houses	
the humanities	Number of authored books published in major international	Num.
and the social	languages at prestigious foreign publishing houses	
sciences only)	Number of edited books in major international languages at	Num.
	prestigious foreign publishing houses	
Impact	The cumulated relative influence score of works published or	
indicators	accepted for publication	

## 7. The structure of the project team.

The project team may be formed as follows:

- a project leader, holding a Ph.D., having an internationally relevant scientific activity;
- research team members, including: senior researchers, postdoctoral researchers, Ph.D. students, master students, other students, technical staff; depending on the project, there may not be other team members than the project leader;

Note: The structure of the team and the choice of members is up to the project leader. At the time of the proposal submission he or she must specify only the structure of the team. Naming the members is possible but is not required. The team members can be hired or recruited subsequent to the selection of the project for funding. Free positions will be announced publicly, including on the site <u>www.euraxess.ro</u>.

#### 8. The presentation of the project proposals

Project submission is done in one step, using the online project submission platform - <u>www.uefiscdi-</u> <u>direct.ro</u>. The proposal may be written only in English, with the exception of humanities projects (see Appendix 4 for a list of humanities research areas), where proposals in English, French or German are allowed, and with the exception of projects with a national Romanian character, where proposals in Romanian, English, French or German will be allowed. In cases where the proposal is not written in English, the choice of language must be justified by the specific research proposed.

The project proposal must follow the structure described in Appendix 2.

#### 9. Project evaluation

### 9.1. Checking eligibility

The project proposals are received and verified by the UEFISCDI personnel, for the host institution as well as for the project leader. The list of eligible project proposals will be published on the UEFISCDI website - <u>www.uefiscdi.gov.ro</u>.

Candidates who wish to appeal the eligibility results can send their appeals by email to <u>contestatiiTE@uefiscdi.ro</u>, by fax to 021 3071919, or directly to the UEFISCDI headquarters, within 3 workdays from the date of publication of the results.

### 9.2. The expert evaluation

The eligible projects are evaluated by experts of international recognition. For each project, at least 50% of the expert evaluators are selected from outside the country, from other member states of the European Union, or from member states of the Organisation for Economic Cooperation and Development, with the exception of the projects with a national Romanian character (see Appendix 4).

The evaluators must satisfy the minimal eligibility standards presented in Appendix 1.

**9.2.1. The individual evaluation step** The quality of each proposal declared eligible is evaluated, independently, online, by at least 3 expert evaluators who form the evaluation committee. These assign individual grades for each criterion, according to the evaluation sheet. The grades assigned to each criterion are justified with comments, which point out the strong and weak points. After all individual evaluations are available for a given project, each evaluator in the committee will have access to the grades and comments of the other evaluators. If they consider it necessary, the evaluators can adjust their initial grades.

The evaluation sheet is presented in *Appendix 3*.

**9.2.2.** Consensus. Consensus is reached if the difference between the grade level given by each evaluator and the mean of the levels does not exceed 10 points. If consensus has not been reached after the individual step, the evaluators may communicate via the online evaluation platform, maintaining anonymity, and they can adjust their grades and comments in order to reach consensus. The project proposals for which consensus is not reached are evaluated by a final committee, composed of the evaluators in the original committee, to which is added at least one other evaluator. The final grade

level is obtained as the mean of the grade levels given by the members of the final committee.

**9.3. The evaluation results.** The list of the project proposals and the levels obtained by each of them, in decreasing order, will be published on the UEFISCDI website - <u>www.uefiscdi.gov.ro</u>.

**9.4. Communication.** The candidates are informed of the evaluation results and they receive the grade levels and comments given by each evaluator, via email, at the address specified on the application form.

**9.5. Appeals.** The candidates may submit appeals during 3 workdays following the date of publication of the evaluation results. Appeals can attack only faults of procedure that the candidate considers as non conforming to the information pack. Appeals cannot attack the levels and the comments given by the evaluators. They may be sent by email to <u>contestatiiTE@uefiscdi.ro</u>, by fax to 021 3071919, or directly to UEFISCDI headquarters.

**9.6. The competition results.** Project proposals are selected in decreasing order of the grade levels obtained, taking into account the available funds.

**9.7. Budget negotiation and signing the contracts.** Evaluators will be given a chance to give appreciations of the proposal budgets, and whether and to what extent the budget is well correlated with the planned activities and objectives. In cases where the evaluators will point out mismatches in this area, the project directors will negotiate with CNCS/UEFISCDI the funding amounts and the structure of the contract budget. The contract is signed after the negotiation is concluded.

Evaluations are anonymous, ensuring the confidentiality and impartiality of the expert evaluators.

The list of the evaluators used in the evaluation of projects in the TE subprogram will be published on the UEFISCDI website, at the end of the call.

#### **10.** Main obligations of the parties:

#### **Project leader:**

1. Is responsible for the execution of the project;

2. Compiles and sends to the UEFISCDI reports of scientific progress during the course of the project, and a final report, at the time and in the format specified by CNCS/UEFISCDI in the funding contract. The deadlines of the intermediate reports are proposed by the project leader, in accordance with the workplan presented in the project proposal;

3. Communicates about the ongoing activities and publishes open positions in the project (including on the websites <u>www.ancs.ro/jobs</u> și <u>www.euraxess.ro</u>);

3. Mediatizează activitățile și anunță pozițiile vacante în proiectul de cercetare, inclusiv pe site-urile <u>www.ancs.ro/jobs</u> și <u>www.euraxess.ro;</u>

4. For the duration of the contract, the project leader is registered on the portal <u>www.cercetatori-</u><u>romani.ro</u> and has the obligation of maintaining an up to date CV and of participating in the evaluation process of other competitions, at the request of the contracting authority;

5. Publishes up to date information on the project activities (at least a summary and the list of publications supported by the project) on a webpage, in English; for projects with a national Romanian character, the site can be written in Romanian as well, with a short summary in English.

#### The host institution

1. Provides acces of the project leader to the existing research infrastructure and provides the administration services which are required for an efficient implementation of the project;

2. Compiles and sends to the UEFISCDI the financial reports of the project, at the end of each financial report phase. The form of the financial reports is specified in the contract;

3. The host institution, via the signature of its legal representative, certifies the legality and correctness of the information which is presented in the application forms, accepts to host the project on its premises, provides access to the resources mentioned in the project proposal, commits to provide all needed administrative support for an efficient implementation of the project and to employ the members of the project team for the duration of the project, in respect of all legal provisions in force, if the project is selected for funding.

#### **UEFISCDI:**

Makes available the funds, and carries out the monitoring of the project, in respect of all legal provisions, of the contract provisions and in the limit of the available budget.

#### 11. Project mobility

In general, the project leader will implement the project in the host institution through which he or she submitted the project proposal. However, for project longer than 24 months, UEFISCDI can allow the project leader to transfer the project to a different host institution in the country, at most once for a given project, and only during the first 12 months of the duration of the project. The reason for offering this freedom to the project leader is to optimize the chances of success of the project.

The project leader has the obligation to address a written request to the UEFISCDI for the transfer of the project to a different host institution, along with a detailed justification and a written agreement of the new host institution and of the original host institution. In the cas in which the original host institution refuses the transfer, it must send UEFISCDI the reasons for the refusal. CNCS will analyze

the reauest for transfer and, depending on the situation, will make a decision in order to optimize the chances of success of the project implementation. If the request is accepted, the UEFISCDI will terminate the contract with the original host institution and will sign a new contract with the new host institution, through which to ensure the timely transfer of all remaining funds (not spent and not committed to be spent) and all equipment and materials acquired through the project to the new institution. The original host institution has the obligation to transfer, within 30 days of the contract termination, al funds and all equipment and materials acquired through the project, to the new institution, in order to allow the resumption of the project as quickly as possible. The transport expenses for the equipment and materials to the new location will be supported by the new host institution.

#### 12. Deadlines:

ACTIVITY	TIME
Call launched	22 March 2011
Proposal submission	06 May 2011
Eligibility results published	23 May 2011
Appeals to the eligibility results	24-26 May 2011
Final eligibility results published	07 June 2011
Evaluation of eligible proposals	08 June – 23 August 2011
Preliminary results published	29 August 2011
Appeals to the evaluation results	30 August – 01 September 2011
Final results published	9 September 2011
Final list of selected projects published	16 September 2011
Contracts signed	22 September 2011
Projects start	01 October 2011*

\*Depending on the specific situations, some projects may start after this date.

#### Useful information:

Funding proposals are to be submitted via the online submission platform - <u>www.uefiscdi-direct.ro</u>, which will be available after march 31<sup>st</sup> 2011. No paper submission is necessary. Project proposals are signed only by the project leader, are scanned in pdf format and are loaded into the online platform in the section provided for this purpose.

Also, the proposal must be accompanied by a declaration (signed and stamped by the legal representative) by which the host institution offers the necessary administrative support, provides access to all necessary infrastructure, agrees to support the implementation of the project in good conditions and to employ the members of the project team, while observing all legal provisions in force, if the project is selected for funding. This declaration is signed and scanned in pdf format, and is loaded into the online platform in the section provided for this purpose.

#### APPENDIX 1 - Minimal eligibility standards for the project leader and the evaluators

#### a) For fields outside the humanities and social sciences

To have published, in the period 2001 - 2011, as a main author (see Appendix 5 - Definitions), articles in journals with a relative influence score<sup>2</sup> not less than 0.5, and with a cumulated relative influence score of not less than 1. These articles must be published in journal indexed in the Web of Science database, labeled with the document type *article* or *review*.

#### **b)** For the social sciences (see Appendix 4 – Scientific Domains)

To have accumulated at least 50 points from published works after January 1<sup>st</sup> 2001, from the following categories:

1. Books published as author or co-author: 60 points per book;

2. Chapters published as author or co-author in collective volumes: 30 points per chapter;

3. Articles published as the main author (see Appendix 5) in journals with a relative influence score<sup>1</sup> not less than 0,25. These articles must be published in journals indexed in the Web of Science, labeled with the document type article, review or proceedings paper. For each such article, points are obtained as follows: 50 points  $\times$  relative influence score.

For categories 1 and 2: will be considered only works available in at least 3 libraries of higher education institutions from the other member states of the European Union, or from the member states of the Organisation of Economic Cooperation and Development, indexed in the worldwide catalogue WorldCat (available at www.worldcat.org<sup>3</sup>).

## c) For the humanities (see Appendix 4 – Scientific Domains)

To have accumulated at least 50 points from works published after January 1<sup>st</sup> 2001, from the following categories:

1. Reference works for the humanities (authored books, dictionaries/encyclopaedias, particularly difficult critical editions<sup>4</sup>), published at publishing houses from outside of Romania and of the Republic of Moldova, in major international languages (see Appendix 5). These works must be available in at least 3 libraries of higher education institutions from other member states of the

<sup>&</sup>lt;sup>2</sup> The relative influence score is defined in Appendix 5 and is available on the UEFISCDI website www.uefiscdi.gov.ro

<sup>&</sup>lt;sup>3</sup> In order to determine the number of libraries, after searching for the work in WorldCat, you must fill out the "Enter your location" field with a city name such as "Paris", since WorldCat does not recognize Romanian cities.

<sup>&</sup>lt;sup>4</sup> By "particularly difficult critical edition" is meant the publishing of a volume which contains sources relevant for at least one discipline in the humanities, and whose origins are not restricted to a certain period if they consist of manuscripts, but which date to before 1800 for printed texts, and the editing work involved at least 2 of the following activities: 1. the (re)establishment of the text by the critical comparison of several versions; 2. the (re)translation of the original text and editing it bilingually, by using rare paleographic/epigraphic/linguistic knowledge (by which one means the knowledge of languages particular to civilizations from the antiquity or the middle ages, or from the early modern period); 3. the elaboration of an introductory contextualizing study or of an ample series of explicative notes.

European Union or from member states of the Organisation for Economic Cooperation and Development, indexed in the worldwide catalog WorldCat (disponibil la <u>www.worldcat.org</u>): 100 point per work.

2. Reference works for humanities published at publishing houses in Romania or the Republic of Moldova (authored books, dictionaries/encyclopaedias, particularly difficult critical editions<sup>3</sup>). These works must be indexed in the world catalogue WorldCat. Maximum 2 works may be considered from this category: 20 points per work.

3. Studies published in journals indexed in the Arts & Humanities Citation Index sau included in the European Reference Index for Humanities (ERIH), categories A or B (<u>www.esf.org/research-areas/humanities/erih-european-reference-index-for-the-humanities.html</u>), or chapters authored in collective volumes edited in major international languages, or volumes edited in major international languages. The collective volumes must be found in not less than 3 libraries of higher education institutions from other member states of the European Union, or member states of the Organisation for Economic Cooperation and Development, indexed in the worldwide catalogue WorldCat: 10 points per study, chapter or volume edited.

#### **APPENDIX 2 - Application Form**

This document uses Times New Roman font, 12 point, 1.5 line spacing and 2 cm margins. Any modification of these parameters (excepting the figures and their captions), as well as exceeding the maximum number of pages set for each section can lead to the automatic disqualification of the application. The grey text contains instructions for the candidates and it may be removed and replaced with the required information. The black text must be kept, as it marks the mandatory information and sections of the application.

#### A. General information

#### Project title (maximum 150 characters):

#### Summary (maximum 1500 characters, spaces included):

#### **Project leader:**

Last name:

Previous last names:

First name:

Birthday (DD/MM/YYYY):

Doctorate obtained in the year:

Phone number:

Email address:

#### Host institution:

Name of institution:

Address of institution:

Registration code in the Register of Potential Contractors (http://rpc.ancs.ro/):

#### Domain of the proposal (see appendix nr. 4).

Domain:

Subdomain:

Main research area:

Secondary research area:

Secondary research area (optional):

#### **Keywords:**

1: 2: 3: 4 (optional): 5 (optional):

Foreign experience of the project leader (if any):

1. Total period of time employed abroad as a researcher or as a research scholarship or fellowship recipient:

#### years/months

# 2. Details of periods spent working abroad as a researcher: period/institution/position

3. If the project leader will come to Romania from abroad and wishes to benefit from a higher budget ceiling, he or she must include a copy (scanned in pdf format and loaded into the online proposal submission system) of the most recent employment, scholarship or fellowship contract, ending not more than 12 months before the submission deadline.

# **B.** Project leader

# B1. Scientific visibility and prestige (max. 2 pages)

**B.1.1**. *Main research results*. The most important contributions of the project leader in his or her field will be presented. This includes results, findings or discoveries that have led to a significantly better understanding in the field.

**B.1.2.** *The visibility of the scientific contributions.* Please include the international prizes, invited talks at prestigious international conferences or at foreign universities, membership in editorial committees of journals and collections published abroad, or other elements of recognition of the scientific activity of the project leader.

# **B2.** Curriculum vitae (max. 4 pages)

Contains at least the following categories of information:

- a) education, degrees and diplomas;
- b) professional experience, former employers;
- c) list of publications and patents;

d) Hirsch index and the total number of citations, according to Web of Science (this applies to research areas outside of the social sciences and humanities);

e) optionally, the address of the researcherid.com profile (recommended for proposals in research areas outside of the humanities).

## B3. Scientific contributions from the period 2001-2011

For research areas outside of the humanities

Please include the most important and representative publications of the project leader (at most 6). This can include for instance, articles, monographs or intellectual property titles.

*Articles.* This section will point out the most important articles indexed in the Web of Science database, published by the project leader as the main author. The number of citations (without autocitations) for each article will be included as well. It is possible to include articles accepted for publication, with the mention of the date of acceptance. If available, the DOI (digital object identifier) may be provided. If there are important articles published as coauthor, that the project leader considers as relevant for his or her scientific activity, these can be mentioned as well.

Articles will be listed in the following format:

Authors. *Article title*, Journal title, volume, pages (Year published). No. of citations:

DOI (optional):

Summary (optional):

*Monographs*. Please indicate only the scientific monographs published at prestigious international publishing houses. The names of at most 10 university libraries that hold the monograph may be included (these may be obtained from the worldcat.org website or directly on the webpage of the university library catalogue). University or lower level textbooks will not be considered, even if published by prestigious international publishing houses.

Monographs will be listed in the following format:

Authors. Book title, Publishing house (Year published).

No. of libraries in worldcat.org:

University libraries:

*Intellectual property titles.* Only IP titles obtained in <u>other</u> countries of the EU or in countries of the OECD will be considered.

IP titles will be listed in the following format:

Authors. Title of patent/model (Year obtained). Name of emitting office.

For the humanities

The most important works will be indicated (at most 6): books, chapters, articles, critical editions, dictionaries or encyclopedias. The proposal may also include at most 2 works (or fragments) considered representative for the activity of the project leader. These will be loaded in electronic format onto the online proposal submission platform.

Works will be listed in the following format:

Authors. Title of the article/chapter/book. Publishing house (Year published).

#### C. Project description (max. 10 pages)

In this section the candidate will detail the scientific context, the goals and objectives, the approach to these objectives, and the required material and human resources.

**C1**. *Scientific context and motivation*. Please describe the main concepts of the project in the context of the state of the art in the field. The choice of project will be explained and motivated, with a focus on identifying the new aspects and open problems which are to be tackled.

**C2**. *Objectives*. Please detail the project objectives with explicit references to the importance of the subject for the broader field of research and to the novel notions that will be studied or elaborated.

**C3**. *Method and approach*. The approach taken to the stated objectives must be described in detail, with reference to the most recent techniques in the field. Several intermediate milestones must be proposed. The organization and planning of the project will be presented in the form of a workplan. The workplan will include an estimation of the time commitment from each of the team members in units of man-months. The adjoining argument must underline the convergence of the material resources and the human resources in the available time, to the goal of reaching the stated scientific objectives.

C4. *Impact, relevance, applications.* The candidate will discuss the aspects related to the expected impact of the proposal in the larger scientific field, including a discussion of the possible applicative research directions which will be explored within the project, from a scientific, social or economic viewpoint.

**C5.** *Resources and budget.* The existing, relevant infrastructure will be described, as well as the equipment which is to be acquired within the project. In case one or more pieces of equipment of more than 60000 lei are thought to be needed, a detailed justification will be given for each their roles and importance for the project. The yearly budget layout and the types of expenses will also be detailed and justified. The candidates will assume a starting date of October 1<sup>st</sup> 2011. The types of expenses are as follows: salaries, logistics, mobility, and indirect expenses (overhead). The overhead is calculated as a percentage of the direct expenses. The percentage must be agreed upon by the project leader and the host institution. For percentages larger than 25% a detailed justification is required.

# Budget Breakdown (lei)

Budget chapter	2011 (lei)	2012 (lei)	2013 (lei)	2014 (lei)	Total (lei)
(expenses)					
Salaries					
Inventory					
Mobility					
Overhead					
Total					

# Budget Breakdown (euro)

Budget chapter (expenses)	Total budget (euro)
Salaries	
Inventory	
Mobility	
Overhead	
Total	

# The information in this application is hereby certified to be correct.

Project leader, Last name, first name: Signature:

Date:

#### **APPENDIX 3 - Evaluation Sheet**

#### 1. Project Leader (Principal Investigator) - 60%

1.1 How would you rate the PI's professional prestige and international visibility in his/her research field? (20%)

1.2 How do you assess the quality of the PI's publications in his/her field of research? (15%).

1.3 How relevant is the PI's expertise, as derived from his/her publications and background, for the proposed objectives? (15%).

1.4 How would you rate the level of originality and creativity of the previous results of the PI? (10%)

#### 2.Proposal and budget - 40%

2.1 Significance. How would you rate the level of importance of the specific problem studied and the potential impact of the proposed objectives for science, society or technology? (10%)

2.2 Approach. To what extent are the methods, design and investigation tools adequately selected and/or developed, well integrated, well reasoned, and appropriate to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative approaches ? (10%).

2.3 Innovation. Is the project original and innovative? For example: Does the project challenge existing paradigms or address an innovative hypothesis or critical barrier to progress in the field?Does the project develop new methods/technologies or significantly extend/improve previous ones?Does the project employ novel concepts, approaches, tools, or technologies within the specific area? (10%)

2.4 Work plan and resources. How appropriate and well adapted is the work plan for achieving the goals of this project? How likely is it that the goals be achieved within the proposed timescale and resources, taking into account the existing resources and the newly acquired infrastructure? (5%)

2.5 How adequate is the proposed budget, based on:

i) the research activities envisioned and their type (theoretical research, experimental research)?

ii) the proposed expenditure on personal mobility related to the project (conferences, networking activities, visits to other labs, etc)?

iii) the aim of expanding the research infrastructure in the PI's laboratory?

Please comment and/or suggest possible corrections.

(5%)

#### **Recommendations for evaluators:**

- a) Please give a grade for each subcriteria: 0 absent, 1 very poor, 2 poor, 3 fair, 4 good, 5 very good;
- b) The final score will be calculated as a sum of the grades for each of the subcriteria weighed by the corresponding precentage and multiplying the result by 20 (final score between 0 and 100);
- c) Please add comments in support of your evaluation, for each of the subcriteria.

# **APPENDIX 4 – Scientific domains and research areas**

Domain Code:	SH
Subdomain Code:	SH1, SH2, SH3, SH4, SH5, SH6
<b>Research Area Code:</b>	SH1_1SH1_12, SH2_1SH2_14

#### DOMAIN SOCIAL SCIENCES AND HUMANITIES

SH1	Individuals, institutions and markets: economics, finance and management
SH1_1	Macroeconomics, growth, business cycles
SH1_2	Microeconomics, institutional economics
SH1_3	Econometrics, statistical methods
SH1_4	Financial markets, banking and corporate finance
SH1_5	Competitiveness, innovation, research and development
SH1_6	Consumer choice, behavioral economics, marketing
SH1_7	Organization studies, strategy
SH1_8	Human resource management, employment and earnings
SH1_9	Public administration, public economics
SH1_10	Income distribution, poverty
SH1_11	International trade, economic geography
SH1_12	Economic history, development
SH2	<b>Institutions, values, beliefs and behavior:</b> sociology, social anthropology, political science, law, communication, social studies of science and technology
SH2_1	Social structure, inequalities, social mobility
SH2_2	Ageing, work, social policies
SH2_3	Kinship, cultural dimensions of classification and cognition, individual and social identity, gender
SH2_4	Myth, ritual, symbolic representations, religious studies
SH2_5	Ethnography
SH2_6	Globalization, migration, interethnic relations
SH2_7	Transformation of societies, democratization, social movements
SH2_8	Political systems, legitimacy of governance
SH2_9	Legal systems, constitutions, foundations of law
SH2_10	Private, public and social law
SH2_11	Global and transnational governance, international law, human rights
SH2_12	Communication networks, media, information society

SH2_13	Social studies of science and technology, S&T policies, science and society
SH2_14	History of science and technology
SH3	<b>Environment and society:</b> environmental studies, demography, social geography, urban and regional studies
SH3_1	Environment and sustainability
SH3_2	Environmental regulation and mediation
SH3_3	Social and industrial ecology
SH3_4	Geographical information systems, cartography
SH3_5	Human and social geography
SH3_6	Spatial and regional planning
SH3_7	Population dynamics
SH3_8	Urbanization and urban planning, cities
SH3_9	Mobility and transportation
SH4	The Human Mind and its complexity: cognition, psychology, linguistics, philosophy and education
SH4_1	Evolution of mind and cognitive functions, animal communication
SH4_2	Human life-span development
SH4_3	Neuropsychology and cognitive psychology
SH4_4	Clinical and experimental psychology
SH4_5	Formal, cognitive, functional and computational linguistics
SH4_6	Typological, historical and comparative linguistics
SH4_7	Acquisition and knowledge of language: psycholinguistics, neurolinguistics
SH4_8	Use of language: pragmatics, sociolinguistics, discourse analysis
SH4_9	Second language teaching and learning, language pathologies, lexicography, terminology
SH4_10	Philosophy, history of philosophy
SH4_11	Epistemology, logic, philosophy of science
SH4_12	Ethics and morality, bioethics
SH4_13	Education: principles, techniques, typologies
SH5	<b>Cultures and cultural production:</b> literature, visual and performing arts, music, cultural and comparative studies
SH5_1	Classics
SH5_2	History of literature
SH5_3	Literary theory and comparative literature, literary styles
SH5_4	Textual philology and palaeography
SH5_5	Visual arts

SH5_6	Performing arts
SH5_7	Museums and exhibitions
SH5_8	Numismatics, epigraphy
SH5_9	Music and musicology, history of music
SH5_10	History of art and architecture
SH5_11	Cultural studies, cultural diversity
SH5_12	Cultural memory, intangible cultural heritage
SH6	The study of the human past: archaeology, history and memory
SH6_1	Archaeology, archaeometry, landscape archaeology
SH6_2	Prehistory and protohistory
SH6_3	Ancient history, ancient cultures
SH6_4	Medieval history
SH6_5	Modern and contemporary history
SH6_6	Colonial history, entangled histories, global history
SH6_7	Military history
SH6_8	Historiography, theory and methods of history
SH6_9	History of ideas, intellectual history
SH6_10	Social, economic, cultural and political history
SH6_11	Collective memories, identities, lieux de mémoire, oral history
SH6_12	Cultural heritage

Domain Code:	PE
Subdomain Code:	PE1, PE2, PE3 PE10
<b>Research Area Code:</b>	PE1_1PE1_18, PE2_1PE2_17

#### DOMAIN

#### MATHEMATICS, PHYSICAL SCIENCES, INFORMATION AND COMMUNICATION, ENGINEERING, UNIVERSE AND EARTH SCIENCES

PE1	<b>Mathematical foundations:</b> all areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics
PE1_1	Logic and foundations
PE1_2	Algebra
PE1_3	Number theory
PE1_4	Algebraic and complex geometry
PE1_5	Geometry
PE1_6	Topology
PE1_7	Lie groups, Lie algebras
PE1_8	Analysis
PE1_9	Operator algebras and functional analysis
PE1_10	ODE and dynamical systems
PE1_11	Partial differential equations
PE1_12	Mathematical physics
PE1_13	Probability and statistics
PE1_14	Combinatorics
PE1_15	Mathematical aspects of computer science
PE1_16	Numerical analysis and scientific computing
PE1_17	Control theory and optimization
PE1_18	Application of mathematics in sciences
PE2	<b>Fundamental constituents of matter:</b> particle, nuclear, plasma, atomic, molecular, gas, and optical physics
PE2_1	Fundamental interactions and fields
PE2_2	Particle physics
PE2_3	Nuclear physics
PE2_4	Nuclear astrophysics
PE2_5	Gas and plasma physics
PE2_6	Electromagnetism
PE2_7	Atomic, molecular physics
PE2_8	Optics and quantum optics

PE2_9	Lasers and laser physics
PE2_10	Acoustics
PE2_11	Relativity
PE2_12	Classical physics
PE2_13	Thermodynamics
PE2_14	Non-linear physics
PE2_15	General physics
PE2_16	Metrology and measurement
PE2_17	Statistical physics (gases)
PE3	Condensed matter physics: structure, electronic properties, fluids, nanosciences
PE3_1	Structure of solids and liquids
PE3_2	Mechanical and acoustical properties of condensed matter
PE3_3	Thermal properties of condensed matter
PE3_4	Transport properties of condensed matter
PE3_5	Electronic properties of materials and transport
PE3_6	Lattice dynamics
PE3_7	Semiconductors
PE3_8	Superconductivity
PE3_9	Superfluids
PE3_10	Spintronics
PE3_11	Magnetism
PE3_12	Nanophysics: nanoelectronics, nanophotonics, nanomagnetism
PE3_13	Mesoscopic physics
PE3_14	Molecular electronics
PE3_15	Soft condensed matter (liquid crystals)
PE3_16	Fluid dynamics (physics)
PE3_17	Statistical physics (condensed matter)
PE3_18	Phase transitions, phase equilibria
PE3_19	Biophysics
PE4	<b>Physical and Analytical Chemical sciences:</b> analytical chemistry, chemical theory, physical chemistry/chemical physics
PE4_1	Physical chemistry
PE4_2	Nanochemistry
PE4_3	Spectroscopic and spectrometric techniques

PE4_4	Molecular architecture and Structure
PE4_5	Surface science
PE4_6	Analytical chemistry
PE4_7	Chemical physics
PE4_8	Chemical instrumentation
PE4_9	Electrochemistry, electrodialysis, microfluidics
PE4_10	Combinatorial chemistry
PE4_11	Method development in chemistry
PE4_12	Catalysis
PE4_13	Physical chemistry of biological systems
PE4_14	Chemical reactions: mechanisms, dynamics, kinetics and catalytic reactions
PE4_15	Theoretical and computational chemistry
PE4_16	Radiation chemistry
PE4_17	Nuclear chemistry
PE4_18	Photochemistry
PE5	<b>Materials and Synthesis:</b> materials synthesis, structure-properties relations, functional and advanced materials, molecular architecture, organic chemistry
PE5_1	Structural properties of materials
PE5_2	Solid state materials
PE5_3	Surface modification
PE5_4	Thin films
PE5_5	Corrosion
PE5_6	Porous materials
PE5_7	Ionic liquids
PE5_8	New materials: oxides, alloys, composite, organic-inorganic hybrid, superconductors
PE5_9	Materials for sensors
PE5_10	Nanomaterials : nanoparticles, nanotubes
PE5_11	Biomaterials synthesis
PE5_12	Intelligent materials – self assembled materials
PE5_13	Environment chemistry
PE5_14	Coordination chemistry
PE5_15	Colloid chemistry
PE5_16	Biological chemistry
PE5_17	Chemistry of condensed matter

PE5_18	Homogeneous and heterogeneous catalysis	
PE5_19	Characterization methods of materials	
PE5_20	Macromolecular chemistry	
PE5_21	Polymer chemistry	
PE5_22	Supramolecular chemistry	
PE5_23	Organic chemistry	
PE5_24	Molecular chemistry	
PE6	<b>Computer science and informatics:</b> informatics and information systems, computer science, scientific computing, intelligent systems	
PE6_1	Computer architecture	
PE6_2	Database management	
PE6_3	Formal methods	
PE6_4	Graphics and image processing	
PE6_5	Human computer interaction and interface	
PE6_6	Informatics and information systems	
PE6_7	Theoretical computer science including quantum information	
PE6_8	Intelligent systems	
PE6_9	Scientific computing	
PE6_10	Modelling tools	
PE6_11	Multimedia	
PE6_12	Parallel and Distributed Computing	
PE6_13	Speech recognition	
PE6_14	Systems and software	
PE7	Systems and communication engineering: electronic, communication, optical and systems engineering	
PE7_1	Control engineering	
PE7_2	Electrical and electronic engineering: semiconductors, components, systems	
PE7_3	Simulation engineering and modelling	
PE7_4	Systems engineering, sensorics, actorics, automation	
PE7_5	Micro- and nanoelectronics, optoelectronics	
PE7_6	Communication technology, high-frequency technology	
<b>PE7_7</b>	Signal processing	
PE7_8	Networks	
PE7_9	Man-machine-interfaces	
PE7_10	Robotics	

PE8	<b>Products and process engineering:</b> product design, process design and control, construction methods, civil engineering, energy systems, material engineering
PE8_1	Aerospace engineering
PE8_2	Chemical engineering, technical chemistry
PE8_3	Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment
PE8_4	Computational engineering
PE8_5	Fluid mechanics, hydraulic-, turbo-, and piston engines
PE8_6	Energy systems (production, distribution, application)
PE8_7	Micro(system) engineering
PE8_8	Mechanical and manufacturing engineering (shaping, mounting, joining, separation)
PE8_9	Materials engineering (biomaterials, metals, ceramics, polymers, composites,)
PE8_10	Production technology, process engineering
PE8_11	Product design, ergonomics, man-machine interfaces
PE8_12	Lightweight construction, textile technology
PE8_13	Industrial bioengineering
PE8_14	Industrial biofuel production
PE9	<b>Universe sciences:</b> astro-physics/chemistry/biology; solar system; stellar, galactic and extragalactic astronomy, planetary systems, cosmology; space science, instrumentation
PE9_1	Solar and interplanetary physics
PE9_2	Planetary systems sciences
PE9_3	Interstellar medium
PE9_4	Formation of stars and planets
PE9_5	Astrobiology
PE9_6	Stars and stellar systems
PE9_7	The Galaxy
PE9_8	Formation and evolution of galaxies
PE9_9	Clusters of galaxies and large scale structures
PE9_10	High energy and particles astronomy – X-rays, cosmic rays, gamma rays, neutrinos
PE9_11	Relativistic astrophysics
PE9_12	Dark matter, dark energy
PE9_13	Gravitational astronomy
PE9_14	Cosmology
PE9_15	Space Sciences
PE9_16	Very large data bases: archiving, handling and analysis
PE9_17	Instrumentation - telescopes, detectors and techniques

PE9_18	Solar planetology	
PE10	Earth system science: physical geography, geology, geophysics, meteorology, oceanography, climatology, ecology, global environmental change, biogeochemical cycles, natural resources management	
PE10_1	Atmospheric chemistry, atmospheric composition, air pollution	
PE10_2	Meteorology, atmospheric physics and dynamics	
PE10_3	Climatology and climate change	
PE10_4	Terrestrial ecology, land cover change,	
PE10_5	Geology, tectonics, volcanology,	
PE10_6	Paleoclimatology, paleoecology	
PE10_7	Physics of earth's interior, seismology, volcanology	
PE10_8	Oceanography (physical, chemical, biological)	
PE10_9	Biogeochemistry, biogeochemical cycles, environmental chemistry	
PE10_10	Mineralogy, petrology, igneous petrology, metamorphic petrology	
PE10_11	Geochemistry, crystal chemistry, isotope geochemistry, thermodynamics,	
PE10_12	Sedimentology, soil science, palaeontology, earth evolution	
PE10_13	Physical geography	
PE10_14	Earth observations from space/remote sensing	
PE10_15	Geomagnetism, paleomagnetism	
PE10_16	Ozone, upper atmosphere, ionosphere	
PE10_17	Hydrology, water and soil pollution	

Domain Code:	LS
Subdomain Code:	LS1,LS2LS9
<b>Research Area Code:</b>	LS1_1LS1_8,LS2_1LS2_14

#### DOMAIN LIFE SCIENCES

LS1	<b>Molecular and Structural Biology and Biochemistry:</b> molecular biology, biochemistry, biophysics, structural biology, biochemistry of signal transduction	
LS1_1	Molecular biology and interactions	
LS1_2	General biochemistry and metabolism	
LS1_3	DNA biosynthesis, modification, repair and degradation	
LS1_4	RNA synthesis, processing, modification and degradation	
LS1_5	Protein synthesis, modification and turnover	
LS1_6	Biophysics	
LS1_7	Structural biology (crystallography, NMR, EM)	
LS1_8	Biochemistry of signal transduction	
LS2	<b>Genetics, Genomics, Bioinformatics and Systems Biology:</b> genetics, population genetics, molecular genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biologicalmodelling and simulation, systems biology, genetic epidemiology	
LS2_1	Genomics, comparative genomics, functional genomics	
LS2_2	Transcriptomics	
LS2_3	Proteomics	
LS2_4	Metabolomics	
LS2_5	Glycomics	
LS2_6	Molecular genetics, reverse genetics and RNAi	
LS2_7	Quantitative genetics	
LS2_8	Epigenetics and gene regulation	
LS2_9	Genetic epidemiology	
LS2_10	Bioinformatics	
LS2_11	Computational biology	
LS2_12	Biostatistics	
LS2_13	Systems biology	
LS2_14	Biological systems analysis, modelling and simulation	
LS3	<b>Cellular and Developmental Biology:</b> cell biology, cell physiology, signal transduction, organogenesis, developmental genetics, pattern formation in plants and animals	
LS3_1	Morphology and functional imaging of cells	
LS3_2	Cell biology and molecular transport mechanisms	

LS3_3	Cell cycle and division	
LS3_4	Apoptosis	
LS3_5	Cell differentiation, physiology and dynamics	
LS3_6	Organelle biology	
LS3_7	Cell signalling and cellular interactions	
LS3_8	Signal transduction	
LS3_9	Development, developmental genetics, pattern formation and embryology in animals	
LS3_10	Development, developmental genetics, pattern formation and embryology in plants	
LS3_11	Cell genetics	
LS3_12	Stem cell biology	
LS4	<b>Physiology, Pathophysiology and Endocrinology:</b> organ physiology, pathophysiology, endocrinology, metabolism, ageing, regeneration, tumorigenesis, cardiovascular disease, metabolic syndrome	
LS4_1	Organ physiology	
LS4_2	Comparative physiology	
LS4_3	Endocrinology	
LS4_4	Ageing	
LS4_5	Metabolism, biological basis of metabolism related disorders	
LS4_6	Cancer and its biological basis	
LS4_7	Cardiovascular diseases	
LS4_8	Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)	
LS5	<b>Neurosciences and neural disorders:</b> neurobiology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological disorders, psychiatry	
LS5_1	Neuroanatomy and neurosurgery	
LS5_2	Neurophysiology	
LS5_3	Neurochemistry and neuropharmacology	
LS5_4	Sensory systems (e.g. visual system, auditory system)	
LS5_5	Mechanisms of pain	
LS5_6	Developmental neurobiology	
LS5_7	Cognition (e.g. learning, memory, emotions, speech)	
LS5_8	Behavioral neuroscience (e.g. sleep, consciousness, handedness)	
LS5_9	Systems neuroscience	
LS5_10	Neuroimaging and computational neuroscience	
LS5_11	Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)	

LS5_12	Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)	
LS6	<b>Immunity and infection:</b> immunobiology, aetiology of immune disorders, microbiology, virology, parasitology, global and other infectious diseases, population dynamics of infectious diseases, veterinary medicine	
LS6_1	Innate immunity	
LS6_2	Adaptive immunity	
LS6_3	Phagocytosis and cellular immunity	
LS6_4	Immunosignalling	
LS6_5	Immunological memory and tolerance	
LS6_6	Immunogenetics	
LS6_7	Microbiology	
LS6_8	Virology	
LS6_9	Bacteriology	
LS6_10	Parasitology	
LS6_11	Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)	
LS6_12	Biological basis of immunity related disorders	
LS6_13	Veterinary medicine	
LS7	<b>Diagnostic tools, therapies and public health:</b> aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics	
LS7_1	Medical engineering and technology	
LS7_2	Diagnostic tools (e.g. genetic, imaging)	
LS7_3	Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	
LS7_4	Analgesia	
LS7_5	Toxicology	
LS7_6	Gene therapy, stem cell therapy, regenerative medicine	
LS7_7	Surgery	
LS7_8	Radiation therapy	
LS7_9	Health services, health care research	
LS7_10	Public health and epidemiology	
LS7_11	Environment and health risks including radiation	
LS7_12	Occupational medicine	
LS7_13	Medical ethics	
LS8	<b>Evolutionary, population and environmental biology:</b> evolution, ecology, animal behaviour, population biology, biodiversity, biogeography, marine biology, eco-toxicology, prokaryotic biology	
LS8_1	Ecology (theoretical, community, population, microbial, evolutionary ecology)	
LS8_2	Population biology, population dynamics, population genetics, plant-animal interactions	

LS8_3	Systems eEvolution, biological adaptation, phylogenetics, systematics
LS8_4	Biodiversity, comparative biology
LS8_5	Conservation biology, ecology, genetics
LS8_6	Biogeography
LS8_7	Animal behaviour (behavioural ecology, animal communication)
LS8_8	Environmental and marine biology
LS8_9	Environmental toxicology
LS8_10	Prokaryotic biology
LS8_11	Symbiosis
LS9	<b>Applied life sciences and biotechnology:</b> agricultural, animal, fishery, forestry and food sciences; biotechnology, chemical biology, genetic engineering, synthetic biology, industrial biosciences; environmental biotechnology and remediation
LS9_1	Genetic engineering, transgenic organisms, recombinant proteins, biosensors
LS9_2	Synthetic biology and new bio-engineering concepts
LS9_3	Agriculture related to animal husbandry, dairying, livestock raising
LS9_4	Aquaculture, fisheries
LS9_5	Agriculture related to crop production, soil biology and cultivation, applied plant biology
LS9_6	Food sciences
LS9_7	Forestry, biomass production (e.g. for biofuels)
LS9_8	Environmental biotechnology, bioremediation, biodegradation
LS9_9	Biotechnology, bioreactors, applied microbiology
LS9_10	Biomimetics
LS9_11	Biohazards, biological containment, biosafety, biosecurity

#### Research areas in the social sciences:

- SH1\_1 Macroeconomics, growth, business cycles
- SH1\_2 Microeconomics, institutional economics
- SH1\_3 Econometrics, statistical methods
- SH1\_4 Financial markets, banking and corporate finance
- SH1\_5 Competitiveness, innovation, research and development
- SH1\_6 Consumer choice, behavioural economics, marketing
- SH1\_7 Organization studies, strategy
- SH1\_8 Human resource management, employment and earnings
- SH1\_9 Public administration, public economics
- SH1\_10 Income distribution, poverty
- SH1\_11 International trade, economic geography
- SH2\_1 Social structure, inequalities, social mobility

- SH2\_2 Ageing, work, social policies
- SH2\_3 Kinship, cultural dimensions of classification and cognition, individual and social identity, gender
- SH2\_6 Globalization, migration, interethnic relations
- SH2\_7 Transformation of societies, democratization, social movements
- SH2\_8 Political systems, legitimacy of governance
- SH2\_9 Legal systems, constitutions, foundations of law
- SH2\_10 Private, public and social law
- SH2\_11 Global and transnational governance, international law, human rights
- SH2\_12 Communication networks, media, information society
- SH2\_13 Social studies of science and technology, S&T policies, science and society
- SH3\_1 Environment and sustainability
- SH3\_2 Environmental regulation and mediation
- SH3\_3 Social and industrial ecology
- SH3\_4 Geographical information systems, cartography
- SH3\_5 Human and social geography
- SH3\_6 Spatial and regional planning
- SH3\_7 Population dynamics
- SH3\_8 Urbanization and urban planning, cities
- SH3\_9 Mobility and transportation
- SH4\_1 Evolution of mind and cognitive functions, animal communication
- SH4\_2 Human life-span development
- SH4\_3 Neuropsychology and cognitive psychology
- SH4\_4 Clinical and experimental psychology,
- SH4\_5 Formal, cognitive, functional and computational linguistics
- SH4\_7 Acquisition and knowledge of language: psycholinguistics, neurolinguistics
- SH4\_8 Use of language: pragmatics, sociolinguistics, discourse analysis
- SH4\_9 second language teaching and learning, language pathologies, lexicography,

terminology

SH4\_13 Education: principles, techniques, typologies

#### Research areas in the humanities:

- SH1\_12 Economic history, development
- SH2\_4 Myth, ritual, symbolic representations, religious studies
- SH2\_5 Ethnography
- SH2\_14 History of science and technology
- SH4\_6 Typological, historical and comparative linguistics
- SH4\_10 Philosophy, history of philosophy
- SH4\_11 Epistemology, logic, philosophy of science

SH4\_12 Ethics and morality, bioethics

SH5\_1 Classics

SH5\_2 History of literature

- SH5\_3 Literary theory and comparative literature, literary styles
- SH5\_4 Textual philology and palaeography
- SH5\_5 Visual arts
- SH5\_6 Performing arts
- SH5\_7 Museums and exhibitions
- SH5\_8 Numismatics, epigraphy
- SH5\_9 Music and musicology, history of music
- SH5\_10 History of art and architecture
- SH5\_11 Cultural studies, cultural diversity
- SH5\_12 Cultural memory, intangible cultural heritage
- SH6\_1 Archaeology, archaeometry, landscape archaeology
- SH6\_2 Prehistory and protohistory
- SH6\_3 Ancient history, ancient cultures
- SH6\_4 Medieval history
- SH6\_5 Modern and contemporary history
- SH6\_6 Colonial history, entangled histories, global history
- SH6\_7 Military history,
- SH6\_8 Historiography, theory and methods of history
- SH6\_9 History of ideas, intellectual history
- SH6\_10 Social, economic, cultural and political history
- SH6\_11Collective memories, identities, lieux de mémoire, oral history
- SH6\_12 Cultural heritage

#### Research areas with a national Romanian character are the Romanian language and literature and Romanian

- law which fall into the following research areas:
- SH2\_10 Private, public and social law
- SH5\_2 History of literature
- SH5\_3 Literary theory and comparative literature, literary styles
- SH5\_4 Textual philology and palaeography

#### **APPENDIX 5 – Definitions**

- The main author or authors of a publication can be any of the following:
  - the first author, when the order of the authors reflects the importance of their contribution;
  - the corresponding author (*reprint author* in Web of Science), when he or she is identified;
  - o other authors whose contribution is explicitly indicated as being equal to the contribution of the first author or the corresponding author;
  - all the authors of a publication, in the case where, due to the accepted practice in the field, the order of the authors of a publication does not reflect their contribution to it (for instance in cases in which the authors of a publication are ordered alphabetically) for publications from the following fields: mathematics (subdomain PE1), theoretical computer science (research areas PE6\_3, PE6\_6, PE6\_7, PE6\_10), experimental high energy physics (research areas PE2\_1, PE2\_2 şi PE2\_3) and economics (subdomeniul SH1).
- An ISI indexed journal is a journal which is indexed in the Science Citation Index Expanded, Social Sciences Citation Index or the Arts & Humanities Citation Index, databases maintained by Thomson Reuters.
- An ISI ranked journal, is a journal for which Thomson Reuters calculates and publishes an impact factor in Journal Citation Reports.
- The influence score is a quantity which reflects, for a given scientific journal, the average influence of an article in that journal in a 5 year interval after publication, by taking into account the number of times the articles of the journal ar cited, weighed with the influence of the citing journals. The article influence score (AIS) is calculated by Thomson Reuters in Journal Citation Reports. Journals for which the AIS is not calculated are considered to have an AIS equal to zero.
- Median influence score in a given subject area is equal to the median of the influence scores of the journals in that subject area, which have non-zero influence scores, according to the journal grouping used by Thomson Reuters.
- The reference influence score of a subject area is the median influence score of that subject area, with the exception of the area "Multidisciplinary sciences", for which the reference influence score is the mean of the median influence scores for all the other subject areas covered by Journal Citation Reports. The reference influence score of a given scientific journal indexed in Science Citation Index Expanded or Social Sciences Citation Index is the smallest of the reference influence scores of the subject areas to which the journal is assigned,

according to the grouping used by Thomson Reuters.

- The relative influence score of a scientific journal is equal to the ratio of the influence score of that journal and the reference influence score of the journal. The relative influence score of an article is the relative influence score of the journal that published the article.
- The cumulated relative influence score of a set of scientific articles is the sum of the reative influence scores of each article in that set.
- The impact factor of a scientific journal is a quantity that reflects the average number of citations received by articles in that journal, published in a given year, in the course of two years after publication. The impact factor is calculated by Thomson Reuters in Journal Citation Reports. The journals for which Thomson Reuters does not compute an impact factor ar considered to have an impact factor equal to zero.
- The aggregate impact factor of a subject area is a quantity which reflects the average number of citations received by the articles of the journals in a subject area, published in a given year, in a time interval of 2 years after publication. The aggregate impact factor is calculated by Thomson Reuters in Journal Citation Reports.
- The reference impact factor of a subject area is the aggregate impact factor of that subject area, with the exception of the subject area "Multidisciplinary sciences", for which the reference impact factor is the mean of the aggregate impact factors of all the other subject areas of Journal Citation Reports. The reference impact factor of a scientific journal indexed in Science Citation Index Expanded or Social Sciences Citation Index is the smallest of the reference impact factors of the subject areas to which the journal is assigned, according to the grouping used by Thomson Reuters.
- The relative impact factor of a scientific journal is equal to the ratio between the impact factor of the journal and the reference impact factor of the journal. The relative impact factor of an article is the relative impact factor of the journal which published it.
- The relative impact factor and the relative influence score, for each ISI ranked journal, and the reference impact factor for each subject area are calculated by the UEFISCDI, according to the most recent available edition of the Journal Citation Reports, and are published on the UEFISCDI website, www.uefiscdi.ro.
- The number of citations of a publication is the one shown by Web of Science.
- The number of domain normalized citations of a scientific article published in a journal indexed in Science Citation Index Expanded or Social Sciences Citation Index is obtained by taking the ratio of the number of citations of the article to the reference impact factor of the journal. In the case of other publications from the subject areas covered by the Science Citation Index Expanded or Social Sciences Citation Index, the number of domain normalized citations

is obtained by taking the ratio of the number of citations of the publication to the reference impact factor of the subject area in which the article fits best.

• Major international languages: English, French, German, Italian, Russian and Spanish.

# APPENDIX 6 – Process, results and impact indicators for the subprogram ID-PCE-2011-3

	Names of indicators	Units.
Process	Number of attendees of international conferences financed	Nr.
indicators	Number of PhD students supported	Nr.
	Number of PhD students in co-direction with foreign instituions	Nr.
	supported	
Results	Number of articles published or accepted for publication in the	Nr.
indicators	international research publication mainstream	
	Relative cumulated impact factor of articles published or	
	accepted for publication	
	Number of field normalized citations of articles	
	Number of articles in international collaboration published or	Nr.
	accepted for publication in the international research publication	
	mainstream	
	Number of researchers coming from abroad integrated in the	Nr.
	national R&D system	
	Number of patent applications supported, of which EPO,	Nr.
	USPTO, JPO, other EU and OECD countries	
Results	Number of articles published in journals indexed AHCI or ERIH	Nr.
indicators	Category A or B	
(applies to the		
humanities		
only)		
Results	Number of chapters published in collective editions, in major	
indicators	foreign languages, at prestigious foreign publishing houses	
(applies only to	Number of books authored in major foreign languages at	Nr.
the social	prestigious foreign publishing houses	
sciences and	Number of books edited in major foreign languages at	Nr.
humanities)	prestigious foreign publishing houses	
Impact	Cumulated relative influence score of articles published or	Nr.
indicators	accepted for publication	

#### **APPENDIX 7 - Legislation**

#### **Ethics**

Ethics in research, development and innovation activities, referred to as R&D below, are based on a set of moral principles and on a set of procedures designed to enforce them. The competition and the projects financed as a result submit to the provisions of Law 206/2004 concerning the rules of good practice in R&D activities in Romania. Such activities must also obey the international regulations in the area, such as, in particular, the legislation of the European Union.

#### **Other relevant legislation**

- Government decision no. 134/2011 for the approval of the Norms concerning the categories of expenses for R&D activities, eligible for funding from the state budget
- Government decision no. 1265/2004 for the approval of the Norms concerning the contracts, financing, monitoring and evaluation of R&D programs projects and actions which compose the National Plan for R&D;
- Government decision nr. 217/2007 concerning the approval of the National Strategy fo R&D, for the period 2007-2013;
- Government decision nr. 475/2007 concerning the approval of the National Plan for R&D, with the subsequent modifications;
- Government Ordinance no. 57/2002 concerning scientific research and technological development, approved with modifications through Law no. 324/2003, with the subsequent modifications;
- Law no. 319/2003, concerning the Statute of R&D personnel;
- ► Law no. 1/2011 of national education;
- Government decision no. 1860/2006 concerning the rights and obligations of the public authorities and institutions, during the delegation to other areas, as well as during the delegation to other locations within the same area, in the interest of the employer, with subsequent modifications;
- Government decision no. 518/1995 concerning some rights and obligations of Romanian personnel sent abroad in the interest of carrying out missions with a temporary character, with the subsequent modifications.