

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

The Program HUMAN RESOURCES The Subprogram “Postdoctoral research projects”

Information package¹



MINISTERUL
EDUCAȚIEI
CERCETĂRII
TINERETULUI
ȘI SPORTULUI

¹ Unauthorised translation. Only the Romanian version of the pack has legal validity.

Table of Content

POSTDOCTORAL RESEARCH PROJECTS 3

ANNEX 1 - Minimal eligibility standards for the postdoctoral advisor and the evaluators..... 14

ANNEX 2 - Funding Application..... 17

ANNEX 3 - Evaluation Sheet 23

ANNEX 5 - Definitions 40

ANNEX 6 – Process, results and impact indicators for the subprogram RU-PD..... 44

ANNEX 7 - Legislation 45

POSTDOCTORAL RESEARCH PROJECTS

Call number: PN-II-RU-PD-2012 - 3

1. Goal

Supporting young researchers with doctorates in the sciences, with high level results, who wish to develop an independent professional career in Romanian R&D units or institutions, with an aim to stimulate excellence in Romanian scientific research. The subprogram is also open to those who are working abroad and who are interested in leading research projects in Romanian institutions.

2. Objectives

- creating, for young researchers, an additional chance to obtain a stable research position in R&D units and institutions in Romania;
- providing the financial and logistical support in order to allow young doctorate recipients to continue a research career in Romania;
- promoting advanced fundamental research, with results up to the highest international standards;
- implement the principle “the funds go with the performance”;
- increasing the visibility of Romanian research internationally, by improving the quality level and the efficiency of exploitation of research results;
- helping research units and institutions to offer the adequate conditions to the return and professional reintegration of high level Romanian researchers, with a proved potential for excellence in scientific research;
- an increase in the number of full time researchers financed via project based funding and employed on permanent contracts in Romanian R&D units or institutions.

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, obtained not more than 5 years before the date of submission of the project. 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, but not later than 1st of April 2013. 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 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;
- c) 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;
- d) 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;
- e) The host institution must be different from the institution that granted the project leader the doctoral diploma;
- f) There is an agreement to assume the role of postdoctoral advisor from a researcher satisfying the minimal eligibility standards in Appendix 1, employed full time at the host institution with a permanent contract or with a fixed term contract covering at least the duration of the postdoctoral project. The information necessary to verify the eligibility standards must be filled out in the online proposal submission platform;
- g) A given person can submit, as a project leader within the competition of the year 2012, 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 who is a leader of a PD, TE, PCE or PCCE type project, which is on-going cannot be in the same time a leader of a new PD type project. A person who runs a PD, TE, PCE or PCCE type project being - at the date of closing of the submitting period for the financing applications -

in the last 12 months of project progress can run for getting a financing for a new project of PD type, which will start after the ending of the project being in progress.

- i) It is forbidden the submission of projects which refer to already financed activities or to those which are going to be financed from other sources, national and foreign international ones, or those which are the result of a plagiarism or selfplagiarism. The applicants who developed similar research topics will mention them and they will clearly specify the degree of novelty of the actual one. Also, is forbidden to make and use counterfeit experimental information and data, in order to influence the results of the application evaluation, of activity reports or of the publications resulted from the project progress. In the case of noticing some violations of the norms concerning the good practice in the scientific research, CNCS informs The National Council for Ethics of Scientific Research, Technological Development and Innovation (CNE). CNE analyses and finds the violations noticed and can decide sanctions, according to the legislation into force. Based on the CNE finding, CNCS can decide non-contracting/ cancellation of the financing contract, with the giving back of the used sums and the forbidding of the right to participate to the next competitions, organized in PNII programmes developed under the aegis of it.
- j) A given person can participate, as postdoctoral advisor, in not more than 3 PD type projects ongoing at any given time.

5. Duration

The duration of the project is of minimum 12 months and maximum 24 month.

6. Budget

The ceiling for the funding awarded for a project with a duration of 24 months is 300.000 lei.

The maximum amount awarded for projects which are shorter than 24 months is calculated proportionally to the duration, with reference to the 24 month maximum duration.

Eligible expenses

- *expenses with the salaries* (including all corresponding state and social contributions) only for the postdoctoral advisor and for the project leader; for the postdoctoral advisor the expenses with the salaries, including all corresponding state and social contributions, cannot exceed 700 lei/month;
- *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 well as for participants to scientific events organized within the project may also be financed;

-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 10% of the direct expenses. In well established situations, the host institution can request a larger percentage (but not larger than 20%), in a mutual agreement with the project leader. The justification of this request is done in the project proposal, section D5.

Notes:

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

2. If a volume is published as a result of the project, the project leader must disseminate it on-line. In case of existing of a volume printing version the project leader must present at the final report the proofs of its distribution by internationally prestigious libraries. Also, at the final report, it must be desirable the citation of the criticism which the volume could have.

3. The expenses with the personnel, mobility and indirect ones are not eligible for the projects led by persons who benefit of a POSDRU scholarship being in progress. After its finalization it could be signed an additional amendment to the grant agreement in which these expenses are declared eligible for the rest of the project period.

4. The budget allocated to projects being contracted as a result of the present call of the PD subprogramme, for the entire duration of the projects, is of maximum 50.000.000 lei

7. The presentation of the project proposals

Project submission is done in one step, using the online project submission platform - www.uefiscdi-direct.ro. The proposal is compulsory done from an account created by the project leader (the identification data for creating an account on the platform must be those of the project leader). 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*.

8. Project evaluation

8.1. Checking eligibility

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

Candidates who wish to appeal the eligibility results can send their appeals by email to contestatiiPD@uefiscdi.ro, by fax to +40-(0)21-311.5992, or directly to the UEFISCDI headquarters, within 5 workdays from the date of publication of the results.

8.2. 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 (section 1.2)*.

Each evaluator, including the panels' members, will declare in writing his/her the judiciary, confidentiality and the competency in the field to which belongs the proposal of project which is going to be evaluated and he/she will promise that in any moment, during the evaluation process he/she will announce in writing UEFISCDI if he/she will notice that one of these conditions aren't fulfilled or that he/she is in a conflict of interests.

8.2.1. 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 (see Annex 3). The grades assigned to each criterion are compulsory justified by cumulative comments, which point out the strong and weak points. For an evaluation as homogenous as possible of the level of the applicants' publications, each evaluator will get the access to the B2, C1 and C2 sections of all the requests from each of his/her expertise field (as 3 pdf. files, separately loaded by the project leader). After finalizing all the individual evaluations for a 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.

8.2.2. The answer of the applicant. After the editing of the consensus reports, the UEFISCDI personnel will send to the applicants, by e-mail, all the comments summarised in the consensus report with the invitation of stating in writing, a point of view towards the comments expressed by the evaluators. The answers, limited to 4.000 characters (including the spaces), will be filled in, using a form available in the submitting platform, in an interval of 5 working days from the moment of the initial request of answering. The answer will be written in the same language used for the writing of the project and it will strictly consist in an counter-argument connected to the critical notes of the evaluators, as they show up in the consensus report. The answer of the applicant isn't compulsory and doesn't affect the evaluation in panel of the project.

8.2.3. Reaching the consensus. After receiving the answers from the applicants the stage of editing the consensus report starts. This stage will be coordinated by a reporter. The reporters are selected from abroad, from other members' states of The European Union or from the member states of the Organisation for Economic Cooperation and Development, with a possible exception of those from the fields with a Romanian character. The reporters and the members of the panels must fulfill the minimum standards of eligibility scheduled in *Annex 1 Session 1.2*. The selected reporters weren't involved in the individual evaluation stage, either. Each reporter will edit the consensus report for more proposals of project.

In a first stage all the evaluator experts will have the access to the applicant answer (if there is any) and when there is necessary they can adjust scores and the initial comments. Then, the reporter reads the comments from the individual reports and also the applicant answer and he/she checks for each criterion: (i) the substantiality of comments, meaning the degree of concreteness and adjusting to the evaluated criterion, (ii) the concordance between the comments and the given score and also (iii) the way the applicant answer is reflected. Should the reporter notice any problems, he/she asks the respective evaluator, by on-line platform, keeping the anonymity, to operate the necessary modifications.

After the verification stage ends, the reporter initiates the editing of the *consensus report*, with the direct involvement of all the evaluators. The report will be edited as such: for each criterion, where the evaluators are on consensus, the individual comments are gathered in an unique comment, which will eliminate the eventual redundancies, but it will contain absolutely all the real remarks from the individual reports. It is considered that there is a consensus on a subcriterion when, as a consequence of the individual evaluations, followed by the interactions between the evaluators and of the eventual adjustments of scores, the difference between the score given by each evaluator is not higher than 1p (on a scale from 0-5, according to Annex 3) and where the individual comments are not contradictory. In this case the given score on that criterion is the arithmedical average of the individual scores. Where the consensus cannot be reached on given criterion, according to what was described above, the comments and the score (or the scores) which represent *the minority option (or the options)* are

separately registered. In the same time the majority consensus comments and scores (if there are any) are treated in the same manner as in the case of the total consensus, too. The possible comments and minority scores are constitutive part of the consensus report.

In order to ensure the following of the evaluation procedures and of the evaluation fairness, the process of the individual evaluation and that of reaching the consensus will be monitored by a team of *project officers*, appointed by CNCS (by avoiding the conflict of interests). The project officers *won't be involved at all in the proper evaluation*, but they will follow just for the evaluation of each project to be adequate, both procedurally and qualitatively.

As a consequence of the consensus, the projects for which was reached the consensus on all the subcriterion and which got less than 65 points totally or which got less than 25 points to at least one of the two main criteria of evaluation (*Principal Investigator*, respective *Proposal*) are declared nonrecommended for funding. The same rule applies also for projects to which the consensus wasn't realised on all subcriterion, specifying that in the case of the nonconsensus criteria is taken into account the maximum score.

8.2.4. The evaluation in panel. The projects – which after the consensus stage were not declared non-financeable will be evaluated in the experts panels and they will settle the final hierarchy of the projects. The subfields where the projects are applied will be grouped in 11 fields, according to *Annex 4*. For each field indicated in *Annex 4* it will be settled a panel formed by the reporters of the projects from that field, especially those who were allocated to the projects which are going to be analysed in the panel. Each panel will be made up from at least 9 members.

Each member of the panel, before the panel meeting, will have access to the proposals of project, to the comments of the expert evaluators, to the reports of consensus and to the answers of the project managers for all the projects allocated to the panel. Excepting the reporter initially allocated to a project, for each project will also be assigned another member of the panel who will have the task of reading carefully all the specific information to a given project.

First the panel will analyse the projects which didn't meet consensus in the individual evaluation stage and will settle the score by consensus, for each non-consensus criterion. Second in order to establish the final hierarchy, the projects are discussed according to the evaluation criteria (presented in *Annex 3*), the panel having the opportunity to arbitrate the cumulative comments from the consensus reports and to adjust the final points of the projects, in order to ensure the homogeneity of the evaluation in each field. In order to reach this objectives the panel will make use of all the available information, including the applicant's answer and the information from sections B2 and B3 of all the applications from the panel's corresponding field.

The decisions of the panel can be taken only with the approving vote of at least 2/3 of the panel members. Where this majority is not met, the final score of the project is reached through a process

of mediation of the scores given by all the expert evaluators. The decisions which establish this score will be motivated by a panel report, adopted by a panel decision and which is transmitted to the project leader at the final stage of the evaluation.

The project officers assigned by CNCS can participate at the panel meeting, avoiding the conflicts of interest.

8.3. Publishing the evaluation results. The lists of the project proposals, one for each of the 11 fields, (according to Annex 4) will be published on the UEFISCDI website - www.uefiscdi.gov.ro. The lists will contain the score obtained by every proposal, being in a decreasing order, according to the value of the score.

8.4. Information. The project leaders are informed about the submission of the evaluation final report in the on-line platform (www.uefiscdi-direct.ro), through e-mail, at the address specified in the proposal. The final report will include the evaluators' comments and scores which based the final decision of the evaluation panel and also the final score calculated by the mediation of these scores or, if the case, through the panel decision.

8.5. 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 contestatiiPD@uefiscdi.ro, by fax to +40-(0)21-311.5992, or directly to UEFISCDI headquarters.

8.6. The competition results. For each of the 11 domains (according to Annex 4) project proposals are selected for funding in decreasing order of the scores obtained, considering the available funds.

8.7. Budget negotiation and signing the contracts. The leaders of the winning projects will negotiate the amount and the structure of the requested budget - with CNCS/UEFISCDI. The leaders of the winning projects must justify the budget in front of the CNCS committees. The committees will discuss based the notes provided by the evaluators, the correlation of the objectives with the requested budget.

The contract is signed after the negotiation is concluded.

Notes:

1. Evaluations are anonymous, ensuring the confidentiality and impartiality of the expert evaluators.
2. The list of the evaluators used in the evaluation process and individual composition of each panel will be published on the UEFISCDI website, at the end of the call.

9. 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. For the duration of the contract, the project leader is registered on the portal www.cercetatori-romani.ro 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;
4. 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 postdoctoral advisor:

Coordinates and support the activity of the project leader in the host institution.

The host institution:

1. Provides access 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.

10. 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 12 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 case in which the original host institution refuses the transfer, it must send UEFISCDI the reasons for the refusal. CNCS will analyze the request 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, all 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.

11. Call timeline

ACTIVITY	TIME
Call launched	1.03.2012
Proposal submission	12.04.2012
Eligibility results published	4.05.2012
Appeals to the eligibility results	07-11.05.2012
Final eligibility results published	18.05.2012
Evaluation of eligible proposals	21.05-06-09-2012
Preliminary results published	07.09.2012
Appeals to the evaluation results	10.09-12.09.2012
Final results published	17.09.2012
Final list of selected projects published	19.09.2012
The negotiation of the contract and the sign of the contract	20.09-28.09.2012
Projects start*	1.10.2012

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

Notes

1. *Funding proposals are to be submitted via the online submission platform - www.uefiscdi-direct.ro, no paper submission being necessary.*
2. *The funding proposals are loaded on the platform, in the respective session in a .pdf text format (the scanning is excluded).*
3. *These will be accompanied by **a declaration on its own responsibility of the project leader**, by which it is confirmed the correctness of the data included in the electronic version of the funding proposal.*
4. *Also, the proposal must be accompanied by **a declaration on its own responsibility of the host institution** in Romanian (signed by the legal representative and stamped) by which is certified the accepting of the project implementation in the institution, the ensurance of the administrative support, the providing of all necessary infrastructure for the project, the agreement of supporting the development of the project in good conditions and the employment of the members of the project team, under the inforce law, according to the proposal, 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.*

ANNEX 1 - Minimal eligibility standards for the postdoctoral advisor and the evaluators

1.1 Minimal eligibility standards for the postdoctoral advisor

For natural sciences, exact sciences and engineering sciences

Publishing between 2002 – 2012² as a main author (according to Annex 5) of some articles in journals which have a relative influence score³ each, not less than 0,5 and which have a cumulated relative influence score not less than 1. These articles must be published in journals indexed in the Web of Science database, labeled with the document type *article or review*. The articles with double label „*article; proceedings paper*” aren’t taken into consideration.

Alternately, for informatics field (subfield PE6) a project leader is considered eligible based on the citations obtained by his/her publications—as a main author- in 2002-2012, in ISI Web of Science indexed journals, with the notification that the journals who cite must reach a relative influence score not less than 0.5 and the relative influence score cumulated for all the citations taken into consideration not less than 3. The self-citations (see the definition in Annex 5) are not taken into account.

For the social sciences (see Annex 4) To sum up at least 50 points from published works in 2002 – 2012 period, 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 a main author** (see Annex 5) in journals with a relative influence score³ each not less than 0,25. These articles must be published in journals indexed in the Web of Science, labeled with the document type as article, review or proceedings paper. For each such article, points are obtained as follows: 50 points × relative influence score.

Notes:

1. For categories 1 and 2: it will be considered only works available in at least 12 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 Karlsruhe Virtueller Katalog (KVK).
2. The 50 points can be achieved also from contributions from just one category.

² Articles from 2012 will be taken into account if these are Web of Science indexed until the moment of eligibility checking.

³ The relative influence score of journals is defined in Annex 5 and it is found on UEFISCDI site, at www.uefiscdi.gov.ro

For the humanities (see Annex 4)

To sum up for the period 2002-2012 minimum 50 points from volumes of author (1 and 2), collective volumes (3 and 4), studies in scientific journals or in collective volumes (5 and 6), quantified according to the following table:

Publication	Category	Place of publishing		Qualitative standard (according to definitions from Annex 5)	A minimum number of entries in KVK catalogue	Score/Publication
Authored books. Books of theories of interpretations, respective that of the musical composition. Catalogs for visual arts and architecture reference. Dictionaries/encyclopaedia. Particularly difficult critical editions.	(1)	Publishing house from abroad		KVK	15	75
	(2)	Publishing house from Romania and Republic of Moldavia		CNCS – A Category	3	50
				CNCS – B Category	3	40
				KVK	10	40
Published studies volumes	(3)	Publishing house from abroad		KVK	15	30
	(4)	Publishing house from Romania and Republic of Moldavia		CNCS – A and B Categories	3	20
				KVK	10	20
Studies/Specialty articles	(5)	Journals indexed in:	Web of Science Arts & Humanities Citation Index			20
			Social Sciences Citation Index	relative influence score ≥ 0.25		
			Science Citation Index	relative influence score ≥ 0.5		
			European Reference Index for the Humanities (ERIH)	ERIH – INT1 Category		
			CNCS	CNCS - A Category		
	Collective volumes, encyclopaedias and lexicons showed up to a publishing house from:	Abroad	KVK	15		
		Romania and Republic of Moldavia	CNCS - A Category	3		
	(6)	Journals indexed in:	European Reference Index for The Humanities (ERIH)	ERIH – INT2 Category		10
			CNCS	CNCS - B Category		
		Collective volumes, encyclopaedias and lexicons showed up to publishing houses from Romania and Republic of Moldavia		CNCS - B Category		
KVK				10		

Notes

1. In the case of the articles from encyclopaedia and lexicons will be taken into account just the texts which exceed 2 pages of A4, being compulsory the attachment of a photo copy in order to prove the apparition.
2. The score for each category of publication is equally shared to the number of authors/editors.
3. The calculation of the score is taken into account only after the achievement of the identity condition between the application field and the ranking field of the publishing house or of the journal by CNCS (Annex 4).

1.1 Minimal eligibility standards for the evaluators

Each evaluator will have to fulfil the **double of the minimum score** asked for the project leaders, according to those described in the actual annex, in section 1.1.

ANNEX 2 - Funding Application – Identifier competition: PN-II-RU-PD-2012-3

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 4 – Scientific Domains)

Domain:

Subdomain:

Main research area:

Secondary research area:

Secondary research area (optional):

Keywords:

1:

2:

3:

4 (optional):

5 (optional):

Notes:

1. This document uses Times New Roman font, 12 point, 1.5 line spacing and 2 cm margins. Any modification of these parameters (excepting the tables, figures and their captions), as well as exceeding the maximum number of pages set for each section will lead to the automatic disqualification of the application. The imposed number of pages (Section 3 – Application Form) doesn't contain the references; these will be written on additional pages.

2. If the project leader will come to Romania from abroad and wishes to benefit from a higher budget ceiling, he or she must include copies of the documents which prove the fulfilling of the imposed conditions.

B. Project leader

B1. Important scientific achievements of the project leader (maximum 3 pages)

Please present the most important contributions of the project leader in the PhD thesis or in the postdoctoral stage/research experience reached after the PhD title was awarded. In the presentation please underline the following aspects: (1) the relation of these contributions to the topic of the proposed project; (2) the reflection of these contributions in his/her publications (particularly those published as the main author), by references to the list of publications from CV and/or other publications included in Researcher ID profile (www.researcherid.com) of the project leader.

B2. Curriculum vitae (maximum 2 pages)

This must contain at least categories of information specified in the final section of this Annex.

B3. Defining elements of the remarkable scientific achievements of the project leader (max. 3 pages)

Please include the most important publications of the project leader. The publication will be presented according with the specification from the „Presentation of information” section (end of Annex).

C. Project advisor

C1. Curriculum vitae (max. 2 pages)

This must contain at least categories of information specified in the final section of this Annex.

C2. List of the most important works

This section will point out the most important publication of the postdoctoral advisor (max.6) published in the period 2007-2012. Publication will be presented according with the specification from the „Presentation of information” section (end of Annex).

C3. The autonomy and visibility of the scientific activity.

Please indicate a number of **maximum 5 factual arguments** of the high degree of autonomy of the research activity developed by the project leader. The arguments can belong to one or more of the following categories, but not necessarily from all categories: (1) the articles where the project leader is *a main author* (referring to the C2 section or the researcher ID); (2) research fellowships, academic grants where the project leader was the principal investigator (PI) or project coordinator⁴ (3) total number of

⁴ for each grant will be given the following concise information: title, funding agency, total amount in euros, the ongoing period and web link;

citations (without self-citations)⁵ and the Hirsch Index ; (4) international prizes⁶ (5) oral presentations at international conferences⁷ (6) status of invited speaker to prestige universities⁸.

Presentation of information

Curriculum vitae

This must contain at least the following categories of information:

- a) information about the degrees and diplomas;
- b) information about the professional experience and jobs. The postdoctoral advisor will indicate the professional positions, pointed out the coordination of a team (project leader) or a group, or a research laboratory, if any.
- c) optional, the address of the profile on www.researcherid.com site (recomended for projects submitted in reasearch areas ather than the humanities).

The list of publications

For natural sciences, exact sciences, engeneering sciences and social sciences: Please indicate the most relevant papers of the project leader including:

- **Articles:** Please point out the most relevant articles published by the project leader. Can also be indicated the articles accepted for publication, with the mention of the date of acceptance. The evaluation will focus on the articles where the project leader is *a main author*, but in the situation when there are papers published as a co-author, which are considered relevant for his/her scientific production by the project leader himself/herself, these can be indicated. The format is as follows:

Identification data:	Authors. <i>Article's title</i> , Journal/Conference Title, Volume, Pages (publishing year)
Is he/she a main author?	YES/NO (see Annex 5)
Is it in the project's field?	YES/NO
Number of citations:	see <i>ISI Web of Science</i> (without self-citations – see Annex 5)
DOI (Digital Object Identifier)	<i>optional</i>

- **Monographs:** Please indicate just the scientific monographs published by internationally prestigious publishing houses. Textbooks aren't taken into account even if they are published at international publishing houses. The format is as follows:

Identification data:	Authors. <i>Book's title</i> , Publishing House (publishing year)
Is it in the project's field?	YES/NO

⁵ according to Web of Science

⁶ the prize was awarded by a legal entity from OECD country

⁷ the conference is organized by OECD country

⁸ only 500 top universities, according to ARWU 2011 Ranking, www.arwu.org

No. of libraries according to Karlsruher Virtueller Katalog (KVK) world catalogue.	See http://www.ubka.uni-karlsruhe.de/kvk.html
University libraries	The names of the most important university libraries (maximum 10) which acquired the monographs (see http://www.ubka.uni-karlsruhe.de/kvk.html or see the catalogue of the university library)

- **Patents:** Please especially indicate the patents/utility models with a technologic transfer obtained in other countries of the European Union or in member countries of OECD. The format as follows:

Identification data:	Authors. <i>The title of the patent/utility model</i> (awarding year)
The issuer office of patent	
Is it in the project's field?	YES/NO

For the humanities: Please indicate the most important works (maximum 6): books, chapters, articles, critical editions, dictionaries or encyclopaedias. The format is as follows:

Identification data	<p>For edited books/critical editions/collective volumes: Last name, First name author / authors, <i>Full title</i>. Place, Publishing House, Year, No. of pages.</p> <p>The number of entries in libraries from other member states of UE or from the member states of OECD (http://www.ubka.uni-karlsruhe.de/kvk.html)</p> <p>For articles published in journals: Last name, First name author / authors, <i>Full article's title</i>, in: „Journal name”, no. volume, year of publication, no. leaflet, p. xx – xxx.</p> <p>For articles/chapters published in collective volumes: Last name, First name author / authors, <i>Full article's title</i>, in: <i>Title of collective volume</i>, publishers' Last name, First name. Place, Publishing House, Year, p. xx – xxx.</p>
Is it in the project's field?	YES/NO

At most 3 significant works for the activity of the project leader can be uploaded on the web platform in electronic format.

Note: B2, B3 and C sections (including C1, C2 and C3) of the application will be public. These will be loaded on the application platform, both as 3 separate pdf. files and as an integral part of the proposal.

D. Description of the research project (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 resources.

D1. *Problems.* The scientific motivation will clearly delimit the approached problem within the framework of the state of the art. Will be revealed the following three aspects: (1) the importance of the problem from the scientific, technologic, socio-economic or cultural point of view; (2) the difficulty elements of the problem; (3) the limits of the current approaches in the context of the state of the art in the field.

D2. *Objectives.* The approach of the project at the level of principle will be presented, underlining the following three aspects: (1) the concrete objectives of the project; (2) the elements of originality and innovation that the implementation of the objectives bring to the field, related to the state of the art in the field and to the previous projects developed by the project leader; (3) the expected impact of the project in a broader frame of the scientific field.

D3. *Methodology.* The research methodology will be detailed, mentioning, as much as possible, some milestones. In the elaboration of this section the following aspects will be revealed: (1) choosing the investigation methods and tools, by relating to the newest approaches in the field and also the way these will be integrated; (2) a work plan, well scheduled, which will describe the way of organizing and planning the project, related to the proposed objectives; (3) describing the potential risks and the approaches for mitigation these risks.

D4. *Resources and budget.* The existing, relevant infrastructure will be described, as well as the equipment which is to be acquired within the project. Please take into account particularly the following aspects: (1) explain why the research infrastructure available is appropriate for the project objectives in the allocated time; (2) the justification of the need of acquiring of new great value equipment (over 12.500 Euro, VAT included), by the relation to the project's objectives; (3) the specifying and justifying of the budget distribution on types of expenses and years.

Notes:

- It will be considered that the project starts on the 1st of October, 2012.

- The types of expenses that the budget is distributed on are: personnel expenses, inventory, mobility expenses and indirect expenses (overhead).

Budget Breakdown (lei)

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

Budget Breakdown (euro)

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

ANNEX 3 - Evaluation Sheet

1. Principal Investigator⁸ and Mentor (60%)

1.1 (35%) Please assess the **excellence of the PI's research results**, as demonstrated by the list of publications and patents (see sections B1, B2 and B3). Please comment on the originality of the PI's results, on their impact on the state of the art, and on their relevance for the present project.

1.2 (25%) Please assess the **mentors's capacity to autonomously manage scientific activities** as a researcher and/or research group leader, as well as **the visibility and prestige** in her/his international peer group (see sections C1, C2 and C3). Please comment on the mentors's publication record, her/his leadership abilities, the ability to attract funds, and his/her level of international recognition. Please take into account only those facts that you consider relevant for the current proposal.

2. Proposal (40%)

2.1 (20%) Please assess the **overall solution** described in the proposal in the context of the current state-of-the-art and its potential future impact (see section *D1, D2*). **Please comment** on the following aspects: (1) significance and the difficulty of the problem being addressed; (2) the originality of the proposed solution and the appropriateness of the objectives; (3) the potential to advance knowledge in the field and to influence the direction of thought and activity.

2.2 (20%) Please assess the **method and work plan** as defined by the proposal as a concrete approach to reach the envisioned solution (see section *D3*). **Please comment** on how well selected are the methods, design and investigation tools and on the effectiveness of the work-plan within the proposed timescale and resources. Have potential problem areas been appropriately discussed, and have alternative approaches been mentioned?

2.3 Please assess the adequacy of the **proposed budget** and suggest possible corrections (see sections *D3* and *D4*). Please comment on the match between the work-plan and the budget, as well as on the appropriateness of the mobility (conferences, work-visits) and infrastructure acquisitions included in the budget. (There will be no score associated with this item, but the expert opinion will be useful to the funding agency in negotiating the precise financial award.).

Recommendations for evaluators:

1. Choose a score **only after** you wrote the comments; make sure that the comments are **concrete, complete** (i.e. address all questions) and **consistent** with the semantics of each score, namely:

0	ABSENT	The proposal fails to address the criterion under examination or cannot be judged due to <i>missing or incomplete information</i>
1	POOR	The criterion is addressed in an <i>inadequate manner</i> , or there are <i>serious inherent weaknesses</i>
2	FAIR	While the proposal <i>broadly addresses</i> the criterion, there are <i>significant weaknesses</i>
3	GOOD	The proposal addresses the criterion <i>well</i> , Although <i>improvements would be necessary</i>
4	VERY GOOD	The proposal addresses the criterion very well, Although <i>certain improvements are still possible</i>
5	EXCELLENT	The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor

2. When scoring use the full scale! **Half marks may be given.**

3. If scores **3** or **4** are used (improvements are necessary/possible) make sure the required improvements are described! If score **1** or **2** are used make sure the inherent/significant weaknesses are described in concrete terms!

Note: The final score will be calculated as a sum of the grades for each of the seven subcriteria weighed by the corresponding percentage and multiplying by 20 (final score between 0 and 100);

Domain Code:	SH
Subdomain Code:	SH1, SH2, SH3, SH4, SH5, SH6
Research Area Code:	SH1_1..SH1_12, SH2_1..SH2_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	Institutions, values, beliefs and behavior: 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	Environment and society: 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	Cultures and cultural production: 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
Research Area Code:	PE1_1..PE1_18, PE2_1..PE2_17....

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

PE1	Mathematical foundations: 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	Fundamental constituents of matter: 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	Physical and Analytical Chemical sciences: 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	Materials and Synthesis: 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	Computer science and informatics: 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, actotics, automation
PE7_5	Micro- and nanoelectronics, optoelectronics
PE7_6	Communication technology, high-frequency technology
PE7_7	Signal processing
PE7_8	Networks
PE7_9	Man-machine-interfaces
PE7_10	Robotics

PE8	Products and process engineering: 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	Universe sciences: 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,LS2.....LS9
Research Area Code:	LS1_1....LS1_8,LS2_1....LS2_14.....

**DOMAIN
LIFE SCIENCES**

LS1	Molecular and Structural Biology and Biochemistry: 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	Genetics, Genomics, Bioinformatics and Systems Biology: genetics, population genetics, molecular genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling 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	Cellular and Developmental Biology: 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	Physiology, Pathophysiology and Endocrinology: 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	Neurosciences and neural disorders: 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	Immunity and infection: 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	Diagnostic tools, therapies and public health: 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	Evolutionary, population and environmental biology: 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 Evolution, 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	Applied life sciences and biotechnology: 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 fields with a Romanian character are Romanian literature and language and the Romanian law, which are framed in 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

The list of the domains where the projects are hierarchised

Subdomain name	Subdomain code
Mathematics and Computer Science	PE1_1;PE1_2; PE1_3; PE1_4; PE1_5; PE1_6; PE1_7; PE1_8; PE1_9; PE1_10; PE1_11; PE1_12; PE1_13; PE1_14; PE1_15; PE1_16; PE1_17; PE1_18. PE6_1; PE6_2; PE6_3; PE6_4; PE6_5; PE6_6; PE6_7; PE6_8; PE6_9; PE6_10; PE6_11; PE6_12; PE6_13; PE6_14.
Chemistry	PE4_1; PE4_2; PE4_3; PE4_4; PE4_5; PE4_6; PE4_7; PE4_8; PE4_9; PE4_10; PE4_11; PE4_12; PE4_13; PE4_14; PE4_15; PE4_16; PE4_17; PE4_18. PE5_13; PE5_14; PE5_15; PE5_16; PE5_17; PE5_18; PE5_19; PE5_20; PE5_21; PE5_22; PE5_23; PE5_24.
Physics	PE2_1; PE2_2; PE2_3; PE2_4; PE2_5; PE2_6; PE2_7; PE2_8; PE2_9; PE2_10; PE2_11; PE2_12; PE2_13; PE2_14; PE2_15; PE2_16; PE2_17. PE3_1; PE3_2; PE3_3; PE3_4; PE3_5; PE3_6; PE3_7; PE3_8; PE3_9; PE3_10; PE3_11; PE3_12; PE3_13; PE3_14; PE3_15; PE3_16; PE3_17; PE3_18; PE3_19. PE9_1; PE9_2; PE9_3; PE9_4; PE9_5; PE9_6; PE9_7; PE9_8; PE9_9; PE9_10; PE9_11; PE9_12; PE9_13; PE9_14; PE9_15; PE9_16; PE9_17; PE9_18.
Engineering Sciences	PE7_1; PE7_2; PE7_3; PE7_4; PE7_5; PE7_6; PE7_7; PE7_8; PE7_9; PE7_10. PE8_1; PE8_2; PE8_3; PE8_4; PE8_5; PE8_6; PE8_7; PE8_8; PE8_9; PE8_10; PE8_11; PE8_12; PE8_13; PE8_14;
Materials Sciences	PE5_1; PE5_2; PE5_3; PE5_4; PE5_5; PE5_6; PE5_7; PE5_8; PE5_9; PE5_10; PE5_11; PE5_12.
Earth Sciences	PE10_1; PE10_2; PE10_3; PE10_4; PE10_5; PE10_6; PE10_7; PE10_8; PE10_9; PE10_10; PE10_11; PE10_12; PE10_13; PE10_14; PE10_15; PE10_16; PE10_17
Biology and Ecology	LS1_1; LS1_2; LS1_3; LS1_4; LS1_5; LS1_6; LS1_7; LS1_8. LS2_1; LS2_2; LS2_3; LS2_4; LS2_5; LS2_6; LS2_7; LS2_8; LS2_9; LS2_10; LS2_11; LS2_12; LS2_13; LS2_14. LS3_1; LS3_2; LS3_3; LS3_4; LS3_5; LS3_6; LS3_7; LS3_8; LS3_9; LS3_10; LS3_11; LS3_12. LS4_1; LS4_2; LS4_3; LS4_4; LS4_5; LS4_6; LS4_7; LS4_8. LS5_1; LS5_2; LS5_3; LS5_4; LS5_5; LS5_6; LS5_7; LS5_8; LS5_9; LS5_10; LS5_11; LS5_12. LS8_1; LS8_2; LS8_3; LS8_4; LS8_5; LS8_6; LS8_7; LS8_8; LS8_9; LS8_10; LS8_11.
Medicine	LS6_1; LS6_2; LS6_3; LS6_4; LS6_5; LS6_6; LS6_7; LS6_8; LS6_9; LS6_10; LS6_11; LS6_12; LS6_13. LS7_1; LS7_2; LS7_3; LS7_4; LS7_5; LS7_6; LS7_7; LS7_8; LS7_9; LS7_10; LS7_11; LS7_12; LS7_13.
Applied Life Sciences and Biotechnologies	LS9_1; LS9_2; LS9_3; LS9_4; LS9_5; LS9_6; LS9_7; LS9_8; LS9_9; LS9_10; LS9_11.
Social and Economic Sciences	SH1_1; SH1_2; SH1_3; SH1_4; SH1_5; SH1_6; SH1_7; SH1_8; SH1_9; SH1_10; SH1_11. SH2_1; SH2_2; SH2_3; SH2_6; SH2_7; SH2_8; SH2_9; SH2_10; SH2_11; SH2_12 ;SH2_13; SH3_1; SH3_2; SH3_3; SH3_4; SH3_5; SH3_6; SH3_7; SH3_8; SH3_9; SH4_1; SH4_2; SH4_3; SH4_4; SH4_5; SH4_7; SH4_8; SH4_9; SH4_13.
Humanities	SH1_12; SH2_4; SH2_5; SH2_14; SH4_6; SH4_10; SH4_11; SH4_12; SH5_1; SH5_2; SH5_3; SH5_4; SH5_5; SH5_6; SH5_7; SH5_8; SH5_9; SH5_10; SH5_11; SH5_12; SH6_1; SH6_2; SH6_3; SH6_4; SH6_5; SH6_6; SH6_7; SH6_8; SH6_9; SH6_10; SH6_11; SH6_12.

Table of sequence between the application domain and the rating domain of the journal/publishing house by CNCS

1. History of economy; History of science and technology. Social, economic and political history. Military history.	SH1 12, SH2 14, SH6 7, SH6 10
2. Archaeology and archaeometry. Prehistory and protohistory. Ancient history and ancient cultures. Classics. Palaeography. Numismatics and epigraphy.	SH5 1, SH5 8, SH6 1, SH6 2, SH6 3
3. Medieval history. Modern and contemporary history. Colonial history and global history	SH6 4, SH6 5, SH6 7
4. Historiography, theory and methods of history. History of ideas, intellectual history. Collective memories, identities, lieux de mémoire, oral history. Genealogical table. Heraldry and Sealography.	SH6 8, SH6 9, SH 6 11
5. History of art and architecture. Cultural studies. Cultural memory and heritage. Cultural heritage.	SH2 3, SH5 10, SH5 11, SH5 12, SH 6 12
6. Myth, rituals, symbolic representations and religious studies. Ethnography.	SH2 4
7. Romanian language and literature.	SH5 4
8. Foreign languages.	SH4 9, SH5 2, SH5 3, SH5 4
9. Philosophy and history of philosophy. Epistemology, logic and philosophy of science. Ethics and bioethics.	SH4 10, SH4 11, SH4 12,
10. Visual arts. Performing arts. Museums and exhibitions. Music and musicology, history of music.	SH5 5, SH5 6, SH5 7, SH5 9

ANNEX 5 - Definitions

The main author or authors of a publication can be any of the following:

- a) **the first author**, when the order of the authors reflects the importance of their contribution;
- b) **the corresponding author** (called *reprint author* or existing in *reprint address* in Web of Science), when he or she is identified;
- c) **other authors whose contribution is explicitly indicated** as being equal to the contribution of the first author or the corresponding author. In this case, just for the calculation of the cumulated relative influence score, the relative influence score of the journal where the publication was edited is divided to the number of authors (the first one or the corresponding one) who have an equal contribution.
- d) **the last author in bio-medical science situation**, his/her contribution being considered equal with that of the corresponding author, and for the calculation of the cumulated relative influence score is used the calculation method from c) point. These publication must show up in journals indexed by *Journal Citation Reports in the following categories: Allergy; Anatomy & Morphology; Andrology; Anesthesiology; Behavioral Sciences; Biochemical Research Methods; Biochemistry & Molecular Biology; Biology; Biophysics; Cardiac & cardiovascular Systems; Cell Biology; Clinical Neurology; Critical Care Medicine; Dentistry, Oral Surgery & Medicine; Dermatology; Developmental Biology; Emergency Medicine; Endocrinology & Metabolism; Entomology; Evolutionary Biology; Gastroenterology & Hepatology; Genetics & Heredity; Geriatrics & Gerontology; Hematology; Immunology; Infectious Diseases; Integrative & Complementary Medicine; Marine & Freshwater Biology; Medical Ethics; Medical Informatics; Medical Laboratory Technology; Medicine, General & Internal; Medicine, Legal; Medicine, Research & Experimental; Microbiology; Neuroimaging; Neurosciences; Nutrition & Dietetics; Obstetrics & Gynecology; Oncology; Ophthalmology; Orthopedics; Otorhinolaryngology; Parasitology; Pathology; Pediatrics; Peripheral Vascular Disease; Pharmacology & Pharmacy; Physiology; Plant Sciences; Primary Health Care; Psychiatry; Radiology, Nuclear Medicine & Medical Imaging; Rehabilitation; Reproductive Biology; Respiratory System; Rheumatology; Surgery; Toxicology; Transplantation; Tropical Medicine; Urology & Nephrology; Veterinary Sciences; Virology; Zoology.*
- e) **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 or they are indicated as a collaboration, without explicitly specifying the names of the authors); ***here are taken into account just the publications from the following fields: mathematics, mathematical physics,***

nuclear physics, high energy physics, computer science and economics. These publications must show up in Journal Citation Reports indexed journals in the following categories: *Mathematics; Physics, mathematical, Physics, nuclear; Physics, particles and fields; Physics, Multidisciplinary; Computer Science(toate subdomeniile);Economics; Multidisciplinary sciences.* In these cases, just for the calculation of the cumulated relative influence score, the relative influence score of the journal where the publication was edited is compulsory divided

- if $2 \leq n \leq 5$, to $n/2$,
- if $6 \leq n \leq 80$, to $(n + 3)/3$,
- if $n \geq 81$, to 28.

Where n is the number of authors of the publication.

Notes:

1. The project leader is forced to indicate, on the online proposal platform of the research projects, the publications which belong to the exceptional cases, provided at points c), d) and e).
2. When the project leader doesn't indicate the publications which belong to the exceptional cases, provided at points c), d) and e), these will be evaluated according to the indications from a) and b) points.
3. For the publications which belong to the exceptional case c) the project leader is forced to load on the online proposal platform of the projects the PDF of the respective publications.

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.

Critical edition of sources with a special difficulty of publishing represents the publishing of a volume, which contains relevant documentary sources for at least one discipline from the humanities, which have origins with no temporal restriction if they become from manuscripts, but which are previous to year 1800 in the case of some printed texts, and the editing involved at least two of the following activities: 1. the (re)establishing of the text by critical comparison of more variants; 2. the (re)translation of the text from the original and its bilingual publishing, by using rare paleographic/epigraphic/linguistics knowledge (by which it can be understood the appeal to the proper languages of the ancient or medieval civilisations or of the early modernism); 3. The elaboration of an situational introductory study or of some ample explanatory notes.

KVK represents Karlsruher Virtueller Katalog catalogue (it includes also WorldCat). This is available at the following adress: <http://www.ubka.uni-karlsruhe.de/kvk.html>

CNCS (A and B category) represents journals, publishing-houses, collections from Romania and Republic of Moldavia which are recognized by CNCS, according to the ranking available to the following address: <http://www.cncs-uefiscdi.ro/evaluarea-publicatiilor-stiintifice/rezultate-evaluare-revistedituricolectii>

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 are 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 the articles 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 relative 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 are 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

ANNEX 6 – Process, results and impact indicators for the subprogram RU-PD

	Names of indicators	Units.
Process indicators	Number of attendees of international conferences financed	No.
	Number of PhD students supported	No..
	Number of PhD students in co-direction with foreign institutions supported	No.
Results indicators	Number of articles published or accepted for publication in the international research publication mainstream	No.
	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 accepted for publication in the international research publication mainstream	No.
	Number of researchers coming from abroad integrated in the national R&D system	No.
	Number of patent applications supported, of which EPO, USPTO, JPO, other EU and OECD countries	No.
Results indicators (applies to the humanities only)	Number of articles published in journals indexed AHCI or ERIH Category A or B	No.
	Number of books of author and of editions with a special difficulty of publishing	No.
Results indicators (applies only to the social sciences and humanities)	Number of chapters published in collective editions, in major foreign languages, at prestigious foreign publishing houses	No.
	Number of books authored in major foreign languages at prestigious foreign publishing houses	No.
	Number of books edited in major foreign languages at prestigious foreign publishing houses	No.
Impact indicators	Cumulated relative influence score of articles published or accepted for publication	No.

ANNEX 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.