THE NATIONAL PLAN FOR RESEARCH, DEVELOPMENT AND INNOVATION 2015-2020, NP III



P2 Increase the Competitiveness of the Romanian Economy through Research, Development and Innovation

Subprogram 2.1. Competitiveness through R&D and Innovation – Experimental demonstration project

Information package

2021

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EXPERIMENTAL DEMONSTRATION PROJECT

ID: PN-III-CERC-CO-PED-3-2021

1. Goal

Implementation and testing of demonstrative models (functional/experimental) for new or significantly improved products, technologies, methods, systems or services in the areas of smart specialization or public priority.

2. Objectives

- ✓ Use of knowledge generated by basic research for developing a higher Technology Readiness Level (demonstrator, lab-validated technology);
- ✓ Increase the capacities of research organizations to generate lab-validated solutions for new or significantly improved products / technologies services and to provide them to economic agents.

3. Conditions for application

- ✓ Project proposals can :
 - start from a concept formulated by technology / product (TRL¹ 2) and focus on experimental demonstrator laboratory (TRL 3);
 - start from a laboratory experimental demonstrator (TRL 3) and focus on laboratory validated technology (TRL 4);
 - start from a concept formulated by technology / product (TRL 2) and focus on laboratory validated technology (TRL 4).
- ✓ Applications can be developed in the following areas²:
 - Areas of smart specialization:
 - bioeconomy:
 - o agro-food
 - o bioenergy biogas, biomass, biofuel
 - o biotechnology
 - information and communication technology, space and security:
 - o information and communication technology
 - o space
 - o security
 - energy, environment and climate changes:
 - o energy
 - environment and climate changes
 - o smart city
 - eco-nano-technology and advanced materials:
 - o eco-nano-technology
 - decontamination technologies
 - o advanced materials.
 - Public health priority areas:
 - health (including science of medicament):

¹ Technology Readiness Levels

² According to NR 583/2015 for approving NP II, with subsequent amendments

- health (including science of medicament)
- heritage and cultural identity:
 - o heritage
 - \circ cultural identity.

The project proposal can be submitted by:

- a research organization³, project coordinator;
- a research organization, project coordinator, in partnership with one or more research organizations;
- a research organization, project coordinator, in partnership with at least one enterprise with research and/or technological development as part of their activity (in the sense of the state aid legislation⁴);
- a research organization project coordinator, in partnership with an enterprise with research and/or technological development as part of their activity (in the sense of the state aid legislation) and one or more research organizations.
- ✓ The composition of the consortium should be efficient in size in order to accomplish the proposed objectives;
- \checkmark Small medium projects are recommended with no more than 4 partners.

4. Budget

For a project, the maximum funding provided by national budget is 600.000 lei, complying the stated aid legislation. The funding from the state budget allocated to a partner may not exceed the amount from the state budget allocated to the coordinator of the project proposal. The budget allocated for this call is 100.000.000 lei, public funds.

5. Implementation period

The projects will be implemented for a period of minimum 18 months and maximum 24 month.

6. Eligibility criteria

Participant institutions (research organisations and enterprises):

- ✓ have legal personality and operate in Romania;
- \checkmark are not declared in incapacity of payment state , according to law;
- \checkmark do not have any accounts blocked by a court order;
- ✓ did not provide false statements to UEFISCDI within the requested information in the selection of contractors;
- \checkmark have not broken the provisions of another financing agreement previously signed with a contracting authority;

Principal Investigator:

- \checkmark is a doctor in science with relevant expertize in the project's field;
- \checkmark can submit only one proposal as principal investigator, for this call.

³ According to research organization definition from State aid

⁴ State aid establishment approved by ANCSI president decision no 9281/13.08.2015, Annex 2, amended by ORDER no. 6368 of December 23, 2020

- ✓ It is forbidden to submit projects with activities which have already been funded or will be partially or fully funded from other budgetary sources.
- ✓ Can benefit from state aid, the enterprises that had activity in the last financial year, have a turnover at least equal with the request budget from the state budget and have staff employed in the last financial year.
- ✓ If an enterprise participates in several project proposals, as a partner, the turnover from the last financial year must be at least equal with the requested budget from the state budget, for all projects in which it is involved in this call.

All the projects that do not comply with these criteria will be declared ineligible.

7. Ethics

The principal investigator has the obligation to ensure that the proposed project complies with the rules of Law no. 206/2004 regarding the good conduct in scientific research, technological development and innovation, with subsequent amendments and other legislative ethics rules specific to the research project. Also, in case the project domain requires obtaining specific approvals and accreditations, the principal investigator will ensure that they are obtained prior to submitting the funding application.

8. Gender equality

Equal opportunities, as well as gender equality, will be ensured for all participants, both in the implementation of the program and at the project level, in accordance with national legislation and European practices.

In developing and implementing the funding application/project, principal investigator must take all measures to promote equal opportunities for men and women. As far as possible, there must be a balance between women and men for all positions provided for in the grant / project application, including at management level (responsible for the partner team).

9. Types of eligible activities⁵

- Basic research (max. 10% of the total value of the project allocated from the state budget);

- Industrial research;
- Experimental development.

10. Eligible costs⁶

10.1 Direct costs

• Personnel cost (researchers, Ph.D students, postdoctoral researchers⁷, technical staff employed during the research project according to law); these expenses include the legal contributions for the salaries and assimilated incomes⁸;

⁵ According to the definitions in the state aid scheme approved by the Decision of the President of ANCSI no. 9281 / 13.08.2015, Annex 2, amended by ORDER no. 6368 of December 23, 2020

⁶ The categories of eligible expenses are provided in Government Decision no. 134/2011 for the approval of the Methodological Norms regarding the establishment of the categories of expenses for research-development and innovation stimulation activities, financed from the state budget

⁷ Researcher having a PhD title obtained no later than 6 years ago from the moment of submission of project proposals.

⁸ Personal costs submit to the Art. 26 from Annex to NR 583/2015 for approving NP III

- Logistics costs that include:
 - capital costs for entities that involve state aid, if the purchased instruments and equipments have a duration of operation longer than the duration of the research project only amortization charges are eligible, calculated on accounting practices;
 - stocks (materials, supplies and similar products necessary for the project);
 - costs for third parties. Project activities may be subcontracted but cannot exceed 5% of the budget funds;
- Travel costs for travel within the country or abroad for the research team members. For the entities that involve state aid, travel costs may be settled only from their own sources.

10.2 Indirect costs

- Overheads (indirect costs) are calculated as max. 25% of direct costs minus subcontracting and equipment costs.
- ✓ During project implementation, reallocation of budget funds can be carried out between categories of expenses: staff, logistics and travel, up to 15% of the total project budget, with notification to the reporting stage and respecting the Contract with the Contracting Authority.
- ✓ From the project budget, it is forbidden to purchase goods and services from a company partner in the project (if there is one).

11. Evaluation Process

11.1 Submission

The project submission is made in a single stage, using on-line platform <u>www.uefiscdi-direct.ro</u>. The submission of the proposal will be made only from the account of the principal investigator (data for authentication on the platform must be the same with the one's of the principal investigator).

The Funding Application, Annex 1, will be written in English and will be uploaded on the platform as an unprotected pdf file format.

11.2 Eligibility checks

The proposals are checked by UEFISCDI staff, in order to assure that all the eligibility conditions are complied with. The result is ELIGIBLE/NONELIGIBLE.

Only the eligible proposals will be evaluated. The list of eligible project proposals will be published on the UEFISCDI website – <u>www.uefiscdi.gov.ro</u>. The complaints regarding eligibility criteria can be sent by email at <u>demonstrativ@uefiscdi.ro</u> or by fax to 021/311.59.92, within 3 working days following the publishing results date.

11.3 Evaluation

The eligible projects are evaluated by experts recognized nationally and internationally, according to law.

Experts have science PhD (as a must) with proven experience (non-cumulative): scientific articles, patents, industrial and experimental development research projects.

Each evaluator shall declare in writing their impartiality, competence and confidentiality related to the evaluation of the submitted project proposals. If the evaluator concludes, at any time of the evaluation process, that one of these conditions is not satisfied or there is a conflict of interest, she/he will notify UEFISCDI, in writing. If UEFISCDI finds out or is notified about the existence

of a conflict of interest or any other error, it will take all the necessary measures to replace that evaluator.

Evaluations are anonymous, ensuring the confidentiality of expert evaluators.

Individual evaluation

Each eligible project proposal is evaluated, independently, online, by three expert evaluators. They award individual scores for each criterion, according to the Evaluation sheet, Annex II. The scores given to each criterion are justified by summative comments, highlighting the strengths and weaknesses of the proposal.

For a project, after the completion of all individual evaluations, the evaluators will have access to the scores and comments of the other 2 evaluators. If it is necessary, within 3 working days, the evaluators can adjust their scores and comments initially given.

Rebuttal

After the completion/adjustment of the individual evaluation, UEFISCDI staff will make available to the principal investigators, in accounts online submission platform, the concatenated sheet with the three individual evaluations. Based on this, the principal investigator can formulate an evaluation point of view (rebuttal).

Where applicable, principal investigator' rebuttals, limited to 6,000 characters (including spaces), will be completed using a form available on the online submission platform within 3 working days from the date of initial request for response. The rebuttal will be written in English, and will consist strictly of counter-arguments concerning the critical observations of the evaluators, as they appear in the concatenated sheet, without introducing new elements to the project proposal. The rebuttal of principal investigator is not mandatory, and its absence does not affect the subsequent evaluation process.

Reaching consensus

After receiving the rebuttal of the principal investigator (if any), evaluators will automatically receive notification of its existence on the platform and can view and analyse the comments submitted by the principal investigator.

Each project proposal will have a Rapporteur, selected randomly from the three evaluation experts.

Based on the individual evaluations and the rebuttal of the principal investigator (if any), the rapporteur draws up a first version of the Consensus Report. Subsequently, the version of the Consensus Report proposed by the rapporteur is discussed by the evaluators, through the "forum" interface, available in the evaluation platform.

Following the discussions, the rapporteur finalizes the Consensus Report. The other two evaluators are invited to vote on the Consensus Report (vote 'agree' or vote 'disagree').

If the Consensus Report unanimously votes "I agree" it is considered that the consensus has been reached and becomes the Final Evaluation Report. If one of the evaluators votes "disagree" or does not vote on the Consensus Report, it is considered that no consensus has been established for that project.

The rapporteur, by finalizing the Consensus Report and submitting it to the vote, implicitly gives a positive vote to the report.

Panel meetings

Projects without consensus are analyzed in panel meetings. At call level, 6 domain panels will be organized for each area of intelligent specialization / public priority.

The domain panel consists of evaluators and rapporteurs. The size of each panel will be correlated with the number of projects to be discussed in the panel meeting. A panel meeting can take place over one or more days.

Every member of the panel will have access to all project proposals to be discussed at the panel meeting, as well as to the Individual evaluation sheets, Consensus Reports and principal investigators' rebuttal (if any), keeping the confidentiality.

Panel meetings are coordinated by a chair / co-chair. They are chosen from the call database and will moderate the panel debates, without intervening in decision-making.

At the panel meeting, each project proposal with at least one "disagree" vote or no vote on the Consensus Report is presented and analysed in the panel. For each project, the panel sets the final score and prepares the Final Report.

The final score will be decided by the majority of those present in the panel.

For establishing the final score, the notes and comments from the previous evaluation stages and the discussions from the current panel will be taken into account. Major changes in scores will be motivated in detail, for each modified evaluation criterion.

After the completion of the discussions, for each project proposal, a rapporteur will be appointed who will prepare the Final Report in accordance with those established during the panel meeting. The rapporteur who will prepare the Final Report may be the same as the one who prepared the Consensus Report, one of the other initial evaluators or any other expert evaluator present at the panel meeting and will be appointed by the chair / co-chair of the meeting.

The final report may contain elements from the individual assessments or the Consensus Report, agreed at panel level.

11.4 Publication of evaluation results

The list of the project proposals for each of the 6 domains and the score obtained by each of them, in descending order, will be published on UEFISCDI website <u>www.uefiscdi.gov.ro</u>.

Principal investigators are informed about the presence of the Final Report in the submission platform, <u>www.uefiscdi.gov.ro</u>, by an e-mail notification at the address specified on the application form.

Project proposals scored under 80 points will not be granted for funding.

11.5 Complaints

Principal investigators may submit a complaint within 3 workdays after the date of publication of the evaluation results. The complaints may concern exclusively procedural errors which the candidate considers inconsistent with the specifications in the information package. The appeals cannot be about the evaluators' scores and comments. The complaints may be sent by email to: <u>demonstrativ@uefiscdi.ro</u>, by fax to +4021/311.59.92.

11.6 Call results

- ✓ The list of project proposals with the final scores after the settling complaints is published on UEFISCDI site, for each of the 6 domains.
- ✓ The proposals will be ranked according to the final scores, for each of the 6 domain of research and will be proposed for funding, within the funds of the call. The success rate

applicable to each domain is related to the success rate of the call (the ratio between the number of projects may be financed, according to the call budget, and the number of eligible projects).

- ✓ In case two or more proposals receive the same final score, their separation will be made according to the score of each evaluation criterion, in the order of the final report.
- ✓ The list of project proposals accepted for funding, as well as the list of reserve projects will be sent to the Ministry of Research, Innovation and Digitalization, for approval.
- ✓ After the call will be completed, UEFISCDI will publish the list of experts used in the evaluation process on the website <u>www.uefiscdi.gov.ro</u>.

11.7 Negotiation of the budget and contracting projects

For the proposal accepted for funding, a financing contract between the two parts: Contracting Authority – UEFISCDI and Contractor - The research organization, will be concluded. The financing contract will also include a Consortium agreement between the participants in the project (if case).

The principal investigator will negotiate with UEFISCDI the amount and structure of the requested budget. The discussions are based on observations from the final report regarding the correlation between the proposed objectives and the requested budget. The negotiated budget cannot exceed the budget initially requested in the Funding Application. The financing contract is signed after the negotiation process.

In case there are available funds, as a result of not contracting or decreasing of the budget for projects accepted for funding, or as a result of supplementing the budget initially allocated to the call, the negotiation and contracting of the projects included in the Reserve List will be initiated, in order of score, according to the approved budget.

11.8 Main obligations of the parties

Coordinating Institution / Principal investigator and Project Partners:

- Are responsible for the implementation of the project, respecting the stipulated deadlines and the allocated budgets;

- Prepare and submit to the Contracting Authority reports of scientific progress during the project and a final report, at the time and in the format established in the financing contract by CCCDI / UEFISCDI. The deadlines of intermediary reports are proposed by the principal investigator, according to the work plan from funding application;

- Communicate the activities and announce the vacancies in the research project (including on the websites <u>www.jobs.research.gov.ro</u> and <u>www.euraxess.ro</u>);

- Ensure that the staff involved in the project has created and updated the scientific profile in the <u>www.brainmap.ro</u> platform;

- Provide up-to-date information on the progress of the project (at least the abstract of the project, team members and the results obtained in the project) on a web page;

- The project partners insure the access of the project team to the existing research infrastructure and support the implementation of the project;

- The project partners establish, by agreement, the intellectual property rights resulting from the project.

UEFISCDI:

- Ensures the funding and monitoring of the project, according to the financing contract provisions in accordance with the law;

- Processes personal data in accordance with the provisions of Regulation (EU) 2016/679 (GDPR 2018) and Law 190/2018 on the protection of natural persons regarding the processing of personal data and on the free movement of such data, (<u>https://uefiscdi.ro/protectia-datelor-cu-caracter-personal</u>).

12. Research failure

Failure in research occurs if, after a proper conduct of activities specified in a research project to submit deliverables assumed under the contract, results obtained are not the same with the preliminary work (working hypotheses outlined in the project proposal are not confirmed, preliminary functionality in the project proposal is not validated).

During the implementation of a project, failure in research can be identified by an evaluation and monitoring committee constituted for this purpose by the Contracting Authority (according to Art. 87 of Ordinance no. 57/2002 with subsequent amendments and art. 13 of Government Decision no. 583/2015 and art. 1 pt. 17 of Annex Government Decision no. 583/2015).

During the evaluation and monitoring, the committee will decide whether:

- the research team followed the financing contract, carrying out activities in good faith, even if the results are not the expected ones. This case falls within research risk;
- the research team conducted inadequately project activities under the grant agreement or have not achieved them, without notifying the Contracting Authority of the reasons which led to this situation. In these circumstances, the lack of achievements is attributable to the Contractor and the Contracting Authority may require to return the funds improperly used.

The process of identification and certification of situations which fall within the research risk involves examining:

- ✓ the way of activities were implemented according to the application form, which is annex to the grant agreement (in terms of content and timing);
- ✓ the way in which the results were obtained (theoretical or experimental), including deliverables associated with objectives/activities, even though these are different from those provided in the funding application
- \checkmark the communication with the Contracting Authority regarding inconsistencies appeared between the results obtained during the implementation of the project and those from funding application.

Financing a project is discontinued and the share of funding allocated from the Programme budget shall be returned to the Contracting Authority if the evaluation and monitoring committees note that on his own fault, the Contractor, have not made steps / activities and objectives specified in the implementation plan for which received the funding. Also, the contractor returns to the Contracting Authority the funds spent improperly.

Based on the reports of the evaluation and monitoring commissions, the Contracting Authority accepts the failure in the research, without the obligation to recover the state budget funds.

If the evaluation and monitoring commissions find that the financed stages/activities and objectives provided in the implementation plan have not been achieved, by the Contractor's own fault, the

project will be interrupted and the funding allocated from the program budget will be returns to the Contracting Authority.

FUNDING APPLICATION

This document uses Times New Roman, 11 point, 1 interline space and 2 cm margins. Any changes to these parameters (except tables, figures or legends) are prohibited. *Excess pages will not be considered by the experts in the evaluation process.*

This document must be uploaded imperatively as an unprotected PDF file (document generated from a word processor file to a PDF, no scanned document), on the submission platform.

The Funding application is the only document sent to evaluators. The evaluators have no access to the information completed in the platform.

In each section of the application, the explicative text will be maintained.

Please, make sure that the funding application contains all the required information.

A. Identification information (will be completed into the platform)

A.1. Coordinator

Name							
Legal representative							
Position							
Legal form				CUI			
Address			Town / District				
Registration Year							
Web site							
Principal investigator							
First name		Last name			CNP		
UEF –ID (identification		Position					
number <u>www.brainmap.ro</u>)			TOSILIOII				
Tel.			Email				

A.2. Partner(s)

Name					
Legal representative					
Position					
Registration Year			CUI		
No. Trade register					
Main CAEN code			Research CAEN code		
Address		Town / District			
Organization type					
Registration Year					
Year of the last financial ye					
Average annual number of e	employees				
Net annual turnover					
Total Assets					
Website					
Partner leader					
First name		Last name		CNP	
UEF –ID (identification number <u>www.brainmap.ro</u>		Position			
Tel.		Email			

B. Project Proposal

B.1. Project information (will be completed into the platform)

- Project title;
- Summary;
- Acronym;
- Area of research;
- Key words.

B.2 Scientific description (will be uploaded into the platform) – max. 15 pages applied to all sections of B.2. Excess pages will not be considered by the experts in the evaluation process.

In this section the principal investigator will detail the scientific context, the scope and objectives, the approach to these objectives, and the required material and human resources.

B.2.1 Project Scope and Objectives

- *Presentation of the project scope, describing explicitly the demonstration model (product, technology, method, system or service) to be developed and tested / validated;*
- Point out the degree of novelty and relevance of the preliminary (already available) results related to the project in relation to national and international state of the art;
- *Presentation of project objectives, their correlation with the outcome of the project, arguing the feasibility of the project;*
- Clear presentation and argumentation of TRL (Technology Readiness Level) value at the beginning of the project, and the level reached after project implementation.

B.2.2 Presentation of the concept of technology / product or existing model which constitutes the starting point of the project

- Presentation of preliminary results (e.g. theoretical developments, numerical simulations, experimental results) available prior the project application, with explicit indication of publications, patents and research projects that led to the basic concept of the project;
- Briefly describe the expertise of experienced researchers and postdoctoral researchers nominated in the project team; provide the necessary elements to assess their qualification / contribution to the project.

B.2.3 METHOD of project implementation

- Description of the activities required to meet the project goals, with explicit contribution of the research team members from the coordinator or partner research team(s);
- Gantt Chart with planned activities during the project;
- Deliverables associated with each activity;
- Dissemination of results and intellectual property rights;
- *Presentation of the research infrastructure available for the project (indicating link to <u>www.erris.gov.ro</u>) and <i>its development during the project (if applicable);*
- *Structure of research team(s) and justification of salary expenses;*
- Presentation of the risks associated with project implementation activities and ways of treating them (consider the likelihood of risks and the impact on project execution).

Project Budget:

Justify the estimation of the total costs for each line of the budget (excepting personal costs and indirect costs).

Allocated budget / costs (Lei/Euro) 1 EUR = 4.9197 LEI											
		Personal costs		Logistics ⁹		Travel ¹⁰		Indirect costs ¹¹		Total	
		Lei	Euro	Lei	Euro	Lei	Euro	Lei	Euro	Lei	Euro
Coordinator (CO)	Public budget										
	Public budget										
Partner n	Own contribution (<i>if applicable</i>)										
	Total										
Total budget	Public budget										
	Own contribution (<i>if applicable</i>)										

Note: The table is mandatory and the budget values must be the same with the ones completed on the platform (<u>www.uefiscdi-direct.ro</u>).

C. Bibliography (max. 2 pages)

⁹ Subcontracting – no more than 5% of the project's public budget
¹⁰ For institutions under the state aid scheme, costs for travel will be made from their own contribution
¹¹ Max. 25% of direct costs minus subcontracting and equipment costs.

Annex II – Evaluation sheet

Evaluation Criteria for Experimental Demonstrative Projects

(PED 2021)

Criterion 1: Project objectives and scope	(30%)
(see section B2.1 of funding application)	

To what extent:

- The project scope is clearly presented, describing explicitly the demonstration model (product, technology, method, system or service) to be developed and tested/validated?
- Are the results innovative and relevant in relation to the national and international state of the art?
- Are the project objectives correlated with the outcome of the project? Is the project feasible?
- *Is the TRL level clearly argued at beginning of the project, and is the level reached after project implementation well determined on the TRL scale?*

Criterion 2: Presentation of the technology / product concept or of the existing lab product (40%)

(see section B2.2 of funding application)

To what extent:

- Are the preliminary results significant on the date of submitting the proposal: publications, patents and research projects that led to basic concept of the project?
- Is the expertise level of experienced researchers and postdoctoral researchers nominated in the project team good? Is the expertise well-correlated with their contribution in the project?

Criterion 3: Project implementation	(30%)
(see section B2.3 of funding application)	

To what extent:

- Are the proposed activities and deliverables well structured?
- *Is the budget and timetable of the project well justified (resources / time / results)?*
- Is the research infrastructure useful/innovative (used in order to implement the project)?
- *Is each team member's role and team project partner well described?*
- Is the impact and dissemination of project results well described? Are intellectual property rights well shared?
- Are the risks associated with project implementation activities identified and the ways to treating them well described?

• Legend:

1. Grades will be given only after written comments in accordance with the meaning of each score, as below table.

2. The comments must be accurate, complete and consistent, highlighting strengths and weaknesses.

3. Each criterion will be scored from 0 to 5. Scores with a resolution of decimal place may be awarded.

0	INSUFFICIENT	The proposal does not address this criterion thus it cannot be assessed due to
		missing or incomplete information.
1	POOR	Addressing criterion is done improperly, or there are serious weaknesses.
2	FAIR	The proposal broadly addresses the criterion but there are significant weaknesses.
3	GOOD	The proposal addresses the criterion well, although improvements would be necessary.
4	VERY GOOD	The proposal addresses the criterion very well, although certain improvements are still possible.
5	EXCELLENT	The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor appeared.

Note: The final score will be calculated as a sum of the marks for each of the three criteria multiplied by the appropriate percentage and multiplied by 20 (the final score is between 0 and 100).