Platform for Biomedical and Photonics Research for the creation of innovative products (BioPhoT)" research and innovation projects to the competition rules

# Methodology for the individual/consolidated assessment of the scientific quality of $2^{nd}$ round applications for Research and Innovation Projects (PIPs)

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### Introduction

The Methodology for Evaluation of Project Submission (hereinafter - the Methodology) has been developed in compliance with the Cabinet of Ministers Regulation of 4 September 2018 No.560 "Procedure for Implementation of National Research Programme Projects" (hereinafter - the Cabinet Regulation), Cabinet of Ministers Regulation of 18 June 2024 No. 474 "On the long-term national research programme "Innovation Fund - Long-term Research Programme"" (hereinafter - the Cabinet Order) and the Regulations of the Competition for Research and Innovation Projects of the Platform "Biomedical and Photonics Research Platform for Innovative Products (BioPhoT)" (hereinafter - the Regulations).

The methodology is developed for the independent scientific experts from abroad (hereinafter referred to as "the expert") who carry out the evaluation of the project application.

#### 1. Terms used

1.	Scientific Group	scientific staff and scientific technical staff involved in the	
		implementation of the project. The scientific team shall be	
		composed of the project leader, the project PIs and the project	
		executors.	

2.	Applicant	A research organisation registered in Latvia in accordance with Paragraph 2.12 of the Cabinet Regulation (hereinafter referred to as the PIP applicant).	
3.	Project Manager	according to Paragraph 2.12.6 of the Cabinet Regulation, is the scientist who manages the PIP and ensures its implementation, plans and supervises the execution of the PIP tasks, is responsible for the activities of the persons involved in the platform project in accordance with the tasks set out in the PIP and the ethical criteria for scientific research, and for the preparation and submission of documentation describing the progress of the platform project in accordance with these Regulations and the procedures established by the platform.	
4.	Principal investigators of PIPs	the scientists and technicians implementing the Platform project and responsible for its implementation	
5.	PIP Group	the scientific team involved in the platform project The Platform Project Team shall be composed of the Platform Project Leader, the Platform Project Principal Investigators (if required) and the Platform Project researchers	
6.	PIP researchers	members of the PIP team who carry out individual tasks in the implementation of the platform project and are responsible for the execution of the relevant parts of the platform project	
7.	Expert	a foreign scientist who independently evaluates the project proposal, and whose scientific qualifications, evaluation expertise and experience are relevant to the project proposal, the scientific field and the subject matter of the project.	
8.	Reporter	an expert who carries out an individual scientific evaluation of the project application and prepares a consolidated evaluation of the project application, in agreement with the other expert.	

# 2. Scientific evaluation of the project proposal

1. The process of scientific evaluation of Stage 2 project applications (hereinafter - project application) shall be organised by the project secretaries of the Latvian Council of Science (hereinafter - the Council).

If the project proposal fulfils the administrative eligibility criteria, the Project Secretary shall, in accordance with the Council's internal rules on guidelines and principles for the selection of foreign

experts, call two suitable experts from the list of experts for each project proposal for the scientific evaluation of the project proposal.

- 3. Before receiving access to the project application in the information system of the National Scientific Activity Information System (NZDIS) (hereinafter information system) of the Latvian Council of Science, the expert:
- 3.1. declare that he/she has no conflict of interest and undertakes to respect the requirements of confidentiality by signing and sending to the Council, by electronic mail, a declaration of absence of conflict of interest and respect of confidentiality (hereinafter referred to as the "declaration of the expert");
- 3.2. enter into an expert agreement with the Council.
- (4) The Council shall, upon receipt of the expert's attestation and the conclusion of the expert contract, give the expert access to the project application and to all necessary information in the information system to carry out the appraisal of the project application.
- 5. The expert shall carry out the scientific evaluation of the project application by applying his/her knowledge in the relevant scientific field and by justifying his/her evaluation with scientific reasons.
- (6) The expert shall cooperate with the Council during the examination and shall comply with the instructions given by the Council regarding the conduct of the examination within the framework of the examination contract.

## 2.1. Individual evaluation of the project application

7.The expert shall complete the individual evaluation form for the project application (Annex 11 to the Regulation) and approve the individual evaluation of the project application in the information system within three weeks from the date of conclusion of the expert agreement and receipt of access to the project application and all necessary information, unless a different deadline is specified in the expert agreement.

In the individual assessment, the expert shall evaluate each criterion and provide a score for each criterion, taking into account the considerations set out in this methodology.

- 9. The criteria are evaluated by awarding 1 to 5 points per criterion. If the project application exceeds the requirements of the previous lowest criterion but does not fully meet the requirements of the next highest criterion, the score may also be expressed as half a point, i.e. 0,5. A description of the evaluation corresponding to each point shall be as follows:
- 9.1 Outstanding 5 points (an outstanding application, meeting or exceeding the highest standards in the relevant scientific field, any shortcomings in the application are minor);
- 9.2 Good 4 points (good project submission, fulfils the requirements of the criterion in the relevant scientific field, but there are some shortcomings);
- 9.3. Satisfactory 3 points (satisfactory project submission, generally fulfils the requirements of the criterion in the relevant scientific field, some shortcomings that will make it difficult to implement the project and achieve high results);
- 9.4. weak 2 points (weak project proposal, partial or only general compliance with the requirements of the criterion in the relevant scientific field, identifiable shortcomings that make it difficult to successfully implement the project and achieve its objectives);

Unsatisfactory - 1 point (unsatisfactory project submission, does not meet the requirements of the relevant scientific field in the criterion, and the information provided is insufficient for the

assessment in the criterion, and there are significant deficiencies that make the implementation of the project and the achievement of the objectives questionable).

- 10. In the consolidated assessment of the experts' assessment of the project proposal (determined in accordance with point 47 of the Regulation), the quality threshold shall be at least three for the criterion set out in point 27 of the Cabinet Regulation (scientific quality of the project proposal), at least three points for the criterion set out in point 28 of the Cabinet Regulation (impact of project results), at least three points for the criterion set out in point 29 of the Cabinet Regulation (feasibility and support for the implementation of the project).
- 12. The expert shall provide a reasoned justification for the score given for each criterion of the Regulations.

Within three working days from the date of receipt of the individual evaluation of the expert's project application, the Project Secretary shall assess the compliance of this individual evaluation with the considerations referred to in Paragraphs 26, 27, 28, 29, 30 and 31 of the Cabinet Regulations, as well as with the expert evaluation methodology, if necessary returning this evaluation to the expert for clarification/revision, justifying the reasons for the return, by sending a notification by electronic mail. In the event of a return, the expert shall, within three working days of receipt of the notification from the Council, update, revise and validate the individual assessment in the information system.

14. The expert shall complete the individual evaluation in the information system (see Annex 11 to the Regulation, "Individual/consolidated evaluation form for scientific quality of Stage 2 Research and Innovation Project (PIP) applications") according to the following criteria and considerations:

	Individual/consolidated assessment of the project submission						
Proje	Project title:						
Expe	Expert(s):						
1.	Criterion: Scientific excellence of	Maximum 5 points					
	the project proposal	_					
1.1.	Consideration: scientific validity,	The expert shall justify the score given by taking into					
	reliability and novelty of the study	account the fulfilment of the criterion as a whole and					
1.2.	Consideration: scientific quality of	the fulfilment of each criterion consideration.					
	the chosen research strategy and	Specific information for the criterion is given in					
	methodological approaches, and	Section 1 'Scientific excellence' of Part B 'Project					
	relevance to the objectives	description' of the project application, but the					
1.3.	Consideration: ability to generate	evaluation of the criterion must take into account the					
	new knowledge or technological	project application as a whole.					
	insights	2. the scientific excellence of the project, including the					
1.4.	Consideration: contribution of the	chosen research strategy and methodological					
	cooperation partners (if any), their	solutions, as well as the ability to generate new					
	scientific capacity, the planned	knowledge or technological insights and the					
	quality of the cooperation	justification of the need for the project and the novelty					
		of the project in the context of the field of research,					
		shall be assessed according to the specificities of the					
		relevant scientific field or fields and the project, as					
		well as the specificities of the institutions of the project					
		applicant and the project's collaborating partners (if					
		any).					
		In the case of an interdisciplinary project proposal,					
		the expert shall assess the synergies between the					
		disciplines by evaluating the contribution of each					
		discipline to the achievement of the project objectives.					

2.	Criterion: Impact of project results	Maximum 5 points
2.1.	Consideration: expected transfer of acquired knowledge and skills to future activities and scientific capacity development	The expert shall justify the score given by taking into account the fulfilment of the criterion as a whole and the fulfilment of each criterion consideration.  Specific information for the criterion is given in
2.2.	Consideration: opportunities for research development, including contributions to the preparation of new projects for submission to calls for proposals under the European Union's Framework Programmes for Research and Innovation and other research and innovation support programmes and technology initiatives	Chapter 2 "Impact" of Part B "Project description" of the project application, but the assessment of the criterion must take into account the project application as a whole.  2. the results and their expected impact, in particular potential commercialisation or application, as well as work with industry in exploring the commercialisation possibilities of the technology, shall be assessed according to the specificities of the relevant scientific field or fields and of the project, as well as the
2.3.	Consideration: the research will lead to knowledge or policy recommendations and solutions relevant to the objectives of the Programme, the sector concerned, the economy and society	specificities of the applicant institution and the institutions of the project partners (if any).  3. the expert assesses the plans described in the project application for identifying commercialisation and/or application partners, applying the right forms of cooperation and technology transfer (e.g.
2.4.	Consideration: sustainability of the knowledge generated and a qualitative dissemination plan, including planned scientific publications and public	prototyping, etc.). Assess the collaboration of the applicant with the planned niche industry/potential application area.  4. the sustainability of the project results is assessed in relation to the envisaged technology transfer and
2.5.	the implementation of the study contributes to strengthening the scientific capacities of the research staff, including students	commercialisation and/or application activities. 5. the expert shall assess whether there are plans to ensure the transfer of the knowledge generated by the project, involving end-users and/or industry and raising their awareness of the solutions generated by the project, as well as the contribution to society in addressing the specific issues addressed by the project
3.	Criterion: Project implementation	Maximum 5 points
3.1.	Consideration: quality of the study's work plan and its relevance to the objective. The resources foreseen are adequate and sufficient to achieve the objective. The study is designed to ensure efficient use of resources. The planned work steps and tasks are clearly defined, relevant and credible	The expert shall justify the score given by taking into account the fulfilment of the criterion as a whole and the fulfilment of each criterion consideration. Specific information for the criterion is given in Section 3 'Implementation' of Part B 'Project description' of the project application and in Section C 'Curriculum Vitae' of the project application, but the evaluation of the criterion must take into account the project
3.2.	Consideration: scientific qualifications of the project leader and of the main contractors, based on the curricula vitae submitted	application as a whole.  The feasibility of the project, including the research work plan prepared, the envisaged management and quality control of the research, the resources foreseen, the infrastructure available, shall be assessed
3.3.	Consideration: Project quality management is foreseen. The management organisation allows the	according to the specificities of the scientific discipline or disciplines concerned and of the project,

progress of the study to be monitored. as well as the specificities of the proposer and the collaborating partners (if any). Potential risks have been assessed The applicant is a scientific institution. It has the and a plan developed to avoid or possibility to involve cooperation partners - other mitigate them scientific institutions or external service providers this is necessary to achieve the objectives of the 3.4. Consideration: existence of the project. research infrastructure needed to The expert shall assess the relevance of the carry out the study and access to other qualifications and experience of the project leader infrastructure research of the and the main contractors (if applicable) to the collaborating partners (if applicable) achievement of the project objectives and the performance of the tasks envisaged on the basis of the 3.5. Consideration: the institution curriculum vitae submitted in Part C 'Curriculum carrying out the research and its Vitae' of the project application and the descriptions of the choice of partners. collaborating partners (if applicable) The expert assesses the project team, whether the team have the necessary experience to can perform the expected tasks and whether implement the project opportunities to bring in missing competences have been adequately identified, e.g. through outsourcing. The planned implementation of the project is assessed in relation to the completed project application, Part A, Section 4 'Project Budget'. There are no conditions for the apportionment of direct costs. The maximum amount of funding per project is EUR 190 000 and the duration of implementation is up to 8 months The risks identified for the implementation of the project shall be rated as "low", "medium" or "high". Where risks are identified as 'medium' or 'high', the relevant justification (reasoning) for the risk assessment shall be provided: 1) High risk, where the likelihood of occurrence and significant impact on the implementation of the project or achievement of its individual results and/or the overall objectives of the project are very high; 2) medium risk, where there is a low probability of occurrence but significant impact on the implementation of the project or its individual results and/or the overall objectives of the project remains; 3) Low risk, where the likelihood of occurrence and the impact on the implementation of the project or its individual results and/or the overall objectives of the project are limited; 4) no assessment if the information is insufficient

#### 2.2 Expert Consultation Meeting

to provide a full assessment.

In order to ensure that the expert acting as reporter develops an objective and reasoned consolidated evaluation of the project submission within the scientific sector, the Council may organise a consultative meeting of reporters (hereinafter referred to as the consultative meeting). The consultative meeting shall be of an advisory (consultative) nature only, with the aim of providing the reporter with as comprehensive a view as possible of the level (readiness) of the project submissions submitted to the call in the scientific sector concerned, which would support the reporter in developing the consolidated evaluation of the project submission.

The Council may also organise consultative meetings in the relevant scientific field, taking into account the number of project proposals submitted in the scientific field.

Before organising a consultative meeting, project secretaries shall double-check that reporters have no conflict of interest with the project applicant, the project manager and the main contractors.

- 16. In order to ensure the success of a consultative meeting, the Project Secretary shall invite one reporter to chair the consultative meeting at each consultative meeting. The chairperson of the consultative meeting shall be identified on the basis of his/her scientific and managerial experience in order to organise the work of the consultative meeting and to lead a reasoned and consultative discussion among the reporters, with the aim of providing the reporters with a comprehensive view of the situation in the relevant scientific cluster across the project proposals submitted in the call for proposals.
- 17. The Consultative Meeting shall be attended by reporters from the relevant scientific discipline.
  - 18. The Consultative Meeting shall be conducted online by video call.

## 2.3. Consolidated evaluation of the project submission

- 19. The reporter shall, in accordance with the Regulation and deadlines of the expert agreement, prepare a consolidated score for the project application in accordance with Annex 11 to the Regulations, 'Individual/consolidated score sheet for the scientific quality of Stage 2 Research and Innovation Project (PIP) applications'. The reporter shall prepare the consolidated score of the project application taking into account the individual scores of the two experts and shall agree with the other expert before submitting it to the Council in the information system.
- 20. Within three working days, the project secretary shall assess the conformity of the consolidated evaluation of the project application with the methodology and validate it in the information system. If the consolidated score of the project application is inadequate or does not provide sufficient reasoning for the score given, indicating the weaknesses and shortcomings of the project application, it shall be returned to the reporter. Within three working days from the date of receipt of the notification of the returned evaluation by e-mail from the information system, the reporter shall revise the consolidated evaluation of the project application and submit it to the information system for approval by the project secretary, subject to prior agreement with the other expert.