

## TERMS AND CONDITIONS

The National Research Foundation of Ukraine is launching a call for proposals on applied research and development projects aimed at strengthening the defense capacity and national security of Ukraine (hereinafter - the T&C)

### I. GENERAL INFORMATION ABOUT THE CALL FOR PROPOSALS

**1.1. Title of the call for proposals.** Research for Strengthening the Defense Capacity and National Security of Ukraine (hereinafter - the Call for Proposals).

**1.2. The purpose of the Call for Proposals** is to select projects for a collective grant for applied research and scientific and technical (experimental) development aimed at creating new or improving existing materials, IT products, devices, systems, technologies in the field of defense and national security of Ukraine in the form of a draft design, experimental (pilot) sample or its current model, design or technological documentation for scientific and technical products ready for implementation at the enterprises of the defense industry of Ukraine.

The competitive selection is carried out in accordance with the Procedure for Competitive Selection and Financing of Projects by the National Research Foundation of Ukraine (hereinafter - the Foundation, NRFU), approved by the Decree of the Cabinet of Ministers of Ukraine of December 27, 2019, No. 1170 (as amended by the Decree of the Cabinet of Ministers of Ukraine of July 4, 2023, No. 742).

**1.3. Thematic areas of the Call for Proposals.** An application for grant support (hereinafter - the Application) submitted to the Call for Proposals shall meet all of the following requirements:

1) represent a project for the implementation of applied research or development aimed at creating a new scientific and technical product (new materials, devices, technologies, software products, etc.) prepared for implementation at Ukrainian enterprises;

2) comply with at least one of the priority areas of science and technology development defined by the Law as priority at the time of the competitive selection (in accordance with paragraphs 1, 3-7 of Article 3 of the Law of Ukraine “On Priority Areas of Science and Technology Development”);

3) fall within one of the following thematic areas:

- new materials and technologies for their production, components and devices based on them for highly sensitive compact electromagnetic (in the ranges of air transparency) detectors, sound detectors, high-speed height detectors, proximity sensors to objects, including systems for ensuring the operation of such detectors (for example, optical elements, sensing circuits, microcryogenic systems);

- mechanical, laser, electromagnetic and other energy means and technologies of remote impact on moving objects leading to a forced change in the trajectory of movement or loss of controllability of such objects, based on innovative technical solutions;

- devices for remote reception/transmission of control signals or information transmission operating in conditions of strong electromagnetic and/or optical interference, information security technologies based on innovative technical solutions;

- technologies and devices for automatic remote recognition and tracking of moving objects that are periodically partially obscured from observation, with the issuance of control signals to the executive devices for targeting the object;

- algorithms, technologies and devices for coordinated autonomous navigation of distributed systems consisting of a large number of objects;
- fuel substances for metallic, pulse-impact and high-energy facilities using raw materials produced in Ukraine;
- technologies, devices and compact power units for them to create broadband electromagnetic interference based on innovative technical solutions;
- materials, aerosols, technologies and means for absorption and scattering of electromagnetic radiation (in the ranges of air transparency) based on innovative technical solutions;
- aircraft engines, their support systems based on innovative technical solutions, technologies for creating materials with extreme temperature and mechanical resistance characteristics for use in such energy systems;
- technologies for creating low-orbit satellites and respective data collection systems.

4) the planned deliverables of the project shall be at least a new or significantly improved material, device, technology, software product, etc. The deliverable of the project should be a sample of the material with a description of the equipment and technology of its manufacture, a prototype of the device with draft or design documentation, a patent for an invention of Ukraine and/or developed countries, a description of the technological process and/or flow chart, a beta version of the software product, confirming the idea's feasibility. The deliverable shall be supplemented by a comparative analysis of the created scientific and technical product with analogues and a draft commercial proposal for the created product. The project deliverable shall include at least 1 scientific publication in journals indexed in the Scopus / Web of Science databases (Q1-Q4) and 1-5 publications in scientific professional journals of Ukraine.

In addition, the deliverables should include an initial performance evaluation that confirms the benefits of the proposed solution. In case of availability of similar products, technologies or methods, the Application should justify the specific advantages of the proposed solution and include the criteria by which these advantages will be measured;

5) a new product developed by the grantee may be introduced at Ukrainian enterprises with the transfer of rights to manufacture the product in accordance with the current legislation of Ukraine. The proprietary rights to intellectual property created during the project implementation at the expense of the Foundation's grant support belong to the grantee, except as provided for in part two of Article 11 of the Law of Ukraine "On State Regulation of Activities in the Field of Technology Transfer".

An Application will not be accepted for consideration for participation in the Call for Proposals if the consent to implement the project submitted with it does not contain information that the content of the applied research or development performed under the Application does not contain information constituting a state secret within the meaning of the Law of Ukraine "On State Secrets", as well as the obligation of the head of the institution to comply with the legal requirements for the protection of restricted information during the implementation of the project.

The fact that the Application materials do not contain information that constitutes a state secret shall be necessarily indicated in the consent of the institution (organization, enterprise) on whose behalf the Project Application is submitted and signed by its head ([link](#)).

The head of the institution (organization, enterprise) participating in the Call for Proposals is responsible for the inclusion of information constituting a state secret in the Application materials.

#### **1.4. Duration of the projects to be selected based on the results of the Call for Proposals:**

The projects are expected to be implemented in 2025-2026 (subject to the availability of appropriate budget allocations). Project implementation involves two stages:

- the first, intermediate, stage of project implementation;
- the second, final stage of project implementation.

The end of each stage correlates with the end of the relevant budget year\*.

The start of project implementation is planned approximately from August 2025 (the term of project implementation in 2025 will be carried out taking into account and in accordance with budget revenues in the respective year for approximately 4.5 months – from August 1 to December 15, 2025); project implementation in 2026 will be carried out taking into account and in accordance with budget revenues in the respective year for approximately 9 months (from March 1 to November 30, 2026).

*\*Planning the duration of the project implementation stages for 2025-2026 should be guided by the deadlines for processing the reporting documentation provided by the grantee to confirm the completion of each stage of the project (14 calendar days from the date of its completion). The duration of the project implementation stages planned in the application for 2025-2026 may be adjusted at the time of the conclusion of the grant agreement, taking into account and in accordance with budget revenues in the respective year).*

### **1.5. Total amount of funding for applied research and development projects to be selected based on the results of the Call for Proposals**

The total amount of funding for the Call for Proposals in 2025 is up to UAH 60 million, in 2026 - up to UAH 120 million (subject to the availability of appropriate budget allocations).

The total amount of funding for the Call for Proposals is up to UAH 180 million (subject to the availability of appropriate budget allocations).

The maximum total amount of funding for one project is UAH 6 million (UAH 2 million in 2025, UAH 4 million in 2026).

By submitting an Application for the Call for Proposals, the participants of the Call for Proposals confirm that they have fulfilled the condition that the submitted project cannot be simultaneously submitted for participation in another call for proposals in order to be funded from budgetary and other funds, as well as in the case when such a project is or has been funded from budgetary and other funds based on the results of another call for proposals, including those conducted by the Ministry of Education and Science of Ukraine or other bodies.

The terms and procedure for financing projects depend on the amount of budgetary allocations provided in the state budget for the respective year to finance the Foundation's activities.

The grant is provided to the grantee in the amount of the full cost of the work required to implement the project.

Projects are funded by the grantor by gradually transferring funds from its registration account to the accounts of grantees in accordance with the grant agreement concluded between the Foundation and the organization that was selected winner of the Call for Proposals (grantee), in accordance with the Calendar Plan and the Project Financing Schedule for research and development, within the limits of the funding actually allocated to the grantee.

Unused and/or saved amounts of funds during each stage of project implementation shall be returned to the Foundation's registration account within seven business days after the completion of the respective stage of the project.

All the actual expenditures for each stage of the project implementation shall be made before the completion of the respective stage of the project implementation.

Under this Call for Proposals, the project estimated budget includes the following cost items:

**1) Direct costs:**

- labour remuneration;
- payroll accruals;
- materials/consumables required for the performance of the work, except for equipment and facilities;
- equipment and facilities;
- business trip expenses.

The total amount of expenses for the items “Labour remuneration” and “Payroll accruals” may not exceed 40% of the total estimated project cost for each stage of project implementation.

**2) Indirect costs**

The total amount of indirect costs (costs that are not directly related to the research, but are necessary to ensure its proper implementation) may not exceed 15% of the “Direct Costs” cost item within each stage of the project. Such costs may include

- payment for utilities related to the project implementation;
- remuneration and accruals for the remuneration of personnel, in particular, employees of organizational, financial, legal, personnel services, procurement departments, etc. that will be involved in the servicing of the Grant Agreement. Such costs may not exceed 5% of the total amount of the Direct Costs cost item.

**3) Other expenses (if necessary)** - expenses that are not reflected in the above cost items but are necessary for the project implementation, in particular, expenses for services. This expense item may include the costs of: scientific publications, obtaining patents, renting equipment for the technological process of manufacturing a new material, paying for services for the manufacture of a prototype device according to the grantee's design documentation, renting scientific equipment, translation, access to databases, libraries, etc.

*Note 1: see “Guidelines for planning the estimated cost of a project to carry out scientific research (development) at the expense of grant support from the National Research Foundation of Ukraine to the T&C of the Call for Proposals” ([link](#)).*

Expenses for all items must be justified.

The grant cannot be used to purchase: stationery, office equipment and supplies, office computer, multimedia and copying equipment, cartridges, drives, etc.

If the project plans to purchase equipment and supplies worth more than UAH 200 thousand per unit at the expense of the Foundation's grant support, the Application shall be accompanied by a document containing a [detailed feasibility study](#) of the need for such purchase for the project, namely:

- 1) confirmation that the equipment and facilities planned for purchase are not currently in possession of the Applicant;
- 2) a detailed justification of the necessity, feasibility and efficiency of using such equipment and facilities for the planned research (development), taking into account its impact on the research capacity of the Applicant;
- 3) description of the main characteristics of the equipment and facilities required for the research (development);
- 4) detailed confirmation that the Applicant has the necessary conditions for the installation,

operation and maintenance of such equipment and facilities (premises, maintenance of the required temperature/lighting/humidity/other conditions therein, appropriate qualified technical personnel, etc.) In case the equipment and facilities require specially prepared premises/conditions, a description of how these works will be carried out);

5) if the application provides for the purchase of equipment and facilities outside of Ukraine, it is necessary to provide justification for the impossibility of purchasing such equipment in Ukraine and the possibility of its delivery from abroad within the appropriate time frame;

6) a description of the prospects for using the equipment and facilities to be purchased after the project is completed;

7) commercial offers (from at least 2 different suppliers)\* detailing the cost, terms and conditions of equipment delivery with links to the suppliers' websites are attached to the feasibility study. If the equipment is unique (has no analogues on the market), and if it is not possible to provide two commercial offers, an appropriate justification (documentary evidence of the absence of competition on the market for such equipment) shall be provided.

If the project plans to purchase equipment and facilities at a cost of more than UAH 200 thousand per unit at the expense of the Foundation's grant, employees of financial services, structural units responsible for procurement (tendering) and other interested units of the institution participating in the Call for Proposals should be involved in the preparation of the feasibility study.

*Note 2: The feasibility study for the purchase of equipment and facilities for the project is signed by the head of the institution (organization, enterprise) on whose behalf the Application is submitted, the head of the financial department of the institution (organization, enterprise) on whose behalf the Application is submitted, and the project supervisor.*

After the announcement of the results of the Call for Proposals, the winning institution submits a [declaration](#) in which the head of the winning institution and the principal investigator (PI) confirm that the project will be implemented in the winning institution in full, in accordance with the Application for Grant Support; the institution has the material and technical base, organizational resources and team of implementers to ensure the delivery of the project in full; the equipment to be purchased with the grant will be used for its intended purpose (to fulfill project tasks and complete the project in full).

*Note 3: The Project PI shall notify the supplier of the submission of the commercial proposal to the Foundation as part of the Application. The refusal of the supplier to confirm the offer is the basis for the rejection of the Application on formal grounds (due to non-compliance with the T&C).*

The project estimated budget shall include the employment (by month) of the PI and each project implementer.

Grant funds cannot be used to finance: expenses that are not directly related to the implementation of the project (in particular, payment for intermediary services, purchase of goods, performance of works, provision of services that are not related to the project); payment for goods, works, and services that have been or will be financed from other sources before or after the signing of the Grant Agreement.

Grant funds may not be used to finance the costs of maintaining institutions (organizations, enterprises), including those that are participants in the Call for Proposals.

## **II. REQUIREMENTS FOR PARTICIPANTS OF THE CALL FOR PROPOSALS, PI AND PROJECT IMPLEMENTERS\*.**

[\\*The requirements are formulated in accordance with the Agreement on Reforming Research Assessment](#)

**2.1. General requirements.** Applicants are higher education institutions or scientific (research, scientific and technological, scientific and practical) institutions/enterprises/organizations located in Ukraine of any legal form and form of ownership that have expressed a desire to participate in the Call for Proposals and have submitted the Application and documents required for participation in the Call for Proposals, who agree to conduct research/development on their own premises, as well as to approve the related research results.

Legal entities of any legal form and form of ownership, whose founders, beneficial owners and participants are citizens of the Russian Federation and the Republic of Belarus, as well as legal entities operating in the temporarily occupied territories of Ukraine, MAY NOT enter the Call for Proposals. The restriction on entry into this Call for Proposals also applies to individuals and legal entities subject to restrictive measures (sanctions) imposed by the National Security and Defense Council of Ukraine.

Teams of project authors (PI and other project authors) consisting of **at least 3 researchers** (PI and two other project authors) are eligible to submit Applications.

The application may provide for the involvement of **up to 5 support staff members**, including early-career researchers and students, without specifying their names; such persons are not considered members of the team of project authors, but the need for their involvement (indicating the number of persons) must be justified in the application. The total number of persons whose involvement in the project is provided for in the Application (project authors together with support staff) may not exceed **10 persons**.

*Note 4: an early-career researcher is a researcher under the age of 35 years, inclusive, who has a higher education degree of at least the second (Master's) level, or a researcher under the age of 40 years, inclusive, who has a doctoral degree (age at the time of submission of the Application through the online tool 'NRFU Call for Proposals').*

The team (project authors) may consist of researchers representing one institution (organization, enterprise), as well as researchers working in different institutions (organizations, enterprises). One individual cannot be included in more than one application submitted to this Call for Proposals. The PI and authors may be implementers of another winning project within another call for proposals of the Foundation the funding of which is ongoing or has not begun due to the pending procedure of concluding a grant agreement. At the same time, the PI cannot be included in the application for this Call for Proposals if he or she is already the PI of a winning project of another call for proposals of the Foundation the funding of which is ongoing or has not yet begun due to the pending procedure for concluding a grant agreement.

The Call for Proposals is held in compliance with the principle of gender equality. When forming the team of project authors, gender parity should be observed and equal opportunities for participation should be provided to researchers regardless of their gender.

The T&C do not provide for the involvement of a partner/partners in the Proposal (project implementation).

The PI shall be a scientist who works **at the main place of work** in the institution (organization,

enterprise) that submits the Application for participation in the Call for Proposals.

The Project PI and authors shall have a scientific degree (except for postgraduate students) obtained or recognized in Ukraine, scientific publications in periodicals, in particular those indexed by Scopus or WoS (except for postgraduate students), and/or scientific monographs/monograph chapters in the relevant field of knowledge (except for postgraduate students). The Project PI shall meet four or more criteria in the Project PI Questionnaire.

Project implementers cannot work in a foreign institution at their main place of work.

The Project PI and project implementers may not be employees of the Foundation's Directorate, members of the Foundation's Scientific Council, the Scientific Committee of the National Council for the Development of Science and Technology, members of the Call for Proposals Commission, or experts involved in the scientific and scientific and technical evaluation of projects under this Call for Proposals.

Persons who authored and signed the final report on the implementation of projects to which clauses 1-2 of the Restrictive Measures applied to the authors of projects whose grant support was terminated by the decision of the Scientific Council of the National Research Foundation of Ukraine due to improper implementation of research and development, and based on the results of the assessment of the quality of project implementation and publication/ dissemination of its results, are not eligible to participate in the Call for Proposals until the Scientific Council of the National Research Foundation of Ukraine makes a decision on the information and relevant documents provided.

The project supervisor is responsible for the accuracy of the information contained in the application and the documents attached to it. The consequence of providing false information is the withdrawal of the Application from consideration in the course of the entire competitive selection period.

When submitting an Application for the Call for Proposals and implementing the project, the project authors (implementers) shall follow the norms of [The Regulations on Compliance with the Principles of Research Ethics and Conflict of Interests Prevention during competitive selections, scientific and scientific-technical reviewing of projects and consideration of applications for grant support submitted to the National Research Foundation of Ukraine](#) which includes a section on the prevention of cooperation with representatives of the aggressor country and temporarily occupied territories.

Violation of these requirements shall be grounds for rejection of the Application.

**2.2. The Project PI** may be a scientist who has a research degree obtained or recognized in Ukraine, works at the main place of work in the institution (organization) submitting the Application for participation in the Call for Proposals, has scientific publications in periodicals indexed by Scopus or WoS, and meets four or more criteria in the Project PI questionnaire.

*Note 5: this information shall be clearly stated in the Application and in the following documents attached thereto:*

- CV according to the form (in [Ukrainian](#) and [English](#));
- a certificate from the place of work of the project supervisor confirming that he/she works at the main place of work in the institution (organization, enterprise) that submits the Application for participation in the Call for Proposals;
- a questionnaire of the Project PI (in [Ukrainian](#) and [English](#)).

### **2.3 Implementation of the project.**

During the implementation of the project, the Project PI or project implementers may work in foreign institutions with monetary remuneration (compensation) for no more than three months in total per year and during this time cannot receive remuneration or other payments from the Foundation's grant funds. In the event of such circumstances, the Project PI shall inform the Foundation of the terms and conditions of such work.

A project submitted for participation in this Call cannot be simultaneously submitted for participation in another call for proposals to be funded. Nor may a project be submitted for participation in this Call for Proposals that is or has been funded from any other source.

The fact that the project is funded by the Foundation at the expense of the state budget, the project number and its title shall be indicated in all publications, official announcements, media coverage, social media, other open sources, and during speeches at scientific events to present the research results.

The Scientific Council of the Foundation considers scientific pseudo-conferences (including congresses, symposia, seminars, etc.) and relevant publications (conference proceedings, abstracts, etc.) to be unacceptable forms of approbation of the results of the scientific work of project implementers if their organizers/publishers are commercial non-academic structures whose main activity is to implement such events and publications on a paid basis and in absentia. Such events and publications only imitate scientific events and publications and are a profanation of scientific platforms for substantive professional scientific discussion, they discredit scientists and projects supported by the Foundation. Therefore, the Scientific Council of the Foundation does not allow their inclusion in scientific reports on project implementation and will not take into account such conferences/publications as indicators of the implementation of the terms of reference and calendar plan. The Scientific Council of the Foundation invites project implementers to present the results of scientific work within the project at events and in publications organized by higher education institutions, research institutions, and specialized professional associations of scientists (in a particular field of science).

### **2.4. Requirements for the results of interim stages of project implementation and the final result of the project**

Interim result:

At the time of submission of the report on the interim results of the project implementation for the respective stage, the project implementers shall have at least 1 publication in professional periodicals of Ukraine (category A, B) and working materials confirming the applied results presented in the annotated report (drawings, test results, photos/videos, etc.).

Final result:

At the time of submission of the final report, project implementers shall present applied results with a product description, depending on the project objective, namely:

- new material, equipment and technology for its manufacture;
- a prototype of the device with sketch documentation, technical characteristics;
- technological process and/or flow chart;
- beta version of a software product, etc.

The project results shall also include a patent for an invention of Ukraine and/or developed countries and at least 1 published article in publications indexed in Scopus/Web of Science (Q1-Q4).

### III. DOCUMENTS TO BE SUBMITTED FOR PARTICIPATION IN THE CALL FOR PROPOSALS

The documents for participation in the Call for Proposals shall be submitted in Ukrainian and English in electronic form on the Foundation's website (<https://grants.nrfu.org.ua/index.html>) via the online tool “NRFU Call for Proposals”).

**No replacement or clarification of the submitted documents by the participant of the Call for Proposals after the deadline for submission of the Application is allowed.**

To participate in the Call for Proposals, the applicant shall submit an **Application for Grant Support** (in Ukrainian and English) which shall be certified by a qualified electronic signature of the Project PI, as well as the documents submitted by the applicant together with the Application. The application may provide links to photo/video files that demonstrate the results of a preliminary test of the physical principle, technology, etc. that is proposed to be implemented in the application.

Documents to be submitted by the Applicant together with the Application ( via the Foundation's online tool):

1. Consent of the project authors to its implementation ( by marking in the Foundation's online tool using a qualified electronic signature through the implementer's personal account).
2. Consent of the institution (organization, enterprise) on behalf of which the Application is submitted to the implementation of the project signed by its head. The consent shall contain a written confirmation that the Application and the materials submitted with it do not contain information the content of which constitutes a state secret (in accordance with the Law of Ukraine “On State Secrets”), a scanned copy in Ukrainian ([example](#)).
3. A certificate (scanned copy in Ukrainian) from the place of work of the Project PI with a **mandatory indication** that the Project PI works **at the main place of work** in the institution (organization, enterprise) on whose behalf the Application is submitted. *NOTE: the certificate shall contain the phrase “AT THE MAIN PLACE OF WORK”*.
4. A statement signed by the head of the institution (organization, enterprise) on behalf of which the Application is submitted, regarding the compliance of the participant of the Call for Proposals with paragraph 5 of the criteria for assessing the admissibility of state aid to economic entities for research, technical development and innovation, approved by the Resolution of the Cabinet of Ministers of Ukraine dated February 7, 2018 No. 118 (scanned copy in Ukrainian, [example](#)).
5. CVs of the Project PI and authors (electronic copy, in [Ukrainian](#) and [English](#)).
6. Questionnaire of the Project PI (scanned copies, in Ukrainian ([template](#)) and English ([template](#))).
7. Feasibility study on the need to purchase equipment and facilities signed by the head of the institution (organization, enterprise) on whose behalf the Application is submitted, the head of the financial department of the institution (organization, enterprise) on whose behalf the Application is submitted, and the Project PI (if the project plans to purchase equipment and facilities worth more than UAH 200 thousand per unit) (scanned copy, in Ukrainian, [template](#)).
8. Terms of Reference for the research (development) (scanned copies, in Ukrainian ([template](#)) and English ([template](#))).
9. Calendar plan for the implementation of research and development (scanned copies, in Ukrainian ([template](#)) and English ([template](#))).
10. Economic justification of the estimated cost of the project (scanned copy, in Ukrainian ([template](#)) and English ([template](#))).
11. Amount of funding for individual cost items (scanned copy, in Ukrainian ([template](#)) and English ([template](#))).

Documents submitted by the winning institution to the Foundation in paper version (originals certified by signatures and seals):

1. Grant Support Agreement with annexes (hereinafter referred to as the Grant Agreement).
2. Consent of the institution (organization, enterprise), on behalf of which the Application is submitted, to the implementation of the project signed by its head, which confirms that the Application does not contain information, the content of which constitutes a state secret (in accordance with the Law of Ukraine “On State Secrets”), in the following [template](#).
3. A certificate (scanned copy in Ukrainian) from the place of work of the Project PI with a **mandatory indication** that the Project PI works **at the main place of work** in the institution (organization, enterprise) on whose behalf the Application is submitted. *NOTE: the certificate shall contain the phrase “AT THE MAIN PLACE OF WORK”.*
4. A statement signed by the head of the institution (organization, enterprise) on behalf of which the Application is submitted, regarding the compliance of the participant of the Call for Proposals with paragraph 5 of the criteria for assessing the admissibility of state aid to economic entities for research, technical development and innovation, approved by the Resolution of the Cabinet of Ministers of Ukraine dated February 7, 2018 No. 118 ([sample](#)).
5. CVs of the Project PI and authors (in [Ukrainian](#) and [English](#)).
6. Questionnaire of the Project PI (in Ukrainian ([sample](#)) and English ([sample](#))).
7. Feasibility study on the need to purchase equipment and facilities signed by the head of the institution (organization, enterprise) on whose behalf the Application is submitted, the head of the financial department of the institution (organization, enterprise) on whose behalf the Application is submitted, and the Project PI (if the project plans to purchase equipment and facilities worth more than UAH 200 thousand per unit) (in Ukrainian, [guidelines](#)).
8. Informed consent of the Project PI and authors of the project (in Ukrainian).
9. A declaration in which the head of the winning institution and the Project PI confirm that the project will be implemented in the winning institution in full, in accordance with the Application for Grant Support; the institution has the material and technical base, organizational resources and a team of implementers to ensure the full implementation of the project; the equipment to be purchased with the grant will be used for its intended purpose (to perform project tasks and complete the project in full) in Ukrainian ([sample](#)).

#### **IV. TERMS, TIME AND PLACE OF THE CALL FOR PROPOSALS**

The terms and conditions of the Call for Proposals are specified in all clauses of this document which are mandatory.

The Call for Proposals will be held from **03.03.2025** to **01.07.2025** (tentatively).

Venue: 1 Borysa Hrinchenka St., Kyiv, Ukraine.

#### **V. PROCEDURE FOR ACCEPTANCE (RECEIPT), REGISTRATION AND PRELIMINARY REVIEW OF APPLICATIONS**

To submit an Application, the Project PI and project implementers need to undergo a pre-registration procedure on the Foundation's official website. Identification of the person submitting the Application is carried out during registration by using a qualified electronic signature (QES).

An Application is considered submitted if it is received through the online tool 'NRFU Call for Proposals' and signed with a qualified electronic signature (QES).

The Applicant has the right to withdraw the Application before the deadline for its submission about which the Project PI notifies the Foundation by e-mail at [support@nrfu.org.ua](mailto:support@nrfu.org.ua).

It is recommended that you submit the completed Application for Grant Support no later than 48 hours before the deadline for submitting the Application. This will secure you from technical errors when submitting the Application for Grant Support to participate in the Call for Proposals.

Within 10 working days from the date of the deadline for submission of applications, the Foundation's Directorate, as part of the organizational support for the conduct and organization of calls for proposals, checks applications for compliance with formal requirements.

#### **Grounds for rejection of the Application on formal grounds:**

- non-compliance of the Application submitted by the Tenderer with the form provided for in the T&C;
- absence of documents required by the T&C;
- absence or incomplete provision of information in the documents submitted by the Applicant required by the T&C;
- inconsistency of the information provided in the Application with the requirements set forth in the T&C, including the number of authors and implementers of the project;
- the Project PI and/or implementer is included in more than one application submitted to the Call for Proposals;
- the Project PI is already a PI of a winning project in another call for proposals of the Foundation, the funding of which is ongoing or has not started due to the pending procedure of concluding a grant agreement;
- the Project PI and authors are the implementers of more than one winning project in another call for proposals of the Foundation, the funding of which is ongoing or has not started due to the pending procedure for concluding a grant agreement;
- execution of documents submitted for participation in the Call for Proposals in non-compliance with the procedure or form established by the Call for Proposals or the requirements for execution of documents established by law;
- exceeding the maximum amount of funding for one project as a whole and for each stage separately specified in the T&C;
- planning project work beyond the duration of the project provided for in the Call for Proposals

(clause 1.4 of the T&C);

- violation of the requirements for restrictions on the participation in this Call for Proposals of individuals subject to restrictive measures (sanctions) of the National Security and Defense Council of Ukraine;

- the validity of restrictive measures applied to the project supervisor and/or project authors, as defined by the provisions of the Restrictive Measures that may be applied to project authors and/or project executors whose grant support was terminated by the decision of the Scientific Council of the National Research Foundation of Ukraine due to improper implementation of the research and development agreement and/or based on the results of the quality assessment of project implementation and publication/disclosure of the results (decision of the Scientific Council of the Foundation of January 11, 2022 as amended).

The Directorate of the Foundation shall in electronic form notify the concerned Applicant of the rejection of applications on formal grounds within three business days after the deadline for checking applications for compliance with formal grounds.

Within 10 working days from the date of completion of the check of applications for compliance with formal requirements by the Foundation's Directorate, the Call Commission shall conduct a preliminary review of their compliance with the T&C, in particular, the criteria determined by the Scientific Council of the Foundation, and identify false information in the documents submitted by the Applicant.

**Grounds for withdrawal of applications from consideration during the preliminary review:**

- inconsistency of the submitted project with the purpose, thematic areas or the T&C (justification for such compliance is to be provided in the text of the Application);

- the Applicant provided false information;

- inconsistency of the submitted project with the Regulations on compliance with the principles of scientific ethics and prevention of conflicts of interest during competitive selection, scientific and scientific and technical expertise of projects and consideration of applications for grant support submitted to the National Research Foundation of Ukraine in the areas of grant support of the National Research Foundation of Ukraine;

- the qualification level of the Project PI and other project authors does not meet the criteria set out in the T&C (Section II).

Non-compliance of the documents submitted by the Applicant with the T&C, in particular with the criteria for selecting projects defined by the Scientific Council of the Foundation, or the discovery of false information in the documents submitted by the Applicant shall be grounds for withdrawal of the Application from consideration based on the results of its preliminary review, as well as throughout the entire competitive selection period.

Based on the results of the preliminary review of applications for compliance with the T&C, in particular the criteria defined by the Foundation's Scientific Council, in case of detection of false information in the documents submitted by the Applicant, the Call Commission approves the list of applications that are withdrawn from consideration. The decision of the Call Commission to withdraw an application from consideration on the grounds of non-compliance with the T&C, in particular the criteria for selecting projects defined by the Foundation's Scientific Council, or the discovery of false information in the documents submitted by the Applicant, shall be communicated by the Foundation's Directorate to the concerned Applicant in electronic form no later than three business days after such a decision is made.

If the Application complies with the T&C and the documents submitted by the Applicant contain reliable information, the Call Commission shall forward the project to the reviewers for scientific and technical evaluation no later than within seven business days.

## **VI. REPORTING**

Upon completion of the first interim stage of project implementation as defined in the Grant Agreement, the grantee shall submit to the Foundation a report on the interim results of the project and a financial report on the use of budgetary funds, which are a prerequisite for making a decision to continue or terminate the grant support for the project.

The decision to continue or terminate the grant support is made by the Scientific Council of the Foundation upon the proposal of the relevant Scientific Council of the Foundation's section.

Based on the results of the work and within the terms specified in the Agreement, the grantee shall submit to the Foundation:

- a report on the interim results of the project (annotated report). The structure and form of the report on the interim results of the project are determined by the Order of the Ministry of Education and Science of Ukraine No. 1495 of 08.12.2023);
- financial report on the use of budget funds - in electronic form and in one paper copy;
- other documentation specified in the Agreement concluded between the Foundation and the Grantee.

The Foundation monitors the grantee's fulfillment of the obligations specified in the Grant Agreement, analyzes reports on the results of project implementation and the use of budgetary funds allocated for their implementation, and ensures the publication of project results by posting an annotated report (report on the interim results of project implementation) on the work performed with reference to published scientific papers on the Foundation's official website.

The decision to continue or terminate grant support is made by the Foundation's Scientific Council upon the proposal of the relevant Scientific Council of the Foundation's section, based on the results of the review of grantees' reports. Approval of the above documents is the basis for signing the Act on the completion of the intermediate stage of project implementation.

In case of termination of grant support by the decision of the Foundation's Scientific Council, the

report on the interim results of the project and the financial report on the use of budgetary funds within the stage are posted on the Foundation's official website within five business days after the approval of the reporting documentation.

Upon completion of the project, the grantee submits to the Foundation a final report on its implementation describing the scientific and applied result obtained, which describes the product in detail, depending on the project goal, namely:

- new material, equipment and technologies for its manufacture;
- a prototype of the device with sketch documentation, technical characteristics;
- technological process and/or flow chart;
- a beta version of a software product, etc.

The project results shall also include a patent for an invention of Ukraine and/or developed countries and at least 1 published article in a periodical indexed in Scopus/Web of Science (Q1-Q4).

The report may contain links to photo/video materials demonstrating the verification of the physical principle or technology underlying the operation of the developed devices.

Information on the results of the project, together with the final report, a report on the use of budgetary funds within the framework of the project and an annotated report on the work performed within the framework of the project ([link](#)), shall be posted on the official website of the Foundation for free access in the form of open data in accordance with the Law of Ukraine “On Access to Public Information” within five working days.

If it is established that budget funds were misused in the framework of the project, the amount of funds used for non-intended purposes shall be returned to the Foundation in accordance with the procedure established by law.

The structure and rules for preparing the final report on project implementation are determined by DSTU 3008:2015 “Information and Documentation. Reports in the field of science and technology. Structure and rules of execution” or another form that will be established by law at the time of the Grant Agreement conclusion.

In the structure of the final report, the abstract shall be submitted in Ukrainian and English.

The project authors are personally responsible for the results of its implementation. In case of discrepancy between the declared scientific and applied result and the ones obtained, the project authors shall be deprived of the opportunity to apply for the Foundation's calls for proposals for the subsequent 2 years.

## **VII. DEADLINES FOR SUBMISSION AND REVIEW OF APPLICATIONS, SCIENTIFIC AND TECHNICAL EVALUATION OF PROJECTS AND ANNOUNCING THE RESULTS OF THE COMPETITION**

Date and time of the start of application submission: **03.03.2025**, 0:01 Kyiv time.

Date and time of application submission deadline: **01.04.2025**, 23:59 Kyiv time.

Period for conducting scientific and technical expertise and announcing the results of the Call for Proposals: until **July 01, 2025** (tentatively).

Information on the results of the Call for Proposals shall be posted on the official website of the Foundation and shall include:

- 1) the decision of the Scientific Council of the Foundation to approve the results of the Call for Proposals;
- 2) the list of projects recommended for implementation with the Foundation's grant support;
- 3) the amount of funding for projects recommended for implementation with the Foundation's grant support;
- 4) the ranking list of projects with the points scored by each project.

A textual justification of the scores awarded to the project based on the results of the scientific and scientific and technical review is sent to the Project PI by e-mail.

After the Foundation makes a decision to award a grant, the Foundation and the winning institution conclude a Grant Agreement which defines all the necessary conditions for the implementation of the project, including the Grantee's liability and the application of penalties for failure to fulfill or delayed fulfillment of its obligations.

The term for concluding the Grant Agreement shall not exceed 30 calendar days from the date of the decision to award the grant. If the Grant Agreement between the winning institution and the Foundation is not concluded within the specified period due to the fault of the winning institution, it is considered that the winning institution has refused to implement the project.

## **VIII. NUMBER OF REVIEWERS INVOLVED IN THE SCIENTIFIC AND TECHNICAL REVIEW OF THE PROJECT**

The scientific and scientific and technical evaluation of the project submitted to the Call for Proposals is carried out by 3 experts (Ukrainian and foreign scientists with their consent). Members of the Foundation's governing bodies, as well as the author(s) of the project(s) submitted for participation in the Call for Proposals, are not entitled to conduct scientific and scientific and technical evaluation of projects.

Persons who are Project PIs or authors of projects submitted for participation in the Call for Proposals may not be involved in the scientific and scientific and technical evaluation of projects in this Call for Proposals.

## **IX. CRITERIA FOR PROJECT SELECTION AND NUMERICAL EVALUATION, INDICATING THE ORDER OF PRIORITY AND COEFFICIENTS OF INDIVIDUAL CRITERIA**

The selection of projects is carried out in accordance with the procedure specified in [the Procedure for conducting scientific and scientific - technical reviewing of projects and consideration of applications for grant support submitted to the National Research Foundation of Ukraine.](#)

1. Assessment of projects is carried out by independent reviewers according to the form and criteria approved by the Scientific Council of the Foundation.
2. Each project is assessed according to the following aspects with corresponding weighting factors:
  - quality of the research planned;
  - significance of the project for further development of science / engineering / technologies / society (according to the thematic direction of the project);
  - quality and realism of the proposed project implementation plan;
  - research track record of project implementers.
3. Each of the aspects includes several assessment criteria with their own weighting factors.
4. The assessment for each criterion is carried out by a reviewer with a 5-point scale and obligatory provision of the appropriate justification.
5. The number of points for an aspect is calculated as a weighted arithmetic mean of points for the evaluation criteria for this aspect.
6. The total number of points of the project is calculated as the weighted arithmetic mean of the points by aspects, multiplied by 20.
7. For project assessment, a 5-point scale with the following points value is used for each criterion:

0	The project does not meet the criterion or cannot be evaluated due to the absence or incompleteness of the information provided for by this criterion.
1 – Unsatisfactory	Information as of assessed criterion is inadequately presented or has critical deficiencies.
2 – Satisfactory	In general, the project meets the criterion, but at the same time there are significant shortcomings.
3 – Good	The project meets the criterion, but there are some shortcomings.

4 – Very good	The project meets the criterion very well, but improvement is possible.
5 – Excellent	The project fully meets the criterion.

The following criteria, weighting factors, and form are used to evaluate the project in the Call for Proposals:

*(IMPORTANT: Reviewers should clearly justify the number of points assigned based on the recommendations contained in the comments to each sub-criterion).*

<b>Evaluation criteria</b>	<b>Rating scale</b>	<b>Weight factor</b>
<p><b>1. Quality of the research planned</b></p> <p>This section provides an assessment of the justification of the scientific project, its focus on the solution of an actual (urgent) scientific problem, the clarity of the formulation of the goal and tasks, the compliance of the project with the modern world level of scientific achievements, the novelty of the scientific idea, the originality of the scientific hypothesis, the correctness of the choice of methodology and research methods for verification of a scientific hypothesis.</p>	<p><b>From 0 to 5</b></p> <p>The number of points per aspect is calculated as an arithmetic mean weighted points according to the criteria</p>	<p><b>0.2</b></p>
<p><b>1.1. Motivation and validity of the research concept: whether the current state of research and problems that need to be solved are described adequately and with appropriate references.</b></p>	<p>0-5</p>	<p>0.3</p>
<p><i>Comments:</i> Evaluation criteria for item 1.1.</p> <p><b>0 points</b> - no references to sources are provided in the description of relevance; relevance and problem are not described; the scientific concept is absent or contradicts existing data.</p> <p><b>1 point</b> - there are no references to sources in the description of relevance or they are irrelevant; the description of relevance and problem is fragmentary, incoherent; the concept is unsubstantiated, the motivation is unclear, presented formally, without proper argumentation.</p> <p><b>2 points</b> - the description of relevance contains 1-3 references; the problem is not clearly formulated, the relevance is not proven; the project concept has no scientific basis, the</p>		

argumentation is absent or superficially justified.

**3 points** - in the description of the relevance, the justification contains 4-5 references to sources, but some of them are general or from “non-scientific” sources (e.g., non-peer-reviewed publications, journalistic publications, textbooks/manuals, etc.) and/or the review of scientific sources is available, but insufficiently systematized or has gaps in key aspects; the problem is indicated, but its relevance is superficially justified, without in-depth analysis; the scientific concept is described in general terms, without a clear link to existing research.

**4 points** - the description of relevance includes a sufficient number of sources (more than 5), but some of them may be insufficiently relevant or outdated; the problem is formulated, but the justification of its relevance may not be detailed; the scientific concept is described clearly, the connection with existing research is described, but there are logical contradictions or uncertainties.

**5 points** - current research in the relevant field is clearly and thoroughly described, with references to at least 7 scientific sources (articles, monographs, patents, etc.); specific problems to be solved are identified with a logical justification of their importance, conclusions about the relevance are supported by modern data (obtained within the last 5-7 years, unless these are classical works); the scientific concept of the project is well-reasoned: the connection between existing research and the proposed solution is shown; there are no logical contradictions or uncertainties.

*Note: you should pay attention to the quality of the sources, preference should be given to peer-reviewed scientific articles and monographs, and patents. If the project is based on the authors' own previous research, this should be clearly stated.*

<p><b>1.2.</b> The novelty of the research ideas (including from the standpoint of interdisciplinarity if the research is multidisciplinary in nature).</p>	<p>0-5</p>	<p>0.3</p>
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*Comments:*

Evaluation criteria for item 1.2.

**0 points** - there are no signs of novelty in the project, the project is entirely based on copying existing works; the study does not contain new approaches to solving the problem or offers solutions that contradict existing scientific data. If interdisciplinarity is claimed, it is not supported by analysis or sources.

**1 point** - the project repeats already known solutions without significant changes, the authors try to present the idea as a new one but do not provide evidence of its uniqueness, the proposed ideas are obvious and trivial. The interdisciplinary approach (if any) is stated formally, without any real integration of concepts from different sciences.

**2 points** - the idea of the project is not fundamentally new, but contains some elements of originality (for example, a new context for applying an existing method), but there is no clear justification for the novelty, most concepts are borrowed. The interdisciplinary approach (if any) is stated superficially (for example, mentioning another field without actually using its tools), without a deep interconnection between different scientific fields.

**3 points** - the project proposes a modification or improvement of known ideas, but without a radical departure from existing concepts, there is a comparison with current research. The interdisciplinary approach (if any) is described superficially (for example, mentioning another

field without actually using its tools) or insufficiently substantiated.

**4 points** - the project idea is original, but may partially overlap with other works, but complements or modifies existing approaches, the novelty is proven, but not all aspects of the project are unique. The interdisciplinary approach (if any) demonstrates a high-quality combination of different scientific fields, although its impact on the development of science requires additional argumentation.

**5 points** - the idea of the project is absolutely innovative, has no analogues in the scientific literature, demonstrates how the proposed approach fills a gap in existing research or opens a new direction, the novelty is supported by a comparison with relevant publications over the past 3-5 years. Interdisciplinary approach (if any) clearly defines the combination of methods/theories from different disciplines that leads to a unique result.

*Note: If the project is based on the author's own previous research, the novelty should relate to further development, not repetition. Ideas with high novelty often have more uncertainties - this is not a disadvantage, but they should be justified.*

<p><b>1.3.</b> Clarity and relevance of the stated goal and objectives of the research</p>	<p>0-5</p>	<p>0.2</p>
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*Comments:*

Evaluation criteria for item 1.3.

**0 points** - the project goal is missing or incorrectly formulated, does not correspond to the project topic. The tasks are not defined or have no logical connection to the goal.

**1 point** - the project goal is absent or formulated as a process (for example, “research”, “study”) without reference to an applied result. The tasks are listed formally, do not reveal the essence of the study, the wording is unclear, there are logical contradictions or duplications, and are the tasks not applied.

**2 points** - the purpose of the project is defined, but without reference to an applied result or does not contain a clear research problem or is not related to the subject of the study. The research objectives are listed, but some of them are not specific or do not meet the goal, there are logical contradictions or duplications, and the tasks are not applied.

**3 points** - the project goal is clearly stated and contains an applied result. The research tasks are logically related to each other and to the goal, are applied, but some of them are formulated too broadly/narrowly or there is a gap between theoretical and practical parts.

**4 points** - the project goal is clearly formulated, contains an applied result, has scientific substantiation and a logical connection to the topic. The tasks are clearly formulated, logically related to each other and to the goal, and are applied, but some tasks may be general and not reflect a specific result.

**5 points** - the project goal is clearly formulated, contains an applied result, has scientific substantiation and a logical connection with the topic. The research objectives are fully aligned with the goal, specific, logically structured, applied, cover all aspects of the problem under study, detail the steps to achieve the goal, the number of tasks is optimal, and each task reflects a specific result.

<p><b>1.4.</b> Adequacy of the proposed research approaches and methods, their compliance with the purpose and tasks of the project.</p>	<p>0-5</p>	<p>0.2</p>
<p><i>Comments:</i></p> <p>Evaluation criteria for item 1.4.</p> <p>0 points - the research methods are not specified or are completely irrelevant to the purpose and objectives of the project, do not correspond to the applied field of research. There is no justification for the choice of methods.</p> <p>1 point - the research methods are formally specified, have only an indirect connection with the project goal or are outdated and ineffective in solving the stated problem, preference is given to abstract or theoretical approaches that cannot provide solutions to applied problems. The justification for the choice of methods is superficial or absent.</p> <p>2 points - the research methods are indicated, but most of them are indirectly related to the project goal or are outdated and ineffective for solving the stated problem, only some of the methods provide solutions to applied problems. The rationale for the choice of methods is superficial and does not reflect the relationship between the methods and the expected results.</p> <p>3 points - research methods are specified, most of them meet the project goal, provide solutions to applied problems, but some of them are outdated and ineffective for solving the stated problem. The rationale for the choice of methods has some inconsistencies or insufficiently detailed ways to apply them in a particular context.</p> <p>4 points - the research methods are specified, meet the project goal, provide solutions to applied problems, are modern and effective for solving the stated problem. The justification for the choice of methods is well-reasoned, but there are shortcomings in justifying their effectiveness in solving the problem, ways to apply them in a particular context.</p> <p>5 points - the research methods are specified, meet the purpose of the project, provide solutions to applied problems, are modern and effective for solving the stated problem. The justification for the choice of methods is well-reasoned, their effectiveness in solving the problem and ways of applying them in a particular context are described.</p> <p><i>Note: Methods should be focused on obtaining a specific result (technology, device prototype, process improvement, etc.). The stages of testing/validation in real conditions should be provided. The chain “goal → objectives → methods → expected result” should be consistent.</i></p>		
	<p><b>Weighted average score</b></p>	

<p><b>2. Significance of the project for the further development of science / engineering / technology / society (according to the thematic direction of the project)</b></p> <p>Within this section, an assessment of the clarity of the definition and argumentativeness of the prospect of further application of the research results for the purpose of developing science and new technologies, as well as the possibilities of implementing the research results in the economic and social spheres is to be made. The completeness and potential effectiveness of the publication of research results, the possibility of commercialization of the project's achievements are considered.</p>	<p><b>From 0 to 5</b></p> <p>The number of points per aspect is calculated as an arithmetic mean weighted points according to the criteria</p>	<p><b>0.4</b></p>
<p><b>2.1.</b> The potential importance of the expected results and the acquisition of new knowledge, the development of new approaches and technologies and/or their importance for solving actual practical scientific / technical / social problems.</p>	<p>0-5</p>	<p>0.5</p>
<p><i>Comments:</i></p> <p>Evaluation criteria for item 2.1.</p> <p><b>0 points</b> - the final applied result of the project which will be obtained in the form of a prototype device, technology, etc. is not defined or not clearly described, or new solutions and technologies that will be used in the final applied result of the project are not reflected or not clearly described.</p> <p><b>1 point</b> - the final applied result of the project which will be obtained in the form of a prototype device, technology, etc. is clearly defined; the essence of new solutions and technologies that will be used in the final applied result of the project is clearly defined; the expected technical characteristics, etc. of the final applied result of the project are not presented, or a comparative analysis of such characteristics is made only with Ukrainian analogues.</p> <p><b>2 points</b> - the final applied result of the project which will be obtained in the form of a prototype device, technology, etc. is clearly defined; the essence of new solutions and technologies to be used in the final applied result of the project is clearly defined; a comparative analysis of the technical characteristics, etc. of the final applied result of the project with Ukrainian and foreign analogues is presented, separating the impact of new solutions and technologies; no preliminary assessment of the patentability of the project result has been carried out, or it has been carried out by considering only Ukrainian analogues.</p> <p><b>3 points</b> - the final applied result of the project which will be obtained in the form of a prototype device, technology, etc. is clearly defined; the essence of new solutions and</p>		

technologies to be used in the final applied result of the project is clearly defined; a comparative analysis of the technical characteristics, etc. of the final applied result of the project with foreign products is presented, separating the impact of new solutions and technologies; a preliminary assessment of the patentability of the project result was carried out by reviewing Ukrainian and foreign analogues; the scope of the final applied result of the project is clearly defined, but without specifying potential Ukrainian manufacturers.

**4 points** - the final applied result of the project which will be obtained in the form of a prototype device, technology, etc. is clearly defined; the essence of new solutions and technologies to be used in the final applied result of the project is clearly defined; a comparative analysis of the technical characteristics, etc. of the final applied result of the project with foreign analogues is presented, separating the impact of new solutions and technologies; a preliminary assessment of the patentability of the project result was carried out by reviewing Ukrainian and foreign analogues; the scope of application of the final applied result of the project is clearly defined, indicating potential Ukrainian manufacturers; the commercial benefits of the final applied result of the project are not sufficiently substantiated.

**5 points** - the final applied result of the project which will be obtained in the form of a prototype device, technology, etc. is clearly defined; the essence of new solutions and technologies to be used in the final applied result of the project is clearly defined; a comparative analysis of the technical characteristics, etc. of the final applied result of the project with foreign analogues is presented, separating the impact of new solutions and technologies; a preliminary assessment of the patentability of the project result is carried out by reviewing Ukrainian and foreign analogues;

the scope of the final applied result of the project is clearly defined, indicating potential Ukrainian producers; the commercial benefits of the final applied result of the project are clearly justified.

<p><b>2.2.</b> Effectiveness and appropriateness of planned ways of publicizing/using research results (expected professional publications, patents, presentations at international scientific conferences, dissemination of research results among the public).</p>	<p>0-5</p>	<p>0.5</p>
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*Comments:*

Evaluation criteria for item 2.2.

**0 points** - no plans to apply for a patent of Ukraine,

**1 point** - submission of a patent application for Ukraine is planned,

**2 points** - meets 1 of the following objectives: submission of a patent application under the PCT procedure or participation in specialized exhibitions or cooperation with Ukrainian manufacturers on the implementation of the final applied result of the project, which is confirmed by the availability of search products, technologies, etc. obtained in cooperation with Ukrainian manufacturers at the time of project submission, or the scope of application of the final applied result of the project is clearly defined, which is confirmed by joint decisions, protocol decisions, etc. on the state level.

**3 points** - meets 2 of the following objectives: applying for a patent under the PCT procedure, or participating in specialized exhibitions, or cooperation with Ukrainian manufacturers to implement the final applied result of the project, as evidenced by the availability of search products, technologies, etc. obtained in cooperation with Ukrainian manufacturers at the time of

project submission, or the scope of application of the final applied result of the project is clearly defined, as evidenced by joint decisions, protocol decisions, etc. on the state level.

**4 points** - meets 3 of the following objectives: applying for a patent under the PCT procedure, or participating in specialized exhibitions, or cooperation with Ukrainian manufacturers to implement the final applied result of the project, as evidenced by the availability of search products, technologies, etc. obtained in cooperation with Ukrainian manufacturers at the time of project submission, or the scope of application of the final applied result of the project is clearly defined, as evidenced by joint decisions, protocol decisions, etc. on the state level.

**5 points** - the project provides for the submission of a patent application under the PCT procedure; participation in specialized exhibitions; cooperation with Ukrainian manufacturers on the implementation of the final applied result of the project is planned, which is confirmed by the availability of search products, technologies, etc. in the project area, obtained in cooperation with Ukrainian manufacturers; the scope of application of the final applied result of the project is clearly defined, which is confirmed by joint decisions, protocol decisions, etc. on the state level.

	<b>Weighted average score</b>	
<p><b>3. Quality and realism of the proposed project implementation plan</b></p> <p>Within this section, the reviewer assesses reasonableness of the work plan and the clarity of intermediate goals, their logical sequence; the clarity of the description of the planned tasks with the indication of specific results that can be verified; consistency of the complexity of the tasks with their time frames; compliance of the equipment and materials specified as necessary for the implementation of the project, the realization of its purpose and tasks; the clarity of the description of equipment and materials and the adequacy of their price in the budget.</p>	<p><b>From 0 to 5</b></p> <p>The number of points per aspect is calculated as an arithmetic mean weighted points according to the criteria</p>	<p><b>0.2</b></p>

<p><b>3.1.</b> The validity of the work plan, the compliance of the time frame with the complexity of the formulated stages and tasks, the clarity of intermediate goals, their logical sequence.</p>	<p>0-5</p>	<p>0.25</p>
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*Comments:*  
Evaluation criteria for item 3.1.

**0 points** - the work plan is absent or unstructured, the timeframe is not defined. Research stages are not formulated or contradict each other. Intermediate goals are not defined. There is no logical sequence.

**1 point** - the work plan is unstructured, time frames are defined, but they are unrealistic or do not take into account the complexity of the tasks. Intermediate goals are not defined. There is no logical consistency.

**2 points** - the work plan is structured, time frames are defined, but most of them are unrealistic. Intermediate goals are missing or not clearly defined. The logic of the sequence is broken: the stages do not lead to the final result.

**3 points** - the work plan is structured, timeframes are defined, but some of them are unrealistic. Intermediate goals are defined, but do not contain clear parameters for measuring their achievement. The logic of the sequence of stages is partially violated: some tasks are not related to each other or are duplicated.

**4 points** - the work plan is structured, timeframes are defined and realistic. Intermediate goals are identified, but some are not specific enough or do not contain clear parameters for measuring their achievement. The sequence of stages is logical, but there are minor gaps in the links between individual tasks.

**5 points** - the work plan is structured, timeframes are defined and realistic. Intermediate goals are specific and measurable. The sequence of stages is logical, each subsequent stage follows from the previous one, and corresponds to the overall structure of the project.

*Note: The link between the plan, timeline, and practical results is critical. The highest score is given to projects where each stage directly leads to the creation of a technology/device prototype, etc., and the risks are addressed in the timeline.*

<p><b>3.2.</b> Compliance of the material and technical base, equipment (available and planned) with the tasks set.</p>	<p>0-5</p>	<p>0.25</p>
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*Comments:*  
Evaluation criteria for item 3.2.

**0 points** - the material and technical base and equipment (existing and intended) are not described (absent) or do not meet the tasks. There are no plans for its purchase or use.

**1 point** - the material and technical base and equipment (existing and intended) are described, but it is not suitable for the implementation of the planned research. The budget and plan for its purchase and further use are not specified or contradict the project objectives.

**2 points** - the material and technical base and equipment (available and intended) are described, meet most of the tasks, but it is not enough or needs significant updating/upgrading. The budget

and plan for its purchase and further use are formal or not transparent, and the arguments for the availability of equipment are not provided (for example, the expectation of free use of third-party resources).

**3 points** - the material and technical base and equipment (available and intended) are described, meet most of the tasks, but it is insufficient or needs significant updating/upgrading. The budget and plan for its purchase and further use are available, but there are no specific parameters (e.g., no model) or timeframe. The budget is partially unrealistic (e.g., significant underestimation/overestimation of the cost of equipment), high dependence on external factors (e.g., suppliers) without alternative solutions.

**4 points** - the material and technical base and equipment (existing and intended) are described, meet the tasks set, and clearly indicate which resources are already available and which are planned to be attracted. The budget and plan for its acquisition and further use are available, but some details are not specified or there are minor risks to their implementation.

**5 points** - the material and technical base and equipment (existing and intended) are described, meet the tasks set, clearly indicate which resources are already available and which are planned to be attracted, and their characteristics and functionality are indicated. The budget and the plan for its acquisition and further use are fully justified, realistic, and specific risk minimization mechanisms are provided (e.g., backup suppliers, alternative methods of work in case of delays).

<p><b>3.3.</b> Balance and reasonableness of the overall project budget.</p>	<p>0-5</p>	<p>0.25</p>
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*Comments:*

Evaluation criteria for item 3.3.

**0 points** - the budget is missing or compiled in an unspecified form without detailing the costs, the costs are not related to the project's goals and objectives.

**1 point** - the budget is compiled with no clear structure, there is no justification for the costs or they do not correspond to the project objectives.

**2 points** - the budget is compiled for the main cost items, but their relevance to the project objectives has not been proven, the justification of costs contradicts market data (overestimated/underestimated).

**3 points** - the budget is balanced, but there are some inaccuracies (for example, critical tasks are underfunded and secondary tasks are overestimated) or there is no clear justification for individual costs. Some items may be insufficiently detailed or disproportionately distributed.

**4 points** - the budget is balanced, all cost items are justified and detailed, and their relevance to the project objectives is proven. The proportions of funding are logical, but some items need to be clarified (for example, some items are overestimated or underestimated).

**5 points** - the budget is clearly structured, balanced, and fully meets the objectives. Each item of expenditure is substantiated in detail, there are no inconsistencies or unreasonable expenses. The use of funds is optimized, with effective allocation of funding to maximize project effectiveness.

*Note: The key is to take into account the costs of manufacturing a prototype device, working model, technology, etc. The budget should reflect the priority of the applied result (e.g., the costs of pilot production prevail over theoretical research).*

<p><b>3.4.</b> Availability and reasonableness of assessment of possible risks and prediction of ways to prevent or resolve them.</p>	<p>0-5</p>	<p>0.25</p>
<p><i>Comments:</i>  Evaluation criteria for item 3.4.  <b>0 points</b> - risks have not been assessed, their analysis is missing, or the risks are not relevant to the project. No measures are provided to prevent and address them.  <b>1 point</b> - the risks are formally identified (1-2 points), without specific analysis, or the risks are not relevant to the project. Ways to address or mitigate them are not proposed or are ineffective/unrealistic.  <b>2 points</b> - the main risks are identified, but without analyzing their impact on the timing, budget, or quality of the result, their assessment is incomplete or insufficiently substantiated. Ways to address or minimize them are described in general terms or are ineffective/unrealistic.  <b>3 points</b> - the main internal/external risks are identified, and an analysis of their impact on the timing, budget, or quality of the result is provided. Ways to address or mitigate them are general or do not have a clear implementation strategy, without specific tools or distribution of responsibilities, and there are no alternative scenarios for critical risks.  <b>4 points</b> - the main risks (both internal and external) are identified, and an analysis of their impact on the timing, budget, or quality of the result is provided. Ways to address or mitigate them have an implementation strategy with specific tools or distribution of responsibilities, but there are no alternative scenarios for critical/unforeseen risks and no mechanism for monitoring them.  <b>5 points</b> - the main risks (both internal and external) are identified, and an analysis of their impact on the timing, budget, or quality of the result is provided. Ways to address or minimize them have an implementation strategy with specific tools or distribution of responsibilities, alternative scenarios for critical/unforeseen risks and a mechanism for their monitoring are described.</p> <p><i>Note: It is important to assess the risks associated with practical implementation (production delays, partner failure, equipment delivery, etc.). It is important that the plans to address or mitigate them are effective and realistic. Consider whether resources (time, financial, human) are available to implement risk management and monitoring measures.</i></p>		
	<p><b>Weighted average score</b></p>	

<p><b>4. Research track record of project implementers</b></p>	<p><b>From 0 to 5</b></p> <p>The number of points per aspect is calculated as an arithmetic mean weighted points according to the criteria</p>	<p><b>0.2</b></p>
<p><b>4.1.</b> The quality of the PI's publications over the past 5 years.</p>	<p>0-5</p>	<p>0.3</p>
<p><b>4.2.</b> The quality of the publications of the project's implementers over the past 5 years</p>	<p>0-5</p>	<p>0.3</p>
<p><i>Comments:</i></p> <p>Evaluation criteria for items 4.1.- 4.2.</p> <p><b>0 points</b> - there are no publications on the subject of the project in the last 5 years in professional publications of Ukraine and publications in the databases of Scopus, Web of Science (Q1-Q4).</p> <p><b>1 point</b> - no more than 1 publication on the subject of the project in professional journals of Ukraine in the last 5 years, provided that there are no publications on the subject of the project in the databases of Scopus or Web of Science (Q1-Q4).</p> <p><b>2 points</b> - the last 5 years have seen 2 or more publications on the project topic in professional journals of Ukraine, provided that there are no publications on the project topic in the Scopus or Web of Science databases (Q1-Q4).</p> <p><b>3 points</b> - the last 5 years have seen 3 or more publications on the project topic in professional journals of Ukraine and 1 publication in the databases of Scopus or Web of Science (Q1-Q4).</p> <p><b>4 points</b> - 4 or more publications on the subject of the project in professional journals of Ukraine in the last 5 years and 2 relevant publications in the publications of Scopus or Web of Science databases (Q1-Q4).</p> <p><b>5 points</b> - the presence of 5 or more publications on the subject of the project in professional publications of Ukraine over the past 5 years and 2 or more relevant publications in the publications of Scopus or Web of Science databases (Q1-Q4).</p> <p><i>Note: for item 4.2., the total number of publications of the project authors is to be considered.</i></p>		
<p><b>4.3.</b> The balance of the team of implementers: compliance of the number of implementers with the level of their qualifications with the goals and</p>	<p>0-5</p>	<p>0.2</p>

tasks of the project.		
<p><i>Comments:</i>  Evaluation criteria for item 4.3.</p> <p><b>0 points</b> - the team of implementers is formed of specialists whose research publications and work experience do not correspond to the project topic, the number of participants does not correspond to the scope of work and/or the qualifications of the implementers do not correspond to the project goals and objectives.</p> <p><b>1 point</b> - the team is no more than 20% staffed by specialists whose research publications and work experience are relevant to the project topic, the number of implementers is insufficient or excessive to accomplish the project tasks and/or the qualifications of some of the implementers do not meet the key requirements of the project.</p> <p><b>2 points</b> - the team is no more than 40% staffed by specialists whose research publications and work experience are relevant to the project topic, there is a certain imbalance in the distribution of responsibilities and/or the level of qualification of the implementers is mostly relevant to the tasks, but in some areas it is advisable to involve other specialists.</p> <p><b>3 points</b> - the team is no more than 60% staffed by specialists whose research publications and work experience are relevant to the project topic, the number of implementers corresponds to the project objectives and/or the level of qualification of the implementers in most key areas is sufficient for project implementation, but there are minor shortcomings in the distribution of roles or resources.</p> <p><b>4 points</b> - the team is no more than 80% staffed with specialists whose research publications and work experience are relevant to the project topic, the team looks balanced in general, roles are distributed effectively and/or the qualifications of all performers meet the project objectives.</p> <p><b>5 points</b> - the team is more than 80% staffed by specialists whose scientific interests correspond to the project topic, is fully balanced, the number and composition are optimal, and each performer has the appropriate qualifications, experience and competencies to perform their tasks.</p>		
<p><b>4.4.</b> Participation of the project PI and implementers in scientific programs financed by national (home) and international organizations and institutions (in particular, grants) over the past 5 years.</p>	<p>0-5</p>	<p>0.2</p>
<p><i>Comments:</i>  Evaluation criteria for item 4.4.</p> <p>0 points - the PI and implementers of the project have no experience of participation in research programs funded by national and international organizations and institutions (including grants) over the past 5 years.</p> <p>1 point - the PI or 1 project implementer has participated in 1 research program funded by national and international organizations and institutions (including grants) over the past 5 years.</p> <p>2 points - the PI and/or implementers of the project have participated in 2 research programs funded by national and international organizations and institutions (including grants) over the past 5 years.</p> <p>3 points - the PI and/or implementers of the project have participated in 3 research programs funded by national and international organizations and institutions (including grants) over the past 5 years.</p>		

4 points - the PI and/or implementers of the project have participated in more than 3 research programs funded by national and international organizations and institutions (including grants), and the PI has participated in at least 1 project, including being its coordinator.		
5 points - the PI and/or implementers of the project participated in more than 3 research programs funded by national and international organizations and institutions (including grants), but the PI participated in at least 2 projects, including being their coordinator.		
	<b>Weighted average score</b>	
	<b>Total score of the project: arithmetic mean weighted scores by aspects, multiplied by 20</b>	

#### Algorithm for generating the final numerical assessment of applications

The curators analyze the set of reviewers' opinions on the project and report the results at the Panel meeting. For each project, the R-value of the discrepancy between the  $S_1$ ,  $S_2$  and  $S_3$  scores assigned by the three reviewers is calculated:

$$R = \frac{SD}{S} \cdot 100\%,$$

where S is the arithmetic mean of the grades assigned, i.e.

$$S = \frac{S_1 + S_2 + S_3}{3},$$

SD - standard deviation:

$$SD = \sqrt{\frac{(S_1 - S)^2 + (S_2 - S)^2 + (S_3 - S)^2}{3}}.$$

1. If the discrepancy R-value does not exceed the critical value of 20%, the final numerical score of the application is determined as the arithmetic mean S of the reviewer assessments. 2. If the discrepancy exceeds the critical value of 20%, then:

- a) each member of the panel ( $j=1, \dots, N$ , where N is the number of panel members) determines the degree of validity  $k_{ij}$  of each of the reviewers' opinions  $S_i$ ,  $i=1, \dots, 3$  in points from **0 (bad) to 2 (good)**;
- b) the final numerical score of the application is calculated as a weighted average of the reviewer scores:

$$S = S_1\beta_1 + S_2\beta_2 + S_3\beta_3,$$

where

$$\beta_i = \frac{\sum_{j=1}^N k_{ij}}{\sum_{l=1}^3 \sum_{j=1}^N k_{lj}}, \quad i = 1, 2, 3.$$

## X. Contact information

For information related to the competitive selection and submission of proposals, please contact the NRFU contact units:

Subject matter	Contact unit
Non-technical questions regarding the submission of applications	NRFU Grant Support Division <a href="mailto:applied.2025@nrfu.org.ua">applied.2025@nrfu.org.ua</a>
Technical support questions	<a href="mailto:support@nrfu.org.ua">support@nrfu.org.ua</a>

Phone number for inquiries: +(38) 044 298 16 29

E-mail for general inquiries – [nrfu@nrfu.org.ua](mailto:nrfu@nrfu.org.ua)

*Note: please kindly note that these communication channels are available only during business hours.*

Website: <https://nrfu.org.ua/>

Mailing address: Ukraine, Kyiv, 01001, Borysa Hrinchenka Str., 1

## XI. ANNEXES

1. Application form ([link](#)).
2. Recommendations for filling out the Application ([download](#)).
3. Sample form of the Grant Agreement ([download](#)).

