



FRONTEX RESEARCH GRANTS PROGRAMME

CALL FOR PROPOSALS
2022/CFP/RIU/01 – NOVEL
TECHNOLOGIES FOR BORDER
MANAGEMENT (OPEN THEME)

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Glossary of Terms¹

Term	Definition
Academic Institution (or Academia)	<p>Non-profit legal entity (being either a private, public-private or a public body) consisting in a higher education establishment dedicated to education and scientific/technological research which is recognised as such by its national education system.</p> <p>Typical examples of Academic Institutions are private, public-private or fully state-owned Universities, Polytechnic Institutes, Institutes of Technology, Colleges, Campuses, Graduate Schools and Police or Military Academies.</p>
Action	<p>The set of activities or the project for which the grant is awarded, to be implemented by the beneficiary(ies) as described in the Grant Agreement - Annex I (see Annexes 3, 3.1, 4, and 4.1).</p> <p>Within this document, this term is used as synonym of “research project”.</p>
Action grant	<p>According to Article 180(2) FR, “<i>an action intended to help achieve a Union policy objective</i>”.</p>
Affiliated entity	<p>In accordance with Article 187 FR, entities that satisfy the eligibility criteria and that do not fall within one of the situations referred to in Articles 136(1) and 141(1) FR and that have a link with the applicant, in particular a legal or capital link, which is neither limited to the action nor established for the sole purpose of its implementation, will be considered as entities affiliated to the applicant.</p>
Agency	<p>Frontex, the European Border and Coast Guard Agency, governed by the Regulation (EU) 2019/1896 of 13 November 2019 on the European Border and Coast Guard (OJ L 295, 14.11.2019, p. 1).</p>
Applicant	<p>Participating entity that submits a grant application under this Call for Proposals.</p> <p>In the case of an application submitted by multiple co-applicants, the applicant that applies on behalf of other organisations involved in a consortium is defined as a “Coordinator”.</p>
Beneficiary	<p>An applicant whose application was successful during the evaluation and awarding process under this Call for Proposals and who signs a Grant Agreement for the implementation of an action, being recipient of a Frontex grant.</p> <p>The beneficiaries are fully responsible towards Frontex for implementing the Grant Agreement and for complying with all its obligations.</p> <p>In the case of an application submitted by multiple co-applicants, all the consortium members indicated in the Grant Agreement are beneficiaries and are responsible for the implementation of the action.</p>
CET	<p>Central European Time, the standard time of Central Europe.</p>
Consortium	<p>A group of entities set up to jointly submit an application under this Call for Proposals and to implement the corresponding action if the grant is awarded. A consortium must appoint one member (Coordinator) who is in charge of sending the proposal on behalf of the consortium and who will sign the Grant Agreement. The details of how the members of a consortium will cooperate are an internal matter for the consortium.</p>

¹ Other definitions can be found in the Model Grant Agreements - Annex II - General Conditions (see [Annexes 3.2 and 4.2](#)) Article II.1.

Term	Definition
Consortium member	Any entity which is part of a Consortium.
Contact Person	<p>Person authorised by the applicant to submit an application under this Call for Proposals on its behalf and to act as single point of contact between the applicant and Frontex for any administrative and/or technical matters related to the application and, if the grant is awarded, to the project implementation. This person will be contacted by Frontex concerning the proposal (e.g. for additional information, invitation to meetings, sending of evaluation results, convocation to start grant preparation).</p> <p>In the case of an application submitted by multiple co-applicants, the Contact Person for the coordinating organisation will become the primary contact person for Frontex.</p>
Coordinator	If an application is submitted by a consortium: this member of the consortium acts on behalf of the consortium vis-à-vis Frontex, including signing the Grant Agreement, requesting and receiving payments from Frontex, distributing funds to the consortium members, reporting to Frontex.
Data Protection Regulation	Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, L295, 21.11.2018, p. 39-98.
DoA	Description of the Action
EU bodies	Legal entities created under EU law including decentralised agencies.
European Border and Coast Guard (EBCG)	According to Article 4 of the Regulation (EU) 2019/1896 the EBCG consists of: “the national authorities of Member States responsible for border management, including coast guards to the extent that they carry out border control tasks, the national authorities responsible for return and the European Border and Coast Guard Agency (‘the Agency’).”
European Union classified information (EUCI) or, in short “EU classified information” or “classified information”	According to the Commission Decision (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information: “Any information or material designated by an EU security classification, the unauthorised disclosure of which could cause varying degrees of prejudice to the interests of the European Union or of one or more of the Member States”.
EU classified background information	EUCI which is already categorised as such by a country and/or international organisation and/or the EU and is going to be used by the project.
EU classified foreground information	EUCI (documents/deliverables/materials) planned to be generated by the project, which therefore needs to be protected from unauthorised disclosure.

Term	Definition
FR	<p><u>Financial Regulation.</u> Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union.</p>
Frontex Regulation	<p>Regulation (EU) 2019/1896 of the European Parliament and of the Council of 13 November 2019 on the European Border and Coast Guard and repealing Regulations (EU) No 1052/2013 and (EU) 2016/1624, Official Journal of the European Union L 295, 1-131, 2019.</p>
Implementation period	<p>The period of implementation of the activities forming part of an action funded under this Call for Proposals, as specified in the Grant Agreement Article I.2.2.</p>
GA	<p>Grant Agreement</p>
Independent legal entities	<p>Non-dependent legal entities.</p> <p>Two participants (legal entities) are “dependent” on each other where there is a controlling relationship between them:</p> <ul style="list-style-type: none"> • a legal entity is under the same direct or indirect control as another legal entity; or • a legal entity directly or indirectly controls another legal entity; or • a legal entity is directly or indirectly controlled by another legal entity. <p>The following definition of “control” applies: Legal entity A controls legal entity B if:</p> <ul style="list-style-type: none"> • A, directly or indirectly, holds more than 50% of the nominal value of the issued share capital or a majority of the voting rights of the shareholders or associates of B, or • A, directly or indirectly, holds in fact or in law the decision-making powers in B. <p>The following relationships between legal entities shall not in themselves be deemed to constitute controlling relationships:</p> <p>(a) the same public investment corporation, institutional investor or venture-capital company has a direct or indirect holding of more than 50 % of the nominal value of the issued share capital or a majority of voting rights of the shareholders or associates;</p> <p>(b) the legal entities concerned are owned or supervised by the same public body.</p>
International European research organisations	<p>An international organisation, the majority of whose members are Member States or associated countries, whose principal objective is to promote scientific and technological cooperation in Europe.</p>
Legal entity	<p>Legal person created and recognised as such under European Union, national or international law, which has legal personality and the capacity to act in its own name, exercise rights and be subject to obligations.</p> <p>For the purpose of Frontex Research Grants, the definition of “legal entity” <u>does not include</u> natural persons and entities which do not have legal personality as referred to in point (c) of Article 197(2) of the Financial Regulation.</p>

Term	Definition
Legal personality	Applicant's capacity to sign contracts and constitute a party in court proceedings under the applicable national legislation.
Legal Representative	<p>Person authorised by the applicant(s) to sign the Grant Agreement if the grant is awarded in relation to an application under this Call for Proposals, and responsible for signing any legal binding documents related to Frontex Research Grants on behalf of the applicant.</p> <p>In the case of an application submitted by multiple co-applicants, the Legal Representative of the coordinating organisation will legally represent all the co-applicants by virtue of a specific mandate.</p>
Lump sum	Simplified form of cost estimation in a grant, calculated in accordance with the beneficiary's usual cost accounting practices for specific activities and specific categories of eligible costs which are clearly identified in advance.
MS	Member State of the European Union
Non-profit legal entity	Legal entity which by its legal form is non-profit-making and/or which has a legal or statutory obligation not to distribute profits to its shareholders or individual members.
Non-profit public body	Legal entity which cumulatively meets the conditions of being a 'public body' and of being a 'non-profit legal entity'.
Project results	What is generated during the project implementation, consisting of any tangible or intangible effect of the project, such as data, know-how or information, whatever its form or nature, whether or not it can be protected, as well as any rights attached to it, including intellectual property rights. Project results may include, for example, know-how, innovative solutions, algorithms, proof of feasibility, proof of concepts, new business models, policy recommendations, guidelines, prototypes, demonstrators, databases and datasets, trained researchers, new infrastructures, networks, etc. Most project results (inventions, scientific works, etc) are 'Intellectual Property', which may, if appropriate, be protected by formal 'Intellectual Property Rights'.
Public body	<p>Legal entity established as such by national law (including local, regional or national authorities) in the Member States of the EU or Schengen Associated Countries. 'Established as public body by national law' means:</p> <ol style="list-style-type: none"> 1) incorporated as a public body in the formal act of creation or recognised as public body by the national law and 2) governed by public law. <p>However, public bodies may act and be subject to private law for some or most of their activities.</p> <p>International organisations are excluded from this definition.</p>
RAO	Responsible Authorising Officer

Term	Definition
Research infrastructures	Facilities that provide resources and services for the research communities to conduct research and foster innovation in their fields, including the associated human resources, major equipment or sets of instruments; knowledge-related facilities such as collections, archives or scientific data infrastructures; computing systems, communication networks and any other infrastructure of a unique nature and open to external users, essential to achieve excellence in RTDI; they may, where relevant, be used beyond research, for example for education or public services and they may be 'single sited', 'virtual' or 'distributed'.
Research Organisation	<p>Non-profit legal entity (being either a private, public-private or a public body) which carries out scientific Research and/or Technological Development (RTD) as one of its main objectives. The mere financing of RTD activities carried out by other entities, the dissemination of knowledge and the promotion or coordination of research activities are not considered as RTD activities within the sense of this definition.</p> <p>Typical examples of Research Organisations are private, public-private or fully state-owned non-profit research institutes, Research and Technology Organisations (RTOs), RTD-performing foundations, research incubators, innovation hubs/districts and law enforcement or EBCG national authorities conducting research in the area of border management technologies.</p>
RTD	Research and/or Technological Development.
RTDI	Research, Technology, Development and Innovation.
Schengen Associated Countries (or SAC)	Iceland, Liechtenstein, Norway, Switzerland.
Sensitive information	Information that should not be made public (e.g. commercially sensitive information, business or trade secrets, confidential market data, valuable results not yet protected by intellectual property rights, security-sensitive information, etc). If the project involves sensitive information, this should be identified and handled as 'sensitive' by the applicant(s)/ beneficiary(ies).
Subcontractor	Economic operator that would be proposed by a beneficiary to perform part of the tasks co-financed by the grant (see FR, Article 2 - Definitions).
TO IBM	Technical and Operational Strategy for European Integrated Border Management.
Technological solution	Technological component or system, having the form of a technological concept, proof-of-concept or prototype foreseen to be formulated, realised, validated or demonstrated in the course of the funded research project.

Term	Definition
Technology Readiness Levels (TRL)	<p>The following specific definitions apply, extracted from Frontex Research Glossary, page 38.</p> <ul style="list-style-type: none"> • TRL 1 – Basic principles observed • TRL 2 – Technology concept formulated • TRL 3 – Experimental proof of concept • TRL 4 – Technology validated in lab • TRL 5 – Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies) • TRL 6 – Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies) • TRL 7 – System prototype demonstration in operational environment • TRL 8 – System complete and qualified • TRL 9 – Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space).
Work Package (WP)	<p>A single task or a group of related tasks to be conducted within the project to achieve a certain intermediate result. WPs must be defined on the basis of the logical structure of the project and the stages in which it must be carried out. The number of work packages in a proposed action shall be proportionate to its scale and complexity.</p>

1. Introduction - Background

1.1. Frontex Research Grants Programme

One of the tasks of Frontex Research and Innovation is to generate high quality, independent and cutting edge technological and operational research that supports the Technical and Operational Strategy for European Integrated Border Management (TO IBM)². The Frontex Research Grants Programme specifically supports the following actions³ under the Objective 3.5 of the TO IBM:

- a) **Action 3.5.1 “Institutionalise and stimulate innovation”**, which aims to stimulate innovation by identifying, capturing, assessing and implementing innovative ideas through an “institutionalised innovation mechanism”. This ensures that EBCG capabilities are continuously developed to improve mid-term performance and prepare for the future.
- b) **Action 3.5.2 “Perform horizon scanning of available science and technological developments”**, focused, among others, on activities that strengthen links with national research and innovation related institutes as well as contribute and coordinate monitoring of science and technological developments making them available to MS/SAC and Third Countries. The main desired output from this action is to foster Frontex’s role as EBCG knowledge hub and observatory of border management research, innovation and technological developments.

Guided by these TO IBM actions, Frontex Research and Innovation continuously seeks to engage with a variety of cross-sectorial research partners who play an important role in developing novel technological solutions for the advancement of border security. Pooling the research capabilities of non-profit research organisations and academia is essential in developing technologies that serve the interest of society. The Frontex Research Grants Programme is a step towards incentivizing and facilitating the dialogue with these institutions and maximizing the impact of their applied research activities.

Given the above, **the main objective of the Frontex Research Grants Programme is to accelerate and maximise the impact of technological research in border management by co-funding small-scale research projects of non-profit research organisations and academic institutions operating in EU MSs/SACs.**

1.2. Legal basis

The legal basis under which the Frontex Research Grants Programme has been setup, and this Call for Proposals has been published, is Regulation (EU) 2019/1896⁴ of 13 November 2019 on the European Border and Coast Guard, OJ L 295, 14.11.2019, p. 1 (Frontex Regulation). In particular:

- Pursuant to Article 3(2) of the Regulation, fundamental rights, education and training, as well as research and innovation shall be overarching components in the implementation of European integrated border management.
- Pursuant to Article 10(1)(x) of the Regulation, the Agency shall participate in the development and management of research and innovation activities relevant for the control of the external borders, including the use of advanced surveillance technology, and develop its own pilot projects, where necessary, for the carrying out of activities as provided for in the Regulation.
- Pursuant to Article 66 of the Regulation, the Agency shall proactively monitor and contribute to research and innovation activities relevant for European integrated border management including the use of advanced border control technology, taking into account the capability roadmap referred to in Article 9(8).

Furthermore, the management of the Frontex Research Grants Programme is subject to the Frontex Financial Regulation⁵ adopted by the Management Board Decision 19/2019. In accordance with this Regulation the relevant provisions of the Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union⁶ shall apply.

² <https://op.europa.eu/en/publication-detail/-/publication/2123579d-f151-11e9-a32c-01aa75ed71a1>

³ Not to be confused with the definition of “action” given in the [Glossary of Terms](#).

⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1573722151667&uri=CELEX:32019R1896>

⁵ https://prd.frontex.europa.eu/wp-content/uploads/mb_decision_19_2019_adopting_the_frontex_financial_regulation_002.pdf

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:193:TOC>

The implementation of the Frontex Research Grants Programme has also been authorised through the Management Board Decision 50/2022⁷ of 14 September 2022 adopting amendment N1 to the Single Programming Document 2022 - 2024⁸.

The use of Frontex contribution in the form of reimbursement of the eligible costs of the actions declared by the beneficiaries on the basis of a lump sum calculated in accordance with their usual cost accounting practices, for actions under the Frontex Research Grants Programme, has been authorised through a Decision of the Executive Director of Frontex.

2. Objectives - Themes - Priorities

2.1. General objectives

The general objectives of this call are to:

- a) Support European non-profit research and academic communities in bringing forward innovation by inviting them to propose small-scale research projects aimed at developing future-oriented technological concepts, proof-of-concepts or prototypes in support of specific and concrete border security needs, and providing a streamlined and simplified funding mechanism to these projects.
- b) Advance scientific knowledge of the European Border and Coast Guard (EBCG) by exploring the potential use of the outcomes of such research projects in the operational environments.

2.2. Specific objectives

In line with the legal basis described in [paragraph 1.2](#), with main reference to the need to conduct and participate in the development and management of the necessary research and innovation activities relevant for contributing to the European integrated border management through the use of advanced border control technologies, with this Call for Proposals Frontex wants to achieve the following three specific objectives:

1. Scouting - Discover R&I on cutting-edge technologies available in the EU's non-profit academic and research organisations' ecosystem with a potential to address current border management operational challenges and respond to emerging threats.
2. Guidance - Develop innovative technological solutions by encouraging non-profit EU R&I actors to shape their small-scale technological research products in a way capable to satisfy the operational requirements of the EBCG community.
3. Scale-up - Support the transition of current small-scale R&I in fields of relevance for border security to higher technology readiness levels, incentivising the realisation of experimental proof-of-concepts and prototypes, as well as validations and demonstrations in relevant environments.

2.3. Themes

This is a Call for Proposals with “open theme” dedicated to Research, Technology, Development & Innovation (RTDI) projects (hereinafter referred to simply as “research projects” or “actions”) tackling any technology with a high innovation potential and addressing a broad range of operational tasks relevant to border management. In this sense, there are no restrictions on the research themes that can be proposed by the applicants, or on narrowly defined subject matter requirements, as long as the priorities of the Call listed in [paragraph 2.4](#) are met.

⁷ The document can be found under this [link](#).

⁸ <https://prd.frontex.europa.eu/document/single-programming-document-2022-2024/>

2.4. Priorities

A project proposal in response to this Call must target **research activities having the following essential characteristics** (hereinafter called “priorities”):

- **Priority 1 - Focus on applied research**: Shall focus on the realisation of a new or improved technological solution⁹ which has already passed the fundamental research stage (TRL 1 - Basic principles observed)¹⁰ at the date of submission of the application. The ambition shall be to bring the proposed technological solution to a maturity level not exceeding the stage of a system prototype demonstration (TRL 7) by the end of the implementation period. It is hoped that the funded research activities will ultimately lead to future development and market uptake (which is beyond the scope of this funding). In this respect, the following research activities must be targeted by the proposed project in relation to the targeted TRLs:

Target TRL	TRL Definition	Targeted research activities
2	Technology concept formulated	Activities that aim to formulate novel technological concepts, capable to respond to critical needs in border security.
3	Experimental proof-of-concept	Analytical and laboratory experimental studies to demonstrate the feasibility of novel or upgraded technological products (components, systems or processes) to achieve a proof-of-concept. The proof-of-concept is intended as an unrefined and unfinished version of a technological product to showcase its essential functionalities for testing and feedback by relevant stakeholders.
4	Technology validated in a laboratory	Activities to design a tangible laboratory-scale prototype of the envisaged novel solution, including the definition of its technical specifications on which such design is developed. These activities shall include any preliminary laboratory tests for reducing the risks linked to the introduction in the operational environment of border security.
5	Technology validated in a relevant environment	Activities that aim to realise a reduced-scale prototype of the envisaged novel solution and to provide objective evidence that, when in use, it fulfils its business or mission objectives. The prototype shall achieve its intended use in a laboratory environment that closely simulates the future operational border security environment. The validation process shall provide confidence that “the right product is built” and meets the needs of the EBCG community.
6	Technology demonstrated in a relevant environment	Activities that aim to provide objective evidence, through a proper testing campaign, that the reduced-scale prototype of the envisaged novel solution fulfils its specified technical requirements and characteristics, when operated in a laboratory environment that closely simulates the future operational border security environment The purpose of the demonstration process shall be to provide evidence that the product is free from errors, defects or faults, ensuring that “the product is built right”.

⁹ See the definition of “technological solution” in the [Glossary of Terms](#).

¹⁰ The definition of “Technology Readiness Levels” can be found in the [Glossary of Terms](#).

Target TRL	TRL Definition	Targeted research activities
7	System prototype demonstration in an operational environment	<p>Activities for the realisation of a full-scale prototype of the envisaged novel solution, and execution of validation and demonstration activities in a realistic environment as close as possible to the intended border security operational one.</p> <p>These activities shall cover not only the prototype itself but also all the interfaces with its operational environment, in order to demonstrate that the properties of the realized product meet the applicable requirements. The process shall be concluded by an operational readiness review.</p>

The targeted TRLs (between TRL 2 and TRL 7) shall refer to the development of technological solutions in the form of novel components or systems. In particular:

- if components are targeted in the research project, the TRL shall refer to the components, and their suitability for integration into systems must be clearly demonstrated;
- if the research aims at developing a system, the TRL shall refer to the level or readiness of the integrated system and its functionalities as a whole, not necessarily to its components for which both novel and off-the-shelf solutions may be adopted.
- **Priority 2 - Present innovation potential:** Shall focus on a technological solution that has an ambitious innovation target and goes beyond the state-of-the art by demonstrating at least one of the following characteristics:
 - be based on novel or improved concepts and approaches which have not been previously applied in the mainstream market;
 - addresses unique, disruptive or transformational technologies;
 - involves a high degree of technical risk (for example has never been attempted or is still facing technical hurdles);
 - demonstrates potential for significant market impact (e.g. having the potential to disrupt the targeted market segments if successfully developed).

The proposed research shall focus not on currently marketed or existing technological solutions, but on new, future-oriented ones which have not been previously published or commercially exploited.

- **Priority 3 - Realise a viable technological solution:** shall conduct to a technological solution which is feasible, cost-effective and suitable to be operationalised.
- **Priority 4 - Contribute to the Thematic Categories:** shall contribute to at least one of the seven **Thematic Categories** listed in [Appendix A](#), representative of the typical mission-relevant technologies distinctive for the European Border and Coast Guard:
 1. Technologies for Border Checks
 2. Technologies for Border Surveillance and Situational Awareness
 3. Technologies for Information and Communication Management and Data Analytics
 4. Simulation Tools
 5. Technologies for Standing Corps¹¹ and Logistic Support

¹¹ For the Standing Corps functions and composition, see *Frontex Regulation, Article 54*.

6. Advanced Technologies for Environmentally Sustainable Systems and Operations (cross-cutting Thematic Category)
7. Disruptive, Emerging and Key Enabling Technologies (cross-cutting Thematic Category)

Within each of the Thematic Categories, a broad range of **Key Areas of Research** have been identified and listed in [Appendix A](#). However, while the seven Thematic Categories shall be targeted by the research projects funded under this call, the listed Key Areas of Research must only be intended as indicative (i.e. non-mandatory) and non-exhaustive, as the ultimate goal of this open call is to seek innovative ideas of relevance for border management, across all the Thematic Categories.

Where possible and relevant, Frontex also encourages the applicants to find synergies or complementarities with foreseen, ongoing or completed research projects conducted in the MSs/SACs in the field of border security, notably EU-funded actions under Horizon 2020 and Horizon Europe¹² (possibly exploiting the results of such actions if already available) or the most recent research studies conducted by Frontex: [“Artificial Intelligence - based capabilities for European Border and Coast Guard The European”](#), [“The Green Deal and the European border and Coast Guard”](#) and the [“Technology Foresight on Biometrics for the Future of Travel”](#).

In general, the proposed project can be part of a larger-scale research initiative of the applicants or to which the applicants are taking part (e.g. a larger-scale research project or a program) which is funded by other sources. However, under no circumstances shall the same costs be financed twice by the European Union budget¹³.

2.5. Expected outputs

Project proposals submitted in response to this Call, shall result in the **development of novel technological concepts, proof-of-concepts or prototypes to be formulated, realised, validated or demonstrated in the course of the project implementation.**

The outcomes of a funded research project must be clearly illustrated by the beneficiary(ies) in a **Research Report** which shall have the content described in [paragraph 11.6.1](#).

The assessment of the degree of compliance of the proposed research projects with the General Objectives ([paragraph 2.1](#)), Specific Objectives ([paragraph 2.2](#)) Themes ([paragraph 2.3](#)), Priorities ([paragraph 2.4](#)) and Expected Outputs ([paragraph 2.5](#)) of the call will be carried out within the evaluation of the award criterion “Scope of the Research” (see [paragraph 9.2](#)).

3. Timetable

The following table summarises the indicative schedule for the different steps and stages of the selection procedure under this Call for Proposals:

Steps		Date and time or indicative period
(a)	Publication of the Call for Proposals	December 2022
(b)	Deadline for submitting requests for clarifications	27 February 2023 12:00 CET
(c)	Last day of publication of the clarifications	02 March 2023 12:00 CET

¹² See some examples of EU-funded projects in the field of border security under Frontex EU Research webpage <https://frontex.europa.eu/future-of-border-control/eu-research/horizon-projects/>.

¹³ For more information about the principle of “Non-cumulative award” please refer to Article 196(1)(f) FR and [paragraph 11.7](#).

Steps		Date and time or indicative period
(d)	Deadline for submitting applications	05 March 2023 12:00 CET
(e)	Evaluation period	April 2023
(f)	Information to applicants on the outcome of the evaluation	May 2023
(g)	Signature of Grant Agreements	May 2023

4. Budget available

The total budget earmarked for the co-financing of projects under this Call for Proposals is estimated at **250,000 EUR**. Frontex reserves the right not to distribute all the funds available.

5. Admissibility requirements

In order to be admissible, applications must be:

- a) sent to Frontex no later than the “Deadline for submitting applications” referred to in [section 3](#);
- b) sent electronically by email to researchgrants@frontex.europa.eu, using the forms available at <https://frontex.europa.eu/about-frontex/grants/> under the relevant section dedicated to this Call for Proposals, and following the procedure described in [section 14](#);
- c) drafted in English.

Failure to comply with those requirements will lead to rejection of the application.

6. Eligibility criteria

Applicants that do not comply with the conditions in [paragraph 6.1](#) and/or submit a proposal that do not comply with the conditions in [paragraph 6.2](#) below, will not be considered eligible, therefore not allowed to participate in this Call for Proposals and to submit a proposal for an action.

6.1. Eligible applicants

Applicants submitting project proposals under this call must satisfy all of the following eligibility requirements¹⁴:

- a) must be ***non-profit legal entities***;
- b) must be *legal entities* established in one or more EU Member States of the European Union or Schengen Associated Countries¹⁵. Established should be understood as having a registered office, central administration or principal place of business in one of these countries;
- c) must belong to at least one of the following **categories of entities**:

a. Research Organisation

Non-profit legal entity (being either a private, public-private or a *public body*) which carries out scientific research and/or technological development (RTD) as one of its main objectives. The mere financing of RTD activities to be carried out by other entities, the dissemination of knowledge and

¹⁴ Within this paragraph, the terms written in italics are those for which a definition is provided in the [Glossary of Terms](#).

¹⁵ Iceland, Liechtenstein, Norway and Switzerland.

the promotion or coordination of research activities are not considered as RTD activities within the sense of this definition.

Typical examples of Research Organisations are private, public-private or fully state-owned non-profit research institutes; Research and Technology Organisations (RTOs), RTD-performing foundations, research incubators, innovation hubs/districts and law enforcement or EBCG national authorities conducting research in the area of border management technologies.

b. Academic Institution

Non-profit legal entity (being either a private, public-private or a *public body*) consisting in a higher education establishment dedicated to education and scientific/technological research which is recognised as such by its national education system.

Examples of academic institutions are private, public-private or fully state-owned universities, polytechnic institutes, institutes of technology, colleges, campuses, graduate schools and police or military academies.

Please note that the following categories of entities are **not eligible** for funding under this call:

- natural persons
- entities which do not have legal personality
- profit-making entities
- *EU bodies*
- *International European research organisations*
- *legal entities* directly or indirectly controlled from any third countries
- **Any third parties**, including but not limited to affiliated entities to the applicants, subcontractors, third parties receiving financial support from the applicants, as well as third parties giving in-kind contributions to the applicants; also, these cannot be delegated by the applicants to conduct the tasks indicated in the proposal.

- d) must have the appropriate **operational capacity** in terms of know-how, qualifications, experience and *research infrastructures* to implement the project under their own responsibility. If the proposal is selected for award, the applicant(s) will be the sole responsible towards the granting authority for implementing the project and for complying with all the obligations set out in the Grant Agreement. The operational capacity of the applicants will be assessed at the time of the evaluation of the proposal (please refer to [paragraph 8.2](#) and [section 9](#))

An application can be submitted by a **single applicant** or **multiple independent co-applicants**. The following provisions apply in the two distinct cases:

a) Application submitted by a single applicant.

In this case the grant will be considered as a **mono-beneficiary grant** if the proposal is selected for award.

The single applicant must satisfy all the eligibility requirements a) to d) listed above.

If the proposal is selected for award, the general obligations of the beneficiary will be those set out in the Annex II to the Grant Agreement (General Conditions) - Article II.2 (see [Annexes 3 and 3.2](#)).

b) Application submitted by multiple co-applicants.

In this case the co-applicants will form a **Consortium** and will become consortium members; if the proposal is selected for award, the grant will be considered as a **multi-beneficiary grant**, and each co-applicant will be considered as co-beneficiary.

In order to be eligible, a consortium must be composed of at least two (2), and no more than four (4), eligible independent legal entities. Consortia with less than 2 or more than 4 legal entities are **not eligible** for funding under this call.

Each of the co-applicants forming a Consortium must satisfy the same eligibility requirements a) to d) listed above.

In a project proposal submitted by a Consortium, the Consortium members shall be clearly identified as well as the activities each of them is involved in. In particular, the consortium members should choose amongst them a lead organisation, referred to as the “Coordinator”.

The Coordinator shall be responsible for:

- submitting the application in response to this Call for Proposals on behalf of the consortium and will be the intermediary for all communications between the co-applicants and Frontex;
- supplying all documents and information to Frontex in due time upon request.

If the proposal is selected for award, the general obligations and roles of the Coordinator and each beneficiary will be those set out in the Annex II to the Grant Agreement (General Conditions) - Article II.2 (see [Annexes 4 and 4.2](#)).

Supporting documents

In order to assess the applicants' eligibility, the following supporting documents are requested:

- a **Legal Entity Form** (see [Annex 1.1 or 2.2](#)).
- a **Declaration on Honour** (see [Annex 1.3 or 2.4](#));

6.2. Eligible activities

A project proposal in response to this Call will only be considered eligible if the targeted research activities:

- a) comply with the General Objectives (see [paragraph 2.1](#)), the Specific Objectives ([paragraph 2.2](#)) and the Themes ([paragraph 2.3](#)) of the Call;
- b) address the Priorities of the call (see [paragraph 2.4](#));
- c) aim to produce the Expected Outputs described in [paragraph 2.5](#).

In relation to the “Priority 1” (see [paragraph 2.4 - Priority 1 - Focus on applied research](#)), please note that:

- research activities targeting **TRL 1 (Basic principles observed)**, intended as activities that aim to conduct fundamental (not applied) research or observe basic principles, **are not eligible** under this Call.
- the entry TRL of the proposed technological solution and the TRL to be reached by the end of the implementation period must be clearly indicated in the project proposal (Grant Application Form - Section 4 Description of the action) and be consistent with the “TRL Definition” and the corresponding description of the “Targeted research activities” provided in the table under the same “Priority 1”.

Implementation period: The duration of a project proposed under this call must be **between 6 months and 12 months**. In no circumstances the overall duration of a project funded under this call can exceed 12 months. Applications for projects scheduled to run for shorter than 6 months or longer than 12 months **will not be accepted**.

7. Exclusion criteria

7.1. Exclusion

The authorising officer shall exclude an applicant from participating in Call for Proposals procedures where:

- (a) the applicant is bankrupt, subject to insolvency or winding-up procedures, its assets are being administered by a liquidator or by a court, it is in an arrangement with creditors, its business activities are suspended, or it is in any analogous situation arising from a similar procedure provided for under EU or national laws or regulations;
- (b) it has been established by a final judgment or a final administrative decision that the applicant is in breach of its obligations relating to the payment of taxes or social security contributions in accordance with the applicable law;

- (c) it has been established by a final judgment or a final administrative decision that the applicant is guilty of grave professional misconduct by having violated applicable laws or regulations or ethical standards of the profession to which the applicant belongs, or by having engaged in any wrongful intent or gross negligence, including, in particular, any of the following:
 - (i) fraudulently or negligently misrepresenting information required for the verification of the absence of grounds for exclusion or the fulfilment of eligibility or selection criteria or in the performance of a contract, a grant agreement or a grant decision;
 - (ii) entering into agreement with other applicants with the aim of distorting competition;
 - (iii) violating intellectual property rights;
 - (iv) attempting to influence the decision-making process of Frontex during the award procedure;
 - (v) attempting to obtain confidential information that may confer upon the applicant undue advantages in the award procedure;
- (d) it has been established by a final judgment that the applicant is guilty of any of the following:
 - (i) fraud, within the meaning of Article 3 of Directive (EU) 2017/1371 of the European Parliament and of the Council and Article 1 of the Convention on the protection of the European Communities' financial interests, drawn up by the Council Act of 26 July 1995;
 - (ii) corruption, as defined in Article 4(2) of Directive (EU) 2017/1371 or Article 3 of the Convention on the fight against corruption involving officials of the European Communities or officials of Member States of the European Union, drawn up by the Council Act of 26 May 1997, or conduct referred to in Article 2(1) of Council Framework Decision 2003/568/JHA or corruption as defined in the applicable law;
 - (iii) conduct related to a criminal organisation, as referred to in Article 2 of Council Framework Decision 2008/841/JHA;
 - (iv) money laundering or terrorist financing within the meaning of Article 1(3), (4) and (5) of Directive (EU) 2015/849 of the European Parliament and of the Council;
 - (v) terrorist offences or offences linked to terrorist activities, as defined in Articles 1 and 3 of Council Framework Decision 2002/475/JHA, respectively, or inciting, aiding, abetting or attempting to commit such offences, as referred to in Article 4 of that Decision;
 - (vi) child labour or other offences concerning trafficking in human beings as referred to in Article 2 of Directive 2011/36/EU of the European Parliament and of the Council;
- (e) the applicant has shown significant deficiencies in complying with main obligations in the performance of a contract, a grant agreement or a grant decision financed by the Union's budget, which has led to its early termination or to the application of liquidated damages or other contractual penalties, or which has been discovered following checks, audits or investigations by an authorising officer, OLAF or the Court of Auditors;
- (f) it has been established by a final judgment or final administrative decision that the applicant has committed an irregularity within the meaning of Article 1(2) of Council Regulation (EC, Euratom) No 2988/95;
- (g) it has been established by a final judgement or final administrative decision that the applicant has created an entity in a different jurisdiction with the intent to circumvent fiscal, social or any other legal obligations of mandatory application in the jurisdiction of its registered office, central administration or principal place of business;
- (h) it has been established by a final judgement or final administrative decision that an entity has been created with the intent referred to in point (g);
- (i) for the situations referred to in points (c) to (h) above, the applicant is subject to:
 - (i) facts established in the context of audits or investigations carried out by European Public Prosecutor's Office after its establishment, the Court of Auditors, the European Anti-Fraud Office or the internal auditor, or any other check, audit or control performed under the responsibility of an authorising officer of an EU institution, of a European office or of an EU agency or body;
 - (ii) non-final judgments or non-final administrative decisions which may include disciplinary measures taken by the competent supervisory body responsible for the verification of the application of standards of professional ethics;
 - (iii) facts referred to in decisions of persons or entities being entrusted with EU budget implementation tasks;
 - (iv) information transmitted by Member States implementing Union funds;

- (v) decisions of the Commission relating to the infringement of Union competition law or of a national competent authority relating to the infringement of Union or national competition law; or
- (vi) decisions of exclusion by an authorising officer of an EU institution, of a European office or of an EU agency or body.

7.2. Remedial measures

If an applicant declares one of the situations of exclusion listed above (see [paragraph 7.1](#)), it must indicate the measures it has taken to remedy the exclusion situation, thus demonstrating its reliability. This may include e.g. technical, organisational and personnel measures to correct the conduct and prevent further occurrence, compensation of damage or payment of fines or of any taxes or social security contributions. The relevant documentary evidence which illustrates the remedial measures taken must be provided in annex to the declaration. This does not apply for situations referred in point (d) of [paragraph 7.1](#).

7.3. Rejection from the Call for Proposals

The authorising officer shall not award a grant to an applicant who:

- (a) is in an exclusion situation established in accordance with [paragraph 7.1](#); or
- (b) has misrepresented the information required as a condition for participating in the procedure or has failed to supply that information; or
- (c) was previously involved in the preparation of documents used in the award procedure where this entails a breach of the principle of equal treatment, including distortion of competition, that cannot be remedied otherwise.

Administrative sanctions (exclusion) may be imposed on applicants if any of the declarations or information provided as a condition for participating in this procedure prove to be false.

7.4. Supporting documents

Applicants must provide a declaration on their honour certifying that they are not in one of the situations referred to in Articles 136(1) and 141 FR, by filling in the relevant form (see [Annex 1.3 or 2.4](#)) to be annexed to the Grant Application Form ([Annex 1 or 2](#)).

This obligation may be fulfilled in one of the following ways:

- a) for mono-beneficiary grants: the applicant signs a declaration in its name;
- b) for multi-beneficiary grants: the Coordinator of a consortium signs a declaration on behalf of all applicants.

8. Selection criteria

Selection criteria enable the assessment of the applicants' ability to perform the proposed action. The necessary ability of the applicants is assessed under both financial and operational aspects.

8.1. Financial capacity

Applicants must have stable and sufficient sources of funding to maintain their activity throughout the duration of the grant and to participate in its funding. The applicants' financial capacity will be assessed on the basis of a **Declaration on Honour** (see [Annex 1.3 or 2.4](#)) to be submitted with the application (see [section 14](#)).

The verification of the financial capacity shall not apply to public bodies, including Member States organisations.

On the basis of the documents submitted, if Frontex considers that financial capacity is weak, it may:

- request further information;
- where applicable, require the joint and several financial liability of all the co-beneficiaries.

If the RAO considered that the financial capacity is insufficient s/he will reject the application.

8.2. Operational capacity

Applicants must have the professional competencies as well as appropriate qualifications necessary to complete the proposed action. More specifically, the applicants must have the know-how, qualifications, experience and research infrastructures to complete the Work Packages in the project for which the grant is requested.

In this respect, applicants have to:

- submit a **Declaration on Honour** ([Annex 1.3 or 2.4](#)),
- provide the following information in the Grant Application Form ([Annex 1 or 2](#)):
 - **Know-how:** list of not more than 5 most relevant scientific achievements obtained in the last 5 years (i.e. within years 2018 to 2022) relevant to this Call's content or connected to the subject of the proposed research project. With this, the applicants must prove to be able to carry out all tasks in the relevant areas of activities indicated in the project proposal.
 - **Qualifications and Experience:** general profiles (with indication of qualifications and experience in the field covered by the project) of the researchers responsible for managing and implementing the project (**Project Team**). The applicants must prove that the Project Team members have a relevant technical competence and a high degree of specialisation in the areas pertaining to the activities subject to the proposal.
 - **Research Infrastructures:** Description and location of the research infrastructures, including facilities (e.g. offices, laboratories, assembling and testing capabilities), assets and resources (e.g. the technical equipment, tools, software, patents) to be used for the purpose of the project. The applicants must prove to have at their disposal research infrastructures with relevant design and/or development and/or testing tools necessary to implement the proposed project.

Additional supporting documents may be requested by Frontex if they are needed to confirm the operational capacity of the applicant.

The assessment of operational capacity will be carried out during the evaluation of the award criterion '*Quality and efficiency of the implementation*' (see [paragraph 9.2](#)). It will be based on the competence and experience of the applicant(s) and the Project Team, including the operational resources (human, technical and other). If the evaluation of this award criterion leads to a score above the applicable threshold, then the applicant(s) is/are considered to have sufficient operational capacity.

9. Evaluation and awarding procedure

9.1. Evaluation procedure

After the deadline for submitting applications indicated in [section 3](#), all the applications received will be opened and evaluated by the Evaluation Committee to determine whether the applications meet the criteria and conditions defined in this Call for Proposals. During the evaluation, the following assessments are performed by the Evaluation Committee in sequence:

- Admissibility:** see [section 5](#);
- Eligibility:** see [section 6](#);
- Exclusion:** see [section 7](#);

- d) **Selection:** see [section 8](#);
- e) **Ethics, Values and the use of AI:** see [Annex 7](#);
- f) **Security:** see [Annex 8](#);
- g) **Scoring, Ranking and Awarding:** the proposed action will be scored against the award criteria, ranked and finally selected for awarding the Frontex Research Grant according to the criteria defined in [paragraphs 9.2 and 9.3](#).

Proposals failing to pass at least one of the assessments a) to f) will be rejected and not be subject to further assessments in the subsequent steps.

The Evaluation Committee may ask an applicant to provide additional information or to clarify the supporting documents submitted in connection with the application, in particular in the case of evident clerical errors.

After the completion of the assessments of all the received applications, all applicants will be duly informed in writing about their results of the evaluation with the modalities described in [paragraph 9.3](#).

9.2. Award criteria and scoring

Eligible applications will be assessed on the basis of the three award criteria indicated in the following table. When assessing these criteria, the Evaluation Committee will take into account the corresponding sub-criteria listed in the table for each of them, analysing the extent to which the proposed research project fulfils the requirements of this Call for Proposals.

Award Criteria	Sub-criteria	Minimum Score (threshold)	Maximum Score
Excellence	• Clarity and pertinence of the research project’s objectives.	3	5
	• Soundness of the proposed research methodology, including the underlying concepts, models, assumptions and approaches.		
Scope of the Research	• Extent to which the scope of the proposed research meets the objectives (general and specific), themes, priorities and expected outputs of the Call (see section 2).	3	5
Quality and efficiency of implementation	• Quality and effectiveness of the work plan and of the assessment of risks.	3	5
	• Appropriateness of the human, instrumental and financial resources assigned to the proposed research activities.		
	• Extent to which the applicant(s) has/have the operational capacity to successfully perform the proposed project activities in terms of know-how, qualifications, experience and research infrastructures (see paragraph 8.2)		
Total score for the evaluated action (sum of the scores of the three criteria)		Minimum Overall Score (overall threshold)	Maximum Overall Score
		9	15

The following rules apply for scoring the proposals:

- a) Evaluation scores will be awarded for the three criteria, and not separately for the different sub-criteria listed in the above table under each criterion.
- b) Each criterion will be scored out of 5, with half-points allowed, according to the rationale described in the table below.
- c) The threshold for individual criteria will be 3. Proposals that will get a score below this threshold in at least one of the individual criteria will be rejected.
- d) The final assessment and overall score of a proposal will result from a consensus of the Evaluation Committee. The overall score of a proposal will be determined by computing the sum of the scores against each individual award criterion. The overall score of a proposal will therefore range from 0.0 to 15.0.
- e) The threshold for the overall score will be 9 out of 15 points. Proposals that will get an overall score below 9 will be rejected.

Proposals whose scores pass the threshold for individual criteria (and correspondingly the threshold for the overall score) will be considered for funding, within the limits of the available call budget. Other proposals will be rejected.

Score	Rationale
0	The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.
1	Poor - The criterion is inadequately addressed in the proposal, or there are serious inherent weaknesses.
2	Fair - The proposal broadly addresses the criterion, but there are significant weaknesses.
3	Good - The proposal addresses the criterion well, but a number of shortcomings are present.
4	Very Good - The proposal addresses the criterion very well, but a small number of shortcomings are present.
5	Excellent - The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

9.3. Ranking mechanism and award decision

The proposals assessed according to the criteria described in [paragraph 9.2](#) will be ranked by the Evaluation Committee based on their consensus overall score, from the highest to the lowest score (ranking list).

The following approach will be applied successively for every group of ex aequo proposals (if any) in order to determine a priority order for proposals with the same score, starting with the highest scored group, and continuing in descending order:

- a) Proposals that address aspects of the call that have not otherwise been covered by more highly ranked proposals will be considered to have the highest priority.
- b) The proposals identified under a), if any, will themselves be prioritised according to the scores they have been awarded for ‘*Excellence*’. When these scores are equal, priority will be based on scores for ‘*Impact*’. When these scores are equal, priority will be based on scores for “*Quality and efficiency of implementation*”.
- c) If a distinction still cannot be made, the Evaluation Committee may decide to further prioritise by considering other factors related to the objectives of the call. These factors will be documented in the Evaluation Committee consensus report.
- d) The method described in (a), (b) and (c) will then be applied to the remaining ex aequos in the group.

The Evaluation Committee will adopt an award decision based on the ranking list and the available budget for the Call. Only the proposals with the highest rank will be selected for awarding the Research Grant, while the remaining proposals will be put on a reserve list.

At the end of the evaluation, all applicants will be informed of the result. Applicants of the selected proposals will be invited to enter into Grant Agreement preparation (see [section 10](#)) with Frontex. For the proposals on the reserve list, the applicants will be informed that their proposal may receive funding should budget still be available at the end of the Grant Agreement preparation. In such case, they will be invited to enter into the Grant Agreement preparation as well.

Applicants must be aware that invitation to the Grant Agreement preparation stage does NOT constitute a formal commitment to funding from Frontex. Various legal checks will still be needed before the grant can be awarded, such as validation of legal entity, verification of financial capacity, check of exclusion conditions, etc.

10. Legal commitments

In the event of a grant awarded by Frontex, a Grant Agreement, drawn up in euro and detailing the conditions and level of funding, will be sent to the applicant, as well as the information on the procedure to formalise the agreement of the parties. Two copies of the original agreement must be signed first by the beneficiary (in the case of a mono-beneficiary action) or the Coordinator on behalf of the consortium (for an action with multiple beneficiaries) and returned to Frontex immediately. Frontex will sign it last. The implementation of the research project may begin only after both parties have signed the agreement and it has entered into force.

Model Grant Agreements (and their Annexes) for mono-beneficiary and multi-beneficiary actions are annexed to this Call for Proposals (see [Annexes 3 and 4](#) respectively) detailing the conditions governing the grant. These conditions are indicative and can potentially be subject to non-substantial changes.

11. Financial provisions

11.1. Form of the grant

11.1.1. Reimbursement of eligible costs declared on the basis of lump sums based on the usual cost accounting practices of the beneficiaries

The grant offered by Frontex under this Call for Proposals is an action grant¹⁶ for the reimbursement of eligible costs declared on the basis of lump sums based on the usual cost accounting practices of the beneficiaries.

The grant will be defined by applying a **maximum co-financing rate of 90 %** to the eligible costs declared by the beneficiary on the basis of a lump sum calculated in accordance with the beneficiary's usual cost accounting practices for the proposed project activities and the corresponding direct costs (see [paragraph 11.2.1](#)). The lump sum will be paid provided the said activities were properly implemented.

Conditions for compliance of the beneficiary's usual cost accounting practices: The beneficiary must ensure that the cost accounting practices used for the purpose of declaring eligible costs are in compliance with the following conditions:

- (i) the cost accounting practices that are used must constitute the usual cost accounting practices of the beneficiary. The beneficiary must apply those practices in a consistent manner, based on objective criteria irrespective of the source of funding (EU financing or other);
- (ii) the costs declared can be directly reconciled with the amounts recorded in its general accounts; and

¹⁶ For the definition, see Article 180(2) FR: 'action grant' means an EU grant to finance "an action intended to help achieve a Union policy objective".

- (iii) the categories of costs used for the purpose of determining the costs declared do not include any ineligible costs or costs already covered by other forms of grant.

Grant ceiling: The contribution requested to Frontex in a proposal (grant amount) cannot exceed **60,000 EUR**.

Minimum indicative grant amount: Frontex estimates that a contribution of not less than 20,000 EUR (and not exceeding the grant ceiling indicated above) would be reasonable to allow the expected outcomes of this call to be addressed appropriately. Nonetheless, this does not preclude the submission and selection of a proposal requesting amounts below this value.

11.1.2. Payment conditions, checks and audits for lump sums

- a) Contributions based on lump sum will be paid in full provided the corresponding part of the action is implemented properly (with the required quality, fully and on time). If the corresponding part of the action is not properly implemented, the amount of the grant will be reduced proportionately to the degree to which the action has been implemented improperly, on the basis of not completed Work Packages and the corresponding amounts in the estimated budget submitted by the applicant. See also step 3 of [section 11.5](#).

The fulfilment of the above conditions and/or results triggering the payment of the lump sum as specified in [paragraph 11.1.1](#), including where required the achievement of outputs and/or results, will be checked at the latest before the payment of the balance. In addition, the fulfilment of those conditions and/or results may be subject to ex post controls.

- b) For this purpose, in case of verifications, checks or audits, the beneficiary will be required to provide supporting documents proving the proper implementation of the action.
- c) Where the grant takes the form specified in [paragraph 11.1.1](#), the beneficiary will not be required to report on the costs actually incurred for the implementation.
- d) If Frontex has confirmed explicitly that the beneficiary's usual cost accounting practices are in compliance with the conditions set out in this call, costs declared in application of these practices may not be challenged ex post, if:
- (i) the practices actually used comply with those approved by Frontex; and
 - (ii) the beneficiary did not conceal any information for the purpose of the approval of its cost accounting practices.

This does not affect the possibility to reduce the grant as specified above or in the case of irregularity, fraud or a breach of other obligations.

Frontex reserves its right to challenge the amounts of lump sums by ex-post controls, where:

- Frontex did not confirm the usual cost accounting practices as complying with the conditions set out in this call, or
 - the lump sums are not calculated in accordance with the confirmed cost accounting practices.
- e) Payment of the grant on the basis of lump sums as specified in [paragraph 11.1.1](#), does not affect the right of access to the statutory records of the beneficiaries for the purposes of:
- reviewing them for future grants, or
 - protecting the Union financial interests, e.g. detection of fraud, irregularities or breach of obligations.

11.2. Eligible costs

Eligible costs shall meet all the following criteria:

- they are incurred by the beneficiary;
- they are incurred during the duration of the action, with the exception of costs relating to final reports and audit certificates; the period of eligibility of costs will start as specified in the Grant Agreement;

- they are indicated in the estimated budget of the action;
- they are necessary for the implementation of the action which is the subject of the grant;
- they are identifiable and verifiable, in particular being recorded in the accounting records of the beneficiary and determined according to the applicable accounting standards of the country where the beneficiary is established and according to the usual cost accounting practices of the beneficiary;
- they comply with the requirements of applicable tax and social legislation;
- they are reasonable, justified, and comply with the principle of sound financial management, in particular regarding economy and efficiency.

The beneficiary's internal accounting and auditing procedures must permit direct reconciliation of the costs and revenue declared in respect of the action/project with the corresponding accounting statements and supporting documents.

Eligible costs may only be **direct costs. Indirect costs, i.e. costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it, are not eligible under this Call for Proposals.**

11.2.1. Eligible direct costs

The eligible direct costs for the action are those costs which, **with due regard to the conditions of eligibility set out above**, are identifiable as specific costs directly linked to the performance of the action and which can therefore be booked to it directly, such as:

- (a) the costs of personnel working under an employment contract with the beneficiary or an equivalent appointing act and assigned to the action, provided that these costs are in line with the beneficiary's usual policy on remuneration.

Those costs include actual salaries plus social security contributions and other statutory costs included in the remuneration. They may also comprise additional remunerations, including payments on the basis of supplementary contracts regardless of the nature of those contracts, provided that they are paid in a consistent manner whenever the same kind of work or expertise is required, independently from the source of funding used;

The costs of natural persons working under a contract with the beneficiary other than an employment contract or who are seconded to the beneficiary by a third party against payment may also be included under such personnel costs, provided that the following conditions are fulfilled:

- (i) the person works under conditions similar to those of an employee (in particular regarding the way the work is organised, the tasks that are performed and the premises where they are performed);
- (ii) the result of the work belongs to the beneficiary (unless exceptionally agreed otherwise); and
- (iii) the costs are not significantly different from the costs of staff performing similar tasks under an employment contract with the beneficiary;

The recommended methods for the calculation of direct personnel costs are provided in [Appendix B](#);

- (b) costs of travel and related subsistence allowances, provided that these costs are in line with the beneficiary's usual practices on travel;
- (c) the depreciation costs of equipment or other assets (new or second-hand) as recorded in the beneficiary's accounting statements, provided that the asset:
- (i) is written off in accordance with the international accounting standards and the beneficiary's usual accounting practices; and
 - (ii) has been purchased in accordance with the rules on implementation contracts laid down in the Grant Agreement, if the purchase occurred within the implementation period;

The costs of renting or leasing equipment or other assets are also eligible, provided that these costs do not exceed the depreciation costs of similar equipment or assets and are exclusive of any finance fee;

Only the portion of the equipment's depreciation, rental or lease costs corresponding to the implementation period and the rate of actual use for the purposes of the action may be taken into account when determining the eligible costs. By way of exception, the full cost of purchase of equipment may be eligible under the Special Conditions, if this is justified by the nature of the action and the context of the use of the equipment or assets;

- (d) costs of consumables and supplies, provided that they:
 - (i) are purchased in accordance with the rules on implementation contracts laid down in the Grant Agreement; and
 - (ii) are directly assigned to the action;
- (e) costs arising directly from requirements imposed by the Agreement (dissemination of information, specific evaluation of the action, audits, translations, reproduction), including the costs of requested financial guarantees, provided that the corresponding services are purchased in accordance with the rules on implementation contracts laid down in the Grant Agreement;
- (f) duties, taxes and charges paid by the beneficiary, notably value added tax (VAT), provided that they are included in eligible direct costs, and unless specified otherwise in the Grant Agreement.

11.2.2. Eligible indirect costs (overheads)

Not applicable.

11.3. Ineligible costs

The following items are not considered as eligible costs:

- a) return on capital and dividends paid by a beneficiary;
- b) debt and debt service charges;
- c) provisions for losses or debts;
- d) interest owed;
- e) doubtful debts;
- f) exchange losses;
- g) costs of transfers from Frontex charged by the bank of a beneficiary;
- h) costs declared by the beneficiary under another action receiving a grant financed from the Union budget. Such grants include grants awarded by a Member State and financed from the Union budget and grants awarded by bodies other than Frontex for the purpose of implementing the Union budget. In particular, beneficiaries receiving an operating grant financed by the EU or Euratom budget cannot declare indirect costs for the period(s) covered by the operating grant, unless they can demonstrate that the operating grant does not cover any costs of the action.
- i) contributions in kind from third parties;
- j) excessive or reckless expenditure;
- k) deductible VAT;
- l) Indirect costs;
- m) costs for the work of volunteers;
- n) costs derived from subcontracts;
- o) costs of financial support to third parties;
- p) costs of entities affiliated to the beneficiary;
- q) costs that do not meet the eligibility criteria as outlined in [paragraph 11.2.](#)

11.4. Balanced budget

The estimated budget of the action ([Annex 1.4 or 2.5](#)) must be annexed to the Grant Application Form. It must have revenue and expenditure in balance.

The budget must be drawn up in euros. Applicants for whom costs will not be incurred in euros should use the exchange rate published on the Infor-euro website available at:

http://ec.europa.eu/budget/contracts_grants/info_contracts/infoeuro/infoeuro_en.cfm

The applicant must ensure that the resources which are necessary to carry out the action are not entirely provided by the EU grant.

Co-financing of the action may take the form of:

- the beneficiary's own resources,
- financial contributions from third parties.

The grant amount will be paid out to the beneficiary(ies) only for the completed Work Packages¹⁷ (WPs) indicated in the submitted description of the action. Therefore, the applicant(s) must:

- in the **Grant Application Form** ([Annex 1 or 2](#)): clearly define, in the description of the action, the research activities which will be addressed during the whole project duration, subdividing them into **Work Packages** and defining a **single milestone** which will mark the completion of each WP, in a way that will enable Frontex to easily verify it (see paragraph 4.4.1 of the Grant Application Form);
- in the project's **Estimated Budget** ([Annex 1.4 or 2.5](#)): show the eligible direct costs linked to the execution of each of the listed WPs. The cost estimations included in the budget will be assessed against the proposed WPs within the evaluation of the award criterion "Quality and efficiency of implementation" (see [paragraph 9.2](#)). The Evaluation Committee will assess that the estimates are reasonable, justified and non-excessive. If the Evaluation Committee finds unreasonable and/or excessive costs, this is recorded in the Evaluation Summary Report, and will be reflected in a modified (reduced) maximum amount of the grant in the Grant Agreement (in comparison with the grant amount requested by the applicant).

11.5. Calculation of the final grant amount

The final amount of the grant is calculated by Frontex at the time of the payment of the balance. The calculation involves the following steps:

1) Step 1 – Application of the reimbursement rate to the eligible costs.

The amount under step 1 is obtained by applying the reimbursement rate specified in [paragraph 11.1.1](#) to the eligible costs actually incurred and accepted by Frontex, including costs declared in the form of lump sums, to which the co-financing rate applies in accordance with [paragraph 11.1.1](#).

2) Step 2 – Limit to the maximum amount of the grant.

The total amount paid to the beneficiaries by Frontex may in no circumstances exceed the maximum amount of the grant as indicated in the Grant Agreement. If the amount obtained following Step 1 is higher than this maximum amount, the final amount of the grant is limited to the latter.

3) Step 3 – Reduction due to improper implementation or breach of other obligations.

Frontex may reduce the maximum amount of the grant if the action has not been implemented properly (i.e. if it has not been implemented or has been implemented poorly, partially or late), or if another obligation under the Agreement has been breached.

The amount of the reduction will be proportionate to the degree to which the action has been implemented improperly or to the seriousness of the breach (see also [paragraph 11.1.2](#)).

¹⁷ See definition in the [Glossary of Terms](#).

11.6. Reporting and payment arrangements

In the following two paragraphs, basic information is included regarding the reporting and payment arrangements the beneficiaries shall consider in case a project proposal is selected for funding.

In these paragraphs, the term “beneficiary” generally refers to the single beneficiary in the case of a mono-beneficiary grant, or to the consortium Coordinator in the case of a multi-beneficiary grant. More details regarding the obligations on reporting and payments can be found in the Model Grant Agreements ([Annexes 3 and 4](#)).

11.6.1. Reporting

Frontex is entitled to oversee the technical performance of the research activities and the use of the awarded grant. Two **reporting periods** are foreseen during the implementation of the proposed projects:

- 1) **Reporting period 1:** from the starting date of the project implementation period (as stated in the Grant Agreement) to the midterm date of the project (calendar date corresponding to half of the project duration as stated in the Grant Agreement, e.g. if the foreseen duration is 1 year, the midterm date will be 6 months after the starting date of project implementation);
- 2) **Reporting period 2:** from the day following the midterm date of the project to the end date of the project implementation period (as stated in the Grant Agreement).

During those reporting periods, in its workplan the applicant shall incorporate the reporting activities described below:

- **Kick-Off Meeting (KOM):** At this meeting, the beneficiary shall present the overall project workplan (including the foreseen research activities timeline and budget), organisation (including the Project Team) and the monitoring and controlling procedures. This meeting is expected to take place within 10 working days from the official start date of project implementation, as stated in the Grant Agreement. The beneficiary will have to submit to Frontex a brief **KOM Report** that summarises the main discussion points and conclusions of the meeting within 5 working days from the KOM.
- **Interim Review (IR):** Within 10 working days from the midterm date of the project the beneficiary shall release a short **Interim Technical Report** using the form provided in [Annex 3.4 or 4.5](#). The report shall present an overview of work completed¹⁸, the remaining ones, possible amendments to the workplan, lessons learned and decisions to be adopted for the future course of the project if needed. An **Interim Review Meeting** might be requested by Frontex, to be held after the report was formally accepted by Frontex, in order to allow the beneficiary to briefly present and discuss the content of the report.
- **Final Review (FR):** Not later than 15 working days before the closing date of the project, the beneficiary shall release a **Final Technical Report** using the form provided in [Annex 3.4 or 4.5](#). The report shall present an overview of the overall work conducted, the WP(s) and milestone(s) completed, and lessons learned. The report must include, as an annex, the **Research Report** (see description below). A **Final Review Meeting** might be requested by Frontex, after the report was formally accepted by Frontex, in order to allow the beneficiary to briefly present and discuss the content of the Final Technical Report.
- **Reporting during Frontex events:** During or after the project duration, and under mutual agreement, Frontex might request the beneficiary to present the results of its research work at the events organised by the Agency.

Research Report: as indicated in [paragraph 2.5](#), the outcomes of the funded research projects must be clearly illustrated by the beneficiaries in a **Research Report** which shall:

- Describe the main technical characteristics of the devised technological solution, including at least its general design, features, functionalities, performance specifications, technical achievability or manufacturability, and its potential viability for border security applications;
- Include the results of assessment phases aimed at testing, experimenting, validating or demonstrating the idea;

¹⁸ In case of requesting an interim payment, the Interim Technical Report must clearly indicate which WPs (and corresponding milestones) were completed until the midterm date of the project. More information about the interim payment can be found in [paragraph 11.6.2](#).

- Address the weaknesses uncovered during the assessment phases;
- Address the issues of protecting intellectual property and knowledge transfer;
- Include at least a small-scale visualization exercise (in the form of e.g. technical drawings, pictures, models, prototypes etc.) suitable to practically show the potential real-life application of the proposed idea. Although this will not be yet about delivering a full-scale technological solution, it will have to show its feasibility and usability through the visual representation of at least an unrefined or unfinished version of the proposed technological solution. This shall be intended as a tool for showcasing its essential functionalities and receiving feedback from the stakeholders.
- Include a brief proposal for how to move forward in RTDI beyond the duration of the project.

The Research Report is a mandatory deliverable to be produced at the end of the project’s implementation period.

Form and costs of meetings and events: Upon agreement between Frontex and the beneficiary, the meetings and events described above can be held in presence or virtually (e.g. by videoconference). In case they are requested by Frontex to be held in-presence (e.g. at Frontex premises), all reasonable costs of the participation in the meeting/event incurred by the beneficiary’s representatives will be reimbursed by Frontex in line with the Frontex’s reimbursement rules. No costs will be reimbursed by Frontex for the meetings and events in which the beneficiary participates virtually.

Quality assessment of reports: Frontex will have 5 working days from the receipt of the reports (KOM Report, Interim Technical Report and Final Technical Report) to assess their quality, in accordance with the provisions set out in this Call for Proposals and approve or reject them in full or in part. Upon reception by the beneficiary of the comments and/or requests for clarification from Frontex, the beneficiary will have 5 working days to complete, adapt or correct the reports and submit additional information and/or another report and/or clarifications. Should Frontex still not consider the new reports acceptable, Frontex will formulate further recommendations, observations, comments that shall be taken into consideration by the beneficiary for elaborating in 5 working days a new version of the reports. Should Frontex still not consider the reports acceptable, Frontex will consider that the beneficiary fails to perform its obligations (especially with regards the completion of the research activities).

The following table summarises the indicative timeline for the implementation of the actions funded under this Call for Proposals and related reporting activities:

Activity	Indicative timing/deadline
Start date of implementation period of funded research projects	First day of the month following the date when the last party signs the Grant Agreement (as stated in the GA).
Kick-Off Meeting	Within 10 working days from the start of project implementation period
Kick-Off Meeting Report delivery date	Within 5 working days from the Kick-Off Meeting
Midterm date (end of Reporting period 1)	Calendar day corresponding to half of the project’s implementation period (as stated in the Grant Agreement)
Interim Technical Report delivery date	Within 10 working days after the midterm date
Interim Meeting (if requested by Frontex)	To be agreed with Frontex

Activity	Indicative timing/deadline
Final Technical Report (including the Research Report) delivery date	At least 15 working days before the closing date of the project
Final Review Meeting (if requested by Frontex)	To be agreed with Frontex
Closing date of the project (end of Reporting period 2)	Between 6 and 12 months from the starting date (as stated in the GA).

11.6.2. Payment arrangements

The beneficiary may request an **interim payment** and a **payment of the balance** provided that the conditions of the Grant Agreement are fulfilled (e.g. payment deadlines, ceilings, etc.). The payment requests (made by using the templates provided in [Annex 5 or 6](#)) shall be accompanied by the documents provided below and detailed in the Grant Agreement:

Payment request	Payment time-schedule		Accompanying documents
	Deadline for submitting the request and accompanying documents to Frontex	Deadline for Frontex to issue the payment	
Interim payment The interim payment shall not exceed 50% of the maximum grant amount.	Within 60 calendar days following the end of the Reporting period 1.	Within 60 calendar days from when Frontex receives the request and accompanying documents.	(a) Interim Technical Report (template in Annex 3.4 or 4.5) (b) Interim Financial Statement (template in Annex 3.5 or 4.6)
Payment of the balance Frontex will establish the amount of this payment on the basis of the calculation of the final grant amount (see paragraph 11.5 above). If the total of earlier payments is higher than the final grant amount, the beneficiary will be required to reimburse the amount paid in excess by Frontex through a recovery order.	Within 60 calendar days following the end of the Reporting period 2.	Within 60 calendar days from when Frontex receives the request and accompanying documents.	(c) Final Technical Report (template in Annex 3.4 or 4.5) with annexed the Research Report (d) Final Financial Statement (template in Annex 3.5 or 4.6) (e) Summary Financial Statement aggregating the financial statements already submitted previously and indicating the receipts (template in Annex 3.5 or 4.6).

11.7. Other financial conditions

a) Non-cumulative award

An action may only receive one grant from the EU budget.

Under no circumstances shall the same costs be financed twice by the Union budget. To ensure this, applicants shall indicate in the grant application the sources and amounts of Union funding received or applied for the same action or part of the action or for its (the applicant's) functioning during the same financial year as well as any other funding received or applied for the same action.

b) Non-retroactivity

No grant may be awarded retrospectively for actions already completed.

c) Implementation contracts/subcontracting

Where the implementation of the action requires the award of procurement contracts (implementation contracts), the beneficiary may award the contract in accordance with its usual purchasing practices provided that the contract is awarded to the tender offering best value for money or the lowest price (as appropriate), avoiding conflicts of interest.

The beneficiary is expected to clearly document the tendering procedure and retain the documentation in the event of an audit.

Entities acting in their capacity as contracting authorities within the meaning of Directive 2014/24/EU¹⁹ or contracting entities within the meaning of Directive 2014/25/EU²⁰ must comply with the applicable national public procurement rules.

Beneficiaries may not subcontract tasks forming part of the action.

d) Financial support to third parties

The applications may not envisage provision of financial support to third parties.

12. Publicity

12.1. By the beneficiaries

Beneficiaries of the grant must clearly acknowledge Frontex's contribution in all publications or in conjunction with activities for which the grant is used.

In this respect, beneficiaries are required to give prominence to the name and emblem of Frontex on all their publications, posters, programmes and other products realised under the co-financed project.

To do this they must use:

- the text *"The project leading to this [publication] [document] [deliverable] [prototype] [etc.] has received funding from Frontex under the Grant Agreement No [number]"*.
- the Frontex emblem;
- the disclaimer *"Frontex is not responsible for the views displayed in the publications and/or in the activities for which the grant is used"*.

If this requirement is not fully complied with, the beneficiary's grant may be reduced in accordance with the provisions of the Grant Agreement.

12.2. By Frontex

All information relating to grants awarded in the course of a financial year shall be published on Frontex's website no later than on 30 June of the year following the financial year in which the grants were awarded.

Frontex will publish the following information:

- name of the grant beneficiary,
- address of the grant beneficiary,
- subject of the grant,
- amount awarded.

¹⁹ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (OJ L 94, 28.3.2014, p. 65-242).

²⁰ Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC (OJ L 94, 28.3.2014, p. 243-374).

Upon a reasoned and duly substantiated request by the grant beneficiary, the publication shall be waived if such disclosure risks threatening the rights and freedoms of individuals concerned as protected by the Charter of Fundamental Rights of the European Union or harms the commercial interests of the grant beneficiaries.

12.3. Public Access to Documents

Any documents submitted to Frontex may become subject to an application for public access to documents in accordance with Regulation (EC) No 1049/2001. As stated in Article 4(4) of said Regulation, Frontex will consult the originator in such context, unless it is clear that the document concerned shall or shall not be disclosed. Frontex stands ready to provide further information in this regard.

13. Processing of personal data

The reply to this Call for Proposals involves processing of personal data (such as name, address and CV). Such data will be processed pursuant to Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, L295, 21.11.2018, p. 39-98.

Any personal data requested are required to evaluate the applications, as well as for the award and subsequent management of the Frontex Research Grants, in accordance with the specifications of this Call for Proposals (including its [Annexes](#)) and the Grant Agreement, and will be processed solely for that purpose by the Head of Research and Innovation Unit in Frontex.

Information concerning the processing of personal data is available on the privacy statement in [Annex 9](#).

Personal data may be registered in the Early Detection and Exclusion System managed by the Commission, should the grant beneficiary be in one of the situations mentioned in Articles 136 and 141 of Regulation (EU, Euratom) 2018/1046²¹. For more information see the European Commission's Privacy Statement on:

https://ec.europa.eu/info/data-protection-public-procurement-procedures_en

Applicants are expected to gain permission for processing personal data of any individual whose data is included in the application in line with applicable national law.

The eligible applicants must comply with the EU General Data Protection Regulation (Regulation (EU) 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC).

Specific conditions and requirements for processing personal data by the beneficiaries of the grants in the framework of implementation of actions funded under this Call for Proposals will be further agreed between Frontex and the beneficiaries. If necessary, a Data Processing Agreement shall be concluded between the beneficiary(ies) and Frontex using the model provided in [Annexes 3.6 and 4.7](#).

14. Procedure for the submission of proposals

This Call for Proposals and all its [Annexes](#) are available for download on the Frontex webpage dedicated to Grants: <https://frontex.europa.eu/about-frontex/grants/> under the relevant section identified as follows:

- **Title of Call for Proposals: Frontex Research Grants Programme - Novel Technologies for Border Management (Open Theme)**
- **Reference number: 2022/CFP/RIU/01**

In order to apply for a grant for a research project under this Call for Proposals, applicants must:

²¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018R1046>

a) properly fill-in the **Grant Application Form** and **all its Annexes** in all their sections:

- for a single applicant: [Annex 1 and Annexes 1.1 to 1.4](#)
- for multiple co-applicants: [Annex 2 and Annexes 2.1 to 2.5](#)

carefully following the instructions and guidelines provided in section 1 of the Grant Application Form and in all its Annexes;

b) submit the **Grant Application Form and all its Annexes to Frontex by the deadline set out under section 3**; guidelines for the submission process are provided below.

The following requirements apply for the submission of multiple applications by the same applicant(s) under this Call for Proposals in order to comply with the principle of noncumulative financing and award²²:

- a) **Applications submitted by a single applicant**: An applicant can submit more than one application only if the actions covered in the respective Grant Application Forms ([Annex 1](#)) - Section 4 (Description of the action) are different from each other.
- b) **Applications submitted by multiple co-applicants**: The same consortium can submit more than one application, and applicant(s) may participate in multiple applicants' consortia, only if the actions covered in the respective Grant Application Forms ([Annex 2](#)) - Section 4 (Description of the action) are different from each other.
- c) If multiple submissions are received by Frontex that relate to the same action, then only the latest application received by the deadline will be considered.

In this respect, the proposed actions will be considered "different" by the Evaluation Committee only when the contents of the Grant Application Form ([Annex 1 or 2](#)) - Section 4 (Description of the action) included into the submitted applications differ from each other not in minor ways.

A checklist is included in section 10 of the Grant Application Forms to facilitate a final conformity check by the applicants before the submission to Frontex.

Once the applicant completed the Grant Application Forms and all its Annexes, **all the corresponding files** (in total 5 separate files in case of an application submitted by a single applicant, 6 separate files for an application submitted by multiple co-applicants) **must be submitted by a single email to: researchgrants@frontex.europa.eu by the deadline for submitting applications set out under section 3**, paying attention to the following details:

- **Subject of the submission email**: in the subject of your submission email, please mention: "Project Acronym-2022-CFP-RIU-01", where "Project Acronym" is the acronym defined for the project in paragraph 4.1 of the Grant Application Form. For example, if you are submitting the application for a project whose acronym is "EAGLE", please mention in the subject of your email: "EAGLE-2022-CFP-RIU-01".
- **Size of the attachments to the submission email**: the total size of the attachments to the submission email **must not exceed 25 MB**.

If the application has been submitted successfully (i.e. has been received by Frontex and contains the correct number of attachments - no checks will be performed at this stage on the content and correctness of the application documents), you will receive a confirmation e-mail within two working days from researchgrants@frontex.europa.eu.

Do not leave the submission process to the last minute. Frontex cannot be held responsible for any delays due to, for example, an overload of the mailbox, heavy internet traffic or connection difficulties or for issues with the size of the attachments to the email used to send the application documents to Frontex.

Failure to comply with the above requirements will lead to rejection of the application.

No modification to the application is allowed once the deadline for submission has elapsed. However, if there is a need to clarify certain aspects or to correct clerical mistakes, Frontex may contact the applicant during the evaluation process.

Applicants will be informed in writing about the results of the selection process.

²² See Article 191 FR "Principle of non-cumulative award and prohibition of double funding".

15. Contacts

15.1. By the applicant

Questions regarding this Call for Proposals, indicating its reference number (2022/CFP/RIU/01), can be sent by email to the functional mailbox address researchgrants@frontex.europa.eu.

In [section 3](#), the “Deadline for submitting requests for clarifications” on the Call for Proposals is clearly stated. Frontex will reply to requests for clarifications submitted by that deadline as soon as possible by sending a message directly to the email address from which the inquiry was sent.

If relevant to other applicants, the questions and answers will be anonymously published, by the “Last day of publication of the clarifications” indicated in [section 3](#), on the Frontex webpage: <https://frontex.europa.eu/about-frontex/grants/> under the relevant section dedicated to this Call for Proposals (see [section 14](#)), where a file named “Frequently asked questions - FAQs” will be made available for download containing all such questions (if received) and answers.

15.2. By Frontex

During the evaluation process (see [section 9](#)) Frontex may contact the applicant, using the contact details indicated in the Grant Application Form, if there is a need to clarify certain aspects or for the correction of clerical mistakes. Please note that the applicant must reply to such questions within 2 working days. If Frontex is not able to reach the applicant at the contact details provided in the Grant Application Form or the applicant does not reply within the given deadline, the application may be rejected from further evaluation.

Appendix A - Thematic Categories and Key Areas of Research

Thematic Categories	Key Areas of Research ²³
<p>1. Technologies for Border Checks</p>	<ul style="list-style-type: none"> • Biometric technologies for extending, augmenting, or improving recognition (identification and verification) capabilities at border crossing points, especially (but not limited to) those enabling seamless stand-off border checks and employing contactless friction ridge recognition, 3D face recognition, infrared face recognition, iris recognition in the visible and NIR spectrum • Biometric capture, identification and verification devices • Multimodal biometric systems • Automated Border Control (ABC) systems • Self-service systems (e.g. kiosks, e-gates and corridors) • Movable systems (e.g. mobile check-points, autonomous and semi-autonomous robotic systems) • Systems based on personal devices (e.g. handheld and mobile solutions) • Identity document readers, identity document verification and fraud detection • Identity and travel documents security • Virtual traveller identification schemes • Machine-readable travel document solutions • e-documents chips and scanning technologies • Multispectral travel documents inspection, view and scan • Cryptographic authentication devices • Automated number plate recognition systems • Security graphics (e.g. holograms)
<p>2. Technologies for Border Surveillance and Situational Awareness</p>	<ul style="list-style-type: none"> • Infrared motion detectors and barrier sensors (passive and non-passive) • Radio-frequency sensors (active and passive) • Microwaves and radar motion detectors • Photoelectric sensors (diffuse reflective/retro reflective) • Light barrier sensors and light curtains • Electrostatic field sensors (E-field) • Microphones (long-range)

²³The following sources were considered, among others, to define the Key Areas of Research:

- European Border and Coast Guard Agency (Frontex), "Artificial Intelligence-Based Capabilities for the European Border and Coast Guard - Final Report", 2021.
- European Border and Coast Guard Agency (Frontex), "Green Deal and the EBCG - Final Report", 2021.
- European Border and Coast Guard Agency (Frontex), "Technology foresight on biometrics for the future of travel: research study", Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2819/097463>.
- European Commission, Directorate-General for Migration and Home Affairs, "EU security market study: final report", Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2837/19472>.
- Eulaerts, O. and Joanny, G., "Weak Signals in Border Management and Surveillance Technologies", EUR 31126 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-53530-0, doi:10.2760/784388, JRC128871.
- NATO Science & Technology Organization, "Science & Technology Trends 2020-2040 - Exploring the S&T Edge", 2020.
- U.S. Department of Homeland Security, "Science and Technology Directorate's Long-Range Broad Agency Announcement (LRBA 18-01)".
- Gartner, "Top Strategic Technology Trends for 2022 - 12 Trends Shaping the Future of Digital Business", 2022.
- Gartner, "Emerging Technologies and Trends Impact Radar: 2022 - Research Excerpt", 2022.
- MIT Technology Review, "The 10 Breakthrough Technologies Issue", March/April 2022.
- Deloitte, "Deloitte Insights - Tech Trends 2022", 2022.
- PricewaterhouseCoopers, "PwC Insights on Technologies", 2019.

Thematic Categories	Key Areas of Research ²³
	<ul style="list-style-type: none"> • Acoustic sensors (active, passive) • Ultrasonic sensors and motion detectors • Seismic sensors • Sensor systems (e.g. chemical, biological, pollution, acoustic) • Thermographic cameras (infrared cameras and thermal imaging cameras) • Tracking cameras (e.g. to help verify or disprove alarms, or alert security operators) • Intelligent video surveillance • Video and camera surveillance systems (including body-mounted cameras and fibreoptic cameras) • Video synopsis • Intelligent video analysis (e.g. for detection of suspicious behaviour or people in need of help) • Video management system (e.g. for monitoring, recording, storing and handling videos) • Situational awareness and threat monitoring • Maritime domain awareness technologies • Crisis mapping services • Aircraft-based surveillance systems • Remotely piloted aircraft systems (RPAS) • High-altitude pseudo-satellites (HAPS) • Surveillance and navigation satellites • Detection and interception of low-flying objects (e.g. Counter Unmanned Aircraft Systems (C-UAS) and system to detect anti-drones detectors) • Coastal surveillance systems (e.g. fast craft detection) • Underwater surveillance (e.g. diver communication and disruption systems, and autonomous underwater surveillance) • Ground surveillance systems (e.g. networked deployable and mobile semi-autonomous surveillance towers); • Space surveillance and tracking systems (e.g. visual sensors for space surveillance, semiconductors for application in image intensifiers) • Intelligent surveillance systems (ISS) • Moveable technical surveillance posts • Surveillance RADAR • Thermal and multispectral imaging surveillance platforms (including thermal pan-tilt-zoom cameras and thermal imaging devices) • Radio-wave imaging devices • Radio Detection and Ranging (RADAR) • Light Detection and Ranging (LIDAR) • Laser rangefinders • Autonomous systems and robotics: ground, naval, air and underwater capabilities • Unmanned Ground Systems (UGS) (including Unmanned Ground Vehicles (UGV) and tactical robots) • Unmanned Aircraft Systems (UAS) (including Unmanned Aerial Vehicles (UAV) and drones).

Thematic Categories	Key Areas of Research ²³
	<ul style="list-style-type: none"> • Unmanned Marine Systems (UMS) (including Unmanned Underwater Vehicles (UUV), autonomous UUV, underwater robotics, water rescue and unmanned surface vehicles). • Geographic information systems (GIS)
<p>3. Technologies for Information and Communication Management and Data Analytics</p>	<ul style="list-style-type: none"> • Blockchain for border security • Big data and advanced analytics • Data analytics platforms • Software to analyse large datasets (information processing technologies) • Systems for pre-processing of data (e.g. image categorisation tools) • Information and data fusion technologies • Information analysis for intelligence functions • Risk management systems • Image analytics (image processing) • Video analytics systems • Video smart search capabilities • Signal analysis • Optical signal processing technologies • Command and control (including geo-information systems and integrated communications systems) • Communications systems and networks • Critical communications and interoperable communications • Narrow-band and broadband professional mobile radio (PMR) communications systems • Land mobile radio (LMR) communications systems • Radio frequency (RF)-based communications (including very high frequency (VHF) and ultra-high frequency (UHF)) • Software-defined radios • Jamming/spoofing detection/avoidance devices • Wireless Mesh Networks (WMN) • Communications devices (wireless and radio-based) (including smart cellular phones, satellite phones, tablets and other mobile devices, vehicle-mounted and portable) • Next-generation wireless communication networks (including 5G and 6G) • Infrastructure independent communication technologies
<p>4. Simulation Tools</p>	<ul style="list-style-type: none"> • Training platforms and systems • Simulators (e.g. for driving, command and control, crisis management, optimisation of BCPs) • Augmented reality tools (e.g. for training, simulation, command and control, operational activities support) • Virtual reality tools (e.g. software, glasses and integrated platforms) • Holographic-based systems
<p>5. Technologies for Standing Corps and Logistic Support</p>	<ul style="list-style-type: none"> • Wearable technologies • Smart wearables • Smart textiles

Thematic Categories	Key Areas of Research ²³
	<ul style="list-style-type: none"> • Internet of Things (IoT) • Augmented and virtual reality tools • Autonomous systems and robotics • Lightweight equipment (e.g. CO2 detectors, heartbeat detectors, night vision devices, uncooled and cooled thermal cameras, document inspection devices, fingerprint scanners, drug detectors, on-board diagnostic devices, videoscopes, drones, radiation detection pagers, jammer detectors) • Virtual Awareness Assistants (to support and advise operations in real-time based on comprehensive operational awareness). • User-behaviour analytics • Vehicle use optimisation (to allocate and route vehicles using real-time situational awareness of the operating environment) • Advanced protective clothing (protective garments, protective footwear, hand protection) and duty uniforms • Smart technology vests • Personal Alert Safety Systems (PASS) and Automatic Distress Signal Units (ADSU) • Emergency and alarm technologies • Rapidly deployable tents and structures / multi-purpose tents • 3D printing
<p>6. Advanced Technologies for Environmentally Sustainable Systems and Operations (cross-cutting Thematic Category²⁴)</p>	<ul style="list-style-type: none"> • Technologies for improved sustainability (significant reduction of GHG emission or carbon footprint) in operational activities • Novel future-proof designs for operational assets with optimised use of resources and increased performances (e.g. fossil-free vehicles for operations) • Sustainable technological retrofitting • Sustainable and efficient energy generation, management and storage for future platforms • Long-duration renewable energy storage technologies • Next-generation electrical energy storage for operation bases (e.g. innovative battery cells) • Systems based on hydrogen-powered fuel cells • Wireless power transfer systems • Alternative propulsion and energy systems for next generation ground, marine and air vehicles • Sustainable mobility solutions • Solutions based on recycling of resources • Carbon capture and storage technologies • Predictive maintenance and fault detection technologies (e.g. IoT- or AI-based)
<p>7. Disruptive, Emerging and Key Enabling Technologies (cross-cutting Thematic Category²⁴)</p>	<ul style="list-style-type: none"> • Artificial Intelligence (AI), especially (but not limited to) applications in: border checks, automated border control, border surveillance, situational awareness and assessment, information management, communications, threat detection, simulation and exercise, machine learning optimisation, natural language

²⁴ Thematic Categories 6 and 7 refer to cross-cutting Key Areas of Research that have the potential to find application and/or yield significant improvements in other Key Areas of Research (pertaining to Thematic Categories 1 to 5).

Thematic Categories	Key Areas of Research ²³
	<p>processing, expert systems, heterogeneous robotic systems, small autonomous UAS, predictive asset maintenance, computer vision, objects and individuals recognition, geospatial data analytics</p> <ul style="list-style-type: none"> • Edge AI • Explainable AI • Neuromorphic computing for next-generation intelligent devices and autonomous systems • Autonomy • Internet of Things (IoT) platforms • Advanced human interface devices • Cryptography and privacy preserving/enhancing technologies (e.g. distributed ledger technologies, homomorphic encryption, multi-party computation, zero knowledge proofs) • Post-quantum cryptography (e.g. quantum-safe approaches) • Edge Computing • Data-AI-Autonomy (synergistic combination of Big Data and Advanced Analytics, AI and Autonomy) • Quantum Computing • Quantum Simulation • Quantum Communications • Quantum Sensing & Metrology • Data-Quantum (increased Command, Control, Communications, Computers, Intelligence and Surveillance data collection, processing and exploitation capabilities through quantum technologies) • Advanced Virtual Assistants • Digital Twins • Multimodal User Interfaces • Smart Spaces

Appendix B - Specific conditions for direct personnel costs

1. Calculation

The ways of calculating eligible direct personnel costs laid down in points (a) and (b) below are recommended and accepted as offering assurance as to the costs declared being actual.

Frontex may accept a different method of calculating personnel costs used by the beneficiary, if it considers that it offers an adequate level of assurance of the costs declared being actual.

a) for persons working exclusively on the action:

{monthly rate for the person

multiplied by

number of actual months worked on the action}

The months declared for these persons may not be declared for any other EU or Euratom grant.

The **monthly rate** is calculated as follows:

{annual personnel costs for the person

divided by 12}

using the personnel costs for each full financial year covered by the reporting period concerned.

If a financial year is not closed at the end of the reporting period, the beneficiaries must use the monthly rate of the last closed financial year available;

b) for persons working part time on the action

- (i) If the person is assigned to the action at a fixed pro-rata of their working time:

{monthly rate for the person multiplied by pro-rata assigned to the action

multiplied by

number of actual months worked on the action}

The working time pro-rata declared for these persons may not be declared for any other EU or Euratom grant.

The monthly rate is calculated as above.

- (ii) In other cases:

{hourly rate for the person multiplied by number of actual hours worked on the action}

or

{daily rate for the person multiplied by number of actual days worked on the action}

(rounded up or down to the nearest half-day)

The number of actual hours/days declared for a person must be identifiable and verifiable.

The total number of hours/days declared in EU or Euratom grants, for a person for a year, cannot be higher than the annual productive hours/days used for the calculations of the hourly/daily rate. Therefore, the maximum number of hours/days that can be declared for the grant are:

{number of annual productive hours/days for the year (see below)

minus

total number of hours and days declared by the beneficiary, for that person for that year, for other EU or Euratom grants}.

The 'hourly/daily rate' is calculated as follows:

{annual personnel costs for the person

divided by

number of individual annual productive hours/days} using the personnel costs and the number of annual productive hours/days for each full financial year covered by the reporting period concerned.

If a financial year is not closed at the end of the reporting period, the beneficiaries must use the hourly/daily rate of the last closed financial year available.

The 'number of individual annual productive hours/days' is the total actual hours/days worked by the person in the year. It may not include holidays and other absences (such as sick leave, maternity leave, special leave, etc). However, it may include overtime and time spent in meetings, trainings and other similar activities.

2. Documentation to support personnel costs declared as actual costs

For **persons working exclusively on the action**, where the direct personnel costs are calculated following **point (a)**, there is no need to keep time records, if the beneficiary signs a **declaration** confirming that the persons concerned have worked exclusively on the action.

For **persons assigned to the action at a fixed pro-rata of their working time**, where the direct personnel costs are calculated following **point (b)(i)**, there is no need to keep time records, if the beneficiary signs a declaration that the persons concerned have effectively worked at the fixed pro-rata on the action.

For **persons working part time on the action**, where direct personnel costs are calculated following **point (b)(ii)**, the beneficiaries must keep **time records** for the number of hours/days declared. The time records must be in writing and approved by the persons working on the action and their supervisors, at least monthly.

In the absence of reliable time records of the hours worked on the action, Frontex may accept alternative evidence supporting the number of hours/days declared, if it considers that it offers an adequate level of assurance.

List of annexed documents

- Annex 1 - Grant Application Form for single applicant
 - Annex 1.1 - Legal Entity Form
 - Annex 1.2 - Financial Identification Form
 - Annex 1.3 - Declaration on Honour for single applicant
 - Annex 1.4 - Estimated Budget for single applicant
- Annex 2 - Grant Application Form for multiple co-applicants
 - Annex 2.1 - Letter of Mandate
 - Annex 2.2 - Legal Entity Form
 - Annex 2.3 - Financial Identification Form
 - Annex 2.4 - Declaration on Honour for multiple co-applicants
 - Annex 2.5 - Estimated Budget for multiple co-applicants
- Annex 3 - Model Grant Agreement for mono-beneficiary action
 - Annex 3.1 - Model Grant Agreement for mono-beneficiary action - Annex I - Description of the action
 - Annex 3.2 - Model Grant Agreement for mono-beneficiary action - Annex II - General Conditions
 - Annex 3.3 - Model Grant Agreement for mono-beneficiary action - Annex III - Estimated budget
 - Annex 3.4 - Model Grant Agreement for mono-beneficiary action - Annex IV - Model technical report
 - Annex 3.5 - Model Grant Agreement for mono-beneficiary action - Annex V - Model financial statement
 - Annex 3.6 - Model Grant Agreement for mono-beneficiary action - Addendum - Model Data Processing Agreement
- Annex 4 - Model Grant Agreement for multi-beneficiary action
 - Annex 4.1 - Model Grant Agreement for multi-beneficiary action - Annex I - Description of the action
 - Annex 4.2 - Model Grant Agreement for multi-beneficiary action - Annex II - General Conditions
 - Annex 4.3 - Model Grant Agreement for multi-beneficiary action - Annex III - Estimated budget
 - Annex 4.4 - Model Grant Agreement for multi-beneficiary action - Annex IV - Mandate(s) provided to the coordinator by the other beneficiary(ies)
 - Annex 4.5 - Model Grant Agreement for multi-beneficiary action - Annex V - Model technical report
 - Annex 4.6 - Model Grant Agreement for multi-beneficiary action - Annex VI - Model financial statement
 - Annex 4.7 - Model Grant Agreement for multi-beneficiary action - Addendum - Model Data Processing Agreement
- Annex 5 - Model request for interim payment
- Annex 6 - Model request for payment of the balance
- Annex 7 - Ethics, values and the use of AI
- Annex 8 - Security
- Annex 9 - Privacy Statement

All the listed Annexes are available for download on the Frontex webpage dedicated to Grants:
<https://frontex.europa.eu/about-frontex/grants/> under the relevant section assigned to this Call for Proposals (see [section 14](#)).