Preparatory Action on Defence Research

2019 Calls for proposals
and
General Annexes

(based on European Commission Decision C(2019)1873)

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Introduction

Investment in future-oriented European defence research programmes today is a crucial step to maintain freedom of action and the ability to develop the capabilities that will be required tomorrow. Yet up to now, EU funding could only be used to fund research activities with an exclusive focus to civil applications.

The Preparatory Action on Defence Research (PADR) is a first essential step, limited in time and in budget, to test the added value of the EU budget supporting defence research. It will pave the way to a substantial defence research programme within the context of the European Defence Fund under next multiannual financial framework post 2020.

The main objective of the PADR is to test mechanisms that can prepare, organise and deliver a variety of EU-funded cooperative defence research and technology development (R&T) activities to improve the competitiveness and innovation in the European defence industry and to stimulate cooperation amongst R&T actors in all Member States.

The focus of the PADR is on defence research rather than dual-use research; nevertheless it will be complementary with existing EU programmes such as the 7th Framework Programme for Research and Technological Development and Horizon 2020 as well as R&T activities in the Member States and in the European Defence Agency (EDA).

The core of the PADR is a research programme that is implemented through annual calls for proposals from 2017 onwards for 3 years[1]. The calls are based on annual work programmes defined in close cooperation with Member States and adopted by the Commission. The work programme contains a detailed description of the actions (research projects) that will be funded through the award of grants to consortia after the publication of calls of proposals. While the overall responsibility for the management of the Preparatory Action lies with the Commission, EDA will implement the annual work programmes, organise the calls, evaluate the project proposals submitted and manage the research projects funded. As an exception, the topic for PADR-FDDT-OPEN-03-2019 *'Challenging the future'* for projects on disruptive defence technologies will be managed directly by the Commission. Funding for grants awarded under this topic will take the form of lump sums as defined in Commission Decision C(2019)1873

This document contains the 2019 PADR call texts together with budgetary information and General Annexes with relevant information for applicants and the modalities which the funding authorities will use to evaluate the proposals.

In 2019 there will be three calls for proposals.

The call (PADR-EMS-03-2019 *'Electromagnetic Spectrum Dominance'*) will result in the selection of one project for research activities at system and component levels for the development of compact, highly performing and lightweight multifunction radiofrequency systems (combination of radar, communications and electronic warfare functions), based on a

[1] Commission Decision of 19 March 2019 on the financing of the 'Preparatory action on Defence research' and the adoption of the work programme for 2019, C(2019)1873.

European Active Electronically Scanned Array (AESA) technology, free from any non-EU nations end-user restrictions and compatible with aerial platforms with the possibility to be integrated in other platforms.

The second call for proposals will focus on future disruptive defence technologies, with two topics. The first topic (PADR-FDDT-OPEN-03-2019 *'Challenging the future'*) will result in the selection of up to 3 projects on potential disruptive defence technologies: these projects should demonstrate (convincing experimental proof of concept) the radical impact of technologies of any kind in the area of defence bringing technological superiority over potential adversaries.

The second topic (PADR-FDDT-EMERGING-03-2019 *'Emerging Game-changers'*) under this call for proposals will result in the funding of 5 projects to contribute to the development of breakthrough technologies for defence applications under 5 predefined topics.

The third call for proposals (PADR-US-03-2019 *'Unmanned Systems'*) will fund one project on interoperability standards for military unmanned systems allowing interoperability of various defence units using autonomous systems.

Finally, a financial contribution for the call for tender for independent experts for the evaluation of proposals submitted to the calls described above is foreseen.

Key websites

All information relating to the present calls for proposals can be accessed from the Funding and Tenders Opportunities portal:

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502,31094503;programCode=PPPA;programDivisionCode=null;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState

Information on the Preparatory Action, is available at the following website: https://ec.europa.eu/growth/content/preparatory-action-defence-research-description-2019-topics_en

EU Budget 2019 – Section III - Item 02 04 77 03 — Preparatory action on Defence Research: https://eur-lex.europa.eu/budget/data/LBL/2019/en/SEC03.pdf

Call – Electromagnetic Spectrum Dominance

PADR-EMS-2019

Situational awareness nowadays goes well beyond air, sea, land, or space. The electromagnetic environment has become an integral yet still very different part of the modern warfare manoeuvre space. Next to the more traditional functions of sensing and communication, electronic warfare (EW) plays a key role in dominating this environment: knowing how and why the spectrum is used, ensuring the spectrum can be used as deemed necessary whilst denying other actors to use it for their purposes[2]. Advanced electronic architectures allow optimising the combined use of radar, communications and/or EW functions in a single functional integrated system. With more, different and increasingly complex threats emerging - in combination with a rapid deployment in an ever more congested spectrum - there is a critical need to invest in developing advanced radiofrequency (RF) systems for many defence applications in many warfare domains to ensure that Member States can maintain their strategic autonomy while guaranteeing the security of supply of the necessary systems and components.

Proposals are invited against the following topic:

PADR-EMS-03-2019: Combined radar, communications, and electronic warfare functions based on European Active Electronically Scanned Arrays for military applications

Specific Challenge:

With smaller manned and unmanned platforms increasingly being used for Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) missions, there is a strong need to design compact, highly performing and lightweight multifunction RF systems. Moreover, with an increasing range of multifunction RF systems and new EW threats appearing rapidly, such platforms should also be resilient to operate in the presence, react to and supress such systems and threats when participating in military operations and playing a role in the battlefield. A complex yet very promising solution is to develop European advanced Active Electronically Scanned Array (AESA) technology allowing an optimal combination of radar, communication and EW functions into a single multifunction RF system.

Europe has a strong position in advanced military RF systems. Yet the risks are high that the Union becomes severely dependent on suppliers established in third countries for this critical defence technology. This not only limits the strategic autonomy of the Member States but also generates security-of-supply risks. End-user restrictions imposed by third countries (e.g., the US International Traffic in Arms and Export Administration Regulations (ITAR and EAR))

[2] For the purpose of this call and in accordance to most modern military doctrines/NATO terminology, Electronic Warfare (EW) is not considered as a single discipline, but as an overarching term covering Electronic Attack (EA), Electronic Defence (ED) and Electronic Surveillance (ES).

already endanger the security-of-supply of essential electronic components of certain RF systems.

To remove such important limitations, a research and technological development (R&T) action, potentially later on followed by further and/or development actions, needs to be initialised to design and build in Europe a multifunction RF system based on AESA technology for a broad range of applications, to become available for defence applications in several military domains within the next decade.

Scope:

European multifunction RF systems should integrate several functionalities in one system. This approach requires new system design technologies and the use of new architectural frameworks as well as the integration of electronic components. This would allow the sharing of many RF components and building blocks, managing these via an intelligent automated resource management system, leading to savings in size, weight, power as well as cost and capability benefits. Care should be taken to ensure optimal performance of the overall system whilst keeping it modular and scalable.

At the component level, high-power, high-frequency, broadband components, highly performant under harsh military conditions are key enablers for the realisation of multifunction RF systems. As an example, incremental advances in Si or GaAs-based transistors resulted in operating respectively into the low GHz range and medium power levels. This is no longer sufficient to meet the current demand of increasing the carrier frequencies, achieving broader, instantaneous and tuneable bandwidths, and delivering higher power and efficiencies. For this, completely new devices based on advanced materials, architectures and processes need to be developed and reliably fabricated in relatively large volumes.

As an example, next generation systems, such as photonics-based systems amongst other technologies, are even based on very different technologies, primarily to reach higher performance in the frequency domain while avoiding noisy up and down conversions. This would allow, for example, for synthetic aperture radar (SAR) imaging with superior resolution, broadband ES and EA operation, as well as high-bandwidth data transmission and improved sensor resilience.

Proposals need to include in the proposed activities both (1) a R&D assessment with a criticality mapping and (2) the implementation of balanced R&T activities at system as well as at component level, based on the assessment and criticality mapping.

The proposal should include a high-level description of the key performance indicators (KPIs) for the envisaged functionalities and the methodologies on how to measure them. A report with a detailed description of these KPIs and methodologies should be delivered within 6 months after the start of the project.

1. R&D assessment

Proposals should cover an R&D assessment for a joint Union development programme for a multifunction RF (radar, EW and communication) system based on AESA technology without end-user restrictions by third countries, including a technology roadmap. A size, weight, power and cost (SWaP-C) and cooling analysis should be performed to support the proposed solutions, and a cost estimate provided for the development of a prototype (TRL 7) by 2027 based on technologies without end-user restrictions by third countries.

The operational use will be based on the ability of the system to provide radar, EW as well as communication functions[3].

The system definition should be in line with the following technical requirements:

- the three functionalities should be integrated in a single aerial platform and ideally adaptable to more types of platforms, with an appropriate surveillance and reconnaissance, classification and identification, targeting and fire control, communications and EW capability and the possibility for single antennas/pods to concurrently perform some of them and to switch efficiently between them;
- the use of AESA for EW applications such as ES for detection and identification of waveforms and EA for countering threats should be analysed and assessed in the framework of multifunction system;
- the system should fully cover a bandwidth of 2-18 GHz and partially address regions of the electromagnetic spectrum up to 40 GHz.

Moreover, fully-electronic RF systems[4] should also comply with:

- the waveform (radar, EW, and communication) shall be digital, i.e., it will be stored and/or processed in digital format, and converted to analogue signal for transmission. In the design, the concepts of Software Defined Radar should be used;
- the antenna pattern should be formed by digital means, i.e., the information (phase or time) to compose the antenna pattern should be sent in a digital format to each - preferably digital - Transmit Receive Module (TRM) which will generate the appropriate signal to the radiating element to form the beam pattern.

The architecture and the functional specifications of the building blocks of the multifunction AESA-based system should be compatible for use in an aerial system, with the possibility to fully or partially adapt the technologies for other systems which are very demanding in terms of SWaP-C. The values of the performance parameters for all three functions and the concurrent modes capability should be analysed in detail.

[3] A generic scenario to reflect the technical and operational requirements is available (EUCI classified). The conditions related to get access to this document are outlined at the end of this call and in the General Annexes.

[4] In the meaning of systems which are not based on photonics-assisted RF generation and/or detection.

Concepts of employment and use of the system should be provided as part of the assessment.

The architecture should allow the system to adapt its performance to future improved characteristics of the enabling components and technologies.

Criticality mapping

Applicants should propose a criticality mapping to identify materials, components and/or technologies that need foremost priority support because of technological or economic bottlenecks. Insufficient R&D capacity in the Union at the early stages of the development as well as a lack of industrial capacity (including skills) towards the pre-manufacturing stages of the multifunction AESA-based system should be mapped. End-user restrictions imposed by third countries should be avoided.

The deliverables related to the R&D assessment and the criticality mapping will be annexed to the Special Report[5].

R&T activities

The applicants should propose R&T activities at the system level as well as at the component level in line with the proposed roadmap and criticality mapping.

(a) System level

The objective of the proposed RF AESA-based system is to demonstrate the joint and coordinated operation of radar, EW and communications functions in at least a laboratory environment.

In order to achieve this objective, research activities should therefore cover developments, or at least show tangible progress on the following areas:

- broadband antenna array with particular attention to grating lobes and electronic scanning performance;
- for fully-electronic RF systems[4], a digital beam former with multi-beam capability in Tx/Rx for EW;
- a resource manager able to coordinate the EW functions with the radar and communication ones in order to optimise the overall system performance in various scenarios.

Applicants can decide the extent to which they will cover in their proposal each of the above areas.

(b) Component level

Research activities should cover at least one design-fabrication-test cycle of a high-power, high-frequency, high as well as instantaneous and tunable bandwidth

[5] Model in Annex I of the 2019 Calls for Proposals and General Annexes.

Transmit/Receive (Tx/Rx) module. Consortia should thereby rely on the production capabilities of ideally more than one trustable[6] fab or foundry established in the Union.

Solutions to optimise the heat dissipation and achieve better and more cost-effective packaging of the integrated circuits should be included in the proposals.

A high-level description of the KPIs for state-of-the-art performance of the envisaged functionalities, and of the methodologies on how to measure them should be included for both subtopics. A report with a detailed description of these KPIs and methodologies should be delivered within 6 months after the start of the project.

Hardware and software products used or developed in the context of both sub-topics should not be subject to non-EU export control regulations.

The solutions or technologies proposed for the defence domain could also be assessed for other potential use, in particular in the security and space domain[7],

When relevant, results publicly available from EDA and NATO activities and studies should be taken into account for the proposed work. The activities included in the proposals should clearly differentiate from or go beyond work already covered under relevant themes of the Union Research and Innovation Framework Programmes.

The implementation of both R&T subtopics is intended to target at least TRL 4.

The Commission considers that proposals requesting a contribution from the Union between EUR 9 000 000 and 10 000 000 would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

No more than one action will be funded.

The lifetime of the proposed project should not exceed 30 months.

Expected Impact:

- Convincing demonstration of the potential of Union funded research in support of Union critical defence technologies, in particular in the domain of multifunction RF system;
- Establish a R&D assessment including a technology roadmap towards a joint Union development programme for a multifunction RF system based on AESA technology with milestones and estimated budget needs;
- Ensure secure and autonomous availability of multifunction RF systems to military end-users by 2027;

[6] i.e. commercially open, with a qualified process.

[7] Applicants are invited to consult the Work programme 2018-2020 "5.iii. Leadership in Enabling and Industrial Technologies – Space", and in particular the technical guidance documents listed in the Work programme.

- Contribute to strengthening the European industry and help improve its global position through the implementation of innovative technologies along a new European manufacturing value chain.

Type of Action: Research action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Conditions for the Call – Electromagnetic Spectrum Dominance

Opening date(s), deadline(s), indicative budget(s):[8]

Topics (Type of Action)	Budgets (EUR million)	Deadlines
	2019	
Opening: 21 Mar 2019		
PADR-EMS-03-2019 (RA)	Up to 10.0[9]	28 Aug 2019 (Single stage)
Overall indicative budget	Up to 10.0[9]	

Indicative timetable for evaluation and grant agreement signature:

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 6 months from the final date for submission; and
- Indicative date for the signing of grant agreements: Maximum 3 months from the date of informing successful applicants.

Eligibility and admissibility conditions: The conditions are described in General Annexes B and C of the work programme.

Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in General Annex F of the work programme.

Evaluation Procedure: The procedure for setting a priority order for proposals with the same score is given in General Annex F of the work programme.

The full evaluation procedure is described in the relevant guide published on the Funding and Tenders Opportunities portal.

[8] The authorising officer by delegation responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
All deadlines are at 17:00:00 Brussels local time.
The authorising officer by delegation responsible may delay the deadline(s) by up to two months.
The budget amounts are subject to the availability of the appropriations provided for in the budget for 2019.
[9] The Commission intends to increase this budget up to a maximum of EUR 10 million subject to availability of funds.

Additional requirements: a generic scenario to reflect the technical requirements is available. This document is EU classified information[10]. Access to the classified document should be requested at least 15 working days before the deadline of the submission of proposals.

The processes to get access to the classified document are described in General Annex J of the work programme.

Special report: a special report is requested to be submitted according to the template included in General Annex I of the work programme.

Consortium agreement: Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.

[10] Commission Decision (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information.

Call – Future Disruptive Defence Technologies

PADR-FDDT-2019

The development of new defence products and services very often relies on incremental improvements of existing ones leading to a higher performance or more efficient operation of established capabilities. However, technologies are emerging that could – when used in a military context – radically change the balance of military power between opponents. Such disruptive technologies for defence then lead to game-changing shifts in military paradigms. Exploring innovative technologies for defence use is thus essential to alter or maintain technological dominance.

Proposals are invited against the following topics:

PADR-FDDT-OPEN-03-2019: Challenging the future

Specific Challenge:

To lay the foundations for radically new future technologies of any kind with unexpected impact, that aims to bring radical technological superiority over potential adversaries. This topic also encourages the driving role of new actors in defence research and innovation, including excellent young researchers, ambitious high-tech SMEs and visionary research centres of big companies and research and technology organisations.

Scope:

Proposals are sought for **cutting-edge**, **high-risk/high-impact research leading to game-changing impact in a defence context.** They must have all of the following essential characteristics:

- **a disruptive impact in a defence context:** the proposal needs to clearly address how the proposed solutions would create a disruptive effect when integrated in a realistic military operation;
- **radical vision:** the proposal must address a clear and radical vision, enabled by a new technology concept that challenges current paradigms. In particular, research to advance on the roadmap of a well-established technological paradigm, even if high-risk, will not be funded;
- **breakthrough technological target:** the proposal must target a novel and ambitious science-to-technology breakthrough as a first proof of concept for its vision. In particular, blue-sky exploratory research without a clear technological objective targeting defence applications will not be funded.

The inherently high risks of the research proposed shall be mitigated by a flexible methodology to deal with the considerable science-and-technology uncertainties and for choosing alternative directions and options.

Proposals should include an assessment of the ethical, legal and societal impact of the proposed solutions.

The implementation of this topic should not go beyond the delivery of a convincing experimental proof of concept.

The Commission considers that proposals requesting a contribution from the Union of up to EUR 1 500 000 would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

The lifetime of the proposed project should not exceed 24 months.

Expected Impact:

- scientific and technological contributions to the foundation of a future technology with disruptive applications in the area of defence;
- potential for future social or economic impact or market creation;
- building leading defence research and innovation capacity across Europe by involvement of key actors that can make a difference in the future, for example excellent young researchers, ambitious high-tech SMEs, visionary departments of big companies, research centres and universities;
- convincing demonstration of the potential of EU-funded research for defence applications.

Type of Action: Research action

Funding awarded under this topic will take the form of lump sums as defined in Commission Decision C(2019)1873

The conditions related to this topic are provided at the end of this call and in the General Annexes.

PADR-FDDT-EMERGING-03-2019: Emerging Game-changers

Specific Challenge:

Anticipated and ongoing advances in several technology areas will continue to have a substantial impact on the defence sector. Emerging technological directions need to be explored and consolidated, in order to analyse and exploit their disruptive potential on the defence sector. The communities that are able to drive this forward need to be encouraged to extend from the participating consortia to a wider European pool of expertise, thus stimulating the emergence of a European innovation eco-system with strong relations with the defence sector around a new technological paradigm, well beyond the world of research alone, including military end-users.

Scope:

Proposals are sought for cutting-edge high-risk/high-reward research projects that aim to demonstrate a new technological paradigm within the scope of one or more of the following sub-topics. Applicants can submit proposals which are in scope of several sub-topics but are requested to indicate one sub-topic as the main scope of the proposed research activities.

(1) Autonomous positioning, navigation and timing

Global Navigation Satellite Systems (GNSS) have a profound impact on military positioning, navigation and timing (PNT) services which however critically depend on reliable satellite signals. The availability of these signals cannot be assured under all conditions because operations can take place in GNSS denied/contested environments or because of the physical limitations of the current technology.

A promising complementary device would be autonomous PNT sources that can be used without the need for position or timing updates. Relevant factors for considered solutions should be low drift, small scale, power-efficiency and integrability.

(2) Artificial Intelligence (AI) for defence

The ambition of achieving Artificial Intelligence (AI) drives promising breakthrough technologies, expected to become significant in many fields in the area of defence. Their potential for the defence domain is huge, as AI solutions are expected to play an important role in critical fields such as cyber defence, C4ISR systems, intelligent and autonomous unmanned systems and swarms, electronic warfare, data fusion, logistics and maintenance optimization, information processing and intelligence analysis, mission planning and control, war gaming and training, which could radically accelerate the cycle of military operations and deeply influence the military practices.

Proposals are invited for research activities that apply AI in defence technologies in any part of the military capability spectrum, including for cyber defence.

(3) Quantum technologies for defence applications

The advancement of quantum technologies is expected to impact profoundly military operations. Quantum information processing, quantum communication, quantum key distribution and quantum sensing technologies will probably produce a paradigm shift in many fields, such as C4ISR, navigation, object and chemical detection etc.

Research proposals in this subtopic should address areas in quantum technologies with clear military applications.

(4) Long-range effects

The operational challenges and specificities of the modern military missions and the rapidly growing cost of use of the defence systems require radical solutions for cost-efficient long-range precision strike. The separate or combined use of electromagnetic railguns, guided ammunition and hypervelocity projectiles, among other things, has been proposed and explored with promising results.

Proposals in this sub-area should feature research activities aimed towards solutions which would provide a disruptive change in the area of long-range fire support.

(5) Augmenting soldier capacity

Soldiers have to operate in increasingly demanding and complex environments, performing different and multiple tasks. Soldiers' equipment becomes increasingly heavier and more complex, adding to the challenge of accomplishing their missions in a better, faster and more efficient way. Potential solutions for augmenting the capacity of the soldiers to perform their tasks have been studied, ranging from the enhancement of their physical capacities by using exoskeletons and robotic systems, to applying augmented reality for increased situational awareness.

Research in this area should propose solutions which would radically increase the capacity of the modern soldiers to perform physically demanding or mentally exhausting tasks.

The proposals should include a high-level description of the key performance indicators (KPIs) for the envisaged functionalities and the methodologies on how to measure them. A report with a detailed description of these KPIs and methodologies should be delivered within 6 months after the start of the project.

When applicable, proposals should include an assessment of the ethical, legal and societal impact of the proposed solutions. The inclusion of an assessment of the ethical, legal and societal impact for all the proposed solutions for subtopics 2 and 5 is mandatory.

The implementation of this topic is intended to target TRL 3-4.

The Commission considers that proposal requesting a contribution up to EUR 1 500 000 would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

The Commission intends to fund the highest ranked proposal per subtopic (with proposals being evaluated separately within each sub-category). In case none of the proposals submitted to one or more sub-topics are fundable, the proposals second ranked proposal in each of the remaining sub-topics will be ranked following their evaluation score. This ranked list will determine the priority order of funding additional proposals within the limit of the available budget.

The lifetime of the proposed project should not exceed 24 months.

<u>Expected Impact:</u>

- scientific and technological contributions to the development of a new future technology with target applications in the area of defence;
- potential for future social or economic impact or market creation;
- building leading defence research and innovation capacity across Europe by involvement of key actors that can make a difference in the future, for example excellent

young researchers, ambitious high-tech SMEs or visionary departments of big companies;

- convincing demonstration of the potential of EU-funded research for defence applications.

Type of Action: Research action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Conditions for the Call – Future Disruptive Defence Technologies

Opening date(s), deadline(s), indicative budget(s):[11]

Topics (Type of Action)	Budgets (EUR million)	Deadlines
	2019	
Opening: 4 Jun 2019		
PADR-FDDT-OPEN-03-2019 (RA)	Up to 3.96[12]	03 Sep 2019 (First stage) 30 Jan 2020 (Second stage)
Opening: 21Mar 2019		
PADR-FDDT-EMERGING-03-2019 (RA)	Up to 7.50[13]	28 Aug 2019 (Single stage)
Overall indicative budget	Up to 11.46	

Indicative timetable for evaluation and grant agreement signature:

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 6 months from the final date for submission; and
- Indicative date for the signing of grant agreements: Maximum 3 months from the date of informing successful applicants.

For two stage procedure:

- Information on the outcome of the evaluation: Maximum 3 months from the final date for submission for the first stage and maximum 5 months from the final date for submission for the second stage; and

[11] The authorising officer by delegation responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
All deadlines are at 17:00:00 Brussels local time.
The authorising officer by delegation responsible may delay the deadline(s) by up to two months.
The budget amounts are subject to the availability of the appropriations provided for in the budget for 2019.
[12] The Commission intends to increase this budget up to a maximum of EUR 4.5 million subject to availability of funds.
[13] The Commission intends to increase this budget up to a maximum of EUR 7.5 million subject to availability of funds.

- Indicative date for the signing of grant agreements: Maximum 8 months from the final date for submission of the second stage.

Eligibility and admissibility conditions: The conditions are described in General Annexes B and C of the work programme. The following exception applies:

PADR-FDDT-OPEN-03-2019	The outline proposal (first stage) should not exceed 2500 words (10 pages) for both sections.

Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in General Annex F of the work programme. The following exceptions apply:

PADR-FDDT-OPEN-03-2019	For second-stage evaluations, the following criteria, scoring and threshold apply: **Excellence** • Clarity of the radical vision of a science-enabled technology and its differentiation from current paradigms. • Novelty and ambition of the proposed science-to-technology breakthrough that addresses this vision. • Range of and added value for opening up new areas of research; non-incrementality of the research proposed. • High-risk, plausibility and flexibility of the research approach. **Threshold: 4/5, Weight: 50%** **Impact** • The extent to which the outputs of the project would contribute to the expected impacts listed in the work programme under this topic. **Threshold: 4/5, Weight: 30%** **Quality and efficiency of the implementation** The following aspects are taken into account: • Coherence and effectiveness of the research methodology and work plan to achieve project objectives and impacts, including

	adequate allocation of resources to tasks and partners. • Role and complementarity of the participants and extent to which the consortium as a whole brings together the necessary expertise. **Threshold: 3/5, Weight: 20%**
PADR-FDDT-EMERGING-03-2019	The following criteria, scoring and threshold apply: **<u>Excellence</u>** • Clarity of the radical vision of a science-enabled technology and its differentiation from current paradigms. • Novelty and ambition of the proposed science-to-technology breakthrough that addresses this vision. • Range of and added value for opening up new areas of research; non-incrementality of the research proposed. • High-risk, plausibility and flexibility of the research approach. **Threshold: 4/5, Weight: 50%** **<u>Impact</u>** • The extent to which the outputs of the project would contribute to the expected impacts listed in the work programme under this topic. **Threshold: 4/5, Weight: 30%** **<u>Quality and efficiency of the implementation</u>** The following aspects are taken into account: • Coherence and effectiveness of the research methodology and work plan to achieve project objectives and impacts, including

	adequate allocation of resources to tasks and partners. • Role and complementarity of the participants and extent to which the consortium as a whole brings together the necessary expertise. **Threshold: 3/5, Weight: 20%**

Evaluation Procedure: The procedure for setting a priority order for proposals with the same score is given in General Annex F of the work programme. The full evaluation procedure is described in the relevant guide published on the Funding and Tenders Opportunities portal.

The following exceptions apply:

PADR-FDDT-OPEN-03-2019	The submission and evaluation of the proposals submitted to the call PADR-FDDT-OPEN-03-2019 will be done in two stages: **Stage 1**: Submission of an outline proposal with the central idea and key points, the scientific-technological objectives to be explored and reached together with the approximate cost. It shall include a separate section describing how the proposed technology/solution would produce a disruptive effect in the defence domain. The size of the proposal should not exceed 2500 words. The evaluation of these first-stage proposals will cover: • A scientific evaluation of the scientific and technological merits of the proposal by a multidisciplinary panel of qualified independent experts with an interest in defence affairs. The scientific evaluation will focus on the novelty of the concept, the scientific soundness ("Excellence" criterion, to be scored out of 10) and expected impact ("Impact" criterion, to be scored out of 5) of the proposal. The overall threshold of 11/15 is applied to the sum of the two scores, *SE*. • For all the proposals that will exceed the overall threshold in the scientific evaluation, a military evaluation of the disruptive impact

	of the proposals in the defence domain by defence experts (nominated by the MS and Norway). The defence experts are invited to mark with 1 point up to 10 proposals considered to have the strongest disruptive impact in the defence domain. A proposal subjected to the military evaluation may thus receive an accumulated mark *ME* of maximum the total number of nominations by the MS and Norway, ME_{max}. The overall threshold, applying to the total score *TS* which is the weighted sum[14] $$TS = SE + \frac{15}{ME_{max}} * ME$$ will be set such that the total requested budget admitted to the second stage is as close as possible to four times the available budget. The actual level will therefore depend on the number of proposals passed to the military evaluation. **Stage 2**: Consortia which submitted proposals to the first stage and passed the threshold will be invited to submit full proposals. Evaluation scores will be awarded for the criteria, and not for the individual different aspects listed in the table above.

Conditions on EU classified information:

PADR-FDDT-OPEN-03-2019	Full proposals submitted to the second stage will be classified “RESTREINT UE/EU RESTRICTED”

Special report: a special report is requested to be submitted according to the template included in General Annex I of the work programme.

Consortium agreement: Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.

[14] A factor equal to $\frac{15}{ME_{max}}$ is introduced to ensure that both the scientific and military evaluations have an equal weight in the total score.

Call – Unmanned Systems

PADR-US-2019

Unmanned systems are already broadly used by the armed forces to conduct a wide variety of tasks. Technological improvements and breakthroughs in microelectronics, data processing, guidance, navigation and control, as well as increased complexity of the military tasks and missions are expected to broadly expand the use of unmanned systems in the defence domain. The extensive, novel and perhaps intensive operation of unmanned systems in homogeneous and heterogeneous swarms, operated by or/ and operating together with human actors requires addressing technical aspects concerning the interoperability and standardisation of different systems, equipment, components, procedures in order to maximise and optimise the adoption and integration of unmanned systems in the armed forces.

Proposals are invited against the following topic:

PADR-US-03-2019: Interoperability standards for military unmanned systems

Specific Challenge:

Interoperability of defence systems is key for the ability of different forces to operate safely and effectively together in joint or combined operations. It can be challenging for the armed forces to achieve desired levels of interoperability. Interoperability relates on a technical level to the possibility of connecting or commonly using equipment and systems. This can be enhanced by e.g the use of open standards or joint architectures. But interoperability can also require interlocking processes and can even have implications on concepts of use and employment of systems. The increased use of unmanned systems (UXS, in which "X" can stand for "A" (aerial), "S" (surface), "G" (ground) or "U" (underwater)) of modern forces in multi-national operations require multi-national interoperability, cross-domain interoperability, effectiveness, as well as adaptability of systems to mission and mission intensity, which may imply upgrade and adoption of novel payloads or maintaining and upgrading equipment at state-of the art or standardising the human-machine interaction.

Scope: Interoperability can exist at different levels. Proposals are invited to focus on interoperability and standardisation of systems, subsystems, components and procedures of complex UXS platforms in a network centric environment. Proposals can address, amongst other, topics such as:

- the coordinated use of multiple platforms, datalink aspects (including standardised security), and standardisation of control stations to simultaneously control several platforms and to control the handover between stations;
- intra-system interoperability: interoperability between the subsystems and payloads within a system, with standard interfaces, leading to plug-and-play connection capability, making it thus easier to install new and/or change mission payloads;

- standardisation of the modules, interfaces and information formats to simplify the design of new and the upgrade of existing UXS;
- robotic hardware standardisation to allow for the exchange of robotic elements in military applications;
- interoperability between UXS; manned systems and UXS; soldiers, manned systems and UXS;
- concepts for interoperability between military units utilizing autonomous systems.

The proposed activities should include a demonstration of the effectiveness of the proposed approach.

The proposals should include a high-level description of the key performance indicators (KPIs) for the envisaged functionalities and the methodologies on how to measure them. A report with a detailed description of these KPIs and methodologies should be delivered within 6 months after the start of the project.

The Commission considers that proposals requesting a contribution from the Union up to EUR 1 500 000 would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

When relevant, results publicly available from EDA and NATO activities and studies should be taken into account for the proposed work. The activities included in the proposals should clearly differentiate from or go beyond work already covered under relevant themes of the EU Programmes.

No more than one action will be funded.

The lifetime of the proposed project should not exceed 24 months.

Expected Impact:

- convincing demonstration of EU-wide research cooperation in defence research;
- promotion of intra-/inter-system interoperability for unmanned systems;
- increase of modularity and reduction in life cycle costs for unmanned systems;
- enhancement of the effectiveness of military personnel and systems.

Type of Action: Research action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Conditions for the Call – Unmanned Systems

Opening date(s), deadline(s), indicative budget(s):[15]

Topics (Type of Action)	Budgets (EUR million)	Deadlines
	2019	
Opening: 21 Mar 2019		
PADR-US-03-2019 (RA)	1.50	28 Aug 2019 (Single stage)
Overall indicative budget	1.50	

Indicative timetable for evaluation and grant agreement signature:

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 6 months from the final date for submission; and
- Indicative date for the signing of grant agreements: Maximum 3 months from the date of informing successful applicants.

Eligibility and admissibility conditions: The conditions are described in General Annexes B and C of the work programme.

Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in General Annex F of the work programme.

Evaluation Procedure: The procedure for setting a priority order for proposals with the same score is given in General Annex F of the work programme.

The full evaluation procedure is described in the relevant guide published on the Funding and Tenders Opportunities portal.

Special report: a special report is requested to be submitted according to the template included in General Annex I of the work programme.

[15] The authorising officer by delegation responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
All deadlines are at 17:00:00 Brussels local time.
The authorising officer by delegation responsible may delay the deadline(s) by up to two months.
The budget amounts for the 2019 budget are subject to the availability of the appropriations provided for in the draft budget for 2019 after the adoption of the budget 2019 by the budgetary authority.

Consortium agreement: Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.

Other actions[16]

External Expertise

This action will support the use of appointed independent experts for the evaluation of proposals.

Type of Action: Expert Contracts

Indicative budget: EUR 0.3 million from the 2019 budget

[16] The budget amounts for the 2019 budget are subject to the availability of the appropriations provided for in the draft budget for 2019 after the adoption of the budget 2019 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

Budget[17,18]

	Budget line(s)	2019 Budget (EUR million)
Calls		
PADR-EMS-03-2019		Up to 10.00
	from 02.04 77 03	*10.00*
PADR-FDDT-OPEN-03-2019		Up to 3.96
	from 02.04 77 03	*3.96*
PADR-FDDT-EMERGING-03-2019		Up to 7.50
	from 02.04 77 03	*7.50*
PADR- US-03-2019		Up to 1.50
	from 02.04 77 03	*1.50*
Other Actions		
Expert Contracts		0.30
	from 02.04 77 03	*0.30*
Estimated total budget		23.26

[17] The budget figures given in this table are rounded to two decimal places.
The budget amounts are subject to the availability of the appropriations provided for in the budget for 2019.
[18] The budget does not include administrative expenditures for the management of the Preparatory Action on Defence Research.

General Annexes

A. List of countries and entities eligible for participation and funding

Legal entities established in the following countries and territories for the whole duration of the grant agreement will be eligible to receive funding through PADR grants:

- The Member States (MS) of the European Union (EU), including their overseas departments;
- The Overseas Countries and Territories (OCT) linked to the Member States[19]:

  Anguilla, Aruba, Bermuda, Bonaire, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Curaçao, Falkland Islands, French Polynesia, French Southern and Antarctic Territories, Greenland, Montserrat, New Caledonia, Pitcairn Islands, Saba, Saint Barthélémy, Saint Helena, Saint Pierre and Miquelon, Sint Eustatius, Sint Maarten, South Georgia and the South Sandwich Islands , Turks and Caicos Islands, Wallis and Futuna.

- Norway;

⚠ For British applicants: Please note that until the UK leaves the EU, EU law continues to apply to and within the UK, when it comes to rights and obligations; this includes the eligibility of UK legal entities to fully participate and receive funding in actions such as those called for in the 2019 work programme of the Preparatory Action on Defence Research[20]. Please be aware however that the eligibility criteria must be complied with for the entire duration of the grant. If the UK withdraws from the EU during the grant period without concluding an agreement with the EU ensuring in particular that British applicants continue to be eligible, they will no longer be eligible to receive EU funding and their participation may be terminated on the basis of Article 50 of the grant agreement.

⚠ For Norwegian applicants: Please be aware that all eligibility criteria related to the calls published on the basis of Commission Decision C(2019)1873 must be complied with at least on the 31 December 2019. If the participation of the Kingdom of Norway in the research programme of the Preparatory Action is not confirmed at that date, Norwegian participants will cease to receive EU funding (while continuing, where possible, to participate) or be required to leave the consortia on the basis of Article 50 of the grant agreement.

[19] Entities from Overseas Countries and Territories (OCT) are eligible for funding under the same conditions as entities from the Member States to which the OCT in question is linked.

[20] Commission Decision of 19 March 2019 on the financing of the 'Preparatory action on Defence research' and the adoption of the work programme for 2019, C(2019)1873.

International European interest organisations[21] will be eligible to receive funding through PADR grants.

The call conditions may exclude entities unable to provide satisfactory security guarantees, including as regards personnel security clearance if justified by security reasons.

[21] An international European interest organisation is an international organisation, the majority of whose members are Member States or Norway, and whose principal objective is to promote scientific and technological cooperation in Europe.

B. Standard admissibility conditions and related requirements

1. Proposals must comply with the admissibility conditions set out in this Annex, unless they are supplemented or modified in the call conditions.

To be considered **admissible**, a proposal must be:

(a) submitted in the electronic submission system before the deadline given in the call conditions[22];

(b) readable, accessible and printable.

2. **Incomplete** proposals may be considered inadmissible. This includes the requested administrative data, the proposal description, and any supporting documents specified in the call.

3. The following supporting documents will be required to determine the operational capacity for grant proposals, unless otherwise specified in the call:

- A curriculum vitae or description of the profile of the persons who will be primarily responsible for carrying out the proposed research and/or innovation activities;
- A list of up to five relevant publications, and/or products, services (including widely-used datasets or software), or other achievements relevant to the call content;
- A list of up to five relevant previous projects or activities, connected to the subject of this proposal;
- A description of any significant infrastructure and/or any major items of technical equipment, relevant to the proposed work;
- A description of any third parties that are not represented as project partners, but who will nonetheless be contributing towards the work (e.g., providing facilities, computing resources).

4. The following supporting documents will be required to determine the financial capacity for grant proposals:

- The balance sheet for the last financial year for which the accounts were closed;

[22] Submission of EU classified information (as defined in Commission Decision (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information). is excluded from the obligation to be submitted in the electronic submission system, but the deadline for submission of proposals should be respected. If the proposal is submitted by registered post or by courier service, the post office stamp or the date of the deposit slip from the courier service will be considered as proof of the date of submission. If the proposal is hand-delivered, it should be delivered not later than 17h00 (Brussels local time) on the day of the deadline for submission. Proposals sent after the final deadline or hand-delivered after the final deadline will automatically be rejected.

- The profit and loss account for the last financial year for which the accounts were closed.

The financial year data cannot be older than 2 years. Public entities and international organisations are exempted from the financial capacity assessment.

If a satisfactory financial capacity cannot be established on the basis of such documents, the financial capacity of each member of the consortium will be assessed on the basis of other documents considered as relevant and requested on a case by case basis.

5. Grant proposals must include a draft plan for the exploitation and dissemination of the results, unless otherwise specified in the call conditions.

6. In addition, to the above admissibility conditions, the following related requirements apply.

Page limits will apply to proposals/applications. Unless stated otherwise in the call conditions, the limit for a full proposal is 70 pages, except for coordination and support actions, where the limit is 50 pages.

The page limits and sections subject to limits will be clearly shown in the proposal templates in the Funding and tenders opportunities participant portal electronic submission system.

If a proposal/application exceeds the limits, the applicant will receive an automatic warning, and will be advised to re-submit a version that conforms.

After the call deadline, excess pages (in over-long proposals/applications) will be automatically overprinted with a “watermark”.

Evaluators will be instructed to disregard these excess pages.

Proposals must be written in a legible font, further guidance on the use of fonts, margins and other page formatting will be included in the proposal templates.

The structure of proposals must correspond to the requirements specified under each section of the proposal template.

C. Standard eligibility conditions

1. Proposals must comply with the **eligibility conditions** set out in this Annex, unless they are supplemented or modified in the call conditions.

A proposal will only be considered **eligible** if:

(1) its content corresponds, wholly or in part, to the topic description for which it is submitted

(2) it complies with the eligibility conditions for participation set out in the table below, depending on the type of action:

	Eligibility conditions for participation[23]
Research actions (RA)	At least three legal entities. Each of the three must be established in a different EU Member State or Norway[24]. All three legal entities must be independent of each other.
Coordination & support actions (CSA)	At least one legal entity established in an EU Member State or Norway[24].

Two legal entities are considered as independent of each other where neither is under the direct or indirect control of the other or under the same direct or indirect control as the other.

Control may, in particular, take either of the following forms:

(a) the direct or indirect holding of more than 50 % of the nominal value of the issued share capital in the legal entity concerned, or of a majority of the voting rights of the shareholders or associates of that entity;

(b) the direct or indirect holding, in fact or in law, of decision-making powers in the legal entity concerned.

The following relationships between legal entities are not in themselves be deemed to constitute controlling relationships:

(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;

[23] Natural or legal persons, groups or non-State entities covered by the Council sanctions in force are not eligible to participate in Preparatory Action on Defence Research. Please see the consolidated list of persons, groups and entities subject to EU financial sanctions, available at http://eeas.europa.eu/cfsp/sanctions/consol-list_en.htm.

[24] Legal entities established in Norway shall be eligible for funding provided that Protocol 31 to the EEA agreement authorises the participation and the financial contribution of the Kingdom of Norway in the PADR. The PADR annual work programme and the Decision of the EEA Joint Committee shall be adopted in the same year.

(b) the legal entities concerned are owned or supervised by the same public body.

If one of the applicants is the JRC, or an international European interest organisation (IOEI) or an entity created under Union law, it is considered to be established in a Member State or Norway other than any Member State or Norway in which another applicant in the same action is established.

All the infrastructure, facilities, assets and resources used by the applicants, including subcontractors and other third parties, in actions funded under the Preparatory Action on Defence Research should not be located on the territory of non-Member States or non-associated countries. The use of such infrastructure, facilities, assets and resources shall not be subject to control or restriction by third countries. Applicants shall identify before the signature of the grant agreement all relevant elements and infrastructure to be used in the action.

Where appropriate and duly justified, the call conditions may provide for additional conditions according to specific policy requirements or to the nature and objectives of the action, including inter alia conditions regarding the number of beneficiaries, the type of beneficiary and the place of establishment.

D. Types of action: specific provisions and funding rates[25]

Research actions (RA)

Description: Action primarily consisting of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution. Depending on the topic, they may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment or rather have their focus on activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services. For this purpose they may include large-scale prototyping, testing, demonstrating, or piloting.

Funding rate: 100% of the eligible costs.

Coordination and support actions (CSA)

Description: Actions consisting primarily of accompanying measures such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, including design studies for new infrastructure and may also include complementary activities of strategic planning, networking and coordination between programmes in different countries.

Funding rate: 100% of the eligible costs.

Indirect costs are eligible if they are declared on the basis of a flat-rate of 25% of the eligible direct costs, excluding eligible direct costs for subcontracting.

[25] Participants may ask for a lower rate.

E. Technology readiness levels (TRL)

Where a topic description refers to a TRL, the following definitions apply, unless otherwise specified:

- 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
- TRL 6 – technology demonstrated in relevant environment
- 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)

F. Evaluation rules

1. Selection and award criteria

Selection Criteria

1. *Financial capacity:* The financial capacity of the coordinators and the applicants shall be verified in accordance with the provisions of the Financial Regulation.

2. *Operational capacity*: As a distinct operation, carried out during the evaluation of the award criterion 'Quality and efficiency of the implementation', the evaluators will indicate whether the applicants have sufficient operational capacity to carry out the proposed work, based on the competence and experience of the individual applicant(s).

Award criteria, scores and weighting

1. Grant proposals will be evaluated according to Articles 150 and 200 of Regulation (EU, Euratom) No 2018/1046.

The proposals will be evaluated on the basis of the following award criteria: (a) excellence (b) impact and (c) quality and efficiency of the implementation.

The aspects to be considered in each case depend on the types of action as set out in the table below, unless otherwise specified in the call conditions:

	Award criteria		
	Excellence *The following aspects will be taken into account, to the extent that the proposed work corresponds to the topic description in the calls text:*	**Impact** *The following aspects will be taken into account:*	**Quality and efficiency of the implementation** *The following aspects will be taken into account**:*
All types of action	Clarity and pertinence of the objectives; Soundness of the concept, and credibility of the proposed methodology;	The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the call under the relevant topic;	Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables; Appropriateness of the management structures and procedures, including risk and

			innovation management; Complementarity of the applicants and extent to which the consortium as whole brings together the necessary expertise; Appropriateness of the allocation of tasks, ensuring that all applicants have a valid role and adequate resources in the project to fulfil that role.
Research actions (RA)	Extent that the proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models) Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge.	Any substantial impacts not mentioned in the call, that would enhance innovation capacity, create new market opportunities, strengthen competitiveness and growth of companies, address – in the context of a defence-oriented research programme – issues related to climate change or the environment, or bring other important benefits for society; Quality of the proposed measures to: • Exploit and disseminate the project results (including management of IPR), and to manage research data where relevant. • Communicate the project activities to different target audiences	
Coordination & support actions (CSA)	Quality of the proposed coordination and/or support measures.	Quality of the proposed measures to: • Exploit and disseminate the project results (including management of IPR), and to manage research data where relevant.	

		• Communicate the project activities to different target audiences	

* not all aspects are relevant to proposals involving just one beneficiary.

2. Scoring and weighting:

Unless otherwise specified in the call conditions, evaluation scores will be awarded for the criteria, and not for the different aspects listed in the above table. For full proposals, each criterion will be scored out of 5. The threshold for individual criteria will be 3. The overall threshold, applying to the sum of the three individual scores, will be 10.

3. Priority order for proposals with the same score:

Unless the call conditions indicate otherwise, the following method will be applied.

If necessary, the panel will determine a priority order for proposals which have been awarded the same score within a ranked list. Whether or not such a prioritisation is carried out will depend on the available budget or other conditions set out in the call text. The following approach will be applied successively for every group of ex aequo proposals requiring prioritisation, starting with the highest scored group, and continuing in descending order:

a) Proposals that address topics, or sub-topics, not otherwise 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 the criterion excellence. When these scores are equal, priority will be based on scores for the criterion impact. In the case that the call gives increased weight to impact, this prioritisation will be done first on the basis of the score for impact, and then on that for excellence.

c) If necessary, any further prioritisation will be based on the following factors, in order: size of EU budget allocated to SMEs; gender balance among the personnel named in the proposal who will be primarily responsible for carrying out the research activities.

d) If a distinction still cannot be made, the panel may decide to further prioritise by considering how to enhance the quality of the project portfolio through synergies between projects, or other factors related to the objectives of the call or to the Preparatory Action on Defence Research in general. These factors will be documented in the report of the Panel.

e) The method described in (a), (b), (c) and (d) will then be applied to the remaining ex aequos in the group.

4. Evaluation procedure

1. Calls will be subject to a one-stage submission and evaluation procedure unless otherwise specified in the call conditions.

2. The evaluation shall be carried out according to Articles 150 and 200 of Regulation (EU, Euratom) No 2018/1046. Unless otherwise specified in the call conditions, the evaluation will be based on the assessment of an evaluation committee set up by the authorising officer assisted by independent experts.

The independent experts will be chosen on the basis of their skills, experience and knowledge appropriate to carry out the tasks assigned to them. The appropriate security clearance will be required before appointment.

Experts competent in defence research or related areas will be identified and selected on the basis of a call for expression of interest. A database of candidates will be established. All candidates included in the database will be required to be validated by the Member State that has issued their security clearance.

When appointing independent experts, appropriate measures will be taken to seek a balanced composition within the expert groups and evaluation panels in terms of various skills, experience, knowledge, geographical diversity and gender, and taking into account the situation in the field of the action.

An expert faced with a conflict of interest in relation to a matter on which the expert is required to provide an opinion cannot evaluate, advice or assist on the specific matter in question.

All exchanges with independent experts, including the conclusion of contracts for their appointment and any amendment thereto, may be done through electronic exchange systems as stipulated in Article 148 of Regulation (EU) No. 2018/1046.

As part of the evaluation, a panel review will recommend one or more ranked lists for the proposals under evaluation, following the scoring systems indicated above. A ranked list will be drawn up for every indicative budget shown in the call conditions.

3. Proposal coordinators receive an Evaluation Summary Report (ESR), showing the results of the evaluation for a given proposal.

4. If special procedures apply, they will be set out in the call conditions.

G. Review of ethical, legal and societal aspects (‘ethics review’)

A review of ethical, legal and societal aspects will be systematically carried out for proposals raising such issues.

This review will verify compliance with relevant national, Union and international law, including the Charter of Fundamental Rights of the European Union. The actions shall also comply with ethical principles deriving from relevant national, Union and international law.
The review will be conducted by a group of experts on military ethical and legal issues. The appropriate security clearance will be required before appointment. All experts must be validated by the Member State that has issued their security clearance.

The process of the review will be as transparent as possible and ensure that it is carried out in a timely manner avoiding, where possible, the resubmission of documents. Guidance notes for preparing the self-assessment are available from the Funding and Tender Opportunities portal under “Topic conditions and documents”.

A proposal which contravenes ethical principles or any applicable legislation, or which does not fulfil the conditions set out in the work programme or in the call for proposals may be excluded from the evaluation, selection and award procedures at any time.

H. Actions involving classified information

In the case of actions involving security-related activities, special provisions for classified information (as defined in the PADR Programme Security Instructions and in line with the Commission Decision (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information.) will be taken in the grant agreement, as necessary and appropriate.

It is possible that the output of an action (’results’) needs to be classified, or that classified inputs ('background') are required. In such cases proposers have to ensure and provide evidence of the adequate clearance of all relevant facilities. Consortia have to clarify issues such as e.g. access to classified information or export or transfer control with the national authorities of their Member States/Preparatory Action on Defence Research associated countries prior to submitting the proposal. Proposals need to provide a draft security classification guide, indicating the expected levels of classification. Appropriate arrangements will have to be included in the consortium agreement.

I. Exploitation and dissemination of results

Ownership of results

Results are owned by the beneficiary generating them.

Where beneficiaries in an action have jointly generated results, and where their respective contribution to the joint results cannot be ascertained, or where it is not possible to separate such joint results for the purpose of applying for, obtaining or maintaining the relevant intellectual property rights protection, they will have joint ownership of those results. The joint owners will establish an agreement regarding the allocation and terms of exercise of that joint ownership in accordance with their obligations under the grant agreement. The joint owners may agree not to continue with joint ownership but decide on an alternative regime, inter alia by transferring their ownership shares to a single owner with access rights for the other beneficiaries, once the results have been generated.

Unless otherwise agreed in the joint ownership agreement, each joint owner will be entitled to grant non-exclusive licences to third parties to exploit the jointly owned results, without any right to sub-license, subject to the following conditions:

(a) prior notice needs to be given to the other joint owners;fair, reasonable and non-discriminatory compensation will be provided to the other joint owners.

If employees or any party working for a beneficiary are entitled to claim rights to the results generated, the beneficiary concerned will ensure that it is possible for those rights to be exercised in a manner compatible with its obligations under the grant agreement.

Protection of results

Where results are capable of or may reasonably be expected to be capable of commercial or industrial exploitation, the beneficiary owning those results will examine the possibility of protecting them. The beneficiary will, if possible, reasonable and justified given the circumstances, adequately protect them for an appropriate period of time and with an appropriate territorial coverage, having due regard to its legitimate interests, and the legitimate interests, particularly the commercial interests, of the other beneficiaries in the action.

Exploitation and dissemination of results

Each beneficiary that has received funding under the Preparatory Action on Defence Research will use its best efforts to exploit the results it owns, or to have them exploited by another legal entity, in particular through the transfer and licensing of results (see below).

For the purposes of monitoring and dissemination by the Commission or the funding body, beneficiaries will provide any information on their exploitation related activities, and provide any documents necessary in accordance with the conditions laid down in the grant agreement.

All patent applications, standards, publications or any other dissemination, including those in electronic form, relating to results will, if possible, include a statement, which may include visual means, that the action received financial support from the Union. The terms of that statement are established in the grant agreement.

Transfer and licensing of results

Where a beneficiary transfers ownership of results, it will pass on its obligations under the grant agreement regarding those results to the transferee, including the obligation to pass them on in any subsequent transfer.

Without prejudice to confidentiality obligations arising from laws or regulations in the case of mergers and acquisitions, where other beneficiaries still enjoy access rights or may still request the granting of access rights to the results to be transferred, a beneficiary which intends to transfer the results needs to give prior notice to the other beneficiaries, together with sufficient information concerning the intended new owner of the results, to permit the other beneficiaries to analyse the effect of the intended transfer on the possible exercise of their access rights.

Following notification, a beneficiary may object to the transfer of ownership if it demonstrates that the intended transfer would adversely affect the exercise of its access rights. In such a case, the transfer may not take place until agreement has been reached between the beneficiaries concerned. The grant agreement lays down time-limits in this respect.

The other beneficiaries may by prior written agreement waive their right to prior notice and to object to transfers of ownership from one beneficiary to a specifically identified third party.

Provided that access rights to the results can be exercised, and that any additional exploitation obligations are complied with by the beneficiary who owns the results, the latter may grant licences or otherwise grant the right to exploit them to any legal entity, including on an exclusive basis. Exclusive licences for results may be granted subject to consent by all the other beneficiaries concerned that they will waive their access rights thereto. Granting of exclusive licenses does not affect the access rights of the Union, the Member States and Norway.

With regard to results which are generated by beneficiaries that have received funding under the Preparatory Action on Defence Research, the grant agreement may provide that the Commission may object to transfers of ownership or to grants of a licence to third parties established in a third country not associated with the Preparatory Action on Defence Research, if it considers that the grant or transfer is not in accordance with the interests of developing the competitiveness of the Union economy, or is inconsistent with ethical principles or security considerations.

In such cases, the transfer of ownership or grant of licence cannot take place unless the Commission is satisfied that appropriate safeguards will be put in place.

Where appropriate, the grant agreement will provide that the Commission is to be notified in advance of any such transfer of ownership or grant of a licence. The grant agreement lays down time-limits in this respect.

Non-compliance with these provisions will be subject to measures stipulated in Regulation (EU, Euratom) No. 2018/1046.

These provisions do not affect the export of products, equipment nor technologies integrating results, and do not affect the discretion of Member States and associated countries regarding policy on the export of defence related products.

Background

Beneficiaries need to identify the background for their action in any manner in a written agreement. The written agreement must set out in detail all existing restrictions on the use or export of this background. The work programme or the grant agreement may lay down specific provisions excluding any background which is subject to export control or restriction by a third country not associated to the Preparatory Action on Defence Research.

Access rights principles for beneficiaries

Any request to exercise access rights or any waiving of access rights needs to be made in writing.

Unless otherwise agreed by the owner of the results or background to which access is requested, access rights should not include the right to sub-license.

Beneficiaries in the same action need to inform each other and the granting authority before their accession to the grant agreement of any legal restriction or limit to granting access to their background. Any agreement concluded thereafter by a beneficiary regarding background should ensure that any access rights may be exercised.

The termination of the participation in an action does not affect the obligation of such a beneficiary to grant access under the terms and conditions established in the grant agreement.

The consortium agreement may stipulate that where a beneficiary defaults on its obligations and such default is not remedied such a defaulting beneficiary does no longer enjoy access rights.

Access rights for implementation by beneficiaries

A beneficiary enjoys access rights to the results of another beneficiary in the same action if those results are needed by the former to carry out its work under the action.

Such access is granted on a royalty-free basis.

A beneficiary enjoys access rights to background of another beneficiary in the same action if this background is needed by the former to carry out its work under the action, and subject to any restrictions or limits pursuant to the above paragraph.

Such access is granted on a royalty-free basis, unless otherwise agreed by the beneficiaries before their accession to the grant agreement.

Access rights for exploitation by beneficiaries

A beneficiary enjoys access rights to the results of another beneficiary in the same action if those results are needed by the former to exploit its own results.

Subject to agreement, such access is granted under fair, reasonable and non-discriminatory conditions.

A beneficiary enjoys access rights to background of another beneficiary in the same action if this background is needed by the former to exploit its own results, and subject to any restrictions or limits pursuant the access rights principles for beneficiaries (see above).

Subject to agreement, such access is granted under fair, reasonable and non-discriminatory conditions.

An affiliated entity[26] established in a Member State or Norway, unless otherwise provided for in the consortium agreement, also have access rights to results and, subject to any restrictions or limits pursuant to the access rights principles for beneficiaries (see above), to background under fair, reasonable and non-discriminatory conditions if those results and background are needed to exploit the results generated by the beneficiary to which it is affiliated. Such access rights need to be requested and obtained directly from the beneficiary owning the results or background unless otherwise agreed in accordance with the access rights principles for beneficiaries (see above) Any such affiliated entity needs to meet the same participation requirements that apply to the beneficiaries of this preparatory action.

The period(s) after the end of the action that a request for access may be made, is included in the grant agreement.

Access rights for the Union, the Member States and Norway

The Union institutions, bodies, offices or agencies enjoy, for the duly justified purpose of developing, implementing and monitoring Union policies or programmes, access rights solely to the results of a beneficiary that has received Union funding. Such access rights are limited to non-commercial and non-competitive use.

Such access is to be granted on a royalty-free basis.

All Member States and Norway's national authorities enjoy access rights to the Special Report[27] (see below for a general template) of a project that has received funding under the Preparatory

[26] An affiliated entity means any legal entity complying with Article 187(1) of Regulation (EU, Euratom) No 2018/1046. Control may take any of the forms set out in General Annex C.

[27] 'Special Report' means a specific deliverable of an action summarizing its results, providing extensive information on the basic principles, the aims, the actual outcomes, the basic properties, the performed tests, the potential benefits, the potential defence applications and the expected exploitation path of the research. Any confidential information contained in the Special Report shall be treated accordingly. The content of the Special Report can be defined in the call for proposals and furthermore in the grant agreement. In any case, participants are not required to provide intellectual property in the Special Report.

Action on Defence Research. Such access rights must be granted on a free of charge basis and transmitted by the Commission or the EDA to the appointed authorities by the Member States or associated countries after appropriate confidentiality obligations are in place.

Member States and Norway will use the Special Report solely for purposes related to the use by or for their armed forces, or security or intelligence forces, including within the framework of their cooperative programmes. Such utilisation includes, but be not limited to, the study, evaluation, assessment, research, design, development, manufacture, improvement, modification, maintenance, repair, refurbishment, and product acceptance and certification, operation, training, disposal and other post design services and product deployment, as well as the assessment and drafting of technical requirements for procurement.

The Commission and the EDA rules on security apply regarding classified information.

Any two or more Member States or Norway that, multilaterally or within the frame of an EU organisation, jointly have concluded one or several contracts with one or more beneficiaries to further develop together results obtained within the frame of a specific action that has received funding under the Preparatory Action on Defence Research, enjoy access rights to the results of the action that are owned by such beneficiary(s) and are necessary for the execution of the contract(s).

Such access rights are granted on a royalty-free basis and under specific conditions aimed at ensuring that those rights will be used only for the purpose of the contract(s) and that appropriate confidentiality obligations will be in place.

General template of the Special Report

A. GENERAL REMARK (not to be part of the template)

This Special Report (SR) is intended to be used by the Beneficiaries to provide information to EU Member States on the research performed, which can be used by all EU Member States for the following objectives:

1) *To provide an understanding of the purpose, outcome and potential applicability of the research;*
2) *To assess the work performed by the Beneficiaries;*
3) *To draw up specifications for follow on research or procurement programs, thereby encouraging uptake of EU-sponsored research.*

In this perspective, the information described below is acknowledged as fulfilling the above objectives. Along those lines, the generic content of the SR should be defined in the calls for proposals. In this framework, individual calls for proposals may fine-tune the required content of the SR for a given topic.

While we expect that the SR will generally satisfy the Member States' needs, where they have specific additional information requests, they will be welcome to approach to the Beneficiaries to discuss these needs with no obligation to disclose further information: the terms and conditions of any subsequent disclosure will be subject to bilateral agreement between the Beneficiaries and the relevant Member State(s).

In any cases, the applicants are not required to provide Intellectual property.

This SR will clearly identify two kinds of information:

1) *Information, if any, which should be treated as confidential and only disclosed by a Member State to its internal services for the purpose of understanding or assessing the work performed by the Beneficiaries. Further disclosures by a Member State shall be subject to prior request to the Beneficiaries, who will remain free to determine whether such request is acceptable and if so, under which terms and conditions.*

2) Information intended to be used to draw up specifications for follow-on research and procurement programs. Such information can be transmitted to potential bidders.

As a general principle, MS should ensure that information will only be disclosed within the national administrations on a need to know basis.

B. GENERAL TEMPLATE

1. BACKGROUND, OBJECTIVES OF THE PROJECT AND STATE OF PLAY

The objective of this section is to explain the original intention of the project, the technical objectives, the composition of the consortium and the role of the Beneficiaries, the grant amount and the used methodology. This should provide elements for a sound organizational, technical and economic overview of the project.

In particular, the Special Report will provide a description of the following:

- Content of the project: synthesis of the technical content and main goals
- Description of the methodology used in the research
- Composition of the consortium: large companies and SMEs, laboratories, etc. and the nature of each Beneficiary's contribution
- Level of classification and procedures for disclosure
- State of play of the object of the project and the criticality of the study, and where relevant, any competing technologies or systems
- Grant amount
- Project duration

2. TECHNOLOGICAL RESULTS OBTAINED REFERING THE OBJECTIVES AND MILESTONES

This section summarises the achieved results compared to the prime objective and the used approach. It consists, where applicable, in a description of:

- The systems related to the technology results, including their functions
- The scientific or technical progress compared to the original state of play; technical milestones and TRL scale may be described;
- The technical challenges solved through the research.
- A synthesis of the performance obtained with the corresponding testing conditions.

In this section, the Beneficiaries will identify data/information which can be used by the Member States to draw up specifications for follow-on research/procurement programs and which can be disclosed externally to potential bidders to allow them to participate in follow on research/procurement activities.

3. BENEFITS

This section consists in an assessment of the significant benefits that were generated by the research, and may include a description of other potential operational applications and further benefits or advantages.

Various types of benefits can be assessed, in terms of:

- Operational capability enhancement
- Defence systems and equipment improvements
- Cost reductions and possible cost saving opportunities
- Standardisation and interoperability
- Added value for Europe
- Improvement in competences
- Other….

4. POTENTIAL FURTHER DEVELOPMENTS

This section contains suggestions for additional approaches which could further develop or improve the results of the project:

- Future R & D projects, which could further consolidate the achievements of the contract for operational superiority or for strengthening European industrial competitiveness
- Future short or medium term armament programs, which could be launched after the realisation of the project
- Possible opportunities for European cooperation thorough the identification of a follow on program or study

5. ILLUSTRATIONS

Where applicable, this section will contain relevant pictures and/or diagrams illustrating the project.

6. ISSUANCE OF THE REPORT

The interim and final SR shall be provided by the consortium as agreed upon in the grant agreement.

J. Processes to obtain classified information which is part of a call for proposals

In order to obtain information which is part of a call for proposals (hereunder 'the classified document') and classified at RESTREINT UE/EU RESTRICTED level under the European Union classified information (EUCI) regulation[28], a potential applicant should follow the steps described under "General Process" below.

Given that the process of obtaining the classified document is long, EDA strongly advises to file the application as soon as possible. **EDA will not be in the position to deal with requests received later than 15 working days before the deadline of the call for proposals.**

Rules regarding the access to RESTREINT UE/EU RESTRICTED documents vary from country to country: some countries require a Facility Security Clearance (FSC) and/or Personnel Security Clearance (PSC) for the handling of EUCI at RESTREINT UE/EU RESTRICTED level. Therefore, the steps under "*General Process*" are complemented or modified in the section "*Specific sub-processes depending on the specific rules of eligible countries' National Security Authorities (NSAs)*", depending on the different scenarios described.

The list of countries requesting Facility Security Clearance (FSC) and/or Personnel Security Clearance (PSC) for the handling of EUCI at RESTREINT UE/EU RESTRICTED level can be found in the footnote[29]. In case of entities from the countries included in this list, the request of the document shall include the details of the Facility Security Officer (name, surname, e-mail address, postal address and phone number) of the entity requesting the classified annex. EDA strongly advises all the potential applicants from countries requiring both/either FSC and/or PSC to submit their request as soon as possible, ideally within the first month after the opening of the call.

Please note that EDA and the European Commission cannot be held liable for non-processing of requests due to non-compliance resulting from factors beyond EDA and Commission responsibility and control.

GENERAL PROCESS:

1. Request

In order to receive the classified document, an interested entity shall submit its request by sending an e-mail from an account having the same domain of the entity to the **EDA PADR functional mailbox** PreparatoryAction@eda.europa.eu.

The request shall include the following information:

- Object of the request (in the subject of the message);

[28] Commission Decision (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information.

[29] Denmark, Estonia, Greece, Lithuania, Luxemburg, Netherlands, Slovenia, Slovakia, Sweden.

- Full name of the requesting entity;
- Country in which the entity is established;
- Nature of its activities;
- Contact details of person requesting/receiving the classified document (name and surname);
- Full postal address (to be used for submission of documents).

An entity that requested and received the classified document **cannot** transfer the document to other members of its consortium. Therefore, all the entities of the same consortium, willing to access the classified document, need to send their individual request to EDA.

Please be aware that giving the time required to process each individual request, the requests received by EDA in the last 15 working days before the deadline for submission of proposals may not be honoured.

EDA is not responsible for any delay related to the analysis of the requests and to the assessment of the compatibility of the nature of the activities of the requesting entities with security requirements.

2. Assessment of the 'need to know' by EDA

After receiving the request, EDA makes an assessment of the requesting entity's '**need to know**' on the basis of the nature of activities and compliance with the eligibility criteria as specified in the call text. EDA reserves the right to further enquire about any request in case of doubt of eligibility for access.

3. Requesting approval of the European Commission

After its first assessment, EDA requests the European Commission to grant the requesting entity access to the classified document, providing all the necessary information to the European Commission. The European Commission sends the reply to EDA within 2 working days from EDA request.

4. Informing the requesting entity

4.a. Rejection of the request by the EC

If the European Commission does not approve the request, EDA will inform the requesting entity accordingly.

4.b. Approval of the request by the EC

After receiving the reply with the approval of the European Commission to grant the access to the classified annex to the requesting entity, EDA sends the non-disclosure agreement (NDA)[30]

[30] Please find the template of the Non-Disclosure Agreement (NDA) in the Appendix 1 of this Annex

and the rules of handling EUCI (extracted from the PSI) to the requesting entity. The person from the entity requesting the classified document will have to sign them and send back a scan to **the EDA e-mail address**: PreparatoryAction@eda.europa.eu.

5. Sending the Classified Annex

After receiving the signed NDA, EDA sends the classified annex via post to the requesting entity in accordance with the provision of the Programme Security Instruction concerning the Preparatory Action on Defence Research (PADR PSI)[31]. The person requesting the classified annex signs the acknowledgement of receipt and sends it back to the **EDA PADR e-mail address**: PreparatoryAction@eda.europa.eu.

6. Return of the classified Annex

The requesting entity must return the classified document to EDA, in accordance with the provision of the PADR PSI. The classified document must be received by EDA no later than the deadline for the submission of proposals. If EDA does not receive the classified document within the given deadline, the requesting entity will be contacted and reminded of the obligation to return the classified document. In case of non-compliance, the relevant NSA will be contacted.

It is not allowed to make paper or electronic copies of the classified document.

SPECIFIC SUB-PROCESSES DEPENDING ON THE SPECIFIC RULES OF ELIGIBLE COUNTRIES' NATIONAL SECURITY AUTHORITIES (NSAS)

Depending on the specific rules of the NSAs of eligible countries, different sub-processes might apply to the requesting entities:

A) In case no PSC/FSC is required from the requesting entities: the general process is followed.

B) In case an FSC is required:

- Along the request of the classified document sent to the **EDA e-mail address**: PreparatoryAction@eda.europa.eu, the requesting entity shall include the duly filled in FSC Information Sheet following the template included in Appendix 2 to this Annex.
- EDA requests through the Commission Security Authority (CSA) to check the FSC.
- If the requesting entity has a **valid FSC**: general process is followed.
- If the requesting entity does **not have a valid FSC**:

[31] Available on the Funding and Tender Opportunities portal under "Topic conditions and documents".

- Following the first four steps of the general process, EDA offers the possibility to the requesting entity to consult the classified document in its premises. Please note that the related accommodation and travel costs will not be reimbursed by EDA, they cannot be considered as eligible costs of the project and are at the only charge of the requesting entity.
- Please note that it will be possible to consult the classified document until the deadline for the submission of proposals.

C) In case both FSC and PSC are required: EDA request through the CSA to check the PSC and the FSC.

- Along the request of the classified document sent to the **EDA e-mail address**: PreparatoryAction@eda.europa.eu, the requesting entity shall include:
  - The duly filled in FSC certificate following the template included in Appendix 2 to this Annex.
  - A PSC certificate of the person who has the need to know and will read/use the classified document from the entity's Facility Security Officer or local NSA.
- EDA requests through the Commission Security Authority (CSA) to check the FSC and PSC.
- If the requesting entity has **a valid FSC and the person requesting the document has a need to know and a valid PSC**: general process is followed.
- **If the requesting entity does have a valid FSC but does not have a valid PSC:**
  - EDA asks the requesting entity to appoint a point of contact with a valid PSC, who has the need to know and will read/use the classified document. Upon this request, the entity shall send to EDA the new PSC certificate from the entity's Facility Security Officer or local NSA;
  - Once the point of contact with a PSC is provided, EDA requests through the Commission Security Authority (CSA) to check the new point of contact PSC;
  - After these steps, and if the PSC is valid, the general process is followed.
- **If the requesting entity does not have a valid FSC and a valid PSC:** Access is denied**.**

Please be reminded that access to the classified document will be strictly provided only to the requesting entity for the specific use. Any further disclosure or use needs prior approval of the European Commission.

Checklist of the sub-processes applicable to the specific cases depending on the rules of the NSAs for access to RESTREINT UE/EU RESTRICTED documents

Applicable sub-processes	**A) No PSC/FSC required**	**B) FSC required**		**C) FSC and PSC required**		
A case that a requesting entity has a:		Valid FSC	No FSC	Valid FSC and PSC	Valid FSC, no PSC	No FSC, no PSC
Along the request of the classified document sent to the EDA e-mail address: PreparatoryAction@eda.europa.eu, the requesting entity shall include the duly filled in FSC Information Sheet following the template included in Appendix 2 to this Annex.		✓	✓			
Along the request of the classified document sent to the EDA e-mail address: PreparatoryAction@eda.europa.eu, the requesting entity shall include: The duly filled in FSC certificate following the template included in Annex 2; A PSC certificate of the person who has the need to know and will read/use the classified annex from the entity's Facility Security Officer or local NSA.				✓	✓	✓
EDA requests through the CSA to check the FSC.		✓	✓			
EDA requests through the CSA to check the PSC and FSC.				✓	✓	✓
EDA asks the requesting entity to appoint a point of contact with a valid PSC, who has the need to know and will read/use the classified document. Upon this request, the entity shall send to EDA the new PSC certificate from the entity's Facility Security Officer or local NSA; Once the point of contact with a PSC is provided, EDA requests through the CSA to check the new point of contact PSC. If the PSC is valid, next steps follow.					✓	
After receiving the reply with the approval of the European Commission to grant the access to the classified document to the requesting entity, EDA sends the NDA[30] and the rules of handling EUCI (extracted from the PSI) to the requesting entity. The person from the entity requesting the classified document will have to sign them and send back a scan to the EDA e-mail address: PreparatoryAction@eda.europa.eu.	✓	✓	✓	✓	✓	
After receiving the signed NDA, EDA sends the classified document via post to the requesting entity in accordance with the provision of the Programme Security Instruction concerning the Preparatory Action on Defence Research (PADR PSI)[31]. The person requesting the classified document signs the acknowledgement of receipt and sends it back to the EDA PADR e-mail address: PreparatoryAction@eda.europa.eu.	✓	✓		✓	✓	
The requesting entity must return the classified document to EDA, in accordance with the provision of the PADR PSI. The classified document must be received by EDA no later than the deadline for the submission of proposals. If EDA does not receive the classified document within the given deadline, the requesting entity will be contacted and reminded of the obligation to return the classified document. In case of non-compliance, the relevant NSA will be contacted.	✓	✓		✓	✓	

Applicable sub-processes	**A) No PSC/FSC required**	**B) FSC required**		**C) FSC and PSC required**		
A case that a requesting entity has a:		Valid FSC	No FSC	Valid FSC and PSC	Valid FSC, no PSC	No FSC, no PSC
It is not allowed to make paper or electronic copies of the classified document.						
EDA offers the possibility to the requesting entity to consult the classified document in its premises. Please note that the related accommodation and travel costs will not be reimbursed by EDA, they cannot be considered as eligible costs of the project and are at the only charge of the requesting entity. Please note that it will be possible to consult the classified document until the deadline of the submission of proposals.			✓			
Access is denied.						✓

Appendix 1. Non-Disclosure Agreement (NDA) for the release of the Call PADR-2019-EMS classified document (template)

The European Defence Agency (hereinafter referred to as "EDA"), with offices at Rue des Drapiers 17-23, B-1050 Brussels, Belgium;

and

[Name of the entity receiving information], with offices at *[legal address]* (hereinafter referred to as "the Recipient")

Have agreed as follows:

1. In the frame of *Preparatory Action on Defence Research* (the Purpose), EDA intends to make available the classified information which is part of the call for proposals at RESTREINT UE/EU RESTRICTED (the Classified Document) to the Recipient.

2. The Recipient undertakes to use the Classified Document solely for the preparation of a proposal responding to call PADR – 2019 – EMS (the Use) for the Purpose, in compliance with COMMISSION DECISION (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information and with the Programme Security Instructions (PADR PSI) and in accordance with the terms of this Agreement.

3. The Recipient undertakes to keep the Classified Document secure according to the appropriate security standard referred to in paragraph 2 above and not to disclose it to any third party, except to other employees of the entity, who need to be granted access to the Classified Document and who have a need-to-know for the Use in the frame of the Purpose. The said employees who should be security cleared if requested by the national law, are fully aware they owe a duty of confidence to EDA and are bound by obligations equivalent to those in paragraph 2 above and this paragraph 3. The access to the employees shall be granted under the supervision and the responsibility of the Facility Security Officer of the Recipient, if present.

4. The Recipient declares under his/her responsibility that all the infrastructures, facilities, assets and resources used by the Recipient to store the Classified Document for the Purpose and the Use should not be located on the territory of non-Member States or non-associated countries. The Recipient also declares that the use of such infrastructure, facilities, assets and resources is not subject to control or restriction by third countries.

5. The undertakings in paragraphs 2 and 3 above apply to the Classified Document and to all the information contained in it as transmitted/shown by EDA to the Recipient, regardless of the way or form in which it is transmitted or made available.

6. The Recipient will return the Classified Document to EDA and will not make any copies or records of the Classified Document.

7. This Agreement shall remain in effect for a term of one year. Notwithstanding the foregoing, the Recipient's duty to hold the Classified Document and all the information contained in it which was made available under this Agreement in confidence will remain in effect indefinitely, unless otherwise decided by the European Commission regarding the classification level of the Classified Document.

8. The Recipient declares to have read and understood the terms of the COMMISSION DECISION (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information and of the Programme Security Instructions (PADR PSI), attached to this NDA.

In witness hereof, the Parties have agreed to execute this Agreement as of the date of signature.

On behalf of *[Recipient]*

[Name/ title]

On _____, in _____

_____

Signature

Appendix 2. Facility Security Clearance (FSC) Information Sheet (template)

FACILITY SECURITY CLEARANCE (FSC) INFORMATION SHEET FOR ENTITIES REQUESTING CLASSIFIED INFORMATION OF CALL PADR-2019-EMS

I, …… (name of the person representing the legal entity), the undersigned, declare the below information I provide for this application is true and complete

REQUEST

I. Facility

1. Full facility name:
2. Full facility physical address:
3. Mailing address (if different from 2):
4. Zip code / city / country:
5. Security officer

Name: .....
Phone #: .....
Fax #: .....
e-mail: .....

****

II. Facility Security Clearance (FSC) requirements **

[ ] **Holds a FSC**

At level [ ] RESTREINT UE / EU RESTRICTED (only for DK, EE, GR, LT, LU,NL,SI, SK,SE)
[ ] SECRET UE / EU SECRET
[ ] CONFIDENTIEL UE / EU CONFIDENTIAL

With safeguarding of classified documents:

[ ] yes,
At level [ ] SECRET UE / EU SECRET
[ ] CONFIDENTIEL UE / EU CONFIDENTIAL
[ ] no.

[ ] **Valid until:** …….

REMARKS:

.....

.....
SIGNATURE ON BEHALF OF THE ENTITY Name: Date:

* Please use one form per entity

** Please tick appropriate box