DEFRA

DEFENCE-RELATED RESEARCH ACTION

DEFRA

Defence-related Research Action

Next Generation Combat Aircraft Technologies
Research and Development – Call for proposals (2024)

FULL PROPOSAL DESCRIPTION

Compulsory document - must be completed **- in English**

*Before completing, please consult carefully the **Information document** and the **evaluation matrix for full proposals.***

! Only fully completed templates will be considered for evaluation!

PROPOSAL'S ID	
Project Acronym	Click here to enter text.
Project Title	Click here to enter text.
Research Theme	☐ **Structures and associated subsystems**
	☐ **Propulsion and accessories**
	☐ **Communication, cyber, avionics, embedded sensors and networks**
	☐ **Transversal disruptive enabling technologies**

Please note that the font used to complete the documents must be in Calibri, size 11, with 1,15 line spacing.

PARTNERS / PARTNERSHIP

COORDINATOR (P1)	
Organisation name:	Click here to enter text.
Type of organisation:	Choose an item.
Website:	Click here to enter text.
Principal investigator/R&D lead:	
Last name:	Click here to enter text.
First name:	Click here to enter text.
Email:	Click here to enter text.
Phone number:	Click here to enter text.

PARTNER 2 (P2)	
Organisation name:	Click here to enter text.
Type of organisation:	Choose an item.
Website:	Click here to enter text.
Principal investigator/R&D lead:	
Last name:	Click here to enter text.
First name:	Click here to enter text.
E-mail:	Click here to enter text.

PARTNER 3 (P3)	
Organisation name:	Click here to enter text.
Type of organisation:	Choose an item.
Website:	Click here to enter text.
Principal investigator/R&D lead:	
Last name:	Click here to enter text.
First name:	Click here to enter text.
E-mail:	Click here to enter text.

PARTNER 4 (P4)	
Organisation name:	Click here to enter text.
Type of organisation:	Choose an item.
Website:	Click here to enter text.
Principal investigator/R&D lead:	
Last name:	Click here to enter text.
First name:	Click here to enter text.
E-mail:	Click here to enter text.

Copy the table to include more partners if needed.

PROJECT SUMMARY

Briefly describe:
- *The context and motivation of the project*
- *Expected results and how these will impact the BDTIB and NGCAT*
- *Brief explanation of how the project will be carried out*

[max. 2 pages]

Enter text

PROJECT SCOPE

Explain how the project answers to the research and development priorities of the call (cfr. section 2.3 of the information document)

[1/2 page]

Enter text

1. PROJECT OBJECTIVES

Explain the scope of the project and break it down in major research and development objectives, making sure that those are SMART (Specific, Measurable, Assignable, Realistic, Time-related) defined.

[2 pages]

Enter text

2. STATE OF THE ART AND INNOVATIVE CHARACTER

2.1. Knowledge of the state of the art

- *Explain the state of current knowledge at national and international level on your topic. Include a list of max. 5 relevant existing publications, projects, references and/or (inter)national networks per project partner to support this.*
- *Provide an overview of the knowledge to be acquired within the project team*
- *Provide an overview of the development of new expertise and competences (new techniques, knowledge, way of working…) in Belgium*
- *Describe the opportunities for (new) national and/or international collaborations*

[1 page]

> *Enter text*

2.2. Positioning of the project with respect to the state of the art (innovativeness)

	within	beyond/innovative
... in terms of exploring a gap in (inter)national research	☐	☐
... in terms of exploring new methodologies	☐	☐

Explain why your proposal is original and innovative.

[1 page]

> *Enter text*

3. RELEVANCE AND POTENTIAL IMPACT FOR THE BDTIB and NGCAT

3.1. Potential impact of the proposal in light of the expected outcomes

Explain the relevance and potential impact of the project (e.g. its methodologies, processes, technologies, developments, outcomes, insights, ...) for NGCAT, in relation to the expected impact for your theme.
Explain how the preliminary scientific and technological research will support NGCAT objectives in terms of:
* *knowledge generation*
* *capability*
* *manufacturability*
* *cost reduction*
* *maintainability*

[1/2 page]

> *Enter text*

3.2. Plans to maximise the impact of the project

* *Explain the concrete plans of valorisation and exploitation of the project results to the BDTIB in accordance with the WP valorisation. The target groups of these valorisation proposals must be explicitly described.*
* *Is there a link with another regional / federal / international project?*
* *Are there possible follow-on projects for this proposal, either going deeper or with a broader scope?*

[1/2 page]

> *Enter text*

3.3. Data management plan (DMP)

Will data be collected, reused and/or generated?

Please select the adequate answer(s) taking into account the following concepts:

- *Data content:*
  Refers to the type of data regarding what it contains. E.g. numeric (databases, spread sheets), textual (documents), image, audio, video, mixed media…
- *Data format:*
  Refers to the technical format of data; to the way in which the data is encoded for storage, often reflected by the filename extension. For example: pdf, xls, doc, txt, rdf…
- *Data volume:*
  You may roughly estimate this using the following categories: From 0 – 10GB; From 10 – 100 GB; From 100 – 1000 GB; More than 1000 GB.

My proposal will…	☐ COLLECT DATA ☐ REUSE EXISTING DATA ☐ GENERATE NEW DATA
Please describe: • *Which data you will collect/reuse/generate* • *How data will be collected / from which source it will be reused / how will it be generated* • *Its content, technical format and estimated volume.* • *Any existing constraints regarding its use.*	
Enter text	

How will you handle legal issues?

Please answer the following statements taking into account the following concepts:

Legal issues: This includes personal data, intellectual property issues and security requirements. Regarding personal data, you must ensure when dealing with personal data that Data Protection Laws (i.e. GDPR) are complied with.

My proposal will use / process / store **personal** data:	☐ YES ☐ NO
If your answer is 'YES': shortly describe the kind of personal data. *Add the process and reference to your file in the partners' privacy register.*	
Enter text	
The work undertaken in the project will possibly result in **research data** with potential for **technology transfer** and **valorisation:**	☐ YES ☐ NO

If your answer is 'YES', your proposal must take into account possible intellectual property issues.
Explain who will be the owner of the data (who will have the rights to control access).
Indicate whether there will be intellectual property rights/restrictions for the data you created, and if applicable, describe how these will be managed.

Enter text

The work undertaken in the project will possibly use or generate classified information.	☐ YES ☐ NO

If your answer is 'YES', your proposal must take into account possible security requirements (see section 6.2. of the information document. Identify the classification needs for the work packages of the project that involve threat and /or vulnerability assessments and the information on specifications or capabilities of the tool(s) used.
Attention! Classified information is sensitive, but other, more stringent, rules will apply than the ones described for sensitive information in the following data management paragraphs.

Enter text

How will you document your data?

Please answer the questions/statements, taking into account the following information:

> *Data must comply, as much as possible with FAIR principles; it must be findable, accessible, interoperable and reusable. For this purpose, data must be accompanied by descriptive information in the form of metadata. Metadata is the information that describes, explains, locates, and /or makes the use of an information source easier to retrieve. Where metadata are in place, researchers are advised to use and mention metadata standards.*

What documentation will be provided to enable understanding and reuse of the data collected / generated in this project?
Enter text

Metadata standards will be used:	☐ FOR ALL DATA ☐ FOR SOME DATA ☐ FOR NONE OF THE DATA

- *if your answer is 'for all data' or 'for some data', please describe in detail which standards will be used.*
- *if your answer is 'none of the data', please state in detail which metadata will be created to make the data easy/easier to find and reuse.*

Enter text

Data storage and backup during the project

Please give preference to the use of robust, managed storage with automatic backup, such as networked drives, which offer ample storage space and data security for most purposes.

Consider data protection, particularly if your data is sensitive – for example, containing personal data, politically sensitive information or information relating to religion and health. If this is your case, enquire with the partners' support staff whether your intended storage solution meets the data security policy.

Please answer the statements/questions, taking into account the following information. Note that you may choose one or more answers.

The data will be stored in…	☐ the partner's Research Storage
	☐ OTHER

If your answer includes 'OTHER':
- *Specify which storage solutions you will use during the project, in addition to / instead of the partner's research storage.*
- *Explain the reasons for using these solutions. E.g. because you need more space than available by the partners; to facilitate data sharing with collaborators; or because your data requires additional security.*

Enter text

How will the data be backed up?

Enter text

How will data security and protection of sensitive data be taken care of during the research?	☐ Not applicable (there are no sensitive data)
	☐ Default security of the partners' networked research storage
	☐ Additional security measures

If your answer is other than 'Not applicable': Describe the main risks and how these will be managed.

Enter text

What are the expected costs for data storage and backup during the project? How will these costs be covered?

Costs related to data storage and backup during the project can be covered by the project budget providing these are fully justified and relate to the project.

Enter text

Data preservation in the long term - after the project

Please answer the following questions/statements, taking into account the following information. Note that you may choose one or more answers to the second statement.

The data generated during the project should be preserved (archived) in the long term, in as far as legal and contractual agreements allow. As rule of thumb, long-term storage is considered to be at least 10 years, unless legal provisions or discipline-specific guidelines dictate otherwise.

All data will be preserved in the long term (at least 10 years)	☐ YES
	☐ NO

If your answer is **'NO'**: *clearly describe what data will be preserved long-term and what data will be destroyed for contractual, legal or regulatory purposes, or for physical preservation issues. Indicate how you will decide which data to keep.*	
Enter text	
The data will be archived within…	☐ Partners' Networked Research Storage ☐ OTHER
If your answer includes **'OTHER'**: *Specify which storage solutions you will use in the long term, in addition to/instead of the partners' networked research storage. Please explain the reasons for using these solutions.*	
Enter text	
How will data security and protection of sensitive data be taken care in the long term?	☐ Not applicable (there are no sensitive data) ☐ Default security of the partners' networked research storage ☐ Additional security measures
If your answer is **other than 'Not applicable'**: *Describe the main risks and how these will be managed. Inquire with your partners' support staff whether your intended storage solution meets the data security policy if your research involves sensitive data.*	
Enter text	
What are the expected costs for data preservation in the long term? How will these costs be covered?	
Costs related to data preservation in the long term can be covered by the project budget providing these are fully justified and relate to the project.	
Enter text	

Data sharing and reuse

Please answer the following questions taking into account the following information:

> *As stated before, data must comply, as much as possible with FAIR principles; it must be findable, accessible, interoperable and reusable. It is thus important that you provide information regarding data sharing and reuse. If applicable, data sets will be linked to the scientific publications they underpin and which have either been deposited in.*
>
> *Note that the data available for sharing and reuse may differ from the preserved data, since there may be legal, IP, privacy or security related reasons preventing or restricting the access to data, or lacking of space for large data volumes to deposit them in a repository in its entirety. This could be the case for part or the entirety of data; in the short, mid or long term. A staged approach will provide access for communities of certified users, adapting the degree of certification of users to the sensitivity of the data.*

Are there any factors restricting or preventing the sharing or reuse of the data (e.g. agreements with 3rd parties):	☐ YES ☐ NO

*If your answer is **'YES'**: explain which data are affected by this agreement.*
State the restrictions that are in place.

Enter text

Which data will be made available to the public?	☐ ALL ☐ SOME PART ☐ NONE

*If your answer is **'SOME PART'** or **'NONE'**:*
- *Indicate the restrictions on the sharing of the data (why can't it be shared)*
- *Explain what data sharing agreement will be implemented*

Enter text

Where/how will data be made available to the public?	☐ In a restricted access repository ☐ Upon request by mail ☐ Other (specify)
When will data be made available to the public?	☐ As soon as corresponding communication(s) are published ☐ After the project is finished ☐ After the completion of the project (with embargo)

*If your answer is **other than 'as soon as corresponding communication(s) are published'**: Indicate the reasons for the restrictions on the time release of data (embargo periods). For example, to publish, protect intellectual properties, or seek patents.*

Enter text

Who will be able to access the data and under which conditions?
Enter text

Which data will be made available for re-use?	☐ ALL ☐ SOME PART ☐ NONE

*If your answer is **'SOME PART'** or **'NONE'**: Indicate the restrictions on the re-use of the data. Explain what actions could be taken to overcome or to minimize restrictions.*

Enter text

Responsibilities

Please answer the following questions/statements, taking into account the following information:

Who will be responsible for the data documentation & metadata?
In case of the use of personal data, please note the name and contact data of the concerned data protection officers.
Enter text

Who will be responsible for data storage & back up during the project?

Enter text

Who will be responsible for ensuring data preservation and sharing?

Enter text

Who bears the end responsibility for updating & implementing this DMP?

Default response: The project coordinator bears the overall responsibility for updating & implementing this DMP.

Enter text

4. QUALITY OF THE PARTNERS / PARTNERSHIP

Research institutes (public or private non-profit) *: please provide a description of expertise and skills for each partner:*
- *Their professional background*
- *Maximum 5 top publications relevant for the proposal (indicate clearly the international peer reviewed publications)*
- *A list of the research projects carried out over the past five years in the topic of the call or related areas (specify the duration of the work and funding source).*
- *A list of their (inter)national contacts and the (inter)national networks to which they belong within the context of the proposal.*
- *The scientific quality, management, synthesis and communication skills of the coordinator.*
- *If possible, include web links for all the information above.*

Private companies:
please provide a description of expertise and skills for each partner:
- *Their active production / research and development activities in Belgium*
- *A list of the products / prototypes / research and development projects they actively contributed to over the past five years in the topic of the call or related areas.*
- *A list of their (inter)national contacts and the (inter)national networks to which they belong within the context of the proposal.*
- *An overview of their R&D team and R&D capabilities.*
- *A list of their Defence customers, if any.*
- *The management, synthesis and communication skills of the coordinator.*
- *If possible, include web links for all the information above.*

[2 pages per partner]

COORDINATOR

Enter text

PARTNER 2

Enter text

PARTNER 3

> *Enter text*

PARTNER 4
Enter text

Copy the table to include more partners if needed.

Articulate the rationale for choosing this partnership in addressing the topic of the proposal. The different dimensions of the added value in a partnership can be seen as (non-exhaustive list):

- *Well-balanced partnership*
- *Complementarity of expertise among partners*
- *Complementarity of disciplines and way of working (multi, inter) to properly cover the project objectives*
- *Long term perspective on collaboration: can this project be the starting point for a broadened or intensified collaboration?*

[1 page]

> *Enter text*

5. COHERENCE BETWEEN RESEARCH OBJECTIVES AND METHODOLOGY

Translate your research objectives into a methodology (used methods, techniques, systems and/or way of working) in order to achieve the results:

- *The division of the project into phases*
- *The organisation of the project team*
- *The technologies used*
- *Detail the results your approach will enable to gather (expected outcomes):*
- *Take possible ethical issues into account if relevant*

[5 pages]

> *Enter text*

6. WORK PLAN

6.1. Relation of the work packages to the proposal objectives

Please provide a description of the project in terms of work packages, tasks, and deliverables in accordance with the GANTT chart.

Refer to:

- *Number and title of Work Package, Work Package leader (financed, non-financed)*

- *Number, title and timing of tasks, task leader, participants to the task (financed, non-financed, subcontractors…)*
- *Timing of deliverables*
- *Number of person-months for each task*
- *Means, tools, procedures, techniques to carry out the tasks*

Notes:
- *The work plan must be detailed to the level of work packages (WP) and tasks (Tasks). The definition of subtasks is not possible.*
- *Work packages or tasks necessary for the implementation of the project but not financed by Defence must also be described and added to the GANTT chart.*

Compulsory work packages:
- *Coordination, project management and reporting*
- *Data management*
- *Valorisation / Exploitation*

[1/2 pages/WP]

Enter text

6.2. Work planning and time schedule: GANTT chart
6.3. Workload intensity in relation to the work packages: GANTT chart

Complete the GANTT chart in accordance with the description of the detailed work plan, tasks and deliverables above.
- *Work intensity of each partner within each task (expressed in person-month [PM])*
- *Include for each partner the person-months funded by the project and the person-months funded by other sources (see notes). Make sure that these data correspond with the data filled in the budget tables under point 6.5.*

Notes:
- *Partners include: financed, non-financed and subcontractors.*
- *1 Person-month [PM] = 1 full-time equivalent [FTE] or 2 half-time equivalents over 1 month…*
- *Other sources of financing may include: salary payment by institutions other than Defence and/or via other projects, voluntary contributions… If a given task requires 7 person-months, and 6 months will be financed by the project, the 7th month must appear under 'other sources of financing'.*

Compulsory work packages:
- *Coordination, project management and reporting*
- *Data management*
- *Valorisation / Exploitation*

6.4. Risk assessment of the project

Main risks

Number, identify and explain the main (max 10) incurring risks that could delay or hinder the project. Locate the number of each risk in terms of its likelihood of occurrence and impact on the project. (R1 & R2 are shown as an example)
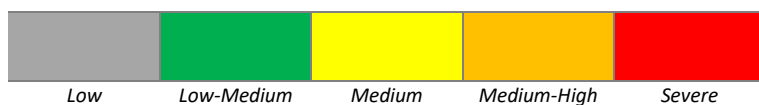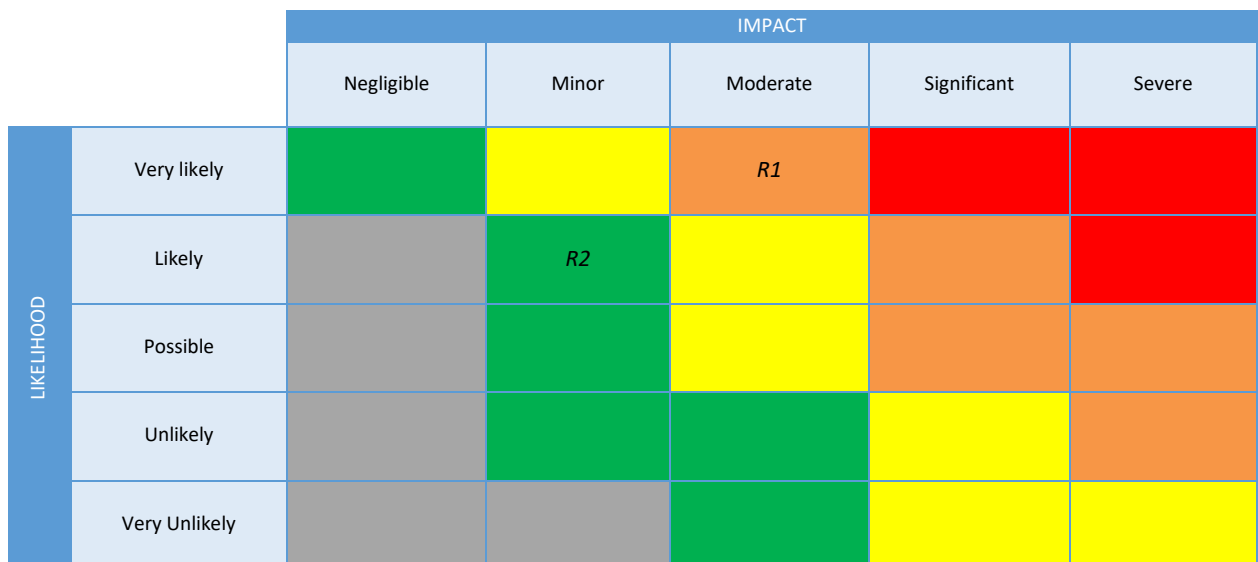
Risk nr	Description of the risk	Likelihood	Impact
R1	Click here to enter text.	Choose an item.	Choose an item.
R2	Click here to enter text.	Choose an item.	Choose an item.
R3	Click here to enter text.	Choose an item.	Choose an item.
R4	Click here to enter text.	Choose an item.	Choose an item.
R5	Click here to enter text.	Choose an item.	Choose an item.
R6	Click here to enter text.	Choose an item.	Choose an item.
R7	Click here to enter text.	Choose an item.	Choose an item.
R8	Click here to enter text.	Choose an item.	Choose an item.
R9	Click here to enter text.	Choose an item.	Choose an item.
R10	Click here to enter text.	Choose an item.	Choose an item.

Additional information regarding **Impact:**
- *Severe = impossible to achieve the main project objectives,*
- *Significant = there will be a direct and substantial impact on the projects' main objectives,*
- *Moderate = there is an impact on some of the projects' main objectives, but not to an extent that the overall goal cannot be achieved,*
- *Minor = the impact on the projects' main objectives is not substantial.*
- *Negligible = the risk will not cause any obstructions to achieve any of the projects objectives*

Likelihood and impact

Locate the number of each risk in terms of its likelihood of occurrence and impact on the project. (R1 & R2 are shown as an example)

	IMPACT				
	Negligible	Minor	Moderate	Significant	Severe
Very likely			*R1*		
Likely		*R2*			
Possible					
Unlikely					
Very Unlikely					

(LIKELIHOOD)

Legend: Low | Low-Medium | Medium | Medium-High | Severe

Contingency measures

For each risk of category "<mark>medium high</mark>" and "<mark>severe</mark>" mitigation measures have to be defined and a check has to be made that the residual risk is below or equal to "<mark>medium</mark>".

Risk nr	Mitigating measures	Residual risk after mitigation (with motivation)
Choose an item.	Click here to enter text.	Click here to enter text.
Choose an item.	Click here to enter text.	Click here to enter text.
Choose an item.	Click here to enter text.	Click here to enter text.
Choose an item.	Click here to enter text.	Click here to enter text.
Choose an item.	Click here to enter text.	Click here to enter text.
Choose an item.	Click here to enter text.	Click here to enter text.
Choose an item.	Click here to enter text.	Click here to enter text.

References (not mandatory)

References to the content of the proposal that give a better understanding of the information provided in the tables above.

Refers to risk(s) number	Document or part of the proposal	Remarks
Click here to enter text.	**Click here to enter text.**	Click here to enter text.
Click here to enter text.	**Click here to enter text.**	Click here to enter text.
Click here to enter text.	**Click here to enter text.**	Click here to enter text.
Click here to enter text.	**Click here to enter text.**	Click here to enter text.
Click here to enter text.	**Click here to enter text.**	Click here to enter text.

Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

6.5. Budget assessment

Complete the **Full proposal cost template** (available on the submission platform) taking into account the budget rules explained under sections 2.7. and 2.8. of the information document. Make sure that the number of person-months indicated in the Gantt chart correspond to the number of person-months in de cost template.

Justification of the requested budget

Budget justification for the Coordinator (P1)

Specific Operation
Explain the nature of the specific operation costs that are included in the full proposal cost template.

Description	Cost (Euro)
...	
TOTAL	

Equipment
Explain what kind of equipment will be purchased.

Description	Cost (Euro)
...	
TOTAL	

Subcontracting
Explain the activities that will be subcontracted (and to whom if already known)

Description	Cost (Euro)
Tasks: Name: Address:	
...	
TOTAL	

Budget justification for Partner 2 (P2)

Specific Operation
Explain the nature of the specific operation costs that are included in the full proposal cost template.

Description	Cost (Euro)
...	
TOTAL	

Equipment
Explain what kind of equipment will be purchased.

Description	Cost (Euro)
...	
TOTAL	

Subcontracting
Explain the activities that will be subcontracted (and to whom if already known)

Description	Cost (Euro)
Tasks: Name: Address:	
...	
TOTAL	

Budget justification for Partner 3 (P3)

Specific Operation
Explain the nature of the specific operation costs that are included in the full proposal cost template.

Description	Cost (Euro)
...	
TOTAL	

Equipment
Explain what kind of equipment will be purchased.

Description	Cost (Euro)
...	
TOTAL	

Subcontracting
Explain the activities that will be subcontracted (and to whom if already known)

Description	Cost (Euro)
Tasks:	

Name: Address:	
...	
TOTAL	

Budget justification for Partner 4 (P4)

Specific Operation
Explain the nature of the specific operation costs that are included in the full proposal cost template.

Description	Cost (Euro)
...	
TOTAL	

Equipment
Explain what kind of equipment will be purchased.

Description	Cost (Euro)
...	
TOTAL	

Subcontracting
Explain the activities that will be subcontracted (and to whom if already known)

Description	Cost (Euro)
Tasks: Name: Address:	
...	
TOTAL	

Duplicate if necessary, with necessary partner-number changes)