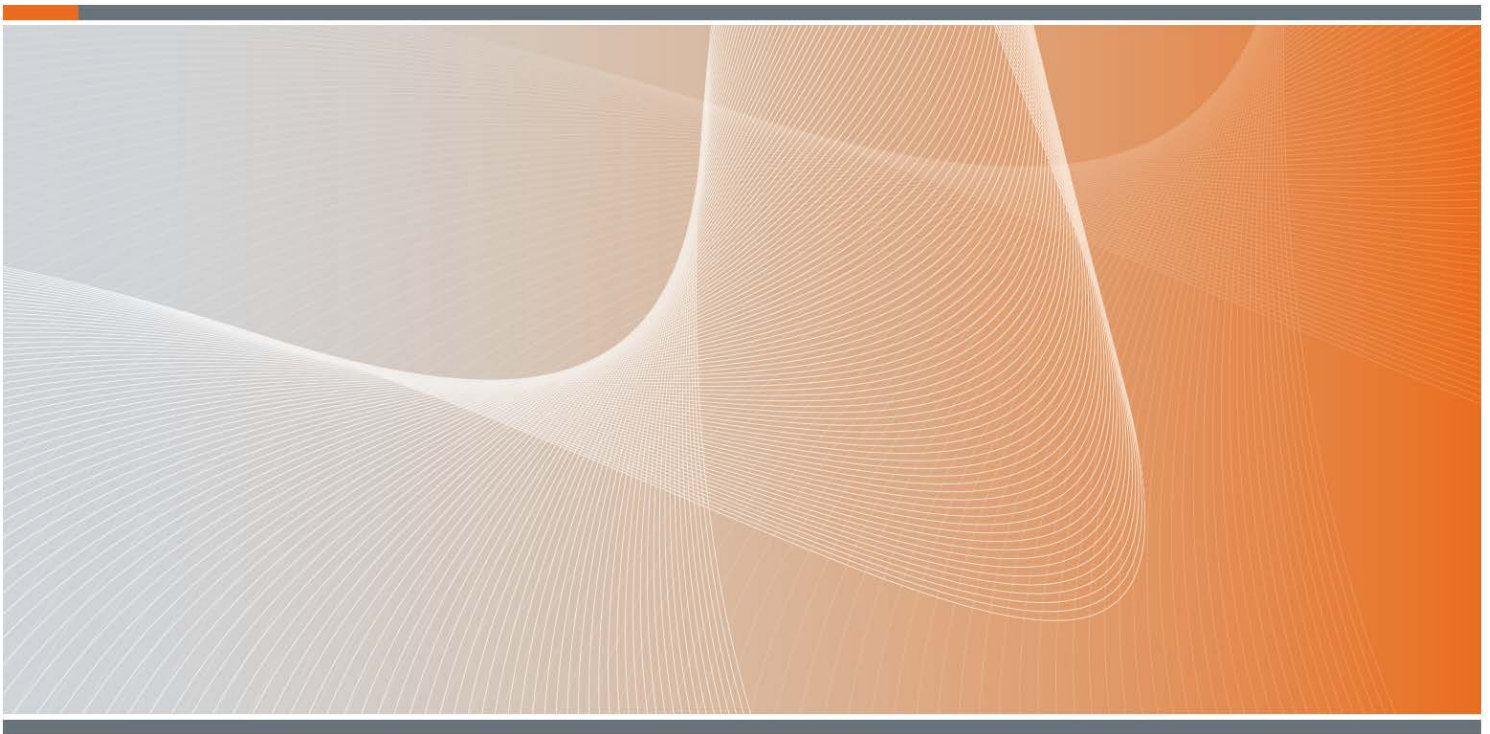


DEFENCE PFAS RESEARCH PROPOSAL GUIDELINE

Guidance on requirements and processes for a PFAS research proposal under the
Defence PFAS Applied Research Strategy



INFRASTRUCTURE DIVISION
PFAS INVESTIGATION AND
MANAGEMENT BRANCH

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1 Introduction

1.1 Purpose

This PFAS research proposal guideline provides requirements and processes for research supported by Defence under the Defence PFAS Applied Research Strategy.

This guideline provides:

- clarity on Defence's requirements
- clarity on the assessment criteria applied to a proposal, and
- a platform for Defence to assess the comparative merits of proposals.

1.2 Application

This document will be used by:

- Defence in managing research proposals under the Applied Research Strategy
- organisations submitting research proposals for Defence support
- The community in understanding how, why and when Defence supports research proposals.

Externally initiated requests for Defence support of PFAS research activities have been submitted through various channels in different formats. All such requests will now be managed in accordance with this guideline.

Nothing in the guideline affects Defence's discretion on whether to accept a proposal.

1.3 Defence procurement processes

All investment by Defence under this Guideline must comply with the Commonwealth Procurement Rules, Defence Procurement Policy requirements and any applicable Public Works Committee requirements.

Defence may conduct an approach to market for one or more of the priorities (or a component of a priority) identified under the Defence PFAS Research Priority List. Where Defence has scheduled, or is likely to schedule, an approach to market, Defence may decline to assess an externally initiated proposal for research within that priority and refer the applicant to the Austender website, <https://www.tenders.gov.au/> for details of the approach to market.

1.4 Scope

This document sets out:

- the requirements for submitting a research proposal under the Defence PFAS Applied Research Strategy that:
 - are indicative of the requirements of an approach to market, or
 - apply where the proposal is externally initiated
- the assessment processes that apply to a research proposal under this Guideline
- the reporting requirements for any proposal accepted under this Guideline.

2 Research proposal requirements and assessment process

This chapter sets out:

- the requirements of a PFAS research proposal (section 2.1)
- conformance checks to be applied at the initial screening of proposals (section 2.2)
- the requirements for assessment of the potential for Defence investment in PFAS research (section 2.3)

2.1 Proposal form and content

Appendix A sets out:

- the required format and content for a Stage 1 proposal (externally initiated proposal); and
- indicative form and content requirements under an approach to market.

For an approach to market, the specific form and content requirements will be as set out in the relevant request documentation.

2.2 Conformance checks

Proposals are to be assessed for conformance against minimum form and content requirements. Where these requirements are not met, the proposal is not to be further assessed and the proponent is to be advised of the decision.

The onus is on the applicant to provide sufficient evidence to Defence to enable Defence to complete the conformance checks. Defence is not required to make further enquiries of the applicant.

CONFORMANCE CHECK

- | | |
|---|---------------|
| • Does the proposal address the terms of the relevant approach to market; or where externally initiated, does the proposal address an identified need on the Defence PFAS Research Priority List; or does the proposal offer a significant innovative or novel advancement in PFAS understanding that has not previously been identified. | YES/NO |
| • In the case of an externally initiated proposal, is the proposal addressed by a scheduled (or likely to be scheduled) approach to market by Defence? | NO/YES |
| • Does the proposal meet the minimum content requirements as set out in section 2.1? | YES/NO |

2.2 Assessment criteria

This section sets out:

- the criteria for the assessment of an externally initiated proposal ('Stage 1 proposal'); and
- the indicative criteria for the assessment of an approach to market (Stage 2 proposal').

For a Stage 1 proposal, a scoring template is set out in Appendix B, applying the five-point evaluation and risk guide set out Appendix C. Note that Defence may at its discretion substitute this with a more detailed evaluation and risk guide for a specific Stage 1 proposal.

For a Stage 2 proposal, the full assessment criteria will be as set out in the relevant request documentation.

CRITERIA

APPLICATION POTENTIAL

1. Addresses an identified priority in the Defence PFAS Research Priority List or a description of the potential for a significant innovative or novel advancement in PFAS understanding that has not previously been identified.
2. A clear understanding of how the results will contribute to scientific or technical understanding and be applied by Defence in PFAS risk management.
3. Clearly identified activities that will support and enhance the transfer of the research outcomes.

SCIENTIFIC AND/OR TECHNICAL MERIT

4. Demonstration of a thorough level of understanding of the specific PFAS issue
5. The degree to which the research will advance the state of the science in the designated priority area.
6. Scientifically sound proposed methodology, ensuring that any associated risks are well characterised.

KEY PERSONNEL

7. The suitability of proposed key personnel, including:
 - roles and percentage of time allocated on the activities
 - nature and extent of their experience in carrying out similar work
 - capacity to perform the specified task in respect of other commitments
 - suitability of any proposed sub-consultants.

PROGRAM

8. The extent to which the Proponent has demonstrated that it has satisfactorily programmed the research activity.
 9. Demonstration of the ability to undertake the work in a designated timeframe by providing a comprehensive, logical, and concise plan, including:
 - major tasks
 - milestones
 - critical paths
 - decision points
 - key events
 - periodic and final reporting and/or publication
-

CRITERIA

VALUE FOR MONEY

10. The Value for Money Assessment will be conducted using the following broad method for the proponent:

- evaluation of any requested support including proposed fees and charges
 - assessment of the extent to which the proponent is assessed as sharing financial risk with the Commonwealth
 - analysis of any potential financial risks/impacts that could arise with the offer
 - incorporating any additional costs or adjustments as a result of assumptions indicated by the proponent
 - consideration of potential whole of life cost implications of proposal with particular reference to ongoing maintenance and support.
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3 Project reporting

3.1 Periodic reporting

Periodic reporting and meetings will be required to document progress and communicate any concerns that may affect the viability of the project. The frequency (monthly/quarterly/milestone) will be determined by the project timelines and milestones. The proponent is required to set out a proposed periodic reporting framework in the proposal.

3.2 Interim reporting

Where an interim report is required by the project specification, it should:

- capture technical and scientific results at the completion of a significant phase of a project
- assess whether interim objectives have been met at a designated milestone
- inform a decision point
- recommend adjustments to the upcoming planned research, as needed.

The interim report is to include the following sections as a minimum.

SECTION	REQUIREMENTS
Objective	<ul style="list-style-type: none"> • The objective(s) of the research, specifically as it relates to the priority area under which the proposal was submitted. • Any working hypotheses that form the basis of the research approach should be clearly stated. • The specific portion of the project that is addressed in the Interim Report. • Where the report is associated with the completion of a major milestone or a decision point, discussion of the role of the milestone or decision point relates to the objective of the research.
Technical approach	<ul style="list-style-type: none"> • Sufficient relevant details on the experimental design and techniques that the experiments could be repeated by another researcher • Only new methods should be described in detail. • Cite previously published methods as needed.
Results and discussion	<ul style="list-style-type: none"> • Discussion of the implications and relevance of the interim results or products in addressing the project’s objectives • Where the interim result report is required to inform a decision point, details of the decision criteria and an assessment of whether they were met • Discussion of specific experiments performed • Figures and tables that highlight the data obtained during the project • Sufficient detail to capture the scientific and technical work accomplished under the project

SECTION	REQUIREMENTS
	<ul style="list-style-type: none"> • Not to include verbatim text published in the primary literature.
Conclusions to date	<ul style="list-style-type: none"> • Synthesis of the results and any conclusions relative to the objectives of the research that can be drawn to this point • Where the interim result report is required to inform a decision point, evaluation of the results to date relative to the decision criteria and justification of the recommendation for the decision. • Work to be performed in future phases of the research project and potential research challenges
Literature citations	<ul style="list-style-type: none"> • Literature cited in the body of the report.

3.3 Final Report

On completion of the project a final report is to be prepared that contains the following sections as a minimum.

SECTION	REQUIREMENTS
Abstract	<ul style="list-style-type: none"> • Structured as: Objectives, Technical Approach, Results, and Benefits • Contains the principal ideas (i.e., the specific PFAS environmental problems addressed or the scientific questions explored), methods, results, and important conclusions relative to the present and potential future applications of the research and/or technology. • Contains sufficient information so that the contents and scope of the report will be evident without access to the full text. • Footnotes, citations, and abbreviations should be avoided in the abstract. • Not to exceed 2 pages
Objective	<ul style="list-style-type: none"> • The objective(s) of the research, specifically as it relates to the priority area under which the proposal was submitted. • Any working hypotheses that form the basis of the research approach should be clearly stated.
Background	<ul style="list-style-type: none"> • Discussion of the environmental issue that the research addressed. • A brief summary of relevant past research that indicates the state of the science at the beginning of the project and frames the specific technical objectives of the project.
Materials and methods	<ul style="list-style-type: none"> • Sufficient relevant details on the experimental design and techniques that the experiments could be repeated by another researcher • Only new methods should be described in detail. • Cite previously published methods as needed.

SECTION	REQUIREMENTS
Results and discussion	<ul style="list-style-type: none"> • Discussion of specific experiments performed • Figures and tables that highlight the data obtained during the project • Sufficient detail to capture the scientific and technical work accomplished under the project • Not to include verbatim text published in the primary literature. • Discussion of the implications and relevance of the overall results or products in addressing the project’s objectives
Conclusions and implications	<ul style="list-style-type: none"> • Synthesis of the results and any conclusions relative to the objectives of the research • Discussion of how the research resolved existing knowledge gaps and identification of related research questions. • Describe the potential for direct implementation by Defence and others
Literature citations	<ul style="list-style-type: none"> • Literature cited in the body of the report.
Appendix A: supporting data	<ul style="list-style-type: none"> • All refined data collected during the research project that warrants archiving in this report. • Data in the form of tables, graphs, graphics, plots, and/or datasets that are not provided in the Results and Discussion section above should be included with sufficient detail to reconstruct the experiments or research. • Sufficient description to enable others not familiar with the data to use and understand them. • Complex datasets to be provided in a format to be agreed with Defence
Appendix B: related publications	<ul style="list-style-type: none"> • List of scientific or technical publications produced during the course of the project, including: <ul style="list-style-type: none"> – Articles in peer-reviewed journals – Technical reports (specify whether in print, accepted for publication, or submitted for publication). – Conference or symposium proceedings scientifically recognized and referenced (other than abstracts). – Conference or symposium abstracts – Textbooks or book chapters • Information of the status of the publications (in print, accepted for publication, or submitted for publication)

Appendix C: other supporting materials	<ul style="list-style-type: none">• For example, patents, protocols/user guides, scientific or technical awards.
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APPENDIX A: Research proposal format and content

Defence’s PFAS knowledge needs and priorities arise directly from its current risk-management activities and from regulator and community expectations and requirements. There are significant knowledge gaps in the understanding of PFAS and its behaviour with few proven options commercially available to manage PFAS risks or remediate PFAS contamination across the Defence estate.

Defence support for the development of scientific understanding, and the validation of technology will normally be addressed through targeted approaches to market to address identified risk priorities. Defence’s preference is to undertake open approaches to market.

However, Defence receives a considerable number of externally initiated proposals, aimed at research and technology gaps in PFAS risk management. The format and content in this Appendix outline the minimum requirements to enable Defence to evaluate these externally initiated proposals.

Where these requirements are not met Defence may not consider the proposal. The conformance checks and assessment process are set out in Chapter 2 of the Guidelines.

All externally initiated proposals are to be sent to pfas.research@defence.gov.au

Research proposals should:

- provide and structure the information as set out in the table below
- not include marketing material
- be no longer than five pages (excluding appendices)
- use a readable sized font
- use appendices for:
 - abbreviated one page curriculum vitae for the principal researcher and each of the key co-researchers
 - a list of acronyms and their definitions
 - citations for any material referred to in the technical section or the supporting technical data
 - (optional) up to three pages of any supporting technical data.

ITEM	COMMENT
1 Proposal Title	1.1 The title should be specific enough to easily distinguish it from other proposals and address the relevant media (eg soil) and outcome (e.g. removal or destruction of PFAS)
2 Priority Area	2.1 Clearly identify the relevant Defence PFAS Research Priority Area/s.

ITEM	COMMENT
3 Lead organisation	3.1 Provide: <ul style="list-style-type: none"> • organisation name/s • a brief summary of the requesting organisation / consortium. • Proposal Lead POC including contact details. This should be email and phone at a minimum.
4 Problem definition	4.1 Demonstrate a thorough understanding of the problem. 4.2 Frame the proposed research in the context of the current state of the science or technology
5 Objectives	5.1 Briefly state the objective(s) of the proposed research
6 Approach	6.1 Describe the technical approach and methods, preferably structured in hypothesis-driven tasks that clearly identify how the objectives of the proposed research will be addressed. 6.2 This section should be the primary focus of the Stage 1 proposal. 6.3 Include definitions of abbreviations/acronyms, citations, and up to three pages of supporting technical data as appendices.
7 Schedule	7.1 Include proposed milestones, activities and deliverables including identification of critical path and dependencies.
8 Technical risks	8.1 Identify potential issues of concern and technical risks 8.2 Identify any assumptions that have been made that, if not realised, could impact the successful implementation of the project. 8.3 Discuss risk mitigation and management. 8.4 Identify regulatory approvals required for handling, transport and disposal of materials.
9 Deliverables	9.1 Describe how the project outcomes will be presented. Specify if this includes a paper eligible for publication in an appropriate scientific journal 9.2 Project reporting in accordance with Part 4 of this guideline. 9.4 Data and data analysis generated by the project. 9.5 Any additional requirements required by an applicable project specification.
10 Cost	10.1 Provide the overall cost, together with a cost breakdown for each of the identified tasks.

ITEM	COMMENT
	10.2 All costs associated with the preparation of the proposal and / or approval processes are to be borne by the proposer.
11 Research team	<p>11.1 Research team composition identifying the principal researcher, the key co-researchers and their respective organisations.</p> <p>11.2 Abbreviated one-page curriculum vitae for the principal researcher and each of the key co-researchers should be provided as an Appendix.</p>
12 Related efforts	<p>12.1 Information on any relationship to other similar research activity, including complementarities, overlaps, co-dependencies.</p> <p>12.2 Identification of any other funding approved or under application by the proposed research team or any member of the proposed research team or their research institutions for the proposed research and similar or related research</p> <p>12.3 Any co-dependencies identified should describe the impact of delays or non-delivery of outcomes from the other research project.</p>

NOTE: All costs associated with preparation of the proposal and/or assessment/approval processes are to be borne by the proponent.

APPENDIX B: Scoring Sheet

Each Board member should record his/her detailed comments in relation to each weighted evaluation criterion and record a score using the Five Point Evaluation Scoring and Risk Guide (Appendix C). Each Board member should record a whole number score for each weighted evaluation criterion.

EVALUATION CRITERIA	COMMENTS	SCORE
Application potential		
1. Relevance to a need from the Defence PFAS Research Priority List or a description of the potential for a significant novel advancement in PFAS understanding.		
2. A clear understanding of how the results will contribute to scientific or technical understanding and be applied by Defence in PFAS risk management		
3. Clearly identified activities that will support and enhance the transfer of the research.		
Scientific and technical merit		
4. Demonstration of a thorough level of understanding of the specific PFAS issue		
5. The degree to which the research will advance the state of the science in the designated priority area.		
6. The research is innovative and the associated risks are well characterised.		
7. The proposed methodology is scientifically sound		
Key personnel		
8. The suitability of proposed key personnel, including: <ul style="list-style-type: none"> • roles and percentage of time on the Services • nature and extent of their experience in carrying out similar work • capacity to perform the specified tasks in respect of other commitments • suitability of any proposed sub-consultants. 		
Program		
9. The extent to which the Proponent has demonstrated that it has satisfactorily programmed the research activity.		
10. Demonstration of the ability to undertake the research in a designated timeframe by providing a		

EVALUATION CRITERIA	COMMENTS	SCORE
<p>comprehensive, logical, and concise plan, including:</p> <ul style="list-style-type: none"> • major tasks • milestones • critical paths • decision points • key events 		
<p>Value for Money</p>		
<ul style="list-style-type: none"> • The Value for Money Assessment will be conducted using the following broad method for the proponent: • evaluation of any requested support including proposed fees and charges • assessment of the extent to which the proponent is assessed as sharing financial risk with the Commonwealth • analysis of any potential financial risks/impacts that could arise with the offer • incorporating any additional costs or adjustments as a result of assumptions indicated by the proponent • consideration of potential whole of life cost implications of proposal with particular reference to ongoing maintenance and support. 		
<p>General observations</p>		
<p>11. Include any general observations.</p>		

APPENDIX C: Five Point Evaluation Scoring and Risk Guide

RATING	CHARACTERISTICS	SCORE
Very Good	<ul style="list-style-type: none"> • Meets all requirements to a very good standard. • All claims are fully substantiated. • Nil or very minor deficiencies which do not affect essential aspects of service delivery. • The proposal offered is sound and represents a very low, manageable risk to Defence. • Where referee comments have been sought, they provide strong support for the Proponent. 	4
Good	<ul style="list-style-type: none"> • Meets all or most requirements to a good standard. • Most claims are well substantiated. • Some minor weaknesses, but the proposal is sound in all key areas and represents a low, but manageable risk to Defence. • Where referee comments have been sought, they provide support for the Proponent with few reservations. 	3
Marginal	<ul style="list-style-type: none"> • Generally meets requirements to a basic standard, but some requirements are not addressed in sufficient detail. • Many claims are not well substantiated. • Some weaknesses in the proposal that could impact on a value-for-money assessment or indicate a low to moderate risk to Defence. • Where referee comments have been sought, they provide some support for the Proponent but with some reservations. 	2
Poor	<ul style="list-style-type: none"> • Requirements are generally poorly addressed or some requirements are not addressed at all. • Most or all claims are unsubstantiated. • The information provided is insufficient to allow any proper judgment of the Proponent’s proposed solution; the solution shows a very poor understanding of Defence requirements; or the solution appears unworkable • The solution represents a very high risk to Defence. • Where referee comments have been sought, they disclose significant reservations about the Proponent’s performance or abilities. 	1
Non-compliant	<ul style="list-style-type: none"> • The Proponent has not provided a response or the response supplied does not address the requirements. 	0