NSW RESEARCH ATTRACTION AND ACCELERATION PROGRAM

PHYSICAL SCIENCES FUND

ROUND 3 2021

GUIDELINES FOR APPLICANTS

1.0 Background

1.1 The Physical Sciences Fund (PSF) is an annual $5 million, competitive technology development and commercialisation program funded by the NSW Government through the NSW Research Attraction and Acceleration Program (RAAP), administered by the Office of the NSW Chief Scientist & Engineer (OCSE).

1.2 The NSW Government recognises the importance of capturing potential commercial applications of NSW research.

2.0 Program purpose

2.1 The purpose is to obtain significant economic, environmental and social benefits to NSW by providing financial support to develop new and innovative devices and systems within NSW across the branches of physical science and engineering, including physics, chemistry, astronomy and the earth sciences.

2.2 The PSF targets innovative devices/systems within Technology Readiness Level (TRL) 3 – 7 to help them move along the TRL scale and enable them to attract large-scale private investment. The TRL scale is at Appendix A.

3.0 Funding

3.1 The funding awarded to each successful applicant will be merit-based and will depend on the overall quality and quantity of applications received.

3.2 Funding will be in the range of $200,000 to $5 million over a period of one to three years. The funding will be distributed in a single payment to each successful applicant.

3.3 Funding from the RAAP will take the form of a cash contribution following the execution of a funding deed between the applicant and Investment NSW (the Department).

3.4 The Department requires repayment of the grant if the project achieves a specified level of economic success. The specific terms of this repayment such as time period and other factors will be agreed to as part of the contract negotiations.

4.0 Principles

4.1 The following principles apply to the PSF:

- the project must demonstrate:
    - how the device/system will attempt to solve a problem
    - significant potential economic, environmental and social benefits to NSW
    - an existing prototype/proof-of-concept
    - a clear path to commercialisation

4.2 Funding may be prioritised if there is a clear contribution to NSW Government priorities.

4.3 Funding can be used for:

- prototyping and piloting studies
- manufacturing
- conducting market and product assessments
- salaries and access to external expertise that is directly related to delivery of the project
- commercialisation strategies and commercial feasibility studies

- specialist equipment and/or infrastructure necessary to progress the project
- intellectual property protection or advice.

4.4 The PSF will not support activities that are deemed to be in the very early stages of project development (e.g. TRL 1 - 2).

4.5 The PSF Expert Panel will have flexibility to tailor funding support according to what it believes is required to assist the development and commercialisation of a device or system. This could include a smaller amount of seed-funding for highly competitive applicants who successfully demonstrate their commercialisation strategy to the Expert Panel.

4.6 The PSF Expert Panel may not support projects where it deems that funding from the PSF is not necessary to commercialise the technology. For example, where the applicant or project has already raised substantial funds.

5.0 Eligibility criteria

5.1 To be eligible for the PSF, you must be:

- a financially viable company or commercial enterprise based in NSW (e.g. location of manufacturing jobs, headquarters based in NSW, NSW investment); have an Australian Business Number (ABN); and is a legal entity; or
- an individual who agrees to form such an entity so that the Department can enter into a legally binding funding agreement; or
- a NSW public research organisation applying through its appropriate technology transfer office or the Chief Executive Officer (or equivalent) of the research organisation that will become a separate entity before entering into a legally binding funding agreement with the Department.

5.2 The project must:

- seek to progress a device or system along the commercialisation pathway
- be innovative (i.e. new to market)
- be headquartered in NSW and demonstrate that most of the project activities will take place in NSW
- deliver economic, social and/or environmental benefit to NSW.

5.3 Applicants must hold the Intellectual Property or the rights to commercialise the device/system.

5.4 Applicants eligible for and/or who have received funding from the NSW Medical Devices Fund are not eligible for the PSF.

6.0 Selection criteria

6.1 Applications will be evaluated against information and evidence provided in relation to the following selection criteria:

- understanding of the problem the device/system is trying to solve
- potential benefits to NSW
- demonstrated need for the PSF grant
- sound scientific/technological basis

- innovation and competitive advantage
- capacity to commercialise the device/system and realise benefits via:
    - engagement with target markets
    - appropriate skills/experience of project team and partners
    - ability to secure additional funding
    - sound intellectual property strategy

7.0 Application process

7.1 The PSF application process is in two stages:

Preliminary applications

- Applicants will complete a short form which will be used to determine eligibility, review the proposed project and assess the commercial opportunity.
- Applicants must submit a 2-minute video clearly explaining the scientific and technological basis for the device/system (including imagery of the device/system), how it works, the intended outcome/benefit to the community, and how the funding would be used to drive commercialisation.
- The Expert Panel will invite a shortlisted group of applicants to provide a short presentation and answer questions (approx. 25 minutes).

Full applications

- The PSF Expert Panel will invite a further shortlisted number of applicants to submit a more detailed application (Full application).
- The Expert Panel will then request an interview with a further shortlisted group of applicants.

7.2 All questions must be answered. If they are not applicable, please indicate.

7.3 Preliminary applications must be submitted by email to raap.grants@chiefscientist.nsw.gov.au by **5pm 06 May 2021.**

7.4 The application must be signed by at least one of the core participants (by the head of the organisation or their authorised delegate).

7.5 All applicants will be informed of the outcome of the Expert Panel's decision regarding their applications. All applicants will have the opportunity to seek specific feedback on their application.

7.6 All information provided to the Department will be collected and stored in accordance with *Privacy and Personal Information Protection Act 1998 (NSW).*

7.7 Information provided by successful applicants will be kept confidential. Successful projects will be publicly promoted in a way that does not jeopardise the applicant's commercial interests.

7.8 The Department will engage:

- an independent probity advisor to oversee the process.
- a commercial and financial advisor to assess shortlisted full

applications and monitor the commercial success of PSF grantees.

8.0 Selection process

8.1 The PSF Subcommittee will support the PSF Expert Panel and will conduct an initial review of the applications. Advice will be provided to the Expert Panel about eligibility and quality of the applications against the selection criteria.

The PSF Expert Panel will then:

a. assess and rank full applications according to the selection criteria; and

b. make recommendations on which applicant(s), if any, should receive funding and the granted amount(s).

8.2 The Department, at its discretion, may choose not to award or recommend funding under this program.

9.0 Funding agreements & reporting

9.1 All applicants who are successful under the PSF and who accept the offer of a grant will be required to enter into a funding agreement with the Department. The funding agreement will specify obligations that relate primarily to the recipient's accountability for the grant, grant activities, repayment of the grant if the project is commercially successful, the return of unspent grant funds, and reporting on the use of the grant for the duration of the terms.

9.2 Successful applicants will be required to meet annually with the Department to discuss the progress of the project.

9.3 The funding deed must be signed by at least one core participant in the organisation or the Chief Executive Officer of the organisation.

10.0 Timeline

10.1 The timetable for the process is:

12 March 2021	Preliminary applications open
06 May 2021	Preliminary applications close
August 2021	Shortlisted applicants present to the Expert Panel
August / September 2021	Full applications requested
October 2021	Shortlisted applicants present to the Expert Panel
December 2021	Successful applicants announced

Please note dates are subject to change.

APPENDIX A

TRL	TRL description	Evidence of achievement
1	Basic principles observed and reported	Published research that identifies the principles that underlie this technology
2	Technical Device/System concept formulated	Practical applications (e.g. devices) of the basic principles of the invention
3	Technical proof of concept demonstration	The basic performance of the invention is demonstrated in a laboratory setting
4	Alpha prototype validation in laboratory environment	A simple prototype is developed, and its performance is demonstrated in a laboratory environment. The performance indicates its potential for solving a community need
5	Beta prototype validation in clinical environment	A more advanced prototype is developed, and its performance is demonstrated in a community environment and further end-user feedback is gained for the final design phase
6	Final Device/System design validation with clinical pilot study	The design of the device or system is frozen, and a small number of devices/systems are manufactured, and a pilot study is conducted by a key opinion leader. A pilot study report is prepared showing the results of the study
7	Device/System from pilot manufacturing line is being trialled in multiple geographical locations	A larger sample of devices/systems are manufactured and sent to multiple sites in different geographical locations for trialling. The reports from these trials will be used for submissions to regulatory authorities
8	Device/System is partially approved and in commercial use	The device/system has been approved in limited geographical regions and is in commercial use in those regions
9	Device/System is fully approved and in commercial use worldwide	The device/system is approved for use worldwide and is in commercial use worldwide