ScienceFund

WINNING WAYS TO SECURE MOSTI'S FUND

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ScienceFund

Outline of Presentation

- Definition and Objectives of ScienceFund
- Scope of Funding
- Research Priority Areas
- Evaluation / Selection Criteria
- Proposal Writing
- Top Ten Reasons of Rejection
- Frequently Asked Questions (FAQ)

Definition of ScienceFund

Grant provided by Government to carry out R&D projects that can contribute to the discovery of new ideas and the advancement of knowledge in **applied sciences**, focusing on **high impact** and innovative research.

Objectives of ScienceFund

i. to support research that **can lead to the innovation of products or processes** for further development and commercialisation; and/or;

ii. to generate **new scientific knowledge** and strengthen national research capacity and capability.

Scope of Funding

ScienceFund covers preliminary research leading to laboratory proof of concept or **towards the development of new products or processes.** The quantum of fund approved will be determined based on the **merit** of each application.

Quantum of Funding

The quantum for each project is up to **RM500,000.00.**

Project Duration

The project duration is up to **30 months**.

Research Priority Areas

- Life Sciences
- Computer Sciences and Information & Communication Technology (ICT)
- Agriculture Sciences/Agricultural Engineering
- Environmental Sciences
- Advanced Materials Science
- Chemical Sciences
- Physical and Mathematical Sciences
- Engineering
- Medical and Health Sciences
- Social Sciences and Humanities

Evaluation/Selection Criteria of the SCIFUND Project

i) **Scientific and technical merit:** The project must be scientifically sound, technically feasible with achievable milestones, and has the **potential for further development and commercialisation**.

ii) **Research competence:** The research team must have the knowledge and **competency to carry out** the research successfully to completion.

iii) **Innovativeness** of the research.

iv) **High impact research:** Clear and **measureable expected output,** outcome **and impact in line with** National Key Economic Areas / National Key Result Areas (NKEA/NKRA).

Evaluation / Selection Criteria

1. Research

- must be a research proposal, NOT just development

- must be applied research, NOT fundamental research

Evaluation / Selection Criteria

2. Novelty

- the research proposal must be novel

- may lead to the generation of new IP, such as filing of a patent: *Newness, inventive step and industrial application*

- identify the patentability aspect of the research proposal, if any

- prior art search must be done to ensure the originality of the proposal

- Patent incentives tell it all !

Evaluation / Selection Criteria

3. Viability of Research Objectives

- must be specific and measurable

e.g. the objective of the project is to develop a thin-film solar cell for micro energy harvester. The expected harvested power level is 10 µW/cm^2

- must be technically feasible

Evaluation / Selection Criteria

4. Output Expected

- Prototype, patents, new/ improved process, new method/ technique

- must reflect the output of an applied research with potential industrial applications

e.g. solar-based energy harvester for microelectronic devices in aquaculture application

Evaluation / Selection Criteria

5. Collaboration and Industry Linkages

- Collaborators may be crucial in certain projects

- Roles of collaborators must be clearly identified

- Letter of Intent or MOA with collaborators must be submitted

Evaluation / Selection Criteria

6. Appropriateness of Research Methodology

- Elaborate the research methodology in stages/ phases

- give details on the analytical techniques, design, and research activities

- should make an attempt to compare the methodology with alternative methods

Evaluation / Selection Criteria

7. Relevancy of Key Milestones

- categorically quantify the various significant accomplishments of the projects in phases

- the milestone should reflect the various major stages of progress in the project.

- must have at least 2 milestones per calendar year.

Evaluation / Selection Criteria

8. Commercialisation Potential

- the research output MUST have the potential for further development and commercialisation.

Evaluation / Selection Criteria

9. Cost Effectiveness

- cost effectiveness of the research outcome / proposed solution.

Evaluation / Selection Criteria

10. Project Risk

- identify the Technical Risk, Financial Risk and Timeline Risk and justify accordingly.

- suggest a risk mitigation plan if the risk is deemed high.

Evaluation / Selection Criteria

Possible Outcomes of Evaluation

(1) Recommended for Approval

(2) Recommended for Rejection (WITH REASONS). Re-submission will be considered new application

Top Ten Reasons of Rejection

1. Not a Research Project

- The so-called proposed research is NOT a research and does not fall under Research & Priority Area.

- The focus is more on application development/ integration

E.g. Integrated fleet management system, online video game, design a product.

Top Ten Reasons of Rejection

2. Lack of Novelty

- various similar works have been published.

- There are already such devices/ software applications in the market that have same functionality

- e.g. search engine

Top Ten Reasons of Rejection

3. Research Objective Not Clear

- The research objective is too general with no details of goals and specific objectives.

Top Ten Reasons of Rejection

4. Research Methodology Not Well Explained

- Lack of proper detailing of research methodology and approach.

Top Ten Reasons of Rejection

5. Technology Soon Becoming Obsolete

- The technology proposed may become obsolete by the time the research is done

- e.g. DDR SDRAM
- crowded market, red ocean

Top Ten Reasons of Rejection

6. Plagiarism

- such dishonesty will never be condoned.

Top Ten Reasons of Rejection

7. Unclear Expected Output

- The expected output of the project is inconsistent and puzzling

Top Ten Reasons of Rejection

8. Little Commercialisation Prospect

- The project has little prospect for further development and commercialisation

- Commercialisation potential not explained in the proposal.

Top Ten Reasons of Rejection

9. No Collaborator

- Failed to identify a collaborator
(for certain projects whereby it
is critically important to have collaborators)

Top Ten Reasons of Rejection

10. Incomplete/ Empty CV

FAQ

***Question** :*

Though similar research has been done elsewhere, no one has done this in Malaysia. I want to do it here to show that Malaysia Boleh!! Will my application be considered ?

***Answer** :*

No. Localisation, cost cutting, - not eligibility criteria

FAQ

***Question** :*
Do I stand a better chance to get the fund if I were to be a Datuk or Professor ?

***Answer** :*
No. We don't look at your status. Evaluation is done purely based on the research proposal

FAQ

Question :

Is priority given to applications from IPTA over that from IPTS?

Answer :

No. It is immaterial where the applications come from.

FAQ

Question :

Is there any quota on the number ScienceFund a university/RI may get ?

Answer :

No.

FAQ

***Question** :*
If I can't finish my ScienceFund project in 30 months, can I apply for extension ?

***Answer** :*
For projects in the ICT Cluster, you are strongly encouraged to finish your project in 18 months

FAQ

***Question** :*
How do I go about getting the allocation of IP incentives for patent filing?

***Answer** :*
Must budget in during submission of ScienceFund application under Special Services (V 29000) :

IP incentives for Patent filing:
RM500 for disclosure, RM5000 for filing, and RM10000 for patent granted

FAQ

***Question** :*
Is there a limit to the number of patents that I can file in a ScienceFund Project?

***Answer** :*
No.

FAQ

Question :

My project is novel but I don't want to file for a patent. Is it ok ?

Answer :

Yes.

FAQ

***Question** :*
My research proposal is novel, but lacks inventive step, and thus can only have a Utility Innovation filed. Am I still qualified for ScienceFund ?

***Answer** :*
It depends on other factors such as the commercialisation potential of the research outcome

FAQ

***Question** :*
If my application is rejected, can I make an appeal ?

***Answer** :*
Yes, but please make amendments according to the comments given before resubmission.

Pre Commercialisation Fund

TECHNOFUND

Outline of Presentation

- Definition and Objectives of TechnoFund
- Scope of Funding
- Research Priority Areas
- Approval Criteria
- Top Ten Reasons for Rejection
- Frequently Asked Question (FAQ)

Definition of TechnoFund

TechnoFund is a grant scheme which aims to stimulate the growth and successful innovation of Malaysian enterprises by increasing the level of R&D and its commercialisation. The scheme provides funding for technology development, up to pre-commercialisation stage, with the commercial potential to create new businesses and generate economic wealth for the nation

Objectives of TechnoFund

- to undertake the development of new or cutting edge technologies or further develop/value add existing technologies/products in specific areas (Section 7) for the creation of new businesses and generation of economic wealth for Malaysia;

- to undertake market driven R&D towards commercialisation of R&D outputs;

- to encourage institutions, local companies and inventors to capitalise their intellectual work through intellectual property (IP) registration; and

- to stimulate the growth and increase capability and capacity of Malaysian technology-based enterprises, Malaysian Government Research Institutes (GRI) and Institutions of Higher Learning (IHL) through both local and international collaborations.

Quantum of Funding

RM1.5 – RM3.0 million

Project Duration

The project duration is up to **30 months***.

**Additional 6 months is permitted for application involving IP acquisition.*

ELIGIBLE APPLICANTS

Eligible applicants can be researchers and other individuals from:

- Small and Medium Enterprises;
- Institutions of Higher Learning;
- Research Institutes; and
- Science, Technology and Innovation (STI) Agencies.

Eligibility Criteria

- All categories of companies must have a minimum of **51% equity held by Malaysians**;
- Applicant or collaborator under the small and medium company category must have minimum **paid up capital in cash of RM10,000.00**. However, **start-up companies are exempted** from this stipulation but must provide justification and supporting documents on the ability to sustain itself;
- **None** of the company directors or project team members have been convicted of any fraudulent activities or the company been **declared bankrupt**, under **liquidation** or placed under **receivership**
- The proposed project must contain elements of **technological innovation** leading to commercialisation of innovative products, processes and services;
- The proposed project should be in the pre commercialisation stage with established **Proof of Concept (POC);**
- The project leader and team members must be **competent** to undertake the proposed project. The resume and supporting documents of the project leader and each project team member must also be submitted.
- The following are **not eligible** for funding under the Pre Commercialisation Fund (TechnoFund):
  1. projects under the scope, responsibility or portfolio of certain Ministry, Department or Agency other than MOSTI; and
  2. applications from Research Institutes with internal research funding such as CESS Fund

Scope of Funding

1. the acquisition of technology (foreign and/ or local). Applicants should provide the acquisition agreement or if such an agreement is not in place, applicants shall provide details of the technology to be acquired;

2. the up-scaling of laboratory-scale prototype or the development of commercial ready prototype; and

3. pre-clinical testing/clinical testing/field trials

The funding can be used for the following:

i. pilot plant/ prototype – equipment and supporting infrastructure which is directly related to the pilot plant;

ii. IP Preparation and Registration in Malaysia only (excluding maintenance)- existing and new IP;

iii. market testing / assessment and/or evaluation;

iv. regulatory and standards compliance;

v. expenditure for services (consultancy/ testing) not exceeding 20% of project cost;

vi. contract expenditure applicable to IHLs and GRIs only (research assistant);

vii. raw materials/consumables; and

viii. technology / IP acquisition (if applicable).

Research Priority Areas

1. *Life Sciences,*
2. *Computer Sciences and Information and Communication Technology (ICT),*
3. *Agriculture Sciences / Agricultural Engineering,*
4. *Environmental Sciences,*
5. *Advanced Materials Science,*
6. *Chemical Sciences,*
7. *Physical and Mathematical Sciences,*
8. *Engineering,*
9. *Medical and Health Sciences, and*
10. *Social Sciences and Humanities.*

Approval Criteria of the TechnoFund Project

1. **Novelty**

   Project proposal must be able to show the uniqueness and the novelty aspect of their technology/product in terms of new product, new technique, new process, modification of existing product/process, additional application, cutting edge technology, and/or patentable. Applicant must conduct a Prior Art Search to verify on the patentability aspect.

Approval Criteria of the Project

2. Technical Feasibility

The applicant will be evaluated with respect to the applicant's ability to successfully complete the project within the stipulated time.

3. Laboratory Proof of Concept (POC)

Evaluation of the Proof of Concept will be made to establish viability, technical issues and overall direction, as well as provide feedback for budgeting.

Approval Criteria of the Project

4. Competency of the Project Team

*-**P**roject teams should consist of qualified and competent members with respect to technical and commercialisation aspects.*

*-**R**oles and responsibilities of collaborators involved in the project should be clearly defined.*

*-**C**ore business of applicant must be related to area of research.*

*-**P**roject leader must be technically fluent & competent in the related project.*

*-**I**nvolvement of consultants in the project should be justified and with details submitted.*

*-**E**ach member of the team should provide CV clearly stating their previous research as well as highlighting significant successes.*

Approval Criteria of the Project

5. Credibility of Project Proposal

The project proposal must be clear, accurate and consistent with the objectives of the Pre Commercialisation Fund (TechnoFund). The proposal must also have milestones and project activities that can be completed within the agreed time frame.

6. Appropriateness of Methodology

The applicant should provide sufficient information (clear sequence of stages & phases of the proposed methodology) for the evaluator to determine whether the chosen methodology (new or established methods/techniques) is appropriate to achieve the project objectives.

Approval Criteria of the Project

7. Deliverables

The applicant should be able to indicate clearly the type of output expected, market size and able to demonstrate its potential for commercialisation of new/innovative technologies and/or new IPs derived from the project.

8. Financial Capability

Applicants should show proof of financial capability to finance any portion of project cost not funded by Pre Commercialisation Fund (TechnoFund).

Approval Criteria of the Project

9. Projection of the Project Costs

Detailed projection of the project costs must be provided. As for purchase of equipment and acquisition of services, all the relevant documents of the Pre Commercialisation Fund (TechnoFund) guideline must be included in the project proposals for evaluation.

10. Risk

The applicant must state the possible risks (technology risk, financial risk and time risk) that may affect the implementation or completion of the project.

Approval Criteria of the Project

11. Others

The applicant and collaborator(s) must fulfill other conditions stipulated under the guidelines and policies of the Pre Commercialisation Fund (TechnoFund).

Top Ten Reasons of Rejection

1. No Proof of Concept (POC) and weak of methodology;
2. Business model is not clear;
3. There is no novelty in the technology presented;
4. Weak project team;
5. The project is already successful and in the commercialisation stage;
6. The project proposed is a common technology and has no value added aspect;
7. Project already exist in market;
8. The project is just to assemble commercial components;
9. The main purpose of the project is to buy equipment and provide services. No element of R&D and technology development have been carried out; and
10. Proposal is still in the idea stages only.

FAQ

1. **We are a newly established company. Due to that nature, we are unable to provide certain documents that are required in the proposal form's checklist. How can we proceed?**

   In your application, please specify the document in question and provide specific reasons for its unavailability. However, this rule does not apply to the required fields in the application forms itself.

2. **Can we use the fund to pay for employees salaries?**

   No. Pre Commercialisation Fund is to be used for development purposes only. Salary comes under operational costs and should be borne by the entity. Kindly also refer to the Pre Commercialisation Fund Guideline.

FAQ

3. Once the project is approved, are we entitled to receive the entire approved amount?

Entity is entitled to claim the entire approved amount, however, payment will be made in stages as agreed in the agreement. Initial payment will be made upon the return of signed duty-stamped agreement and subsequent payment will be on reimbursable basis upon completion of each milestones. MOSTI will identify the recommended amount to be reimbursed according to the physical progress and financial performance of the project.

4. Are we required to pay back the money once the project is completed?

Pre Commercialisation Fund is a 100% grant given to qualified applicants; hence, no repayment is needed. However, if the entity fails to abide the fund agreement and guidelines, MOSTI could take necessary action according to the agreement, i.e. including requires entity to repay the grant.

FAQ

5. Can we apply for extension of project completion date?

Yes with reasons and strong justifications. The cluster has the rights to disallow time extensions if the justifications are not strong or raise any doubts.