Technology Transfer Support Fund

Call for Proposals Guidance

Deadline for Full Proposal Submission: **16th October, 2020** (11:59 PM)

I. General Information

A. Project Description:

The Technology Transfer Support Fund (TTSF) is a key element of the Higher Education Development in Pakistan Project supported by the World Bank and implemented by the Higher Education Commission (HEC). The TTSF is anticipated to support promising partnerships between academia and industry to facilitate the transfer of university developed technological research to industry and the commercial sector. The TTSF will provide funds to selected institutions based upon a competitive, peer-reviewed evaluation of proposals.

The TTSF seeks to support university technology research that has previously developed an existing prototype or an advanced model (or equivalent). The anticipated portfolio of TTSF projects will support higher education institutions across Pakistan to undertake research and development activities focused on technology transfer. TTSF projects are expected to develop products or services that are marketable and can generate positive cash flow.

The priority sectors for TTSF support include:

1. Telecommunications
2. Information Technology and its application in health, textile, agriculture and agri-business such as dairy and horticulture
3. Engineering sciences, including microelectronics, water, power, energy and fleet management
4. Biotechnology
5. Materials sciences, for example nano-technology

TTSF projects must be collaborative in scope, with teams composed of academic researchers with the appropriate expertise to address the research challenge, as well as industry partners who can help bring the technology to market. Principal Investigators should be faculty members at higher education institutions in Pakistan. To take full advantage of the national research capacity,

proposals are encouraged from teams including junior and senior academic staff, as well as both male and female researchers. PIs are also encouraged to include students who have worked on the academic research underpinning the TTSF proposal as part of the team.

TTSF awards will be selected competitively using a merit-based, independent, transparent evaluation and selection process based upon international standards. The process is described in the Sections below, as well as in the full Evaluation and Selection protocol available on the HEC website. In addition, HEC will organize a series of workshops and webinars, as well as develop a list of Frequently Asked Questions (FAQ) regarding the TTSF program.

B. Applicant Eligibility

Principal Investigator (PI) must:
- Be a regular faculty member (PhD or FCPS/MCPS/FRCS) of the Higher Education Institutions (public and private) or hold a contract equivalent to the length of project duration
- Co-financing (including in kind or cash contribution) by the industry partner is mandatory

The detailed eligibility criteria of Institutions are available in the link given below;

- **Web Link - Eligibility Criteria for HEC Competitive Research Grants**

C. Anticipated Funding Amount:

Budgets for TTSF awards may range between Rs. 7.5 – 15 million with a maximum project duration of 2 years.

Principal Investigators are required to obtain co-financing – including in-kind and/or cash contributions – from the industry collaborators. Industry co-financing must equal at least **50%** of the funding requested from HEC for the academic portion of the collaboration. Greater amounts of industry co-financing are encouraged.

Budget requests should be consistent with the proposed research and development activities.

D. Due Date:
- **Full Proposals must be submitted to HEC by 16ᵗʰ October, 2020** (11:59 PM)

II. Proposal Preparation Instructions

A. Basic Guidance

All TTSF proposals must be submitted through the HEC online portal by the higher education institution at which the Principal Investigator is a faculty member.

B. Proposal Formatting

- All Proposals should use the .docx Proposal Template Document as the basis for the submission. The section guidance (in light grey) should be deleted prior to proposal submission.
- Proposals must be submitted in English.
- Proposals should include a Table of Contents.
- All sections of the template must be completed prior to submission. The list of required sections – and the guidance for the content within each section – is provided in Section III below of this Call for Proposals.
- The page limit for each section must not be exceeded.
- All pages of the proposal should have a page number.
- Proposals should be submitted in 11 point, Calibri font.
- Tables should be completed in the format and length indicated in the relevant Proposal Template Document.
- Proposal sections should not include URLs for additional information. Information or documentation beyond that included in the written proposal will not be used in the evaluation process.
- Proposals should follow accepted academic practice in citing references throughout the proposal. References should be numbered sequentially, and listed separately as a required attachment to the proposal. References should be reported in a standard form, and include: the names of all authors; the article and journal title; book title; volume and page numbers; and year of publication. If available, a Digital Object Identifier (DOI) may be provided.

III.   Required Proposal Sections

The required sections for the Proposal submission are described below. All submissions should address the identified topics for each section. Do not exceed the maximum page limit for each section.

A. Full Proposal Submissions

Principal Investigators must complete each section of the proposal as described in the attached link to the Full Proposal Template .docx Document. The section guidance (in light grey) should be deleted prior to proposal submission.

- **Web Link for Full Proposal Application Form**

IV.   Evaluation and Selection Process

The selection of Technology Transfer Support Fund awards will be made through an open, rigorous, transparent, competitive and merit-based process consistent with international standards for funding academic research projects. All Proposals submitted in response to this Call for Proposals will be evaluated by independent experts.

The Evaluation process consists of two sequential steps: administrative screening; and Desk/Panel Evaluation of all eligible Proposals.

IVa.   Proposal Screening

For the administrative screening, the Higher Education Commission will ensure that the Principal Investigator and the lead institution submitting each Proposal is eligible to submit, the project aligns with one of the priority thematic areas, and that the necessary industry collaborators (and the mandatory co-financing) are identified.

If the Proposal is deemed appropriate in those elements described above, the Proposal will be forwarded for further evaluation as described below. For those Proposals that are deemed ineligible for the TTSF, the Principal Investigator will receive a letter identifying the reasons why the Proposal will not be considered for further evaluation.

IVb.   Proposal Desk/Panel Evaluation

For the Desk/Panel Evaluation, Proposals will be grouped by thematic area and assigned to a Panel for evaluation. Each Panel will be composed of a team of experts – including national and international research leaders, sectoral industrial representatives and subject matter experts – who will evaluate the written proposals. Each Proposal will be independently evaluated by at least two members of the Panel, and additional reviews may be obtained by appropriate sectoral industrial representatives and/or subject matter experts.

The expert evaluators will assess each proposal according to a scoring rubric, and will provide written comments on the proposal.

- **Web link for the Scoring Rubric for Desk Evaluation**

All members of the Panel will discuss each Full Proposal assigned to the Panel.

Following the Desk/Panel Evaluation of Proposals, a multidisciplinary committee of composed of the chairs of each thematic Panel will consolidate the thematic Panel results and make recommendations for TTSF awards to the HEC. The recommendations will be reasonably balanced across disciplinary areas.

Proposals recommended for award should meet the following criteria: the proposal must include an academic-industry collaboration in a priority thematic areas as described in the Call for Proposals; based upon the written proposal, there is a strong likelihood of successful implementation of the proposed project; the project team and the institutional leadership should be capable of implementing the project; and the proposal must achieve a scoring threshold as determined by the evaluators in the Desk/Panel Evaluation to ensure quality.
At the conclusion of the Selection process, the evaluations of each proposal submitted will be shared with the proposing institution. Both the scoring rubric(s) and the written comments will be made available. The identities of the expert evaluators will be redacted.

Grievance procedure: In exceptional circumstances, institutions submitting TTSF Full Proposal

that was not selected for funding may submit a written Notice of Grievance to the Ethical Appeal Review Board at the Higher Education Commission within 7 working days of selection results being announced. A Notice of Grievance is permitted only when the institution believes that the proposal was not evaluated fairly or in a reasonable manner.

V.   Negotiation and Implementation

Following the Evaluation and Selection process, the Higher Education Commission – through the TTSF Program Manager - will enter into negotiations with the PI and the host institution on the following topics.

The final budget for each selected TTSF budget will be negotiated following the evaluation and selection process. The budget will depend upon: the proposed research and development activities; the size of the research team; the costs associated with the proposed workplan; the resources required; the capacity of the research team to achieve the results; and the feedback to the PI provided through the Evaluation and Selection process. The negotiation on anticipated results will occur concurrently with the budget negotiation.

Prior to the formal signing of contracts and launch of the selected projects, several critical elements must be completed: (1) a revision and strengthening of the proposal in response to the comments and feedback provided in the evaluation process; (2) a fiduciary assessment and procurement plan; and (3) an environmental and social safeguards screening and management plan. In addition, a detailed implementation plan for the project must be prepared and approved.

VI.   Project Websites

Full details of the Technology Transfer Support Fund will be available on the Higher Education Commission website available at:
http://www.hec.gov.pk

Updated project information will be available at the project website provided below.
http://www.hec.gov.pk/TTSF

Questions regarding the Technology Transfer Support Fund may be directed to:
Info-r&d@hec.gov.pk