



Research & Development Department

CFP8

Research Grants



8th Call for Proposals (CFP8)

General Guidelines

November 2021

I. Scope

With the objective of supporting the research environment at the national level in telecommunications and to keep pace with emerging applications and surmount associated challenges, the NTRA announces periodical calls for proposals (CFP) to fund projects and collaborate with national universities and research institutes in certain priority areas and fields. Such priority areas are determined in accordance with public and industry needs, NTRA interests, and worldwide trends.

II. Proposals Theme

- Proposals applied in this Call target building prototypes for new technologies, applications and services. A support letter from a governmental or industrial institute that shows interest and the benefits of building the prototype is highly recommended for this type of research. This type of research should account for the majority of accepted projects.
- The main outcome includes:
 - building prototypes
 - reports and publications, intellectual properties (e.g., patents)
 - contribution to standards
- Suggested research areas can be downloaded from the NTRA website.
- Applicants should avoid proposals that are: (i) seeking mere academic curiosity; (ii) of marginal contribution to existing works and systems; and (iii) straightforward system integration.
- The NTRA supports research projects in all topics those relevant to the fourth industrial revolution. If you are not sure whether the NTRA fund covers the topic of your proposal, you can contact the R&D department (rd.projects@tra.gov.eg) attaching the title and abstract of the project, even before writing the proposal (Use the abstract template).

III. Guidelines

A. Special Considerations

Special attention and bonus scores will be given to proposals considering one or more of the following items:

- 1) Involving governmental/industrial partners: the research team can identify problems of interest to and collaborate with a governmental entity (e.g., the National Transportation Authority, the ministry of Irrigation...) or an industrial entity to solve industrial problems using innovative and/or effective techniques.
- 2) Targeting solutions of real problems facing the Egyptian society.
- 3) Addressing contribution to standards.
- 4) Establishing a lab or a research center in one of the research institutes outside Greater Cairo and Alexandria.
- 5) Interdisciplinary research: addressing topics and problems that need joint collaboration from different disciplines. Such collaboration can take place either between different departments within the same institute (e.g., between the departments of Electrical Power Engineering and Communications and Electronics) or between different institutes (between the faculties of Engineering, Computer science, Economics, Agriculture ...etc.).
- 6) Having the PI or other team members (including research students) from an institute outside Greater Cairo and Alexandria.
- 7) Having team members from different institutes: the NTRA encourages the cooperation between different universities and research institutes.
- 8) Partnering with teams/entities outside Egypt: examples include partnership with Arab and African countries, partnership with top ranked and high-quality international institutes, partnership with recognized labs, ... etc. However, in any of such partnerships, NTRA will be responsible for funding the local party only.

B. Team Members

- The primary investigator (PI) should allocate at least two days per week working in the project (40% of his/her time).
- Practically, the maximum time allocation percentage of any faculty staff member is considered as 70%.

- Any team member cannot be involved in more than two active projects with NTRA. And he/she can act as a PI in one project at most.
- All projects are encouraged to have full-time Research Assistants (RAs).
- Teaching Assistants (TAs) employed by the applicant institutes are also encouraged to work in the project.
- An Egyptian PhD student/graduate who expects to move back to Egypt during the next four months (or at the project start date) can be part of the team and can even apply to this CFP as a PI.
- In case of building a prototype, the team can include engineer(s) and consultant(s) that are necessary for the success of the project.

C. Budget

- In this CFP, the NTRA fund will be roughly distributed as follows:
 - Large-scale project: the NTRA will support one large-scale project, with a maximum fund of 3 million LE over 24 months.
 - Small-scale projects: the maximum fund for each project in this category is 1.5 million LE over 12 months.
- NTRA funds only research teams at Egyptian governmental universities and research centers as well as national universities, non-governmental and non-profit universities/institutes.
- The monthly salary of the full-time RA student (M.Sc. level) is 5000 LE and the monthly salary of the full-time PhD student is 6000 LE. The exact salary will depend on the offered work load.
- An estimate of the researchers' salaries can be included in the budget. Typically, based on the research rank only, the expected full-time (100%)¹ range of salary is roughly 10-14 k LE for an Assistant Professor, 13-17 k LE for an Associate Professor, and 16-22 k LE for a Full Professor. The exact salary depends on the academic achievements (A), academic rank (R), and the industrial achievements and experiences (E).
- A budget file is available on the NTRA website. Applicants should fill in and submit it during the submission process. Applicants should review all the entries of the budget and be sure that all budget items are included in the final sum.

¹ Note that as explained earlier the maximum accepted work load for any professor rank is 70%.

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- The submitted budget is considered as an initial budget. After proposal approval, NTRA will work out the exact budget details and items with the applicants.
 - All items of the budget should be justified. The “comments” part in the budget file is used to write justifications for the required items. If additional space is needed, applicants can add a section in their proposal entitled "budget justification" to justify the items of their budget.
 - The budget can include an institution overhead of up to 20% of the team salaries. No overhead is calculated on any other items such as equipment, facilities, publications, or tuition fees.
 - The budget can include tuition fees for students. Typically, the NTRA can fund up to 50% of the tuition fees. The exact percentage will be determined after the technical acceptance of the project.
 - The travel item in the budget includes travel trips to conferences and standards meetings (if applicable). Other travel needs should be clearly justified and should be central to the success of the project. Typically, one conference travel should not exceed 50 k LE. Exact details will be announced in a separate travel policy document.
 - If a patent will be filed, the budget plan should account for the required fees for the patenting application process, within \$1,000.
 - The budget should contain a detailed list of the required equipment, along with quotes from sellers or websites as an estimate of the equipment cost. It is acceptable to allocate a budget to "miscellaneous items" including resistors, PCB fabrication, ... etc.
 - It is recommended to use open source SW tools where possible. Otherwise, justification of the required tools should be provided.

D. General Rules

- The NTRA motivates the teams to patent their findings and convert their results to commercial products. In case of having an IP or a profit return (when utilizing any of the project outcomes), the NTRA keeps a 20% share of the IP and the profit.
- During the first 6 months of the project, there should be:
 - A professional website for the project (preferably linked to the main website of the institute) updated periodically (monthly at most) to view the results and activities carried out by the research team.

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- A convenient working place with the supporting infrastructure (Internet access, desks, ... etc). The research institute is responsible for allocating this infrastructure and cannot be part of the budget.
 - o Typically, the equipment purchased during the project will be owned on loan by the main applying institute, unless the NTRA decides otherwise. The NTRA also reserves the right to recover or borrow some or all of these equipment and programs.
 - o Unless clearly stated in the submitted proposal, the purchased books have to be owned by the main institute's library upon conclusion of the project.
 - o The accepted project will typically have a bi-annual review.

E. Proposal Structure

A proposal template is posted and has to be used by the applicants. The proposal should include all supporting work, references, prototypes or previous research done by the team that relate to the subject of the submitted proposal. Furthermore, a team competency document including the team CVs should be attached.

IV. Application Procedure

A. Submission process:

1. The proposal will be submitted to the R&D (rd.projects@tra.gov.eg) as an email attachment, the PI should attach a zip file, including the proposal and the team competency file, in addition to the budget file.
2. The proposal will not be considered for the review round unless it is submitted before the submission deadline.
3. A confirmation email will be sent upon proposal submission. If not, please resend again or Call us at 02- 3534-4045.

V. Evaluation Process

Applicants can download the evaluation sheet which includes a list of the evaluation criteria to be considered. This should help the applicants tune their proposal to match the target criteria and to maximize their acceptance chances.

A. The evaluation stages

1. Screening: Each proposal is first checked for compliance with the general structure and guidelines as described in this document.
2. Review process: Each proposal is assessed by up to three external reviewers. After receiving the reviewers' feedback, the NTRA will send the aggregated comments to the applicants along with a decision (reject or short listed).
3. Oral Presentation: Short-listed proposals will be called for an oral presentation before the R&D committee. During the presentation, the applicants should focus on answering the reviewers' comments that they have received.

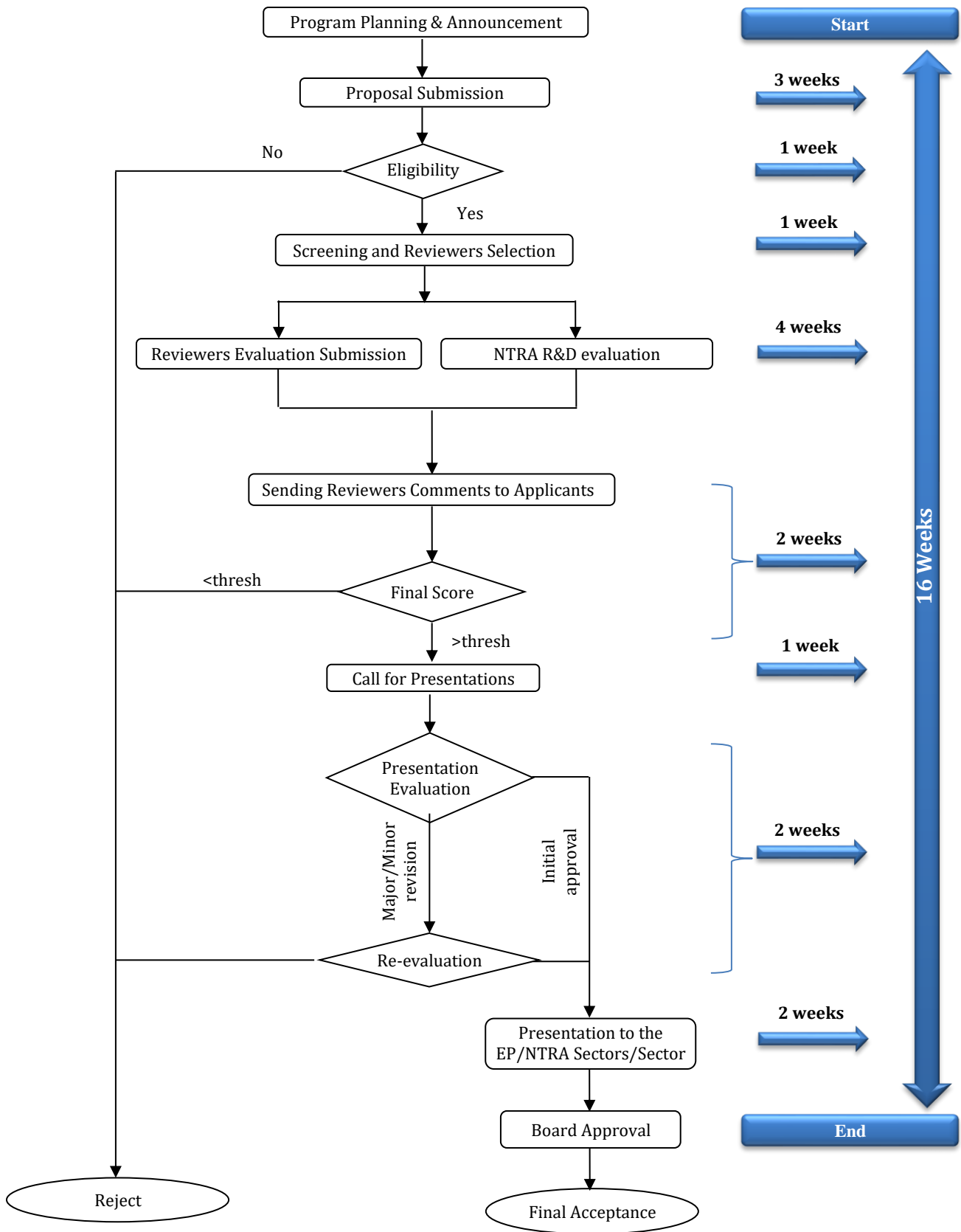
B. Scoring

- The total score (100 points) is divided as follows:

$$\text{Total Score} = \text{Reviewers Score (70)} + \text{NTRA Score (30)} + \text{Bonus points (10)}$$

where bonus points explained in section (III-A) will be added when applicable.

- Proposals with scores below a certain threshold will be rejected at this stage. Others will pass to the oral presentations.



Proposals' Evaluation Process

VI. Agreement Finalization

Once the proposal is technically approved, the details of the budget will be discussed with the PI. The agreement contract will be sent to the applicants for review. The contract will be signed by both the NTRA and the main institute.

General terms and conditions include:

- NTRA's fund will be partially available (typically over six-month periods) via money transfer to the research institute. At the end of each period, NTRA will assess the project progress (with the aid of an external examiner). The applicants have to submit technical and financial reports for each period. Based on the evaluation outcomes, the next installment will be fully or partially paid to the main institute. In case of clear and unavoidable problems, the examiner (or NTRA) may recommend termination of the project.
- NTRA's staff can participate in the development phases of the project.
- The applicants' main institute is responsible for maintaining the sustainability of the established centers or labs after the conclusion of the project.
- Applicants should provide all reports and material required by NTRA. Periodical seminars should also be offered at NTRA as part of the evaluation process.
- Each accepted project should:
 - Clearly refer to the NTRA support where applicable (project website, publications, lab, events, ...).
 - Cooperate with the Egyptian and international universities and research centers that are recommended by the NTRA so as to enrich the research process.
 - Allow the use of all devices and equipment that are purchased from the budget of the project (excluding personal devices such as computers and printers) to Egyptian researchers from all universities and research centers.
 - Include an educational part, if applicable.
 - Involve students (both graduate and undergraduate), and junior researchers as well as introducing educational components during the project.