

**Doc. 001/ 2007 : Guidelines for GE-Proposal Format STC-1.1**

Arab Republic of Egypt

Ministry of Scientific Research

Academy of Scientific Research and Technology (ASRT)

**Guidelines for the Preparation of  
Project Proposals Leading to a  
Marketable Product/Process/Technology/System  
to Be Funded by  
National Program for Biotechnology and Genetic Engineering**

## Domain of the Current Call

Ongoing research projects contracted and funded by the Program of the National Strategy for Biotechnology and Genetic Engineering (NSBGE) cover a wide spectrum of applicability phases. However, the current call for proposals for NSBGE funded projects signifies a move from the 'regular'. Such project proposals must meet certain criteria to be considered and eventually approved for funding by NSBGE.

For instance, there could be a serious and solid research into an attractive scientific phenomenon or current concept requiring preliminary laboratory investigations, which may or may not involve screening of materials for potential and useful activities. This research could eventually produce evidence for a potentially applicable and useful phenomenon (e.g. an active compound or a product or process or system with great commercial value which will contribute significantly to the economic and/or social development in Egypt). The "product" may be *novel* or may be in the public domain, not subject to exclusive intellectual property rights. **Despite its value, such project does not fall in the domain of the present call for proposals** since the chances of conclusion of the research into a marketable technology which would attract investors to pump funds into the expensive process of transforming the phenomenon into a technology – are very small in Egypt.

There could be a proposal where Phase 1 has already been concluded and the potential application of the phenomenon as a marketable technology has become more clear (e.g. a specific active compound has already been shown to be producible or a process possible in the laboratory). The *basic* conditions necessary for laboratory production have been studied. The process of production has been defined and key controlling parameters have been determined either through extensive laboratory experimentation or modeling the process. A preliminary market study showed that the product/process has a competitive place in the local market with a roughly defined size and value. A project proposal here **could be considered but is accorded somewhat lower priority** since the chances of attracting technology development funding will still be low, and most likely must be provided by the Government.

Conversely, there could be a case where Phase 2 had already been concluded and the basis for technology development and marketability has become real. The *technological conditions* for elaboration of a technology has been defined using appropriate laboratory facilities by an interdisciplinary team of researchers (e.g. in one of the two Multi-purpose Pilot Units owned by the NSBGE Program at the National Research Center and Mubarak City for Scientific Research and Technological Applications or equivalent facilities). Pre-pilot technology parameters for the process have been quantified, and basic *cost estimation* for inputs can be used to estimate the basic cost of the product/process. A project-proposal here **will be nominated for top priority funding**, even if this means the NSBGE will further fund pilot studies

However, there could be a situation where Phase 3 had already been concluded and pilot testing taken place and the project would thus be ready for scaling-up studies at the commercial level. This can not be done strictly through research but requires identification of production and marketing facilities which will make it possible to carry out final cost estimation (including the cost of formulation and marketing of the product/process and of capital outlays, depreciation, utilities, personnel etc), an accurate current market study, final economic feasibility and economic competitiveness. This project requires the identification of an investor and its funding is beyond the means and mandate of the Academy. NSBGE **will, however endeavor to identify an investor and mediate negotiation** between the investor and the proposing scientist(s) and his/her (their) institution to conclude a contract.

## General Instructions

### Language

The official language for proposal submission is English. The proposal must be typewritten and submitted in accordance with topics specified in the call request for proposals

### Purpose

The main purpose of the call for this project is to encourage researchers (whose work has reached a mature phase, whereby an actual product or system could be eminent), to submit research proposals for realizing the final stage of producing this product or system. The current guidelines are set to guarantee the provision of a unified format containing necessary information items to be completed by potential candidates preparing research proposals as well as to provide basis for evaluation to reviewers. Hence, the strict adherence (content as well as form, items' numbering ...etc) to the current proposal format is necessary for the consideration and processing of the research proposal.

### General

A copy of the Proposal should be submitted to the Genetic Engineering and Biotechnology (GEBC) Committee Secretariat in a loose-leaf soft cover file binder with fresh signatures while another copy must be sent as a Word document attachment to [nsbge@asrt.sci.eg](mailto:nsbge@asrt.sci.eg)

Applicants are advised to review the terms of the contract to be eventually signed between them and the Academy in case the proposal is agreed upon for funding. The contract form can be found on the web site [www.asrt.sci.eg](http://www.asrt.sci.eg)

### Technical Content of the Research Proposal

The technical content of the proposal should include the following:

- Fully completed cover sheet
- Table of contents
- Summary of the main features of the proposal
- Detailed technical description of the proposed work. The work should be broken down into phases, each phase broken down into technical tasks.
- Most important is how the proposed research is to **complement** efforts to actually come up with **Product or System**.
- A work plan indicating the execution of different tasks over the project duration

The proposal must convey what is to be done, by whom and when, and the potential benefits.

The technical proposal will be the only means of communicating ideas and capabilities to the evaluators. Thus, it should be complete and easy to read. Quality of the proposed research development and engineering effort will be the principal factor for determining which proposal will be funded.

### Costing the Proposal

The costing of proposal should include cost information accompanied with sufficient justification to clarify the cost for each item. The cost information should be broken down into line items related to specified technical tasks.

### Scientific and/or Technical Merit

The primary concern is the scientific and/or technical merit of the proposal as it is capable to deliver a product or system. This will be the basis for determining whether the proposal will be funded.

## **Sequence of Proposal Content**

The proposal format has been designed to elicit the information required for evaluation and internal processing, and hence must be followed by all applicants. The sequence has been designed so as to place into a logical sequence the items needed to evaluate a proposal. Applicants are therefore required to adhere to the following format which may be classified into two main parts; Part I the Technical Information and Part II the Budget Forms as shown hereafter.

## **Part I: Technical Information**

### **1. Cover Page**

The cover page should be completed with the following information:

**a. Call Request for Proposal Code**

To be completed by the secretariat office at Academy of Scientific Research and Technology.

**b. Date of Submission**

Shows the date on which the proposal is submitted.

**c. Project Title**

In English and Arabic (sufficiently indicative of the content)

**d. Proposed Duration**

The number of months for which funding is requested (maximum 36 months)

**e. Proposed Starting Date**

The date on which it is proposed to start work on the project. This date should normally be not earlier than six months after the announced due date for receiving the proposals.

**f. Total Requested Budget**

The funds required from the Program, in Egyptian Pounds, required to carrying out the project

**g. Principal Investigator Information**

The name, signature, title, affiliation, address, telephone number, fax number and email of the individual responsible for scientific and technical management of the project. A deputy PI will eventually have to be designated

**h. Information of Proposing Organization**

The name, telephone number and address of the organization submitting the proposal, and the name, signature and title of the official authorized to commit the organization's physical facilities, manpower and financial resources.

### **2. Table of Contents**

Specify the pagination of each section/subsection of the proposal.

### **3. Fields and disciplines covered by the Proposal**

Identify fields & disciplines that directly relate to the submitted proposal (see table 1 in the document Doc. 002/ 2007: GE-Proposal Format-STC-1.1; if other than those listed in the table, please specify).

### **4. English Summary of Proposed Work**

Prepare an abstract of 300 words.

## **5. Arabic Summary of Proposed Work**

An Arabic summary must be stand-alone and should not include reference to any other sections of the proposal. It should include:

- the purpose or goals of the proposed research as it complements other work to actually come up with a product or system
- a description of how applications of the research results can aid Egypt's development
- how it fits into the National Program for Biotechnology and Genetic Engineering Committee
- an explanation of how the work will be carried out and the method or approach to be followed

## **6. Key Words**

Provide no more than 8 key words descriptive of the project both in English and their correspondence in Arabic.

## **7. Problem Definition**

Define as precisely as possible the problem which the research proposal addresses.

## **8. Proposed Research Objectives**

State the general and specific objectives of the project. The objectives should be enumerated and described in precise measurable terms that will permit meaningful monitoring and evaluation throughout the lifetime of the project.

## **9. Expected Product or System**

Give quantifiable and measurable expected outputs of the proposed project in terms of actual products, new technology and/or new systems.. Please keep in mind that the National Strategy Program in the present phase will only fund R&D projects with a well defined marketable end product expected from each project. Other research projects will not be considered regardless of merit and high scientific value.

## **10. Methodology and Technical Approach**

Detailed description of methodology and technical approach in precisely worded statements, where thorough a step-by-step explanation of the plan to be implemented should be presented. The presentation should clarify whether the used methodology is new, modified or traditional and in any case the adopted methodology should be explained and its adoption justified. The work plan should be broken down into phases which should be numbered. Furthermore, each phase should show the tasks required for its accomplishment and again the tasks should be numbered

## **11. Members of Research Team and their Specialization**

The research team should be named and the résumé of each member be provided in an appendix. Also, a task assignment table must be provided under project management. The Principal Investigator (PI) is strongly recommended to nominate a Co-PI capable of running the project in case of his/her absence

## **12. List of Available Equipment and Services**

Identify the facilities and services necessary to execute the research proposal and which are available at the executing research institute. Indicate their capacities and extent of accessibility (whether at same department or lab). If necessary facilities are not available at the executing research institute, please indicate means of accessing them. Please note

that equipment and facilities funded in past years by the National Strategy Program, including the Multipurpose Pilot Units at the National Research Center and at Mubarak City are accessible to all new projects under terms to be agreed upon through the Academy.

**13. List of Unavailable Needed Equipment and Services**

Describe any permanent equipments that are needed to carry out the proposed project and will be purchased through the project suggested budget. Give a specific justification for each item in terms of project requirements as well as accessibility of similar equipment at other locations. Provide a realistic estimate of the cost, for each requested equipment.

**14. Local Materials and Supplies**

Describe all categories of materials and supplies that are needed to carry out the proposed project.

**15. The Extra Phase which the Project Aims at to Reach the Product or System**

State in unequivocal language the state of art that other relevant research work has reached in that endeavor and how the proposed research will take those research results from there to **actually produce a usable product or system**, and if such research resulted in a registered patent in Egypt or abroad

**16. Project Management**

Identify the different phases of the project and the tasks necessary for the execution of each phase. The phases and tasks must be numbered. Provide a chart for conducting the various tasks. A sample chart is provided in Appendix I in this document. Explain how it is planned to manage the project, both administratively and financially. If the project proposed involves more than one executing institution, explain the organic relationships among them and how the phases and tasks are divided among these participating institutes. Provide the qualifications of the participating institutes as well as an official agreement from each participating institutes attesting to its role and terms of cooperation. Also a task assignment table (see table 2 in the document Doc. 002/ 2007 : GE-Proposal Format-STC-1.1) must be included where the members of the research team conducting the task are specified.

**17. Information on Dissemination Plan**

A plan is to be established explaining how the product or system resulting from this project is to be disseminated to the implementing agencies and scientific communities and society at large e.g. the specific industry, health (human/animal) institution, environment agency, agricultural outfit, marketing among potential investors etc. Evaluation using this criterion will address the comprehensiveness as well as the creativity and openness in communicating project results to the Secretariat and to the community at large.

**18. Previous Studies Relevant to the Problem**

Identify and describe significant research directly related to the proposed effort, with particular emphasis on any studies conducted by the principal investigator or other members of the research team, and describe how they relate to the research proposed. Specifically **list** any patents, prototypes, systems developed by the research team reaching an advanced stage of application, e.g. at semi-industrial level, clinical level, commercial farm and herd level etc. Previous work already concluded on laboratory and/or pre-pilot process level and/or

market studies for the same end product by the research team will definitely rate the project high in funding priorities.

### **19. Institutional Experience**

Include a short C.V. for the hosting institute including a listing of all contracts, grants or other funding arrangements related to the submitted project your organization has received, or is still in receipt of, over the past three years involving similar or related programs. The list must include: the name and address of the organization which funded the project, the current telephone number of a responsible technical representative of that organization, the funding organization's project reference number, and a brief description of the project. Any similar experience provided by the institute to production/services sector(s) and the status and outcome of the activity should be stated.

## **PART II: Budget Forms**

All budget forms must be in LE and endorsed by the stamp of the executing research institute

### **1. Detailed Budget Sheet**

The budget sheet must conform to the format enclosed in table 3 (see table in the document Doc. 002/ 2007 : GE-Proposal Format-STC-1.1) which show the requested budget of each of the following items distributed among the years of funding

**a. Honoraria for research team**

**b. Consultant fees (to be kept to a bare minimum)**

The sum of the allocated amounts to the above two items ( a and b ) must not exceed 20% of the total budget.

**c. Equipment and services needed**

Amounts needed for equipment and services should be shown in this section.

**d. Material and supplies**

Justification for it should be provided on a separate sheet.

**e. Local travel**

**f. Other direct cost**

Other direct cost includes any expenditure that does not fall within any of the specified line item. The other direct cost may include costs of the following items.

- Quarterly progress report
- Technical reports
- Seminars
- Cost of sub-contracting

### **2. Budget Breakdown by Task**

The budget breakdown must show the cost per task and phase as shown in table 4 (see table 4 in the document Doc. 002/ 2007 : GE-Proposal Format-STC-1.1). The tasks and phases must conform to the tasks and phases identified under project management. The maximum grant is dependent on the type of proposal, however, the following amounts may be considered as upper limit for the grants.

