

Guidelines for implementing Research Projects

SCHEME

SCIENCE AND ENGINEERING RESEARCH COUNCIL

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD
NEW DELHI-110 016.

INTRODUCTION

This document provides guidelines for implementation of project proposals supported under the Science and Engineering Research Council (SERC) of the Department of Science and Technology (DST).

The guidelines provide general information in an ideal situation. In addition to these, the implementing agency has to follow its own rules and regulations, where ever necessary. However, we hope that the end result of this would a smooth implementation of project.

We would also welcome suggestions from the Investigators and authorities of the Implementing Institutes.

For any further clarification or further details, please approach the concerned official dealing with the project file.

The Department reserves the right to review these guidelines and modify them.

In case of any specific clarifications please contact :

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PART A : GENERAL GUIDELINES AND INSTRUCTIONS

Introduction

The Science and Engineering Research Council (SERC) is an apex body through which the Department of Science and Technology promotes R&D programmes in newly emerging and challenging areas of science and engineering by providing financial support for the implementation of the project proposals.

The project which is approved for implementation is provided with a financial sanction which is subject to certain terms and conditions which are enclosed as Annexure with the first sanction order. These guidelines assist for smooth implementation of the project in conformity with these terms and conditions.

Guidelines

1. Sanction Order

- i) Once the project is approved, a formal sanction order is issued as per the recommendations of the Expert Panel/ SERC. The total cost of the project is finalised based on the latest quotation(s) of equipment(s) approved under the project and other relevant documents related to manpower, contingencies etc. submitted by the Investigator. The first sanction order provides the detailed breakup of funds allocated under non-recurring and recurring expenditure heads like Equipment, Manpower, Travel, Consumables, Contingencies etc.
- ii) Copies of the sanction order with the terms and conditions annexed to it are sent to the Principal Investigator (PI) and the financial authority (Registrar/ Director/ Comptroller etc.)
- iii) Any correspondence with the Department regarding the project should invariably quote the sanction order No. and date and should be addressed to the concerned official by name.
- iv) Subsequent to the sanction order, a bank draft/ cheque for the released amount is despatched by the Drawing & Disbursing Officer, DST.

2. Date of Commencement of Project & its Duration

- i) The duration of the project is normally of 3 years and this is specified in the first sanction order.
- ii) The project becomes operative with effect from the date on which the Draft/ Cheque is received by the implementing Institution. This date should be intimated by the Institution authorities/ Principal Investigator to this Department. It will, in no case later than one month after the receipt of the draft/ cheque by the Institute.

3. Principal Investigator & Co-Investigator (s) and the Implementing Institution

- i) The Principal Investigator (PI) has the primarily responsibility for the implementation of the project. The project team consists of the PI, Co-Investigator(s) and the project personnel appointed as per the sanction order. It is necessary to ensure that the project is carried out by the project team in a cohesive manner. Periodic meetings of the team are essential for this purpose.

- ii) In case of PIs who would be superannuating during the duration of the project, association of a “in service” Co-Investigator may be ensured by the Institute authorities. In such cases, the Institute authorities should inform to this Department, well in advance, about their “no objection” for providing the infrastructural facilities to the PI for implementation of the project after his superannuation.
- iii) Having accepted the responsibility for the implementation of the project, the PI should be committed to implement the project over its duration and should have no plans to go on long leave.
- iv) In case, the PI is shifting to another institution on new appointment/ transfer/ long term deputation, the project could be transferred to that institution with the mutual consent of both the institutions and of this Department. Such requests for transfer of the project should be sent well in advance and should be accompanied with ‘No Objection’ certificates from both the institutions and the Endorsement Certificate from the new Institution.
- v) In case the PI leaves the project due to unforeseen circumstances, the Co-Investigator could be considered as the PI subject to the approval of the PI, Head of the Institute and this Department. Such a request should be sent at least 4-6 months in advance along with a detailed bio-data of the Co-Investigator.
- vi) The PI as well as the implementing institution has the responsibility of informing this Department about any change in the status of the PI/ Co-Investigator including relieving them on short term deputation for a continuous period of 3 months or more.
- vii) **The project stands terminated in the absence of the PI/ Co-Investigator for a continuous period of 3 months without intimation to this Department.**
- viii) The implementing institution has an important role to play and in consultation with this Department take steps to ensure successful completion of the project, before relieving the PI.
- ix) The implementing Institute should provide full infrastructural facilities such as accommodation, water, electricity, communication facilities etc. for smooth implementation of the project.

4. **Project Staff(s)**

- i) All the personnel including Research personnel appointed under the project, for the full/ part duration of the project, are to be treated as temporary employees and will be governed by the Administrative rules/ service conditions of the implementing Institute. No reference on these issues be made to this Department. The Department will have no liability, whatsoever, for the project staff after completion of the project duration.
- ii) The sanction order specifies the number of personnel, in different categories, sanctioned under the project. The category of post and its emoluments are governed by this Departments Orders at Annexure I.
- iii) Scale and emoluments for the posts not covered under this order are governed by norms prevalent in the implementing Institution or as may be decided by this Department.

- iv) In case of recruitment of JRF/ SRF candidates who have been declared successful at NET/ GATE may be preferred. In exceptional cases, candidates without NET/ GATE may be recruited through a proper selection procedure. It is desirable to have DST Nominee in the selection process and such requests for nominees may be sent well in advance.

5. Release of grants in yearly instalment and financial management

- i) The grants for the project are released on the basis of yearly requirements taking note of the technical progress and expenditure incurred. The first sanction order indicates the budgetary allocation for the duration of the project under various heads like Equipment, Manpower, Travel, Consumable, Contingency etc. In specific cases, the item, apart from these heads, for which an allocation is made will be indicated for eg. Computational costs, RSIC Charges, printing of Newsletter, training workshop etc.
- ii) The first instalment of grant is released along with the first sanction order. It consists of the entire grant for the 'Equipment' and recurring grant including 'Overheads' for the first year of the project.
- iii) Diversion of funds from non-recurring head ie. Equipment to recurring head like Manpower, Consumable etc. is normally not allowed. However, reallocation/ reappropriation of grants under different heads requires prior approval of this Department.
- iv) The Equipment sanctioned on the project should be procured at the earliest to avoid any cost escalation. The PI and the implementing Institute should complete all formalities in advance for placing the order.
- v) The subsequent instalment of grant would be released annually on the basis of expenditure incurred in the previous financial year and expected expenditure in that year.
- vi) However, any request for release of the next instalment should be accompanied by the following documents:
 - a) Utilisation Certificate and Statement of Expenditure for the previous financial year (in original or copy if sent earlier);
 - b) Latest authenticated Statement of Expenditure including Committed Expenditure, for expenditure since 1st April of that financial year till the previous month; and
 - c) Technical Annual Progress Report, if not sent earlier.
- vii) Formal approval of the Department must be taken to **carry forward** the un-utilised grant from the previous financial year to the present financial year. This request may be made while sending the authenticated Statement of Expenditure and Utilisation Certificate after the financial year.
- viii) The Statement of Accounts and the Utilisation Certificates are financial year wise and are to be submitted within a period of 3 months from the 31st of March of that year. (ie. if date of start of the project is 12.01.98, then the first statement of account and utilisation certificate will be for the period 12.01.98 to 31.03.98, the next statement will be for the period 01.04.98 to 31.03.99 and so on.)
- ix) The implementing institute will maintain separate audited accounts for the project. Any interest earned should be reported to this Department and should be reflected in the Statement of Expenditure.

- x) The institute will not entrust the implementation of the work for which the grant is being sanctioned to another institution nor will it divert the grant to other institute as assistance. In case the Institute is not able to implement the project, it should refund to this Department the entire grant or the balance grant at the earliest.
- xi) For permanent, semi-permanent or infrastructural assets acquired solely from the project grants, an audited record in the form of a register in the prescribed format shall be maintained by the Institute. The term "Assets" include (a) the immovable property acquired out of the grant; and (b) movable property of capital nature where the value exceeds Rs 50,000/-. The Institute is required to send to this Department a list of assets acquired from the grant.
- xii) The grant shall not be utilised for construction of any building unless specific provision is made for this purpose in the sanction order.
- xiii) All the assets acquired from the grant will be the property of Government of India and should not be disposed off or encumbered or utilised for purpose other than those for which the grant had been sanctioned, without the prior sanction of this Department.
- xiv) After completion/ termination of the project, the Government of India will be free to sell or otherwise dispose off the assets which are the property of the Government. The Institute shall render to the Government necessary facilities for arranging the sale of these assets. The Government of India also has the discretion to gift the assets to the Institute or transfer them to any other Institute if it is considered appropriate and justified.
- xv) This Department reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilised or appropriate progress is not being made.
- xvi) The Comptroller & Auditor General of India, at his discretion, shall have the right of access to the books and accounts of the Institute maintained in respect of the grant received from the Government of India.

6. Progress evaluation and Monitoring

- i) The PI through the implementing Institute will furnish to this Department 5 copies of the Annual Technical Progress report of the work carried on the project on an annual basis. (ie. if the date of start of a project is 12.09.97 the first Annual Technical Progress report shall be for the period 12.09.97 to 30.09.98, the next will be from 01.10.98 to 30.09.99 and so on).
- ii) In addition, this Department may designate Scientist/ Specialist or an Expert Panel to visit the Institute periodically to review the progress of the work being carried out and to suggest suitable measures to ensure realisation of the objectives of the project. The implementing Institute will provide all facilities to the visiting scientist/ specialist or the Expert Panel by way of accommodation etc. at the time of their visit.
- iii) This Department also organises Monitoring Workshops/ PAC meetings wherein the PIs/ Co-PIs and research staff are invited to present the technical progress of their project. The Investigators should attend such workshops since it provides an opportunity to review their progress based on which any mid term requests by the PIs for additional grants/ extension in duration etc. are considered by this Department. Subsequent releases of grant would be based on the reviewing and monitoring committees recommendations.

- iv) On completion of the project, the PI through the Institute should send the following documents to this Department to enable us to settle the account:
 - a) 5 copies of the Project Completion Report in the prescribed format;
 - b) Consolidated audited statement of expenditure and utilisation certificates;
 - c) List of assets/ equipment in the prescribed format; and
 - d) DD/ cheque for any un-spent amount with the Institute.

The un-spent balance should be sent through a crossed Cheque/ Demand Draft drawn in favour of Drawing & Disbursing Officer, DST.

7. Guidelines for publication of results and safeguard of Intellectual Property Rights

- i) Investigators wishing to publish technical/ scientific papers based on the research work done under the project, should acknowledge the assistance received from this Department.
- ii) The Investigator(s) should not enter into collaboration with a foreign party (individual/ industry) without prior approval of this Department.
- iii) Investigators are also requested to publish some of the research papers emerging out of the project work in leading Indian Journals.
- iv) If the results of research are to be legally protected, the results should not be published without action being taken to secure legal protection for the research results.
- v) In the emerging scenario at the National and International level, the Intellectual Property Rights (IPR) has assumed greater significance. Following are the guidelines which the PI and the implementing Institutions must follow in regard to IPR:
 - a) Institutions are required to seek protection of Intellectual Property Rights to the results of research on R&D projects. IPR include patents, registered designs, copyrights and lay out design of integrated circuits (IC).
 - b) IPR generated by publicly funded R&D institutions/ academic institutions, through projects funded by the Government Departments, be owned by the institutions and they will be required to file patent applications at their cost.
 - c) The Institutions can approach the Patent Facilitating Cell (PFC) set up by this Department to assist them for patent search, obtaining a list of patent attorneys, filing of patent application(s) in India and abroad. These institutions will be free to retain exclusively the benefits and earnings arising out of these IPR.
 - d) If the patent is taken by the Institute at its own cost, it is free to transfer the innovation to industry for commercialisation, after concluding an agreement, as per its laid down procedures. However, the details of the agreement, amounts received, annual sales turnover of the product shall be intimated periodically to this Department.
 - e) If the institution is unable to file a patent application, within a period of 6 months of determination of filing a patent, this Department in consultation with the PFC and in public interest, may file a patent application, at its own cost, in the joint names. For this purpose the institution shall render all assistance to this Department. In such cases, any earnings accruing from transfer and commercialisation shall be shared equally by this Department with the Institution and the generator of the Intellectual Property. However, where ever the expected earnings are above Rs 10 lakhs, the proportion of sharing can be 40% for the institution, 40% for this Department and 20% to the generator of Intellectual Property.

- f) IPR generated through jointly funded projects may be owned jointly by the Institution and Industry. The cost towards filing of patent application may be shared by the institution and industry as may be mutually decided upon on a case to case basis. The Institutions can also approach the Patent Facilitating Cell (PFC) set up by this Department to assist them for patent search, obtaining a list of patent attorneys, filing of patent application(s) in India and abroad.
- g) If the patent is taken jointly by the institution and industry and if the industry has contributed at least one-third of the project cost, the industry (and its associate) shall have the first option, to commercialise the innovation, without paying any royalty, within one year of the completion of the project. The industry shall have exclusive right for three years from the date of completion of the project.
- h) The institution and industry may transfer the technology to another industry for commercialisation, on terms and conditions as may be mutually agreed upon, on non-exclusive basis. Any earnings accruing from such a transfer and commercialisation shall be shared between the institution and the industry as may be mutually agreed to. The details of the agreement, amounts received, annual sales turnover of the product shall be intimated periodically to this Department.
- i) The Government shall have a royalty-free license for the use of the Intellectual Property for the purposes of the Government of India and this Department reserves the right to require the institution and the industry to license others and requires that anyone exclusively licensed to market the innovation in India must manufacture the product in India.
- j) The institution may share the earnings, as per its laid down norms, with the generator(s) of Intellectual Property; provided, the institution sets apart not less than 15% of such earnings for crediting into a fund called Patent Fund. The patent fund should be utilised by the institution for renewal of the patent, protection of rights against infringements, for creating awareness and building competency on IPR and related issues and filing of new patents.
- k) Project investigators and research staff working on the project are advised to ensure that they maintain a diary for recording details of each exercise/ experiment etc. along with the dates. Such records will be useful for proving/ establishing the claim of first inventor and at times may be used as a tool for proving infringement.
- l) For further information/ clarification on this subject, please contact:
 - Director
 - Patent Facilitating Cell
 - Department of Science & Technology
 - Technology Bhavan, New Mehrauli Road
 - New Delhi - 110 016.
 - Tel : **685 9581**
 - 696 7458**
 - Fax: **686 3866**
 - email : tifac@nda.vsnl.net.in

8. Guidelines/ Instructions for Technology Transfer and Intellectual Property Rights

With a view to encourage the institutions to file patent applications on their innovations, motivate them to transfer their technologies for commercialisation, and to facilitate them to reward their inventors, the following instructions are issued.

1. In these instructions :

- a) "Institution" means any technical, scientific or academic establishment where research work is carried out through funding by the Central/ State Government.

- b) "Intellectual Property Rights" include patents, registered designs, copyrights and layout design of integrated circuits.
- c) "Inventor" means an employee of the Institution whose duties involve carrying out scientific or technical research.
2. **Scope:** These instructions apply to those institutions receiving funds for research projects from the Ministry of Science & Technology and Department of Ocean Development.
3. **Inventions by Institutions:** Institutions shall be encouraged to seek protection of Intellectual Property Rights (IPR) to the results of research through R&D projects. While the patent may be taken in the name(s) of inventor(s), the institution shall ensure that the patent is assigned to it. The institution shall get its name entered in the Register of Patents as the proprietor of the patent. The Institution shall take necessary steps for commercial exploitation of the patent on exclusive/ non-exclusive basis. The institution is permitted to retain the benefits and earnings arising out of the IPR. However, the institution may determine the share of the inventor(s) and other persons from such actual earnings. Such share(s) shall be limited to 1/3rd of the actual earnings.
4. **Inventions by Institutions and Industrial concerns:** IPR generated through joint research by institution(s) and industrial concern(s) through joint efforts can be owned jointly by them as may be mutually agreed to by them through a written agreement. The Institution and Industrial concern may transfer the technology to a third party for commercialisation on exclusive/ non-exclusive basis. The third party, exclusively licensed to market the innovation in India, must manufacture the product in India. The joint owners may share the benefits and earnings arising out of commercial exploitation of the IPR. The institution may determine the share of the inventor(s) and other persons from such actual earnings. Such share(s) shall not exceed 1/3rd of the actual earnings.
5. **Patent Facilitating Fund:** The Institution shall set apart not less than 25% of such earnings for crediting into a fund called "**Patent Facilitating Fund**". This Fund shall be utilised by the institution for updating the innovation, for filing new patent applications, protecting their rights against infringements, for creating awareness and building competency on IPR and related issues.
6. **Information:** The institutions shall submit information relating to the details of the patent obtained, the benefits and earnings arising out of IPR and the turnover of the products periodically to the Department/ Ministry which has provided funds.
7. **Royalty-free licence:** The Government shall have a royalty-free licence for the use of the Intellectual Property for the purposes of the Government of India.
8. **Review:** These instructions shall be reviewed by the Central Government after a period of five years.
9. The instructions are issued with the concurrence of the Ministry of Finance, Department of Expenditure vide their OM No 33(5) PF-II 99, dated 22nd February, 2000.
10. For further information/ clarification on this subject, please contact:
- Director
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Department of Science & Technology

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