

Guidelines for Funding R&D Projects for Establishment and Revision of Indian Standards, Special Publications and Handbooks

SCOPE

1. This document provides the guidelines for funding Research & Development (R&D) projects for formulation/revision/amendment of Indian Standards/Special Publications/ Handbooks and may include validation of test methods.

NOTE –The word standard used hereinafter shall mean Indian Standard, Special Publication or Handbook as the case may be.

PURPOSE

2. The guidelines aim at bringing in transparency, clarity and uniformity in the screening, selection, approval and monitoring process of Research & Development (R&D) projects for formulation/revision/amendment of standards.

TYPES OF R&D PROJECTS

3. R&D projects in standards formulation work may be classified as follows:

A. Small R&D Projects:

- i. Projects involving preparation of working draft of new standards and revision of existing standards. The mode of research is normally through internet resources, books, journals, periodicals, regulations, SDO/national/regional/international/foreign standards.
- ii. This may involve a single standard or multiple standards of the same Sectional Committee.
- iii. The duration of a small project shall not exceed one year (i.e. the time for submission of working draft)with approved expenditure not exceeding Rs.2lakh per project.

B. Large R&D Projects:

- i. Projects involving preparation of working draft of new Standards or revision or amendment of existing standards where subjects/standards are of highly complex and of specialized nature and/or involve voluminous technical work.
- ii. Projects involving formulation/revision/amendment of voluminous deliverables such as special publications/handbooks.
- iii. Projects involving work of experimental nature and may include validation of test methods.
- iv. This may involve single standard or multiple standards of same group.
- v. The approved expenditure for such large projects may exceed Rs.2 lakh per project but their duration shall not exceed 2 years (i.e. the time for submission of working draft).

ELIGIBILITY NORMS FOR IDENTIFYING EXPERT ORGANIZATION(S)/EXPERT(S) FOR R&D PROJECTS

4. The eligibility norms for identifying expert organization(s)/expert(s) for R&D projects, by the Sectional Committee, are as follows:
 - a) **Small R&D Project:** Members of Sectional Committee (individual expert or entity) and may include ex/retired BIS Scientific Officers. This may also include individuals representing an organization who may be able to take up the project independently.
 - b) **Large R&D Projects:** Members of Sectional Committee having expertise in the concerned fields. Normally, it may be given to institutions/organizations (entity) only. In exceptional cases, it may be given to experts in individual capacity with proven credentials.

NOTE-The Sectional Committee may assign its work as detailed in these guidelines to its concerned existing Sub-Committee or Panel, or may constitute a specialist Panel/Group for the purpose.

FUNDING

5. The mode of payment for Small R&D projects would be as follows:
 - a) First instalment up to a maximum of 30% of the total approved project cost would be released after approval of the project by the screening committee and submission of undertaking by the grantee institution/expert.
 - b) After mid-term review by the Sectional Committee(as prescribed in para 21) and submission of utilization certificate (in the manner prescribed in para 28) for the fund released, if any and submission of the final working draft and approval thereof by the Sectional Committee, fund to the extent of 50% of the total approved project cost would be released. In cases where fund has not been released initially, fund to the extent of 80% of the total approved project cost shall be released.
 - c) After submission of the final project report along with utilization certificate for the fund released (in the manner prescribed in para 28 below),the balance amount shall be released upon the finalization of the draft for adoption and
 - d) Publication by the Sectional Committee.
6. The mode of payment for Large R&D projects would be as follows:
 - a) First instalment up to a maximum of 50% of the total approved project cost would be released after approval of the project by the screening committee and submission of undertaking by the grantee institution(s)/ expert(s).
 - b) After mid-term review by the Sectional Committee (as prescribed in para 21) and submission of utilization certificate (in the manner prescribed in para 28) for the fund released, if any and submission of the final working draft/validation of test method(s)and approval thereof by the Sectional Committee, fund to the extent of 30% of the total approved project cost would be released. In cases where fund has not been released initially, fund to the extent of 80% of the total approved project cost shall be released.

- c) After submission of the final project report alongwith the utilization certificate for the fund released (in the manner prescribed in para 28), and subsequent final review as prescribed in para 22and para 23, the balance amount shall be released upon the finalization of the draft for adoption and publication by the Sectional Committee.

PROCEDURE FOR APPLYING

7. Proposal from BIS technical committee members for financial assistance for R&D projects (small, large), can be submitted at any time during the year. The proposal shall be got considered by the Sectional Committee for its approval.
8. R&D projects may be an offshoot of decisions (recorded in minutes) taken in BIS Sectional Committee meetings. The individual expert/organization identified by the Committee may be requested to submit the proposal for R&D project subsequent to the meeting with reference to the recorded decision in this regard.

CONTENT OF PROPOSAL FOR LARGE R&D PROJECTS

9. In case of large projects, the proposal should be forwarded by the applicant-organization, duly nominating the Project Leader/alternate Project Leader and certifying that (i) the core facilities are available and will be provided to the Project Leader to work on the proposed project, (ii) the organization will discharge all its obligations, particularly in respect of management of the financial assistance given, and (iii) no other funding is being received/sought for the project proposed to be sanctioned by BIS.
10. The proposals shall *inter-alia* consist of the following:
 - a) Details of the organization/individual expert;
 - b) In case of expert organization, the CV of the Project Leader and Alternate Project Leader and a letter from organization authorizing Project Leader and Alternate Project Leader to undertake the study as proposed and also that facilities available with the organization would be made available to them;
 - c) Objective and scope of the project clearly highlighting the need of such study and what would be the final deliverable;
 - d) Methodology to be adopted for the proposed study with a clear road map and time plan for completion of the project;
 - e) Proposed budget clearly specifying expenditure against each element such as manpower, machine, travelling, testing, consumables, stationery, overheads, etc;
 - f) Proposed payment criteria (within these guidelines).

PROCEDURE FOR APPROVAL WITHIN BIS

11. The relevant checklist for Small R&D Projects and for Large R&D Projects as given at Annex I and Annex II respectively, as the case may be, shall be filled up by the Member Secretary of the concerned Sectional Committee.
12. The Member Secretary of the concerned Sectional committee shall ensure that the R&D proposal is complete in all respects. Additional information, if any, shall

be collected from the concerned organization/individual expert. The R&D proposals shall then be put up to the concerned Sectional Committee for consideration and approval, where prior approval of the Sectional Committee has not been recorded. The proposal shall then be put up to Division Council for approval.

13. The Sectional Committee would be responsible for identification and recommendation of the organization/individual expert member for the specific project, its scope and terms of reference for each assignment and its time frame and time of mid-term review.
14. The draft agreement (prepared in line with model agreement given at Annex III, to be modified on case to case basis) shall also be prepared clearly highlighting the payment term. The Head (Technical Department) shall sign the agreement on behalf of BIS in all cases.

No such agreement shall be required for Small R&D Projects. However, a sanction letter shall be issued by the Head (Technical Department) clearly indicating the details of project, payment terms and project terms and reference to these guidelines.

15. Small or Large R&D projects, after filling up of checklist and enlisting the project details along with deliverables and payment terms, shall be forwarded to Member Secretary (Screening Committee for R&D Projects) through the Head of concerned Technical Department.
16. Member Secretary (Screening Committee for R&D Projects) shall submit the proposal to 'Screening Committee for R&D Projects' within 7 days of such proposal being received by him. The composition of Screening Committee for R&D Projects would be as follows:

- | | |
|---------------------------------------|--------------------|
| a) DDG (Standardization) | : Chairperson |
| b) Head (SPPD) | : Member Secretary |
| c) H(LPPD) | : Member |
| d) All Heads of Technical Departments | : Members |

NOTE -Member Secretary of Sectional Committee whose R&D proposal is to be discussed in a particular meeting of Screening Committee may also be invited.

17. Member Secretary (Screening Committee for R&D Projects) shall send the recommendations of Screening Committee to DG/DDG, as per their delegated powers, for consideration and approval. After the approval of DG/DDG, Member Secretary (Screening Committee for R&D Projects) shall inform the concerned department regarding the decision along with the copy of approval.

SIGNING OF AGREEMENT AND ISSUING OF SANCTION LETTER

18. After receipt of duly signed agreement from the R&D proposer and after the receipt of the approval of DG/DDG, sanction letter would be issued by the concerned Head (Technical Department) to the organization/individual member. The project would be considered to have commenced from the date the sanction letter is issued.

PROGRESS REPORT AND REVIEW OF PROJECT

19. The relevant Sectional Committees of BIS will monitor the progress of project to ensure that the project is progressing as per the planned arrangement. However, Member Secretary of the concerned Sectional Committee under overall

coordination of HOD would be the controlling/link officer for R&D projects and would constantly monitor the progress of the project. Any delay in implementation of project should be duly justified by the Project Leader/expert member to whom the project is awarded and shall be put up to Screening Committee for approval.

20. For Large R&D Projects, the Project Leader of research project would be required to submit to BIS, at the time of mid-term review, comprehensive report indicating the progress of the project. Report should be sufficiently detailed so as to enable the Sectional Committee to review the progress of work vis-à-vis the progress of work stipulated for the period.
21. Mid-term review of progress of the project shall be carried out by the concerned Sectional Committee at the duration as decided by the Sectional Committee. The progress of R&D project shall also be reported to Division Council periodically.

SUBMISSION OF FINAL PROJECT REPORT (FPR)

22. In case of Large R&D Project, the Project Leader is required to submit Final Project Report (FPR) to BIS within three months from the date of submission of final working draft. The report must be detailed and should include information about (a) the original objective(s) of the project, (b) how far these objective(s) have been achieved, and (c) how the results have benefited the development of the national standard(s), (d) a copy of final working draft of the concerned standard(s). The actual research achievements made under the project may be summarized (in about 200 words) and submitted to BIS to facilitate publication of the same by BIS. In case of a Small R&D Project, a brief FPR can be considered to be adequate, however, it should be submitted along with the final working draft and should inter-alia include the information about the source/basis of development of the working draft along with supporting documents.
23. FPR received in BIS would be put up to the concerned Sectional Committee, which will take necessary action for preparation/revision of standard appropriately. The final installment of fund will not be released unless the result of the project is satisfactory upon final review by Sectional Committee and finalization of the draft for adoption and publication by the Sectional Committee. The entity/individual expert shall be responsible to assist in the disposal of comments received on the draft standard and for the preparation of the Finalized Draft, as may be desired by the Sectional Committee/BIS.
24. Extension up to six months (if required) may be given for submission of FPR with the approval of concerned Sectional Committee.

RESULTS OF RESEARCH AND INTELLECTUAL PROPERTY RIGHTS

25. Project Leader(s) would be encouraged to publish the results of research. While doing so, acknowledgement to the effect that financial assistance was received from BIS should be made in the research paper(s) published. BIS should be acknowledged in similar type of other published work/press reports.
26. One re-print of each research paper(s) published as a result of the work done under the BIS funds shall be sent to BIS as and when published.
27. IPR relating to experimental work/test method validation under such R&D project funded by BIS shall be transferred to the BIS appropriately.

OPERATION OF FUNDS

28. At the time of review, the Project Leader would need to submit the utilization certificate of the funds received in previous installment (if any) to BIS in the following manner:
- i) Statement of all equipment, books, etc purchased out of the funds certified by the Head of the organization. The name, description of the equipment, cost in rupees, date of purchase, and the name of the supplier to be given in the list. The main purpose/function of the equipment may also be mentioned against each item.
 - ii) Statement of accounts and utilization certificate certified by the Accounts Officer and countersigned by the Finance Officer of the organization.
 - iii) Any unspent balance lying with the organization should be refunded to BIS after the finalization of the draft immediately, by means of demand draft or online transfer.
29. The Member Secretary of the concerned Sectional Committee/Head (Technical Department) shall ensure that the project leader submits the utilization certificate in the manner prescribed in Para 28 before release of funds.
30. The Member Secretary of the concerned Sectional Committee/Head (Technical Department) shall also ensure that the operation of funds is monitored strictly as specified above. Further the Project Leader is also fully aware and adhere to the obligations of Project Leader as given in this procedure.
31. **Other Requirements:**
- i) Organizations receiving financial assistance for R&D projects from BIS would have to maintain separate accounts for each research project.
 - ii) The sanctioned research project must commence within 3 months from the date of receipt of the sanction letter, unless otherwise authorized by BIS, failing which the scheme will be treated as withdrawn.
 - iii) In the event of a Principal/Alternate Project Leader's absence from his normal place of duty for two months at a stretch, the Head of the organization would need to immediately nominate a Co-Project Leader(s) to supervise the implementation of the project and such a name has to be approved in advance by BIS. In any event, a Project Leader shall give prior notice to BIS of his intention to stay away from the project.
 - iv) Items of equipment, etc should be purchased on the basis of the established rules and procedures of the entity/organization.
 - v) Stock register of all equipment, books, etc purchased out of the funds shall be maintained.
 - vi) Any capital intensive equipment/devices purchased using financial assistance from BIS for R&D projects shall be allowed to be retained by the proposer for their R&D activity etc.
 - vii) The organization shall have to ensure that expenditure with respect to TA/DA are made only as per their own norms but under no circumstances the

executive/business class air travel or stay in a five star hotel is made. The overhead expenses should not be more than 20% of the cost of the project.

- viii) The Project Leader must ensure that the concerned organization's newsletter would carry information on the activities and accomplishments of the various projects funded by the BIS.

Annex I
(Clause 11)
Check-List for Small R&D Projects

Title of the Project:

Name of the Sectional Committee:

Name, Designation & Department of the Entity/Individual Expert to whom project is to be assigned:

Total Duration of the Project:

Sl. No.	Criteria	Yes/No
1.	Whether the Project would lead to formulation of new standard or revision / amendment of the existing Indian Standard.	
2.	Does the Project involve research through internet resources, books, journals, periodicals, regulations, national/SDOs/regional/international /foreign standards.	
3.	Whether the proposal has been approved by the concerned Sectional Committee (enclose relevant extracts of the minutes of the concerned meeting)	
4.	Does the expert to whom project is to be assigned is a member of the concerned Sectional Committee.	
5.	Has the member identified by the Sectional Committee submitted the Project proposal.	
6.	Whether the Scope, Term of reference, the financial assistance required and the time frame has been clearly brought out in the proposal.	
7.	Whether any past assignment of R&D Project undertaken with funding from BIS. If yes brief detail & outcome thereof, in a separate sheet to be Annexed herewith.	
8.	Estimated cost of the Project based on the specified norms.	

Signature:

Name:

Designation:

(Member Secretary of concerned Sectional Committee)

Head (of TD)

ANNEX II
(Clause 11)

Check-List for Large R&D Projects

Title of the Project:

Name of the Sectional Committee:

Name, Designation & Department of the Project Leader:

Name, Designation & Department of the Alternate Project Leader:

Total Duration of the Project:

Payment Plan (indicating Estimated Cost) for the Project:

Sl. No.	Criteria	Yes/No
1.	Whether the Project would lead to formulation of new standard or revision of the existing Indian Standard and/or special publication / handbook.	
2.	Whether application forwarded by the applicant organization has nominated the Project leader, in case the work is proposed to be given to expert organization.	
3.	Whether the applicant organization has certified that core facilities are available and will be provided for proposed Project.	
4.	Does the expert to whom project is to be assigned is a member of the concerned Sectional Committee.	
5.	Whether the proposal has been approval by the concerned Sectional Committee (enclose relevant extracts from agenda and minutes of the concerned meeting).	
6.	Whether it has been clearly spelt out by the applicant organization that the tenure of the Project is not beyond the stipulated time(2 years) and that they will discharge all their obligations particularly in respect to management of financial assistance given to them.	
7.	Whether any past assignment of R&D Project undertaken with funding from BIS. If yes brief detail & outcome thereof, in a separate sheet to be Annexed herewith.	
8.	Whether the Scope, Term of reference, the financial assistance required and the time frame has been clearly brought out in the proposal	

Signature:

Name:

Designation:

(Member Secretary of concerned Sectional Committee)

Head (of TD)

ANNEX III

(Clause 14 &18)

MODEL AGREEMENT (To be modified on case to case basis)

This Deed of Agreement made this _____ day of _____ (Month & Year) between Bureau of Indian Standards having Head Office at Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi – 110 002 (hereinafter called the BIS, which expression shall, wherever the context so admits, includes its successors and assigns) on one part and (name of the Organization/expert) (hereinafter called _____ which expression shall, wherever the context so admits, include their heirs, executors, administrators, legal representative and assigns) of the other part, witness as follows:

1. Whereas (name of the Organisation/expert) through (name of the Project Leader) has submitted a proposal to BIS pertaining to R&D project with an aim to revise 'IS/SP _____' / to formulate the standard _____ / to validate test method _____, for consideration and BIS has accepted the proposal.

2. That duration of the R&D project shall be ___ months/years with a periodic mid-term and final reviews at the end of months and months. The total cost of the project shall be Rs _____/- (Rupees in words) for the complete project. No further expenditure shall be borne by BIS on any account of this project including escalation of time.

3. The fund would be utilised for the specific project/assignment as approved by BIS and shall be spent within the specified time. Any portion of the fund which is ultimately not required for expenditure for the approved purpose shall be duly surrendered to BIS.

4. (name of the Organisation/expert) shall not entrust the implementation of the project/assignment approved by BIS for which fund has been received to any other institution/expert and to divert the fund received from BIS as assistance to any other institution/expert.

5. (name of the Organisation/expert) indemnifies BIS from any legal and/or financial encumbrance arising out of any infringement of IPR/licensing of IPR/technology transfer/commercialization.

6. (name of the Organisation/expert) shall maintain an audited record in the form of a register for permanent, semi-permanent assets acquired solely or mainly out of BIS fund. Once the R&D project is completed satisfactorily, the organization taking up the R&D project may retain the equipment/devices for their R&D activities, etc.

7. BIS shall release the funds for the project as follows:

a. Ist Instalment: ___% of the cost of the project to be released after approval of the project by the BIS screening committee and submission of undertaking

b. IInd Instalment: ___% of the cost of the project to be released after midterm review and submission of the utilization certificate for the fund released

c. IIIrd Instalment: After submission of utilization certificate and submission of final project report along with working/wide circulation draft, balance fund would be released after the final review (finalization of the wide circulation draft by the Sectional Committee).

8. The completion of the R&D project shall remain the responsibility of (name of the Organisation/expert) even if the project leader is not available due to any reason whatsoever. After completion of the project, a report shall be submitted by the Project leader which shall include the details of samples, testing details, result and analysis along with the recommendations to revise

'IS/SP _____' / to formulate the standard _____ / to validate test method _____ and shall provide the working draft.

9. *(name of the Organisation/expert)* shall ensure the completion of the project under the guidance and supervision of any other faculty/Researcher, if the nominated project leader would not be available due to any reason. Such a faculty member/Researcher can only be nominated with the approval of BIS.

10. In case *(name of the Organisation/expert)* is unable to complete the project to the satisfaction of BIS in stipulated time or extended time, BIS shall be entitled to claim the refund of grant so sanctioned with interest @ 10% thereon from *(name of the Organisation/expert)*.

11. The authority to extend the duration of the project shall rest with the BIS.

12. BIS shall have rights to formulate monitoring methodology of the R&D project.

13. Disputes on account of this agreement, if any, shall be settled through mediation/conciliation. However, DG, BIS shall have right to appoint sole arbitrator to settle the dispute if such dispute(s) could not be settled through mediation/conciliation. Such arbitral award would be binding and final on both parties. The Arbitration & Conciliation Act, 1996 will be applicable and the court jurisdiction will be at Delhi.

14. Undertaking given by project leader, if any, shall be part of the agreement.

15. *(name of the Organisation/expert)* shall be responsible for discharge of all its obligations of the project through the nominated project leader or any other faculty members in case of necessity particularly in respect of management of financial assistance given to them. *(name of the Organisation/expert)* shall refund through Demand Draft or Online transfer any excess/unutilized amount of the fund to BIS.

16. BIS shall not release the next instalment of grant unless BIS is satisfied with the progress of the project /utilization certificate.

17. *(name of the Organisation/expert)* shall ensure that Project leader shall give presentation on the progress of project to BIS as and when directed by BIS for continuation of the project, and shall assist in the disposal of comments received on the draft standard and for the preparation of the Finalized Draft, as desired by the Sectional Committee/BIS.

18. The project shall deemed to have been commenced from the date of release of sanction letter. *(name of the Organisation/expert)*, through the project leader, shall submit final project report on completion of the project failing which BIS shall disqualify the project leader from seeking further assistance from BIS and names of defaulting project leaders will be circulated to all fund giving agencies.

19. *(name of the Organisation/expert)* shall ensure that while publishing the results of research, acknowledgement to the effect that financial assistance so received from BIS be made in the research papers published/ other published work/ press reports.

20. Procedure for screening, selecting, monitoring R&D projects prescribed in "Guidelines for Funding R&D Projects for Establishment and Revision of Indian Standards, Special Publications/ validation of test method(s) shall be part of the agreement.
