

**GUIDELINES
FOR RESEARCH PROJECTS OF
MINISTRY OF COAL**



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**GOVERNMENT OF INDIA
MINISTRY OF COAL
SHASTRI BHAWAN
NEW DELHI – 110 001**

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GUIDELINES FOR S&T PROGRAMME

The Ministry of Coal (MoC), Government of India, has been supporting R&D programme in coal and lignite sector since 1976.

The Ministry normally supports projects of shorter duration (preferably 1 to 2 years), the findings of which, if completed successfully, can be used directly for commercial exploitation and benefit to the industry. However, in exceptional cases, research in newly emerging and front line areas of Science & Engineering and projects having long terms implications are also supported.

These guidelines stresses upon the priority of Ministry to the ambitious plans of the GOI on Atmanirbhar Bharat and Make in India projects in line with the identified thrust areas.

The guidelines for implementation of the projects have been issued from time to time, since 1976. These guidelines have been revised by the Ministry and its Standing Scientific Research Committee to make it comprehensive and in line with latest development.

It will help the implementing agencies in formulating the research proposals in an organized manner and facilitate evaluation and monitoring of research projects.

1.0 R&D SET UP in Ministry of Coal (MoC)

A. Standing Scientific Research Committee (SSRC)

Standing Scientific Research Committee (SSRC) of the Ministry of Coal under the Chairmanship of Secretary (Coal) is the Apex body to plan, programme, budget and oversee the implementation of research projects and provide financial support for all activities related to Research and Development project. It has members from statutory bodies, industry, research institution & other ministries. *The SSRC may co-opt any other members whenever deemed necessary from the renowned research Institutes / experts from CIL and other organizations.*

Delegation of Power (DOP):

- a) To approve S&T Project on the recommendation of Technical Sub-committee of SSRC
- b) To approve extension of project duration of the ongoing S&T projects, if required.
- c) To approve Cost Escalation of S&T Projects
- d) Monitoring of on-going S&T projects
- e) Termination of S&T projects on recommendation of the Technical Sub-committee of SSRC
- f) To perform such other work as may be necessary, from time to time, in regard to the furtherance of R&D activities in coal sector

The committee may meet as often as necessary, but at least once in a year. At least 50% of the committee members including Chairman of the committee, must be present for successfully conducting any meeting.

B. Technical Sub-committee of SSRC

For evaluating the need of research work and implementation, SSRC has constituted a Technical Sub-committee of SSRC under the chairmanship of HoD(Mining), IIT-BHU / IIT-KGP/ IIT-ISM on annual rotation basis. Ministry of Coal may reconstitute the committee as and when required.

Delegation of Power:

- a) To recommend new S&T proposal for consideration of SSRC.
- b) To approve extension of projects duration up to 6 months.
- c) To approve Re-appropriation of funds from one item to another in the same head i.e. Capital to Capital and Revenue to revenue, within the approved project cost.
- d) To recommend Cost Escalation of the projects for consideration of SSRC
- e) Monitoring of on-going S&T projects
- f) To approve any change in specifications of equipment, change in implementing agency, scope of work and the methodologies etc. without altering the approved objective(s) of the project and without additional cost
- g) Acceptance of completion reports of S&T projects, with information to SSRC

- h) To recommend termination of S&T projects at any stage if significant progress was not made due to any reason and / or fund has not been properly utilized

The committee may meet as often as necessary, but at least twice in a year. At least 50% of the committee members including Chairman of the committee, must be present for successfully conducting any meeting.

Delegation of Power to Chairman of the Technical Sub-committee of SSRC

- a) To approve extension of project duration up to 03 (Three) months beyond the original schedule to avoid delay in implementation of the project
- b) To approve increase in cost solely due to variation in exchange rate & Govt. taxes (GST etc.) which should be subsequently ratified by SSRC.
- c) One-time approval of Re-appropriation of funds from one item to another in the same head i.e. Capital to Capital and Revenue to revenue, within the approved project cost

2.0 NODAL AGENCY

Central Mine Planning and Design Institute, Ranchi, a Mini Ratna Subsidiary Company of Coal India Limited is the Nodal Agency for coordinating and monitoring of S&T projects of MoC. The job of co-ordination involves inviting new research project proposals, carrying out first level scrutiny, placing the proposals for consideration of Technical Sub-Committee of SSRC and SSRC, monitor the progress of the on-going projects at regular intervals, preparation of S&T Budget Estimates/ Revised Estimates, disbursement of funds to the implementing agencies based on the progress of the project, dissemination of research findings and provide assistance to the nodal officers of the concerned subsidiary/company for promoting their replication in field operations.

The project proposals, if required, may be sent for expert opinion within CMPDI and outside for their opinion on scientific and technical merits of the projects. Nodal Agency may interact with Principal Implementing / Sub-implementing Agency(s) regarding any clarification or modification in the project proposal. If necessary, Nodal agency may call for / visit the institute/organization and discuss with Project leader / Coordinator regarding project proposal. After 1st level scrutiny, Nodal agency will send the Soft copies of all project proposal (with comments received from experts), which conforms to S&T Guidelines, to all the members of the Technical Sub-Committee of SSRC for their views, as the projects shall be deliberated in the meeting of Technical sub-committee of SSRC.

The Nodal Agency, will keep MoC informed of the commencement and progress of the approved S&T projects and provide Agenda papers to Member Secretary for arranging meetings of the Technical Sub-Committee of SSRC and SSRC and provide draft minutes of the meeting to the Member secretary of the committee(s).

3.0 INVITING RESEARCH PROPOSALS

The Nodal Agency shall give wide publicity of S&T Programme of MoC and the identified thrust areas through websites/email etc. and invite proposals from Govt./ Reputed Private Research and Educational Institutions, Organisations, Public Sector Undertakings and from such other agencies which have capabilities to take up R&D work in India and abroad. Nodal Agency may float Expression of Interest (Eoi) on identified thrust areas for inviting project proposals as per the norms framed and approved by the chairman of the Technical Sub-committee for SSRC.

In case of multi institutional projects, the principal Implementing Agency shall obtain formal agreement/consent from the collaborating /sub agencies

- a) CIL subsidiaries, SCCL, NLCIL, Govt. Research & Academic Institutions / Organisations can act as Principal Implementing or Sub-implementing Agency(s) in the project.
- b) Reputed Research Organisations/ Academic Institutes in Public & private sector (affiliated/recognised by Ministry of Education / DST or any Govt. Body) from India, who have past track records and expertise may participate in the research projects alone or along with any Govt. Research & Academic Institutions / Organisations and/or any subsidiary of CIL, SCCL, NLCIL. Organisation / institute from abroad may participate in the project along with Indian Govt. agencies. In above case of multi-institutional projects, the Principal Implementing Agency will enter into a formal agreement with all the Sub-implementing agency(s).
- c) To encourage participation of individual/group of researchers / students namely IDD, B. Tech, M.Tech. and Ph.D. students in R&D initiative, a detailed guidelines are enclosed as **Annexure-II**. All such student projects must have at least one regular faculty as P.I. for guidance, monitoring the project and purchase activities, as per the purchase rules of the concerned institute. Also, the UC, SC and liquidation are important in such projects, which can be taken care through a well-designed system. Further, the student submitting the projects should have at least term of the project period remaining in the Institute. If the student passed out from the institute and leave the institute for any other assignment, it is the responsibility of the project guide to find alternative student to complete the project within the approved project schedule. The funds shall be disbursed through the institution/organization concerned.
- d) For any new institute/organization submitting project proposal, if required, a committee consisting of Chairman of the Technical Sub-committee or his nominated representative along with representative from MoC and representative from CMPDI may visit the institute/organization before taking up any project and submit the report before Technical Sub-committee during deliberation of the proposal. Decision of Technical Sub-committee of SSRC in this regard will be treated as final.
- e) Generally, it is the responsibility of the PI to complete the project on behalf of institute/organisation. However, in exceptional cases, the change of the host institute on account of PI moving from one host institute to another host institute will be considered in MoC subject to the present host institute giving its no objection certificate and the prospective institute agreeing to the terms and conditions of sanctioning of the grant. In such cases, the equipment etc. and the balance of funds will be

transferred from the present institute to the proposed institute. Decision of Technical Sub-committee of SSRC in this regard will be treated as final.

4.0 THRUST AREAS OF RESEARCH PROJECTS

Thrust areas for future research in coal sector have been identified and displayed in the MoC & CMPDI website (<https://scienceandtech.cmpdi.co.in/>) . Thrust areas are broadly categorised as following:

- Advanced technology/methodology for improvement of production & productivity from underground mining and open cast Mining
- Improvement of safety, health and environment
- Waste to Wealth
- Alternative use of coal and clean coal technologies
- Coal beneficiation and utilization
- Exploration
- Innovation and indigenization (Under Make-in-India Concept)

Projects can be undertaken in any other areas which can be beneficial to coal industries. Inter-, multi- and trans- disciplinary projects must be encouraged.

Any technology which is beneficial for coal industry and being used successfully outside the country, may be taken up under S&T project in India with input of indigenisation and Make in India concept to suit Indian working conditions. The same will be applicable for indigenious development of any equipment/system which is being used successfully elsewhere in the world.

5.0 PROJECT PROPOSAL

The S&T proposal should be framed as per the prescribed Proforma ([Form-I](#)). In view of rapid evolution in technology, the projects duration may be limited to 2 years. However, in exceptional situations the extensions may be granted in 2 phases, each being 6- months only so that the total duration does not exceed 3 years for exceptional cases. The methodology of filling in the Proforma and other details are given at Annexure-I with the following details:

- ❖ The project submission proforma should be concise with word limitations in each item as provided in Form-I. For instance, Title - 50 words, Justification – 200 words, Work elements to be illustrated by Bar/PERT charts only, and novelty component - not more than 100 words. Objectives of the projects should not be more than 04 or 05.
- ❖ Project proposal should be submitted online.
- ❖ How the project could be beneficial to the coal industry.
- ❖ Name of Project Leader (s) and Project Coordinator(s) with complete communication details including e-mail & mobile No.

- ❖ Work plan should contain, how the proposed objective of the project can be achieved.
- ❖ Proposed methodology to be carried out during execution of the project. Methodology should contain the detailed activities in a certain time limit in Bar & PERT chart indicating responsibility of participating agencies according to each activities.
- ❖ Literature/ web survey bringing out clearly the recent development in the proposed field in two parts i.e. in the country and in other parts of the world.
- ❖ R&D components present in the project proposal. Specific research or development content which is exclusive to this proposal shall be clearly indicated.
- ❖ Details of expertise available and work done in the proposed field by the institution/agency(s) concerned.
- ❖ Details of infrastructure facilities available in the institution.
- ❖ The past experience and performance of Principal Implementing / Sub-implementing Agency(s) in the execution of similar project vis-a-vis time schedule.
- ❖ The track record for performance assessment of Academic Institutes should be referring to the performance of respective PIs of the project submitting R&D project proposal for assessing; whether the projects given earlier to them are being properly implemented or are suffering from cost and time overrun.
- ❖ In case of Private Research / Private Academic Institutions/ Organisations from India and abroad Credential of the institutes concerned along with CVs of the persons involved in the project from that Institute should be given in the project proposal. Complete address along with the contact numbers and e-mail ids of all persons involved in the project should be provided in the project proposal.
- ❖ Collaborating agency should not be a vendor for the project and should contribute part of research funding.
- ❖ Requirement of funds with break-up under Capital and Revenue heads along with phases.
- ❖ Certification from implementing agencies regarding the project has not been undertaken in the past, to avoid repetition of the project.
- ❖ In case of multi institutional projects, the role and responsibility of each implementing agency should be clearly mentioned activity wise in the bar chart of the project proposal (Form-I).
- ❖ Major milestones during implementation with percentage of fund requirement.
- ❖ The phasing of the fund requirement should be in line with the relevant milestones or activities.
- ❖ In case of development of prototype/any new equipment which require field trial permission from DGMS, project proponent should discuss the matter in advance during the formulation of proposal with concerned Director of DGMS and the advice given by DGMS should be strictly followed to avoid any delay in obtaining field trial permission from DGMS. For field trial projects the DGMS may

be kept in the connectivity link for ease of statutory concurrence during and on completion of the project. Documentation for discussion with DGMS may be incorporated in the project proposal.

- ❖ To engage SC and ST candidates in research projects as per the norms of the government or at least one person each from SC and ST category in each project. Consent from implementing agencies in this regards should be incorporated in the project proposal (As per the Office Memorandum No: 38011/2/2019-IFD issued by Under Secretary to Govt. of India (Finance), Ministry of Coal [MoC] on dated 28.01.2019).
- ❖ Project outlay should be inclusive of all applicable taxes/duties/charges etc. with explicit break up of each taxes/duties/charges etc.

6.0 COST OF ITEMS WHICH CAN FORM PART OF PROJECT PROPOSAL

- (i) Equipment, solely and exclusively required for the project work, if the same piece of equipment or a similar one is not already available with the Principal Implementing / Sub-implementing Agency(s) concerned.
- (ii) Permanent assets like land, buildings, etc. are normally not funded from R&D fund. However, in special circumstances, such assets may be permitted to be created from R&D Fund. The item wise details and justification for each item is to be furnished.
- (iii) Manpower should normally be provided by the Principal Implementing / Sub-implementing Agency(s) concerned. However, if considered essential, a minimum number of scientific and technical personnel [Junior Research Fellows (JRFs), Senior Research Fellows (SRFs), Research Associates (RAs)] may be engaged for the project for field trial/experimental purpose. It should not lead to employment beyond project duration.

For projects requiring more number of JRFs/SRFs/RAs, complete and full justification for engagement of JRFs/SRFs/RAs shall be provided in the project proposal.

In any project implementation, additional Scientific/Technical manpower may be employed on contractual basis and are co-terminus with the project.

- (iv) Maximum of Rs. 50,000/- for organizing, attending seminars, workshop etc. for every implementing agency within the country.
- (v) Identified consumables with proper justification.
- (vi) Contingency shall be limited to 5% of the total revenue cost of the project.
- (vii) TA/DA expenses in connection with tours undertaken in the interest of the project, subject to a ceiling of Rs. 3.0 lakh per institute or organization per project. However, for projects requiring TA/DA amount in excess of Rs. 3.0 lakh per institute or organization for the entire project duration, complete and detailed justification with calculations should be provided in the project proposal to facilitate concerned committees to appreciate and take a view in the matter.
- (viii) Engagement of the personnel during implementation of the project shall be the responsibility of the Principal Implementing or Sub-implementing Agency(s) as the case may be. The payment to

be made to the engaged personnel for the desired duration of the project shall be within the relevant norms/ Guidelines of the concerned Principal Implementing or Sub-implementing Agency(s).

- (ix) Project proposal should have signature of Project Leader(s) / Co-ordinator(s) in each page.
- (x) Institute overhead may be charged as per provision elaborated in Para 4.14 under Annexure-I.

7.0 ITEMS NOT TO BE CONSIDERED UNDER S&T GRANT

Following items are generally not considered for funding under any S&T projects unless it is specifically required for the nature of the project and approved by the concerned committee.

- (i) Infrastructural facilities like land, building, furniture and fittings, calculators, computers, etc,
- (ii) Salaries of permanent employees of the Principal Implementing / Sub-implementing agency(s), except in case of institutions which do not have budget for salary & wages like CMPDI.
- (iii) Honorarium to persons who are already in the employment of the institution,
- (iv) Foreign travel by Indian Implementing /sub-implementing agencies
- (v) Expenditure on account of engaging / inviting foreign experts during the project execution beyond the provisions already indicated in the proposal
- (vi) Purchase of staff car
- (vii) Employment of peons, khalasis, laboratory attendants, stenographers, typists etc,
- (viii) Routine studies and operations.

8.0 SUBMISSION OF PROJECT PROPOSAL

- (i) Project proposal should be submitted in the online portal.
- (ii) Principal Implementing Agency(s) may submit S&T proposal to Nodal Agency as specified in Form-I after incorporating other relevant forms enclosed as Annexure.
- (iii) The proposals can be submitted any time during the year.
- (iv) For EoI proposal, it should be submitted within the specified time limit.
- (v) To speed up the process, the on-line project submission in the rolling mode looks imperative. For scrutinizing the projects received in the rolling mode, the cut-off dates could for project submission may be fixed as 31stMarch, 30thJune, 30thSeptember and 31stDecember. The scrutiny, recommendation and approval of the projects received in each cycle must be done in the intervening period between consecutive cycles.

The proponents will be allowed to track the status of the submitted project proposal through online portal

9.0 PROCEDURE FOR PROCESSING S&T PROJECT PROPOSAL

Initial scrutiny of the project proposal will be made by the Central Mine Planning and Design Institute (CMPDI), which may interact, seek additional information, clarifications and if necessary call for /visit the institute for first hand discussions with the project leader/coordinator concerned. While scrutinizing, the nodal agency may seek the views of the internal and external experts on the proposal. After 1st level scrutiny, Nodal agency will send the Soft copies of all project proposal with comments of the experts, to all the members of the Technical Sub-Committee of SSRC before projects are deliberated in the meeting of Technical sub-committee of SSRC. The Technical Sub-committee of SSRC will evaluate the project proposals and if necessary, may call for clarifications/modifications.

The project proposals which are found feasible and beneficial to Coal industry, the Technical Sub-committee of SSRC will recommend it for consideration and approval of SSRC. If the project proposal are found not feasible and/or beneficial to Coal industry, Technical Sub-committee of SSRC may reject the proposal for funding under S&T Grant of MoC. Decision of Technical Sub-committee of SSRC regarding recommendation/rejection of project proposal shall be treated as final.

The SSRC may approve the project proposal as recommended by Technical Sub-committee of SSRC, after detailed deliberation. Decision of SSRC regarding approval/rejection of project proposal shall be treated as final.

10.0 EVALUATION OF S&T PROJECT PROPOSAL

The following shall be specifically looked into while carrying out technical evaluation of the proposal:

- The project proposal falls within thrust areas of research projects of MoC.
- Past track record and expertise available with the agency concerned for carrying out the research work.
- Progressive R&D input vis-à-vis earlier projects undertaken and similar R&D work carried out within the country and abroad.
- The objectives to be clear and well defined.
- Details work programme with time frame of each activity spelt out.
- Realistic time frame for purchase of equipment and recruitment of manpower.
- Cost provisions
- Benefits to be accrued to the industry through the proposed research work.

11.0 DATE OF COMMENCEMENT OF PROJECT

Once the project is approved by the SSRC, a formal approval letter would be issued by MoC and the date of commencement of project, preferably, would be considered as 1st day of the next calendar month, which will be communicated to the project proponent by CMPDI through sanction letter. The zero date of commencement of the project will be considered from this date.

If required, on request, the date of receipt of funds by the implementing agency may be considered as date of project commencement instead of commencement date of as mentioned in sanction letter, when there is perceptible lag between these two events. Decision of Technical Sub-committee of SSRC regarding project commencement date shall be treated as final.

12.0 DISBURSEMENT OF FUND TO PROJECTS

Fund shall only be disbursed to the Principal implementing agency. All the sub-implementing agencies shall requisite fund through Principal implementing agency and funds will be disbursed to sub-implementing agencies through Principal implementing agency except CMPDI & subsidiaries of CIL.

However, if any Private institute/organization carrying out the project along with subsidiaries of CIL/SCCL/NLCIL, funds will be disbursed to subsidiaries of CIL/SCCL/NLCIL for further disbursement.

After approval of the project, the first installment of fund will be disbursed at one go by CMPDI within one months of the receipt of the request in the prescribed form (Form-II). Request from the Principle Implementing / Sub-implementing Agency(s) for disbursement of subsequent installment of fund for on-going projects should also be submitted two months in advance along with the details of expenditure already incurred and status of the progress of the project vis-à-vis approved work programme, in Forms –III, IV and V, indicating how much fund is lying idle in their account which is liable for payment of interest.

Specific approval for any deviation regarding fund requirement / disbursement shall have to be obtained by the Principal Implementing / Sub-implementing Agency(s) separately from the respective Competent Authority.

Private institute/organization who are carrying out the project alongwith any Govt. Institute/organisation shall submit fund requisition through the Institute/organisation concerned and it will be disbursed to Private Research / Private Academic institutions/ organisations through concerned Institute/organisation and/or any subsidiary of CIL, based on the progress of the project and as per their agreement with the Private Research / Private Academic institutions/ organisations. In exceptional case, Technical sub-committee may instruct activity wise disbursement of fund to Private Research / Private Academic institutions/ organisations directly.

Expenditure of fund for implementing the project activities will be allowed for the project duration only.

If presentation and acceptance of the completed project would not be done within the approved time schedule of the project, Project proponent may separately indicate the expenditure for presentation, within the approved project outlay (subject to celling of Travel limit) and get reimbursement of the same accordingly. Decision of the concerned committee regarding the above expenditure shall be treated as final.

13.0 MONITORING OF S&T PROJECTS

- Physical and financial status of all on-going S&T projects is to be monitored by CMPDI on regular basis. Representatives of CMPDI may visit the sites/locale of project to assess the actual progress of the project and to provide necessary guidance/instructions to complete the project within approved time frame.

- Quarterly Progress Reports and expenditure statements of the ongoing projects for the quarter ending March, June, September & December, shall be submitted by Principal Implementing / Sub-implementing Agency(s) in the prescribed forms (Form III, IV&V) to CMPDI so as to reach by 15th of the month following close of the quarter and will be scrutinized by CMPDI.
- Progress reports (both physical and financial) as received from Principal Implementing / Sub-implementing Agency(s) on quarterly basis are to be reviewed by CMPDI. The causes of delay, if any, are to be discussed & analyzed in detail and remedial measures may be suggested.
- The Principal Implementing / Sub-implementing Agency shall submit a consolidated / interim report of progress made against the objectives and approved work programme at least once in 12 months to CMPDI in five (05) hard copies together with soft copy.
- Progress of S&T projects funded by MoC are to be reviewed by the Technical Sub-committee of SSRC and also by the SSRC.

14.0 PROJECT COMPLETION REPORT

- Three hard copies and soft copy of the Draft completion report will be sent to General Manager (S&T), CMPDIL, preferably, two (2) months prior to date of completion of the project for in-depth scrutiny of the project findings. After incorporating the suggestions/modifications made by CMPDI or by the stake holders, the Principal Implementing / Sub-implementing Agency(s) will submit 60 copies of the project completion report as per the details given in Form-VI along with a soft copy. The completion report shall be accompanied by Final Expenditure Statement in Form-III and Form-IV and duly authenticated by the Associated Finance of the Principal Implementing / Sub-implementing Agency. An audited expenditure statement/audited fund utilization certificate should be enclosed in the project completion report.
- A certificate from General Manager of the area of the CIL subsidiaries/SCCL/NLCIL, where the research work was carried out should also be furnished stating their views on success of the project by the Principal Implementing / Sub-implementing Agency.
- The completion report shall include detailed analysis related to quantified benefits accrued on implementation of that S&T project.
- After successful completion of the S&T projects, the Project Completion Reports will be placed for consideration and approval by the Technical Sub-committee of SSRC.
- The project will be considered completed only after their acceptance by the Technical Sub-committee of SSRC.

15.0 DISSEMINATION OF RESEARCH FINDINGS

- (i) A copy of the project completion report as received from Implementing Agency(s) will be provided to all subsidiary companies of CIL, SCCL, NLCIL to replicate the research findings and also to different research/academic institutes engaged in research in coal and allied industries to enable widespread use of the findings for the benefit of the industry.

- (ii) To intensify future research work and to identify need based research projects for coal sector, workshops/seminars/webinars to be organized from time to time.
- (iii) The research findings of completed research projects may be disseminated through any leading journal or "Minetech" journal being published by CMPDI. The journal is required to be widely circulated amongst the mining community.
- (iv) Abstract of completed projects is to be uploaded in the website of CMPDI.
- (v) Ministry of Coal may issue directive to CIL, SCCL, NLCIL and others (to whom it may think suitable) for replication of the outcome of the successfully completed S&T projects. MoC may also look after the business planning, commercialization, IP management, capital raising, profit sharing among the license, linkages with another organization etc.

16.0 EXTENSION OF PROJECT DURATION

The Principal Implementing / Sub-implementing Agency(s) shall immediately bring to the notice of the Nodal Agency, any slippage; along with corrective actions proposed to be taken up by the Principal Implementing / Sub-implementing Agency(s) to minimize the slippage.

Request for extension of project duration should be sent using Proforma (Form VII), preferably two months prior to the date of expiry of the project in 3 copies, through the Head of the Institution / concerned authorized person.

Approval for time extension of project duration up to 3 months may be accorded by the Chairman of the Technical Sub-committee of SSRC, to avoid delay in implementation of the project.

Approval for extension of project duration up to 6 months beyond the original schedule may be accorded by the Technical Sub-committee of SSRC.

Approval for extension of project duration beyond the original schedule may be accorded by the SSRC, if required.

The Project Implementing Agencies are required to submit realistic timeline for project approval as well as for extension. Therefore, the extension of projects may be allowed not more than two times of 6 months each. However, in exceptional cases, project duration may be extended beyond the time frame as mentioned above by the Technical Sub-committee of SSRC and/or SSRC.

17.0 RE-APPROPRIATION OF FUND/ REVISION OF COST OF PROJECT

Proposal for revision of the overall approved cost of the project would not be entertained as a matter of policy. In exceptional cases, request for revision of the project cost should be submitted by implementing agencies in Proforma (Form VIII) in 3 copies, through the Head of the Institution / concerned authorized person with detailed justifications leading to cost escalation.

Approval for Re-appropriation of funds from one item to another in the same head i.e. Capital to Capital and Revenue to Revenue may be accorded by the Technical Sub-committee for SSRC within the total approved cost. In exceptional cases, if the Technical Sub-committee for SSRC committee permits, Re-appropriation of funds may be allowed in different heads to avoid cost escalation of the project.

The items for which re-appropriation is allowed, should not result in exceeding the laid down limits of expenditure on that particular item as agreed for re-appropriation for further implementation of coal research projects. The overall ceiling on items such as travel, contingency, organizing / attending the seminars for symposia etc. should not be exceeded the laid down provisions in the guidelines for coal research projects.

Approval of cost escalation for the projects may be accorded by SSRC on recommendation of the Technical Sub-committee of SSRC.

Chairman of the Technical sub-committee of SSRC is however, authorized to approve increase in cost solely due to variation in exchange rate and Govt. Tax (GST etc.), which should be subsequently ratified by SSRC. For this purpose implementing agency will be required to submit to CMPDI item wise details of imported equipment provided in the approved proposal along with their value in foreign currency and equivalent Indian rupee, present value of each of these equipment in foreign currency, corresponding Indian rupee and prevailing rate of exchange, tax etc. Any approval of revision of the cost on this account should be communicated to Technical Sub-committee of SSRC and SSRC in its next meeting with required calculations and figures.

To avoid delay in implementation of the project, one-time approval of Re-appropriation of funds from one item to another in the same head i.e. Capital to Capital and Revenue to Revenue may be accorded by the Chairman of the Technical sub-committee of SSRC within the total approved cost.

18.0 PUBLICATION OF RESEARCH PAPER

To restrict publication of sensitive data during wide dissemination of research finding carried out under the S&T Grant of MoC, the Principal Implementing / Sub-implementing Agency(s) will require approval from Chairman of the Technical Sub-committee of SSRC through Nodal Agency.

Investigators may be encouraged to publish some of the research papers emerging out of the project work in leading and widely circulated Indian/International Journals 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.

Principal Implementing / Sub-implementing Agency(s) desirous of publishing papers based on the research work done under S&T Grant funding will duly acknowledge the receipt of grant from MoC and shall provide the endorsed five (5) copies of the publication to the Nodal Agency i.e. CMPDI.

19.0 PATENT OR INTELLECTUAL PROPERTY RIGHTS (IPR)

With a view to encourage the institutions to file patent applications on their innovations, to motivate them to commercialize their technologies and to facilitate them to reward their inventors, the following instructions may be practiced as being followed by DST.

I. In these instructions:

- (a) "Institutions" means any technical, scientific or academic establishment where research work is carried out through funding by Ministry of Coal

- (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 of scientific or technical research.
- II. **Scope:** These instructions apply to those institutions receiving funds for research projects from the Ministry of Coal.
- III. **Sharing of IPR:** Intellectual Property Rights (IPR) will be shared between MoC and the Implementing / Sub-implementing Agency(s) in equal proportion (50:50) after successful completion and before commercialization of the product/ process developed. In case, there are more than one implementing Agencies, the proportion i.e. 50% of the IPR may be distributed among all implementing Agencies in appropriate proportion. Director Technical (RD&T), CMPDI will be the inventor/ proprietor on behalf of MoC during filling of IPR.
- IV. **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 along with Director (T/RD&T), CMPDI entered in the Register of Patents as the inventor/proprietor of the patent. The institution shall take necessary step 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 as per the agreed terms & conditions between IPR holder (mentioned in Sl. No. III). However, the institution may determine the share of the inventor(s) and other person from such actual earnings of the concerned institute/organisation. Such share (s) shall be limited to 1/3rd of the actual earnings.
- V. **Inventions by institutions and industrial concerns:** IPR generated through joint research by institution(s) and industrial concern(s) through joint effort can be owned jointly by them as may be mutually agreed to by them through a written agreement. However, MoC will retain 50% of its share. The institution and industrial concern may transfer the technology to a third party for commercialization on exclusive/non-exclusive basis with consent from MoC. 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 IPR. The institutions may determine the share of the invention(s) and other persons from such actual earnings. Such share(s) shall not exceed 1/3rd of the actual earnings.
- VI. While applying for the IPR, the Principal Implementing / Sub-implementing Agency(s) should clearly mention the name of the S&T project under which various processes / products were developed and the fact that funds for the development, for which patent is proposed to be taken were provided by Ministry of Coal (MoC). Implementing agency shall file patent application with prior approval from the Chairman of the Technical Sub-committee of SSRC through Nodal Agency i.e. CMPDI.
- VII. **Patent Facilitating Funds:** The institution(s) shall set apart not less than 25 per cent of such earnings for crediting into a fund called Patent Facilitating Fund. This Fund shall be utilized 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.

- VIII. **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 funding Agency (i.e. Department/Ministry).
- IX. **Royalty-free license:** The Government shall have a royalty-free license for the use of the intellectual property for the purpose of the Government of India.
- X. Any instructions issued by Central Government time to time regarding IPR shall be strictly followed.

20.0 ASSETS ACQUIRED UNDER S&T GRANT

- (i) All assets acquired under the S&T Grant shall be the property of MoC.
- (ii) The records of all assets procured / purchased under S&T Grant shall be maintained by the Principal Implementing / Sub-implementing Agency(s) in a bound paged register in the prescribed Proforma (Form-IV) as well as in their earmarked computing system.
- (iii) All assets acquired under the S&T Grant shall not, without prior approval of Technical Sub-committee of SSRC, be disposed off or encumbered or utilized or transfer to any other institute/ organisation for the purpose other than specified.
- (iv) At the conclusion of the project, MoC may decide whether to sell, retain in the institute/organization or otherwise dispose off the assets which are the property of MoC.
- The list of all assets, including values, date of purchase and estimated life should be provided by the Heads of the Principal Implementing / Sub-implementing Agency(s) to CMPDI along with their specific requests, if any, for disposal / retention /transfer to any other institute, at the end of the project.
 - List of equipment should also be placed in the website of the concerned institute indicating the project title under which it was procured from the S&T Grant.
 - The request for disposal / retention as received from Principal Implementing / sub-implementing Agency(s) will be placed for consideration and approval of the Technical Sub-committee of SSRC.
 - The decision of Technical Sub-committee of SSRC will be communicated to the Principal Implementing / sub-implementing Agency(s).
- (v) The equipment / instrument procured for a specific purpose/application in a specialized set-up typically designed and constructed at the site of implementation may be allowed to be retained by the Principal Implementing / sub-implementing Agency(s) as these equipment might not be useful / utilized for other purpose.

However, if any profit earned after successful completion of the project utilizing the above equipment, it shall be intimated to CMPDI at the end of every financial year, with details of the place of implementation and benefits acquired.

- (vi) In case of transfer / shifting of assets to other places after successful completion of the project, the Principal Implementing / sub-implementing Agency(s) shall submit a proposal for cost of packing, transportation (including transit insurance), overhauling etc. to the Nodal Agency for consideration of the Technical Sub-committee of SSRC.
- (vii) After written communication from the Nodal Agency (CMPDI), with due approval of the Technical Sub-committee of SSRC, the equipment may be disposed off as per the rules and regulations followed by the organization/Institute concerned, with an intimation to CMPDI. Funds collected (if any) during disposal of assets, to be subsequently credited to CMPDI account for credit to the MoC.
- (viii) Any decision of Technical Sub-committee of SSRC regarding retention/return/disposal/transfer of assets shall be treated as final.

21.0 AUDIT OF ACCOUNTS

It shall be the responsibility of Principal Implementing / Sub-implementing Agency(s) to get the accounts pertaining to the S&T Grant audited, regularly and furnish the copy of audited statement to CMPDI. The Comptroller and Auditor General (CAG) of India at his discretion shall have the right of access to the books and accounts of the Principal Implementing / Sub-implementing Agency(s) for the fund received from MoC. In case of adverse remarks/audit para on the project being funded from this fund, the Principal Implementing / Sub-implementing Agency(s) shall immediately bring such remarks para to the notice of the Nodal Agency, along with their reply to such para remarks.

22.0 INTEREST ON GRANT

If a part or whole of the fund is kept in a bank account earning interest, the interest earned, if any, shall be reported to CMPDI. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installments of fund under the project or to be subsequently credited to CMPDI account for credit to the MoC on completion of the project. Fund received from CMPDI shall not be parked in bank account not earning interest.

23.0 TERMINATION OF A PROJECT

The SSRC reserves the right to terminate a project at any stage if it is convinced that the fund has not been properly utilized or appropriate progress is not being made or any other reasons, on the recommendation of Technical Sub-committee of SSRC. There will be no financial penalty in case of termination of any S&T project if all the approved activities have been followed by the implementing agencies.

SSRC is empowered to take any action against the Project Implementing Agency in case of failure to complete the project due to negligence/lackadaisical approach, despite being given repeated extensions. This will discourage intentional or avoidable delay in execution of research Projects and submission of unrealistic/ underestimated schedule for project completion. This may include (a) banning/black listing etc for certain period of time, (b) recovery of full or part of the disbursed fund if approved activities are not followed, (c) displaying the banning list in the web portal etc.

GENERAL INFORMATION AND INSTRUCTIONS
FOR PREPERATION OF RESEARCH AND DEVELOPMENT PROPOSALS

1.0 GENERAL.

- 1.1 Before filling in the prescribed format for S&T project proposal, please read the GUIDELINES FOR FORMULATION, IMPLEMENTATION AND MONITORING OF COAL RESEARCH PROJECTS OF Ministry of Coal, carefully.
- 1.2 The proposal should be prepared and submitted strictly according to the format prescribed in this document.
- 1.3 Please also read explanatory notes and detailed instructions carefully for completing each section of the prescribed format while preparing the proposal.
- 1.4 Initially proposal should be submitted online for scrutiny by CMPDI. If project proposal is found suitable for further consideration, the Principal Implementing Agency(s) would be informed for submission of soft copy through email, after incorporating suggestions/ additions / modifications, if any, to:

General Manager (S&T), CMPDI
Central Mine Planning & Design Institute Ltd.
Gondwana Place, Kanke Road, Ranchi - 834 031.

2.0 DOCUMENTS/ENCLOSURES REQUIRED WITH THE PROPOSAL

- (i) Detailed project proposal for S&T Grant of MoC (In Form-I)
- (ii) Endorsement from the Head of the Institution (on letter head in Form I A)
- (ii) In case of a multi institutional project, the formal agreement/ consent letter in Form-IA, between Principal Implementing Agency(s) and collaborating Sub-implementing Agency(s).
- (iii) Details of Equipment other than Computer Hardware / Software already procured during last seven years under S&T Grant of Ministry of Coal / R&D fund of CIL - which are related to the S&T / R&D Project (In Form-IX)
- (v) Details of Computers, Software and accessories already procured during last three years under S&T Grant of Ministry of Coal / R&D fund of CIL - which are related to the S&T / R&D Project (In Form-X)
- (vi) Details of manpower cost (salary and wages) (In Form-XI)
- (vii) Details of travel expenditure (TA/DA) (In Form-XII)
- (viii) Supporting documents/resolution of the academic institutes, University / Board / Governing Council for the salary/wages of Senior Research Fellows / Junior Research Fellows / Research Associates.
- (ix) Supporting documents of Overhead Cost required by academic institutes or the Guidelines of concerned University / Board / Governing Council resolutions.

3.0 IMPORTANT NOTES ON PROJECT FORMULATION

- (a) Principal Implementing / Sub-implementing Agency(s) shall confine their project to the specific aspects of a problem which can be studied in depth in the scheduled period and are of benefit to Coal industry. For identifying the specific aspects to be studied, the following should be considered:
- (b) After deciding on a broad topic of research, National and International status should be reviewed.
- (c) Identify the critical gap areas.
- (d) Identify the component of gap areas which can be studied in depth within the project scope & time frame and applied/used for the benefit of the industry.
- (e) Identify the institutions/experts who can contribute effectively to the project.
- (f) The proposal need not be limited to one agency rather an attempt should be made to pool the expertise available with various agencies.
- (g) Mission oriented multi agency, time targeted projects are preferred to projects limited to laboratory investigations or findings which cannot find ready application for the benefit of the industry. The whole idea is that after completion of project, findings should bring tangible benefits to the industry.
- (h) While formulating the proposal, it should be ensured that scientific and technical details are clearly spelt out, avoid generalities.
- (i) Proposals for Analysis/Study generally not to be considered as S&T Project. These type of proposals must include specific R&D component and outcome of which can be replicated in other areas/fields.

4.0 INSTRUCTIONS FOR FILLING UP THE PROFORMA (FORM - I)

Please read additional instructions given in the following pages before filling the corresponding section of the format (Form –I).

4.1 Definition of Problem

Please give precise technical statement of only those issues which the project is expected to cover within the scheduled duration.

4.2 Objectives

Instead of an essay, it is suggested that objectives should be spelt out in a pointed language, keeping in view the subject area to be addressed.

4.3 Justification for selecting the subject area

The importance of the project should be brought out in this section in the light of international and national state of knowledge on the subject and the benefits to the industry likely to be derived due to successful completion of the project.

4.4 Methodology

It is essential that, the experts in the selected subject area of research should get a clear understanding of research technique to be adopted. Further, the description should indicate precisely as to how the stated objectives will be achieved. Discuss various methods of approach in order of priority.

4.5 Work Elements

Entire project activities are to be broken down to specific work elements in consonance with the objectives and methodology defined in earlier section.

4.6 Time Schedule

On the basis of work elements identified earlier, time schedule shall be drawn. Specific indications of milestones shall be identified. These milestones will help in periodic evaluation of the progress of the project and disbursement of fund. It is to be emphasized that the lead time for creation of infrastructural facilities needs to be indicated on realistic basis.

4.7 Financial Outlay

All costs shall be expressed in Rupees (INR) only. Foreign exchange, if required, for purchase of equipment or consumable, shall also be separately mentioned in terms of specified foreign currency and exchange rate adopted. Also include customs duty and other such charges, if applicable.

Foreign Exchange component in the Capital should be minimized.

4.8 Outlay - Land and Building

Permanent assets like land, buildings, etc. are normally not funded from R&D fund. However, in special circumstances, such assets may be permitted to be created from R&D Fund. The item wise details and justification for each item is to be furnished.

4.9 Outlay – Equipment

List of all items of equipment with broad specification and quantity without make and model shall be provided. After the project is approved, the Principal Implementing / Sub-implementing Agency(s) may go for upgraded version so long as the basic characteristics and costs are comparable to those mentioned in the proposal. Installation charges, inland transport, insurance etc., if required additionally, to be separately mentioned.

4.10 Justification for Equipment

Justification for each item and number of equipment required (including its accessories, specific characteristics, resolution etc.) in relation to specific experiment / measurements / test contemplated in the project is to be provided. A certificate is to be enclosed by the Head of the Institute that equipment proposed to be procured for the experimental purpose is not readily available with the institute (Form 1A). Duplication of the infrastructural facilities from S&T Grant is not permitted. In case of a demand for import of equipment, furnish reasons as to why indigenous models, if available cannot be used.

4.11 Outlay - Manpower

Salary and wages of the permanent employees of the Principal Implementing / Sub-implementing Agency(s) are normally not admissible under S&T Grant. Though major scientific and technical work is to be carried out by the Project Leader/Coordinator and co-investigators, some additional scientific and technical personnel (JRFs/SRFs/RAs) may be engaged for working desired duration on the project. Engagement of the personnel for implementation of the project shall be the responsibility of the Principal Implementing or Sub-implementing Agency(s) as the case may be. The payment to be made to the engaged personnel for the desired duration of the project shall be within the relevant norms/Guidelines of the concerned related Principal Implementing or Sub-implementing Agency(s).

In case of engaging of technical personnel (JRFs/SRFs/RAs) in the research project, it is required to engage SC and ST candidates in research projects as per the norms of the Government or at least one person each from SC and ST category in each project. This is as per the Office Memorandum dated 28.01.2019, issued by Under Secretary to the Govt. of India (Finance), MoC.

4.12 Justification for Manpower

Justification for number and level of staff to be engaged and also the resolution of the institution regarding wages of the JRFs/SRFs/RAs.

4.13 Outlay - Contingency

Special requirements not covered under normal heads for any projects, may be indicated under this section. Contingencies are meant to cover incidental expenditure and other miscellaneous expenditure likely to be incurred during project implementation, due to increase in travel/ transport expenses / changes of TA/DA, salary revision of research associates, porter charges and additional expenses during preparation of project completion report etc. This should be limited to 5% of the total revenue cost of the project.

4.14 Institute Overhead Cost with Justification

For meeting the cost of academic expense including infrastructural facilities, Institutional Overhead Cost for academic/research institutes shall be within the provision mentioned as follows:

- a) For projects costing up to Rs: 1.0 crore: Not more than 10% of the total cost for educational institutions and 8% for laboratories and institutions under Central Government Departments/Agencies except CSIR laboratories;
- b) For projects costing more than Rs. 1.0 crore and upto Rs.5.0 Cr.: Rs. 15.0 lakh or 10% of Total project cost, whichever is less:
- c) For projects costing more than 5.0 Cr. and upto Rs. 20.0 Crore. Maximum Rs. 20.0 lakh will be provided as overheads; and
- d) For projects costing more than Rs. 20.0 Crore: the quantum will be decided on a case to case basis and the decision of the approving committee will be treated as final.

4.15 Time Schedule - Bar /Pert Chart

The proposal shall be supported by a BAR chart on time scale / PERT network showing duration of various work elements/activities. The activities should be broken down to sub activities/ sub sub-activities to enable close and fruitful monitoring of the projects. In case of multi-institutional projects, role and responsibilities of all implementing agencies should be clearly mentioned against each activities.

ANNEXURE-II

The following norms will be applicable to individual centric Extra Mural Research (EMR) projects (i.e proposals submitted by an individual researcher or a group of researchers students etc.) funded by the Ministry of Coal, Government of India

(i) **Equipment:**

Full cost of equipment/s which is/are specifically recommended/approved by SSRC be provided without discriminating the type of institutions (Public. Private. NGO etc.). Ownership of such equipment shall be MoC and these shall not be disposed of without obtaining prior approval of the authority which sanctioned the grant-in-aid. At the end of the project a specific request be made by the grantee institution for retention/transfer of these equipment to the Institute subject to the institute in ensuring proper upkeep of these equipment and making these available to the other researchers on recommendation of MoC. A list of such equipment be placed in the website of the concerned institute

(ii) **Emoluments:**

The emoluments for manpower (other than JRF, SRF, RA and Research Scientist) to be fixed as per the norms framed by DST.

(iii) **Overheads:**

Towards meeting the cost of academic expenses including infrastructural facilities, institute overhead may be charged as mentioned below:

- a) for projects costing upto Rs 1 crore, 10% of the total cost for educational institutions and NGOs and 8% for laboratories and institutions under Central Government Departments/Agencies;
- b) for projects costing more than Rs 1.0 crore and upto Rs. 5.0 crore, overheads of Rs 15.0 lakh or 10% of total cost whichever is less,
- c) for projects costing more than 5.0 crore and upto Rs 20.0 crore, Rs 20.0 lakh will be provided as overheads, and
- d) for projects costing more than Rs. 20.0 crore. the quantum will be decided on a case to case basis

(iv) **Travel & Contingencies.**

Maximum of Rs. 50,000/- each per annum may be provided for Travel and Contingencies. Higher amount, based on the recommendations of the Expert Committee, to be provided where the research work involves field work or/and project has many investigators / institutions and larger manpower. The contingency amount may also be used for paying Registration fees for attending international conferences.

(v) **Consumables / Supplies & Materials:**

The amount may be fixed by SSRC based on the recommendations of the Technical Sub-committee of SSRC.

(vi) **Flexibility in Recurring budget:**

- a) Though different allocations are made under various heads in recurring budget such as manpower, consumables, contingency, travel, etc., the investigator has been given flexibility to use upto 10% funds sanctioned under each recurring heads (consumables, travel, contingency etc. but not manpower budget). The PI will inform the Technical Sub-committee accordingly. The Technical Sub-committee in such cases will issue the revised sanction within the said limit of 10 percent and within already approved overall recurring budget allocation.
- b) The Investigator will have the flexibility to appoint more or lesser number of staff and change the designation of manpower within the sanctioned manpower budget

(vii) **Disbursement of fund**

Submission of fund requisition shall be through the involved Institute/organisation Agency and it will be disbursed to Private Research / Private Academic institutions/ organisations through that Institute/organisation and/or any subsidiary of CIL. Fund disbursement shall be activity wise. On completion of certain activities further fund will be disbursed based on the progress of the project. Cost of equipment shall be disbursed to the implementing agency in the first year at one go to avoid delay in implementation of the project.

(viii) **Extension of Projects**

Extension of project up to six months can be granted by the Technical Sub-committee of SSRC, if it does not involve increase in the cost of the project. In other cases, approval are required from SSRC with recommendation of the Technical Sub-committee of SSRC.

(ix) **Transfer of PI from one Institute to another Institute**

The student submitting the projects should have at least term of the project period remaining in the Institute. If the student passed out from the institute and leave the institute for any other assignment, it is the responsibility of the project guide to find alternative student to complete the project within the approved project schedule.

In exceptional cases, the change of the host institute on account of PI moving from one host institute to another host institute will be considered in MoC subject to the present host institute giving its no objection certificate and the prospective institute agreeing to the terms and conditions of sanctioning of the grant. In such cases, the equipment etc. and the balance of funds will be transferred from the present institute to the proposed institute.

PROJECT PROPOSAL FOR S&T GRANT OF MoC

1	PROJECT TITLE	:	
2	Name and address of principal Implementing Agency(s) Name of Project Leader/Coordinator/Principle Investigator	:	
3	Name and address of Sub-Implementing Agency(s) Name of Co-investigator(s)	:	
4	Definition of the issue (Max. 300 words)	:	
5	Objectives (Specific and not more than 2-3)	:	
6	Justification for subject area (Max. 200 words)	:	
7	How the project is beneficial to coal industry		
8	Work Plan (Max. 100 words)	:	
8.1	Methodology (Max. 200 words)	:	
8.2	Organization of work elements (Max. 200 words)	:	
8.3	Time schedule of activities giving Milestones (also include a Bar Chart/PERT Chart)	:	
9	Details of proposed outlay		(Rs.in lakhs)
	Sl. No.	Items	Total cost estimated
			Total project cost 1 st Year 2 nd Year 3 rd Year
		Capital Expenditure	
	9.1	Land & Building	
	9.2	Equipment	
	9.3	Total Capital (9.1+9.2)	
		Revenue Expenditure	
	9.4	Salaries / allowances	
	9.5	Consumables	
	9.6	Travel	
	9.7	Attending or organizing Workshop/Seminar	
	9.8	Total Revenue expenditure (9.4+9.5+9.6+9.7)	
	9.9	Contingency	
	9.10	Institutional Overhead	
	9.11	Applicable taxes/duties/charges etc.	
	9.12	Grand Total (9.3+ 9.8+9.9+9.10+9.11)	

Foreign Exchange Component:

Name of the Foreign Currency:

Exchange Rate:

Date:

10.0 Phasing of fund requirement (in percentage) with respect to activities/milestone

11.0 Outlay for land & Building:

(Rs. in lakhs)

Building:

Sl. No.	Item	Plinth Area	Type of Bldg.	Estimated Cost
1.				
2.				
Total				

12.0 Justification for land & building:

13.0 Outlay for Equipment:

Generic Name of equipment and accessories with major specifications	Number	Imported/ Indigenous	Estimated Cost (Rs.in lakhs)	Foreign Exchange Component
1.				
2.				
3.				
Total				

Note:-

(i) Include GST, installation charges, inland transport, insurance etc.

(ii) For the imported equipment, import duty concessions available for research/S&T/ Environment / Protection / Ecology protection projectors will be availed of, wherever applicable.

(iii) A Certificate to the effect that imported equipment is essential to the project and in the long run will save/not save foreign exchange.

(iv) Please elaborate whether the imported equipment will help/not help, in indigenization of technology.

14.0 Justification for Equipment:

15.0 Outlay for consumable materials:

Head	Particular	Outlay			
		1 st Yr.	2 nd Yr.	3 rd Yr.	Total
	Q				
	B				
	F				
	E				

	Q				
	B				
	F				
	E				

- Q - Quantity/Number
B - Outlay in Rs. Lakhs
F - FE Components
E - Exchange rate adopted

16.0 Curriculum – Vitae of Project Proponents, Viz. Principal Investigator/ Project leader and Co-investigator.

- Educational Qualifications.
- Past Experience in the field of research & industry
- Number of research projects handled
- Commercial application of research findings of other research projects handled by the investigator(s) in the past
- Papers published (India / Abroad) by the Investigators, etc.

17.0 Past experience

- ❖ Details of expertise available and work done in the proposed field by the institution/agency(s) concerned.
- ❖ Details of infrastructure facilities available in the institution.
- ❖ The past experience and performance of Principal Implementing / Sub-implementing Agency(s) in the execution of similar project vis-a-vis time schedule.
- ❖ The track record for performance assessment of Academic Institutes should be referring to the performance of respective PIs of the project submitting R&D project proposal for assessing; whether the projects given earlier to them are being properly implemented or are suffering from cost and time overrun.

18.0 Others

- ❖ Discussions with DGMS, in case of projects requiring field trials in the mines.
- ❖ Literature/ web survey bringing out clearly the recent development in the proposed field in two parts i.e. in the country and in other parts of the world.
- ❖ R&D components present in the project proposal. Specific research or development content which is exclusive to this proposal shall be clearly indicated.

**ENDORSEMENT FROM
THE HEAD OF THE INSTITUTION
(To be given on the letter head)**

Project Title:

1. Certified that the Company/Institute intends to undertake above project with Dr/Sri/Smt..... as a Project Leader/Coordinator/Principal Investigator of the project.
2. Certified that necessary infrastructure facilities shall be made available to Project Team. Accommodation, transport, manpower etc. will be provided at the project site to the research team for undertaking the field work.
3. Certified that equipment proposed to be procured from the S&T Grant are not readily available in the Company/Institute for the purpose.
4. The company/Institute assumes to undertake the financial and other management responsibilities of the project.

Name and signature
of Head of the Company/Institution
(With seal)

Date:

Place:

FUND REQUISITION

FORM-II

Name of the project.....,

Project Code:.....

Name of the Company/Institution.....

Statement of fund requirement for the (year / period) (Rs. in lakhs)

Items	Total approved Cost	Total Fund Received as on	Interest Earned	Expenditure incurred till date	Balance fund available as on date	Fund provision in corresponding Year (As per sanction)	Fund Required for the (year/period)
	(1)	(2)	(3)	(4)	(5) = (2) + (3) - (4)		
A. Land & Building							
B. Capital equipment							
C. Manpower							
D. Consumables							
E. Travel							
F. Contingencies							
G. Attending/organizing workshop/seminar etc.							
Total							

Fund received till date:

Signature of Associate Finance Officer

Name.....

Designation.....

Seal

Signature of Project Leader/Coordinator

Name.....

Designation.....

Note: To be submitted in triplicate

QUARTERLY EXPENDITURE STATEMENT

FORM-III

Project Name
 Project Code:
 Name of Company/Institute-
 Statement of Expenditure for S&T Grant of MoC

Expenditure statement for the quarter ending..... (Rs. In lakhs)

Items	Total approved cost*	Sanctioned provision in the Year.....	Expenditure incurred up to Previous year (1)	Total Expenditure up to previous quarter of the current financial year (2)	Expenditure in the present quarter ending (3)	Progressive expenditure till the end of this quarter (4) = (1)+(2)+(3)
A. Land & Building						
B. Capital equipment						
C. Manpower						
D. Consumable						
E. TA/DA						
F. Contingencies						
G. Attending/organizing Seminar etc.						
H. Others						
Total						

*Details to be submitted as per sanction letter

Funds advanced till date.....

Signature of Associate Finance Officer

Signature of Project Leader/Coordinator

Expenditure incurred till date

Name.....

Name.....

Unspent Balance in hand.....

Designation.....

Designation.....

Seal

Note:

- (i) Expenditure under each specific heads should be limited to the amount funded by SSRC. Additional expenditure, if any, over and above the sanctioned provision is not admissible.
- (ii) To be submitted in triplicate

QUARTERLY EXPENDITURE STATEMENT ON CAPITAL EQUIPMENT

Project Name Project Code : Name of Company/Institute..... Statement of Expenditure for S&T Grant of MoC..... Details of Expenditure on capital equipment for the quarter ending						
(Rs. In lakhs)						
Name of the equipment/*assets with make, model and major specifications	Name of the supplier	No. of units (1)	Unit value (2)	Total value (1) x (2)	Total Approved Cost	Progressive Capital expenditure from date of start of project till this quarter ending
*In case of land/buildings mention area and type of building.						

Signature of Associate Finance Officer
 Name.....
 Designation.....
 Seal

Signature of Project Leader/Coordinator
 Name.....
 Designation.....

Note:

- (i) Expenditure under the specified equipment should be limited to the amount funded by SSRC. Additional expenditure, if any, over and above the sanctioned provision is not admissible.
- (ii) To be submitted in triplicate

FORM-V
QUARTERLY STATUS REPORT FOR S&T PROJECT OF MoC

1. Name of the Project with project code :
2. Progress for the Q/E :
3. Principal Implementing Agency(s) :
4. Sub-implementing Agency(s) :
5. Project Co-ordinator/Leader / Principle Investigator :
6. Date of commencement :
7. Approved date of completion :
8. Bar chart of activities as approved by SSRC including latest status of these activities in the same Bar chart (in different colour) to facilitate monitoring of progress of the project :
9. Details of work done during the quarter :
10. Slippage, if any, and reasons thereof (Tentative date of completion, activity-wise to be submitted herewith) :
11. Corrective actions taken and to be taken to overcome slippage. :
12. Work expected to be done in next Quarter :
13. Quarterly expenditure statements in Forms-III & IV :

Note: Quarterly progress reports should be submitted in triplicate by Principal Implementing / Sub-implementing Agency(s) to General Manager (S&T), CMPDI so as to reach by 15th of the month following close of the quarter.

PROJECT COMPLETION REPORT

1. Title of the project
2. Project Code
3. Date of commencement
4. Approved date of completion (As approved originally)
5. Actual date of completion
6. Objectives as stated in the Proposal
7. The work programme as proposed and approved by SSRC
8. Details of the work done during the project run indicating the areas actually covered and as proposed in the original work programme.
9. The extent to which the objectives as outlined in the original project proposal have been fulfilled.
10. The reasons for not covering all the areas (if any) of the scope of the study.
11. The need or otherwise to take up further studies in the areas not covered under this study.
12. Conclusions and recommendations with quantification of benefits to the industry.
13. Scope of application of findings of the study in the coal industry.
14. Name of persons associated with project and type of expertise developed by them.
15. The final expenditure statement in form III & IV and duly authenticated by associated finance of the company.

NOTE:

- (i) Fifty (50) copies of report shall be submitted in bounded form along with a softcopy
- (ii) The cover page amongst others shall mention “Funded under S&T Grant of MoC”

EXTENSION OF PROJECT DURATION

3 copies of the proposal to be sent through Head of the Institution to reach two months prior to the approved completion date.

1. Name of the project with project code
2. Name of the Principal Implementing / Sub-implementing Agency
3. Name of Project Leader/Coordinator/ Principle Investigator
4. Date of start of the project
5. Scheduled date of completion of the project
6. Approved objective(s)
7. Approved work programme alongwith schedule
8. Details of work done alongwith approved time schedule of work plan (Bar chart)
9. Revised Bar Chart / PERT Network of activities alongwith justification for indicated items of time schedule.
10. Time Extension proposed and reasons for seeking the extension
11. Total cost of the project and actual expenditure incurred (Form-III, IV & V).

Signature of Project Leader

Signature of Project Coordinator

Name.....

Name.....

Designation.....

Designation.....

REVISION OF THE COST OF THE PROJECT/RE-APPROPRIATION OF FUNDS

3 copies of the proposal to be sent through Head of the Institution to reach 2 months prior to the date of requirement of additional funds/re-appropriation.

1. Name of the project with project code
2. Name of the Principal Implementing / Sub-implementing Agency
3. Name of project Leader/ Coordinator/ Principle Investigator
4. Date of start of the project
5. Scheduled date of completion of the project
6. Approved objective
7. Approved work programme alongwith schedule
8. Details of work done alongwith actual time schedule (Bar Chart)
9. Total approved cost alongwith its break-up as per Para 8 of Form-I
10. Revised time schedule, if applicable.
11. Actual expenditure till last quarter in Form – III & IV
12. Revised cost of the project vis-à-vis the approved cost and reasons & justification for the revision / re-appropriation sought.

Signature of Associate Finance Officer

Signature of Project Leader

Name.....

Name.....

Designation.....

Designation.....

FORM – IX

Details of Equipment other than Computer Hardware / Software already procured under S&T Scheme of Ministry of Coal / R&D fund of CIL in the past - which are related to the below mentioned S&T project

Name of the Project:							
Project Code:							
Principal Implementing Agency(s):							
Sub Implementing Agency(s):							
Sl.No	Details of Equipment	No. of Sets	Make & Model	Year of Procurement	Name of the S&T/R&D Project against which procured	Status of equipment	Remark

Note:

- (i) A list of all equipment procured for the last seven years from S&T/R&D **Fund** giving the status and its present utilisation.
- (ii) The status should cover whether the equipment is in working condition or under breakdown. If under breakdown, can it be repaired & used in this research project?
- (iii) In the light of the above please give detailed justification for procurement of additional equipment when such equipment had been procured earlier under other S&T/R&D funding.
- (iv) This form should be signed by Project Leader and Project Coordinator and to be incorporated in the project proposal.

Details of Computers, Software and accessories already procured under S&T Scheme of Ministry of Coal / R&D fund of CIL in the past - which are related to the below mentioned S&T project

Name of the Project:							
Project Code:							
Principal Implementing Agency(s):							
Sub Implementing Agency(s):							
Sl.No	Details of Computers/software	No. of Sets	Make & Model	Year of Procurement	Name of the S&T/R&D Project against which procured	Present condition of the equipment/instrument	Remarks

Note:

- (i) A list of all computer & accessories procured for the last three years from S&T/R&D **Fund** giving the status and its present utilisation.
- (ii) The status should cover whether the computer & accessories are in working condition or under breakdown. If under breakdown, can it be repaired & used in this research project?
- (iii) In the light of the above please give detailed justification for procurement of additional equipment when such equipment had been procured earlier under other S&T/R&D funding.
- (iv) This form should be signed by Project Leader and Project Coordinator and to be incorporated in the project proposal.

DETAILS OF MANPOWER COST (SALARY AND WAGES)

Name of the Project:								
Project Code:								
Principal Implementing Agency(s):								
Sub Implementing Agency(s):								
Sl. No.	Designation	No. of Persons	Total No. of months required/persons	Salary/month, InRs.	Total salary (3 x 4 x 5), InRs.	Year-wise phasing, InRs.		
1	2	3	4	5	6	1 st Yr.	2 nd Yr.	3 rd Yr.

Note:

- Engagement of the personnel (Research Associate/Research Assistant/Research Fellow/JRF/SRF) for implementation of the project shall be the responsibility of the Principal Implementing or Sub-implementing Agency(s) as the case may be. The payment to be made to the engaged personnel for the desired duration of the project shall be within the relevant Norms/Guidelines of the concerned related Principal Implementing or Sub-implementing Agency(s).
- Salaries of permanent employees of the Principal Implementing / Sub-implementing Agency(s) are not admissible
- The form should be jointly signed by Project Leader/Coordinator and Associated Finance Officer of the Principal Implementing /Sub-implementing Agency(s) and to be incorporated in the project proposal.

DETAILS OF TRAVEL EXPENDITURE (TA/DA)

Name of the Project:										
Project Code:										
Principal Implementing Agency(s):										
Sub Implementing Agency(s):										
Designation	From (Place To Place)	Approx. Distance, In Km	Mode	Fare, InRs..	No. of Trips	Total travel Expenses (5 X 6), InRs.	No. of days Involved for Daily Allowance (DA), InRs.	Rate of DA per day, InRs.	Total DA (8 x 9), InRs.	Total TA+DA (7+10), InRs.
1	2	3	4	5	6	7	8	9	10	11

NB:

- The form should be jointly signed by Project Leader/Coordinator and Associated Finance Officer of the Principal Implementing Agency(s)/Sub-implementing Agency(s) and to be incorporated in the project proposal.

For further information/any clarification, please contact

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