COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH CENTRAL PLANNING DIRECTORATE Anusandhan Bhawan, 2, Rafi Marg New Delhi -110001

No. 33/M/SOPs/2023-24-CPD

December 18,2023

Office Memorandum कार्यालय ज्ञापन

Sub: Standard Operating Procedures (SOPs) for selection, implementation and monitoring of project proposals submitted FY 2024-25 onwards for consideration for implementation and funding under different project categories by CSIR under National Laboratories Scheme

The competent authority has approved Standard Operating Procedures (SOPs) for selection, implementation and monitoring of project proposals submitted FY 2024-25 onwards for consideration for implementation and funding under different project categories by CSIR under National Laboratories Scheme. The same is at Annexure – A.

The instructions issued time to time for financial and expenditure management would be applicable to these projects also.

(Dr. S. Sathiyanarayanan) Head, CPD

Copy to:

- 1. Directors of all CSIR labs
- 2. Heads of all CSIR Units/ Directorates/ Divisions/ Sections
- 3. Sr. PPS to DG, CSIR
- 4. PS to FA, CSIR
- 5. PS to JS, CSIR
- 6. CSIR website through Head, IT
- 7. Office Copy

Annexure - A

December 2023

Standard Operating Procedures (SOPs)

For

Projects Supported by CSIR under National Laboratories Scheme



Central Planning Directorate Council of Scientific and Industrial Research

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PREFACE

CSIR has undertaken several initiatives recently to translate laboratory leads to marketable/value-added technologies/products and thereby enhance interactions and connect to stakeholders for enabling ease of doing technology licensing besides focussing on basic and niche-creating high science. One of the initiatives is a "Thematic approach" to harness multidisciplinary talent and infrastructure for solving specific challenges in identified sectors. Themes have been formed with a view to provide greater alignment and for enhancing the industrial/stakeholder focus on CSIR R&D activities. The roadmap and activities of each theme would focus on substantial contributions towards each of the parameters - public good, private good, strategic good and societal good.

CSIR during the current cycle of the Fifteen Finance Commission had formulated several projects through the "Thematic approach". These programmes/projects formulated were representing different categories such as CSIR-Fundamental and Innovative Research in Science of Tomorrow (CSIR-FIRST), Focused Basic Research (FBR), Niche Creating Projects (NCP), Fast Track Translational (FTT), Fast Track Commercialization (FTC), Mission Mode, CSIR-New Millennium Indian Technology Leadership Initiative (CSIR-NMITLI), Major Laboratory Projects (MLP), Special Projects (FCP). The approach was to focus on basic as well as translational research besides addressing specific national problems in mission mode and/or aligning and contributing to the national missions through mission mode projects and the creation of state-of-art infrastructure and facilities to supports R&D activities.

Managing these diverse R&D projects is a complex process, as in order to achieve the set objectives of these projects in a defined time frame, proper regulatory and supporting mechanisms are needed to be put in place to facilitate CSIR laboratories in the smooth implementation and management of these projects. Without adequate project management, a project team can be like a ship without a rudder; moving but without direction, control, or purpose. Proper management of the project allows and enables team members to achieve the set targets within the allocated budget and time besides engaging in the project work seamlessly.

Realizing this need, Central Planning Directorate in consultation with Technology Management Directorate, Innovation Management Directorate and Laboratories/Institutes has prepared generic Standard operating procedures (SOPs) for selection, implementation and monitoring of projects under different categories.

It is expected that the SOPs will assist in the smooth implementation of the projects besides helping CSIR laboratories/ Institutes to deliver new-cutting edge science, technological interventions and world-class services.

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STANDARD OPERATING PROCEDURES (SOPs)

Standard operating procedures (SOPs) are step-by-step instructions that act as guidelines for the selection, implementation and monitoring of projects. SOPs framed by the CSIR for projects supported under different categories are as follows:

(A) SOPs FOR FTT, FTC, FBR, NCP AND CSIR-FIRST PROJECTS - NEW PROJECT PROPOSALS & FIRST YEAR FUND ALLOCATION/ RELEASE

- (a) Approval of the competent authority for inviting the proposals from the CSIR laboratories/ institutes/units is to be obtained by the respective Nodal Directorate at CSIR Hqrs. Since the project (all categories) implementation date will be invariably 1st April, the concerned Directorate should start the process well in advance, preferably August / September of the preceding year.
- (b) The proposals should be invited in the prescribed proforma only as enclosed in **Enclosure-1**.
- (c) The participating laboratory shall submit the structured proposal in the prescribed SFC/EFC and DPR proforma as enclosed in **Enclosure-2** at a later stage if the proposal is recommended by the External Experts/ Review/Selection Committee for further consideration.
- (d) The Stage-Gate Model is to be followed for FTT and FTC Projects.
- (e) Administrative examination of the project proposal in the respective laboratory/unit:
 - i. Budget requirement (excel sheet to be prepared with due justification);
 - ii. Avoid duplicity in capital funds for equipment which are already available with the labs/units and other grants purposes etc. (necessary justifications need to be provided for each and every B/H fund requirement). Only project-specific equipment / minor equipment should be sought. All major/ general usage equipment should be sourced from the Infra budget. Further lab/unit in a network type project should try to utilize the resources available at Nodal/participating Lab/units at the maximum and accordingly the work packages of the proposal should be drafted and planned to exploit such resources in order to minimize capital fund requirement and maximize resource sharing/ utilization.
 - iii. All the TA (Abroad) funds should be sought with proper justification and in adherence with the prevailing CSIR / MoF (DoE) Guidelines for further consideration and needful at Nodal Directorate.

- iv. In the case of a multi-laboratory project (Nodal and Participating Laboratory/Unit case), Nodal PI and Laboratory will be responsible to compile and consolidate all data/information and fund requirements in a single project proposal/ DPR/ SFC document.
- v. All the financial layouts of the proposal should be duly vetted by the respective Finance section of the laboratory/ Institute/unit.
- vi. The proposal should be forwarded by the Director / PME of the Nodal Lab/Unit only to the concerned Nodal Directorate within the deadline.
- (f) All Directorate at CSIR Hqrs. should work in sync to avoid any duplication in any type of project (FTT/FTC/NCP/FBR/MMP/CSIR-FIRST). The preliminary Technical Evaluation of the project proposals by the respective Nodal Directorate at CSIR Hqrs. will be done in terms of:
 - i. Avoiding duplicity in terms of any on-going/past efforts at CSIR or stakeholders' level;
 - ii. Importance of the project proposed at CSIR / National Level including the relevance to the call issued.
 - iii. Observation on proposed Capital and Recurring fund requirement; and
 - iv. Identification and if possible, inclusion of stakeholders in the project.
- (g) There will be two levels of scrutiny: At the internal screening committee under the chairmanship of the Theme Director and External Expert Committee. Project proposals will be placed before the internal screening committee for shortlisting. Based on the recommendations of the internal screening committee, the PIs of the shortlisted proposals will be advised to make a presentation before the External Expert Committee constituted with the approval of the Competent Authority for the final selection of projects under the respective Themes of CSIR. The TOR of the internal and external committee will be taken care by the Nodal Directorate. However, CSIR-FIRST being not directly associated with any Theme, will be primarily submitted and evaluated at RC/AC of the Lab/Unit for submission to CSIR Hgrs. and then at the respective External Expert Committee at CSIR Hgrs. level constituted by Nodal Directorate. The Nodal Co-ordinator of the Nodal Directorate will be responsible for the flawless execution of the process in time time-bound manner.
- (h) CPD being the nodal of the Budget Planning, will communicate the ceiling for the respective FY to the Nodal Directorates. The Nodal Directorates will review the proposed and projected financial layout of the shortlisted projects and revise the same, if needed according to their informed budget ceiling for the respective financial year (in consultation with the respective Lab/Unit) as and if required.
- (i) Ensuring their fund demand well within their informed ceiling, the Nodal Directorates will submit the proceeding/recommendations of the Expert Committee to DG, CSIR (Competent Authority) for approval through CPD. Such approved projects will be implemented after the completion of due process.

- (j) After the Competent Authority approval, CPD will forward file back to the Nodal Directorate for obtaining financial concurrence of the budget requirements of the approved projects from IFD, CSIR.
- (k) After IFD's concurrence, the Nodal Directorate can submit the file along with the following documents to CPD for obtaining final approval of DG, CSIR for implementation of the project/s along with fund sanction/allocation/release for the 1st FY:
 - i. Approved MoM of the Internal screening committee and External Expert Committee and DG's approval of the same (The MoM must include details of submitted project/s along with details of approved projects with duration and FY wise/ Lab Wise fund requirement details); and
 - ii. Financial concurrence from FA, CSIR/IFD.
 - (I) After due examination of such submissions, and fund availability, CPD will seek final approval of DG, CSIR for implementation of the project/s along with sanction/allocation/ release of the fund and subsequently with its recommendation will forward the file to the Nodal Directorate to issue the project/s OM.
 - (m) Nodal Directorate of CSIR Headquarters shall issue the OM with a unique Project Code (as per **Enclosure-3**) and comprehensive FY-wise and Budget sub-head-wise funds details.
 - (n) Nodal Directorate shall submit the file alongwith OM issued to the Budget Section, CSIR Hqrs through CPD (for intimation purpose only) to make sanction/allocation and release of funds for the project.
 - (o) Nodal Directorates are responsible for the completion of entire sequence before mid-March so as to ensure the budget release for the concerned project in the first week of April for smooth execution.

(B) SOPS FOR MISSION MODE PROJECTS (MMP) AND TECHNOLOGY/PRODUCT ORIENTED HEADQUARTERS COORDINATED PROJECTS (HCP) - NEW PROJECT PROPOSALS & FIRST YEAR FUND ALLOCATION/ RELEASE

- (a) Identification of problem/challenge to be addressed through S&T intervention by the Nodal Directorate in consultation with Theme Directors. The directions received from CSIR Society and CSIR Governing Body may also be looked into for the purpose.
- (b) Nodal Directorate shall conduct a Brainstorming Meeting after obtaining approval of DG, CSIR to identify the MMP/HCP to be taken up to address the identified problem/challenge.

- (c) Nodal Directorate to obtain approval of the Competent Authority (DG, CSIR) on the proceedings/recommendations of the Brainstorming Meeting along with inviting concept proposals from relevant CSIR laboratories. Since the project implementation date will be invariably 1st April, the concerned Directorate should start the process well in advance, preferably August / September of the preceding year.
- (d) Formation of Domain Expert Group (considering diversity of the proposal received) with the approval of the Competent Authority for evaluation and fine-tuning of the project proposals/ work packages.
- (e) Nodal Directorate shall ensure that there should not be any duplication of Mission Project with other on-going/past CSIR projects (FTT/ FTC/ NCP/ FBR/ FCP/ MMP/HCP/FIRST etc.) to have better utilization of available CSIR resources.
- (f) Nodal Laboratory shall submit structured proposal in the prescribed SFC/EFC and DPR proforma as enclosed in Enclosure-2 (proposal should also align with the Stage-Gate Model as and if required) incorporating suggestions/ recommendations of Domain Expert Group.
- (g) Administrative examination of the project proposal in the respective laboratory/unit:
 - i. Budget requirement (excel sheet to be prepared with due justification);
 - ii. Avoid duplicity in capital funds for equipments which are already available with the labs/units and other grants purposes etc. (necessary justifications need to be provided for each and every B/H fund requirement). Only project-specific equipment should be sought. All major/ general usage equipment should be sourced from the Infra budget. Further lab/unit in a network type project should try to utilize the resources available at Nodal/participating Lab/units at the max and accordingly the work packages of the proposal should be drafted and planned to exploit such resources in order to minimize capital fund requirement and maximize resource sharing/ utilization.
 - iii. All the TA (Abroad) funds should be sought with proper justification and in adherence with the prevailing CSIR / MoF (DoE) Guidelines for further consideration and needful at Nodal Directorate
 - iv. In the case of a Multi-laboratory project (Nodal and Participating Laboratory/Unit case), Nodal PI and Laboratory will be responsible to compile and consolidate all data/information and fund requirements in a single project proposal/ DPR/ SFC document. Further, for approvals of such proposals, approval of RC/AC of Nodal as well as Participating Labs/units should be annexed in the DPR/SFC documents. The core idea of this is to catalyse networking between labs/units, supporting well-drafted/ formulated project with avoidance of duplication at CSIR level.
 - v. All the financial layout of proposal should be duly vetted by the respective Finance section of the laboratory/ Institute/unit.

- vi. The proposal should be forwarded by the Director / PME of Nodal Lab/Unit only to the concerned Nodal Directorate well within the timeline.
- (h) All Directorate at CSIR Hqrs should work in sync to avoid any duplication in Mission Projects. The preliminary Technical Evaluation of the project proposals by the respective Nodal Directorate at CSIR Hqrs will be done in terms of:
 - i. Avoiding duplicity in terms of any ongoing/past efforts at CSIR or stakeholders' level;
 - ii. Importance of the project proposed at CSIR / National Level
 - iii. Observation on proposed Capital and Recurring fund requirement; and
 - iv. Identification and inclusion of stakeholders in the Mission projects
- (i) CPD being the nodal of the Budget Planning, will communicate the ceiling for the respective FY to the Nodal Directorates. The Nodal Directorates will review the proposed and projected financial layout of the MMP/HCP and revise the same, if needed according to their informed budget ceiling for the respective financial year (in consultation with the respective Lab/Unit) as and if required.
- (j) Ensuring their fund demand well within their informed ceiling, the Nodal Directorates will submit the proceedings/recommendations of the Domain Expert Group to DG, CSIR (Competent Authority) for approval through CPD. Such approved MMP/HCP will be implemented after the completion of due process.
- (k) After the Competent Authority approval, CPD will forward file back to the Nodal Directorate for obtaining financial concurrence of the budget requirements of the approved projects from IFD, CSIR.
- (I) After IFD's concurrence, the Nodal Directorate can submit the file along with the following documents to CPD for obtaining final approval of DG, CSIR for implementation of the MMP/HCP along with fund allocation/release for the 1st FY:
 - i. Approved proceedings of the Domain Expert Group and DG's approval of the same (The proceedings must include project duration and FY wise/ Lab Wise fund requirement details); and
 - ii. Financial concurrence from FA, CSIR/IFD.
- (m) After due examination of such submissions, and fund availability, CPD will seek final approval of DG, CSIR for implementation of the MMP/HCP along with sanction/allocation/ release of the fund and subsequently with its recommendation CPD will forward the file back to the Nodal Directorate to issue the project OM.

- (n) Nodal Directorate of CSIR Headquarters shall issue the OM with a unique Project Code (as per Enclosure-3) and comprehensive FY-wise and Budget sub-head-wise funds details.
- (o) Nodal Directorate shall submit the file alongwith OM issued to the Budget Section, CSIR Hqrs through CPD (for intimation purpose only) to make sanction/allocation and release of funds for the project.
- (p) Nodal Directorates are responsible for the completion of entire sequence before mid March so as to ensure the budget release for the concerned project in the first week of April for smooth execution.

(C) SOPs FOR NMITLI PROJECT

(a) Soliciting conceptual ideas/proposals

i. Through press advertisement in leading national newspapers inviting expression of interest (in the form of ideas/conceptual proposals) from Indian industry under the scheme;

And / Or

- ii. Posting Advertisements on the website and Social Media (Facebook and Twitter of CSIR-India).
- iii. The proposal is to be submitted in the prescribed proforma as enclosed at **Enclosure 4**.

(b) Development of conceptual proposals into projects

- i. Compilation of the conceptual ideas/proposals received within the specified time;
- ii. Prima facie evaluation of the conceptual ideas/proposals for their conformance to NMITLI objectives by a committee of experts drawn from different fields (set up by DG, CSIR)-Screening Committee; and
- iii. Development of shortlisted idea / conceptual proposal into project proposal with the guidance of national experts (Domain Expert Group) and concerned industry partner.

(c) Approvals

- i. The final project proposal as developed will be submitted to the High-Powered Committee for consideration and recommendation.
- ii. The participating industry/ organization shall submit the structured proposal in the prescribed SFC/EFC and DPR proforma as enclosed in **Enclosure-2** if the proposal is recommended by the High-Powered Committee for further consideration.
- iii. The project proposal along with HPC recommendations will then be put up to DG, CSIR / SFC / GB for final consideration and approval.

(d) Eligibility

- i. Companies registered in India and having more than 50% of shareholding by Indians/Non-resident Indians or less than 50% shareholding by Indians/Non-resident Indians but with a manufacturing base in India.
- ii. The Company must have an R&D Centre, registered with the Department of Scientific and Industrial Research (DSIR), Government of India. If not, the designated firm to undertake steps to get its R&D Centre recognized within 12 months.
- iii. Up to two projects of any company will be supported under the NMITLI Scheme at any given time.

(e) Financial Support

- i. The financial support is in the form of grant-in-aid to the institutional partners in the public domain and as a soft loan with 3% interest to the private sector industrial partners having more than 50% of shareholding by Indians/Non-resident Indians and with 5% interest to the private sector industrial partners having less than 50% shareholding by Indians/Non-resident Indians but with manufacturing facilities in India. The first year's support to each of the partners is released by CSIR after the signing of the agreement.
- ii. The repayment of the loan component as well as interest by the industry partners is in 10 equal yearly installments and recovery should commence within six months of the completion of the project.

(f) First-Year Fund Allocation/ Release

- i. With Competent Authority's approval, IMD may obtain the financial concurrence of the budget requirements as proposed in the approved projects from IFD, CSIR.
- After IFD's concurrence, the Nodal Directorate can submit the file along with the following documents to CPD for obtaining approval of DG, CSIR for implementation of the project/s along with fund allocation/release for the 1st FY:
 - a) Approved proceedings of the High Powered Committee (HPC) and Domain Expert Group (The proceedings must include approved duration and FY wise/ Lab wise/Industry wise fund requirement details of the project); and
 - b) Financial concurrence from FA, CSIR/IFD.
- iii. After due examination of such submissions, and fund availability, CPD will seek final approval of DG, CSIR for implementation of the project along with allocation/ release of the fund and subsequently with its recommendation, CPD will forward the file back to the Nodal Directorate to issue the project OM.

- iv. Nodal Directorate of CSIR Headquarters shall issue the OM with a unique Project Code (as per Enclosure-3) and comprehensive FY-wise and Budget sub-head-wise funds details.
- v. Nodal Directorate shall submit the file alongwith OM issued to the Budget Section, CSIR Hqrs through CPD (for intimation purpose only) to make allocation and release of funds for the project.

(D) SOPs FOR FCP AND CSIR UNITS PROJECTS

CSIR-Units' projects will be executed as HCP. As FCP and CSIR Units HCP not being directly associated with any Theme, they will primarily be submitted and evaluated at RC/AC of the Lab/Unit for submission to CSIR Hqrs and then at the respective External Experts Screening Committee at CSIR Hqrs level constituted by the Nodal Directorate. The SOP/Guideline for the selection, implementation and monitoring of Facility Creation Project (FCP) and CSIR Units' projects is enclosed at **Enclosure-5**. The laboratory/ institute/unit shall submit the structured proposal in the prescribed SFC/EFC and DPR proforma as enclosed in **Enclosure-2**.

(E) SUBSEQUENT YEAR ALLOCATION IN THE PROJECT UNDER ALL CATEGORIES OF THE PROJECTS

- a) All CSIR funded project's progress should be periodically reviewed by the Task Force and External Expert Committee/ Monitoring Committee.
- b) The Nodal Directorate should obtain the approval of the Competent Authority for proceedings/ recommendations of External Expert Committee/ Monitoring Committee.
- c) The following documents need to be submitted by Nodal Directorate for placing a fund release request to CPD:
 - (i) Competent Authority's approval for the External Expert Committee/Monitoring Committee proceedings/ recommendations;
 - (ii) Sanction OMs issued by Nodal Directorate;
 - (iii) Fund allocation/ release request submission from the Nodal Lab duly signed by Nodal PI & Head, PME, CoFA/FAO, Director of the concerned Lab and forwarded by Director/Head of Lab/Unit for all category of projects except NMITLI Projects (Nodal Lab will also be responsible to submit the fund allocation/ release request for all the participating labs/units. To avoid any undesirable delay, such request can be made in a single request submission only); and
 - (iv) In case of NMITLI Projects, fund allocation/ release request submission from the participating industry/ institute/ laboratory.
- d) After examination, CPD will get the competent authority's approval and recommend the same to the Budget section for necessary fund release.

(F) **PROJECT MONITORING**

The term "Project Monitoring" becomes one of the vital segments in the overall R&D activities in CSIR. The major role of project monitoring is not only in aligning the project with the initially established schedule but also ensuring the seamless availability and right usage of resources such as manpower, material and finances. Additionally, this assures that consistent effort has been put in uniformly throughout the project duration and prevents any fire-fighting situation which could potentially lead to substandard and/or compromised outcomes. Thus, project monitoring promises timely detection and response for any issues occurring in the project as well as prevention of any problem occurrences and avoiding delays. It is very much required to run the projects smoothly and efficiently in a time and cost bound manner.

All projects funded by CSIR Hqrs viz. FBR, NCP, FIRST, FTT, FTC, MMP, HCP, FCP, CSIR Units projects and other programs' (like CSIR-Jigyasa, Skill Development etc.) will be monitored through Task Force and Extremal Monitoring Committee. The Task Force shall meet bi-monthly/ quarterly. The Extremal Monitoring Committee shall meet once in six months. The Task Force meeting shall be organized by the Nodal Lab/Unit of the project. The concerned directorates of CSIR Hqrs dealing the project shall organize the meeting of the External Monitoring Committee. The Office Memorandum in this regard shall be issued by CSIR Hqrs in due course of time.

(G) PROJECT COMPLETION AND CLOSURE

Proper documentation of the project results is very essential. These reports not only provide information on the results achieved vis-a-vis targets but also help the Management to make an analysis of the success of the project. A proper completion report of the project will support Management Information System (MIS) of an organization. Every effort should be made to prepare the project completion report immediately after the completion of the project. Following guidelines may be followed in this regard:

- All the projects completed as per schedule shall have a project completion report (PCR). The Nodal laboratory of the respective project/s are responsible for preparation of project completion report whose proforma (category wise) is given in **Enclosure 6**.
- Before submission of the PCR to the Hqrs, the PCR (as per appropriate format) should be prepared and placed before the forthcoming Research Council / Advisory Committee meeting of the concerned Lab /Unit for consideration and "in-principle" approval. Subsequent to the same, the PCR should be submitted to the Nodal Directorate for obtaining the approval of the External Monitoring Committee. The approval of the External Monitoring Committee can be obtained by circulation or by conducting the meeting of the committee.
- The PCR should be submitted to the Nodal Directorate, CSIR Hqrs. with below adherence:
 - (i) All the pages of the PCR should be signed by the Nodal PI;

- (ii) Along with PCR, there must be a detailed Financial Statement indicating Year Wise / Budget Head Wise Total Allocation and Total Expenditure duly signed by Director/ Head of the Lab/Unit, F&AO or CoFA (as the case may be), Nodal PI and H/PME; and
- (iii) All the other relevant documents such as approved MoM of LSG, External Monitoring Committee, Steering Committee, CSIR OMs (related to project approval, Time Overrun, Cost Overrun, Project Revision, RCE etc.), Research Council's /Advisory Committee's approvals of PCR and any other document seems relevant should be attached as Annexures.
- The Nodal Directorate will examine the submitted PCR for its completeness and then submit the same to the DG, CSIR for the approval for the closure of the project.
- Any new worthy idea, suggestion emanated from the submitted PCR and its approvals may be discussed in the forthcoming HoD's Meeting/ Directors' Meeting chaired by DG, CSIR and if found worthy and "In-principle" approved by the Competent Authority for further exploration/ consideration, can be forwarded to the respective Nodal Directorate/Theme Strategic Group/Mission Director for further examination and needful (as and if required). The decision taken on all such ideas must be updated to the DG, CSIR in forthcoming HoD's and Directors' Meeting to take all such initiations to a logical point.

Note:

- I. Technology Management Directorate (TMD) is the Nodal Directorate for CSIR-FIRST, FBR, NCP, Society/Ministry driven MMP; Innovation Management Directorate (IMD) is the Nodal Directorate for FTT, FTC, Industry driven MMP and HCP categories and CPD is the nodal Directorate for the FCP, CSIR Units Projects and any assigned HCP Projects. HRDG is the Nodal for CSIR-Jigyasa and HRDC is the Nodal for Skill Development Programme.
- II. The concerned Directorate will be the full custodian of the respective projects (evolving the concept, implementation, monitoring, financial management, closure etc.)

ENCLOSURE-1

PROJECT PROPOSAL FORMAT

For CSIR-FIRST Project

- 1. Title of the project
- 2. Abstract (max 300 words)
- 3. Introduction (max 1000 words)
- 4. Global Scenario (max 400 words):
- 5. Hypothesis/Questions addressed (100 words):
- 6. Objectives/aims (bullet points):
- 7. Research Design & Methodology for each objective with time line:
- 8. Strength and weaknesses of the study:
- 9. Uniqueness and Significance and Anticipated outcomes:
- 10. Any societal impact:
- 11. Budget (in lakhs) with justification:

	1 st	2 nd	Total
Heads	Financial Year	Financial Year	
[A] Capital			
Apparatus & Equipment			
Total [A]			
[B] Recurring			
T.AIndia			
Chemicals, Consumables,			
ORE and Tech HR			
Maintenance			
Contingency			
Total [B]			
Grand Total [A+B]			

PROJECT PROPOSAL FORMAT

For NCP & FBR Projects

PART-A: EXECUTIVE SUMMARY

Full Title of Proposal	
(With Acronym)	
Category of Project	
Theme	
(With Subtheme)	
Nodal Laboratory	
Participating Laboratory(ies)	
Contact Details	
Principal Investigator (PI)	
Co-Pl	
Total Cost (Rs in crores)	
Project Duration (in months)	
Defining the Problem (100 words max):	
Abstract of Project (300 words max.)	
Key words (6 max.):	
Current TRL	Targeted TRL:
Outcomes Envisaged (150 words max.)	

PART-B: PROPOSAL DETAILS

1. Scientific and Technical Summary

1.1. Concept, Relevance and Objectives

- **1.1.1.** Concept:
- **1.1.2.** Scientific Relevance (Why the project needs to be done):
- 1.1.2.1 The Problem Addressed:
- 1.1.2.2 Current general science/technology level:
- 1.1.2.3 Advantage of the proposed work:
- 1.1.2.4 Science/Technology Gap (White space):
- 1.1.2.5 Value Addition proposed:
- 1.1.3 Objectives (What the project envisages to achieve)
- 1.1.4 Novelty of the proposed project work
- **1.2 Envisaged Delivery** (in brief, 100 words max.):
- 1.2.2 Scientific Knowledge Creation
- 1.2.3 Technology Development
- 1.2.4 Process/Product Development

1.3 Competitive Landscape and Benchmarking

- 1.3.2 International State of Art (including competition
- 1.3.3 National State of Art (including competition):
 - 1.3.4 IPR Mapping: The technologies, processes and products generated are novel and IP will be protected through filing suitable applications.
- 1.3.5 Existing Knowledge Gaps and Scope of Innovation

1.4 **Project strategy**:

2. Detailed Work Plan Proposed

2.1 Verticals and Work Packages List

Vertical	Work package	Lead Participant	Participants

2.2 Vertical/Work Package Details:

Vertical	
Work package	
Participant (s)	
Objectives:	
Description of wor	<
Deliverables	

2.3 Milestone Details

Milestone summary (quarterly):

Milestone no.	WPs involved	Expected date of completion	Mode of validation

1.4 Anticipated Potential (max 300 words) – Market, Societal, Global S&T positioning, etc.

Resources needed

- **1.4.1** Capital Resources:
- **1.4.2** Manpower Resources:
- **1.4.3** Financial Resources:
- **1.4.3.1** Total Proposed Outlay (Rs in Crore):
- **1.4.3.2** Summary of Financial Requirement:

Hoade	1 st	2 nd	Total
	Financial Year	Financial Year	
[A] Capital			
Works & Services			
Apparatus & Equipment			
Total [A]			
[B] Recurring			
T.AIndia			
Chemicals, Consumables, ORE and Tech HR			
Maintenance			
Contingency			
Total [B]			
Grand Total [A+B]			

Project Leader	PME Head	COFA	Director
-			

1.4.3.3 Itemized budget justification

A: Capital (each sub-head)

Apparatus & Equipment

SI. No	Description of the item	Cost (In Lakhs)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
	Total	

B: Recurring (each sub-head)

3. Project Delivery

1.1 Anticipated success rate (max 100 words):

1.1.1 Project Outputs

1.1.2 Project Outcome

1.1.3 Impact Envisaged: Direct benefit to Society/Nation

		Description of specific impact
Soci	o-Economic Impact	
а.	Industry Impact	
b.	Societal Impact	
C.	Strategic Sector Impact	
d.	Environmental Impact	
е.	Others (please specify)	

1.2 Follow-up Envisaged

1.3 Any other Information

PART-C: SMART card of the program

Title	
Goal(s)	
Reason this goal is important	

Concept	Description
<u>Specific</u> Exactly what is it you want to achieve? A good goal statement explains the what, why, how and who.	
<u>M</u> easurable You must be able to track progress and measure the result of your goal. A good goal statement answers the question, how much or how many. How will I know when I have achieved my goal?	
<u>Agreed</u> Your goal must be relevant to your stakeholders and agreed with them. Examples of people to agree your goal with are your collaborator, clinician and/or technology deployment partner.	
<u>R</u> ealistic Your goal should be stretching, but realistic and relevant to CSIR/India. Make sure the actions you need to take to achieve your goal are things within your control. Is your goal achievable?	
<u>T</u> ime-Bound Goals must have a deadline. A good goal statement will answer the question, when will I achieve my goal? It's a good idea to set some short-term milestones along the way to help you measure progress.	

PROJECT PROPOSAL FORMAT

CSIR Fast-Track Translation (FTT) Project

- 1. Theme
- 2. Title of the Project
- 3. Keywords (10; should indicate sector, specific problem, type, industry/user, product etc.)
- 4. Nodal Laboratory
- 5. Participating Laboratory (ies)
- 6. Contact Details (Name, Email and Mobile Number)
 - Principal Investigator (PI)
 - Co-Pl
- 7. Total Project Cost (Rs. in lakhs)
 - Capital
 - Recurring
- 8. Project Duration (In months)
- 9. Technology Readiness Level
 - Current
 - Targeted
- 10. Stage I Ideation Information
 - 10.1. Context and Background

Please provide the following information in this section

- 10.1.1. Brief Summary (1 Paragraph)
- 10.1.2. State of the Art Review (Not more than 5-Year-Old References)
- 10.1.3. Development Positioning (Novel/ Incremental development/ ready to use)
- 10.1.4. Identification of Deliverable(s) (Product/ Process/ Technology/S&T Service/ S&T intervention)
- 10.1.5. Target Sector: (Industry/ Society/ Services/ others)
- 10.1.6. Project Type: (Gap filling/ Critical/ Enabling/ Disruptive)
- 10.1.7. Project Objectives

10.2. Proposal Analysis

Please provide the following information in this section

10.2.1. Existing Gaps and Cost to Benefit Analysis

10.2.2. Impact Analysis

	Description of specific impact
Socio-Economic Impact	
Industry Impact	
Improvement in Quality of Life	
Environment Conservation	
Others (please specify)	

11. Stage II – Scoping Information

11.1. Proposal Analysis

Please provide the following information in this section

- 11.1.1. IP study Existing IP Landscape and Scope for potential IP
- 11.1.2. Existing Commercial Solutions National and international USPs, technical gaps with justifications for the proposed technology

11.2. Project Proposal

Please provide the following information in this section

- 11.2.1. Detailing the idea with Broad Technical Specification
- 11.2.2. Time frame and overall budget required
- 11.2.3. Preliminary Results (if any)

11.2.4. Project details in brief

Торіс	Description
The Problem to be addressed	
The proposed approach	
Process/ Product	At the initiation of the project:
specifications	At the completion of the project:
Technology Readiness	At the initiation of the project:
Level (TRL)	At the completion of the project:
Delivery Steps proposed:	
Commercialization/ Outreach of the Project	

11.3. Risk Analysis

Please provide the following information in this section

11.3.1. SWOT analysis

11.3.2. Potential Risks and Impediments – Pre-mortem

11.3.3. Regulatory/ legal/ ethical approval required

12. Stage III - Building Business Case and Plan

12.1. Executive summary

- What is the need?
- What is being proposed?
- How it will be done/ achieved?
- What are the envisaged deliverables including enhancement of Technology Readiness Level (in bullets)?

13. Stage IV- Development

The Proposed Work Plan: Project components, Work plan and Timeframe: (Modularizing the projects into sub-stages of 6 months each)

Work Plan	Sub Stage I 1-6 (months)	Sub Stage II 7-12 (months)	Sub Stage III 13-18 (months)	Sub Stage IV 19-24 (months)

Sub-Stage	КРІ	Milestone/ SMART Goal
1		
Ш		
ш		
IV		

14. Potential risks and Mitigation in the development phase

S.No	Risks/Impediments Identified	Phase of the project	Impact on the project	Mitigation
1	Provide an exhaustive list of potential risks for increasing the success probability of the project. This may include legal/any other issues to be addressed and also potential risks as identified in the preliminary study.			

15. Stage V –

S.No	Action Item	Approximate Timeline	Comments
1.		T₀ + weeks/months (T₀-Date of completion of technology development)	

15.1. Testing/Validation plan for the proposed technology

15.2. Regulatory/legal/ethical approval required for development/ testing/ commercialization

S.No	Approval Required	Project Phase	Approving body	Requirements for obtaining approval
1.	Obtaining regulatory approval, certification such as EMI/EMC (for electronic), FSSAI (for food products), BIS, CDSCO (for pharmaceutical drugs), PESO (for flammable, explosive or high- pressure materials to be stored), etc.			

16. Itemized Budget –

Heads	1 st Financial Year	2 nd Financial Year	Total
[A] Capital			
Work & Services			
Apparatus & Equipment			
Total [A]			
[B] Recurring			
T.AIndia			
Chemicals, Consumables,			
ORE and Tech HR			
Maintenance			
Contingency			
Total [B]			
Grand Total [A+B]			

A. Itemized Justification of Budget (Cumulative)

A: Capital:

- **B: Recurring**
- 17. Stage VI Commercialization/ Business Plan

- 17.1. Deployment Plan:
 - a. Public partner:
 - b. Industry partner:
 - c. Socio-economic organizations:
 - d. Target population:
 - e. Any other:
- 17.2. Follow Up envisaged (Scale-up)

PROJECT PROPOSAL FORMAT

CSIR Fast-Track Commercialization (FTC) Project

- 1. Theme
- 2. Identified Product / Prototype/ Technology for FTC
- 3. Title of the Project
- 4. Keywords (10; should indicate sector, specific problem, type, industry/user, product etc.)
- 5. Nodal Laboratory
- 6. Participating Laboratory (ies)
- 7. Contact Details (Name, Email and Mobile Number)
 - Principal Investigator (PI)
 - Co-Pl
- 8. Total Project Cost (Rs. in lakhs)
 - Capital
 - Recurring
- 9. Project Duration (In months)
- 10. Technology Readiness Level
 - Current
 - Targeted
- 11. Stage I Ideation Information
 - 11.1. Context and Background

Please provide the following information in this section

- 11.1.1. Brief Summary (1 Paragraph)
- 11.1.2. State of the Art Review (Not more than 5-Year-Old References)
- 11.1.3. Development Positioning (Ready for deployment / Needs Finetuning/Validation/Field Trials)
- 11.1.4. Identification of Deliverable(s) (Product/ Process/ Technology/S&T Service/ S&T intervention)
- 11.1.5. Target Sector (Critical/ Enabling/ To Meet Demand)

11.1.6. Project Objectives

11.2. Proposal Analysis

Please provide the following information in this section

- 11.2.1. The problem analysis Problem in Perspective
 - 11.2.1.1. Current level of the development of Identified Product / Prototype / Technology
 - 11.2.1.2. Advantage of the proposed FTC
 - 11.2.1.3. Technology/S&T Gap/Demand-Supply Gap
 - 11.2.1.4. Affordability/Price Competitiveness
 - 11.2.1.5. Value Addition
- 11.2.2. Existing Gaps and Cost to Benefit Analysis Techno-economic Analysis of the Product / Technology with Internal Rate of Returns and Break-even time
- 11.2.3. Impact Analysis

Nature of Impact	Description of specific impact
Socio-Economic Impact	
Industry Impact	
Improvement in Quality of Life	
Environment Conservation	
Others (please specify)	

11.2.4. Global / National Mission & NITI Aayog Directives

11.2.5. Level & Type of Association with Stakeholder/ Industry

- 12. Stage II Scoping Information
 - 12.1. Proposal Analysis Deeper

Please provide the following information in this section

- 12.1.1. IP study Existing IP Landscape and Scope for Potential IP
- 12.1.2. Existing Commercial Solutions National and international USPs, technical gaps with justifications for the proposed technology
- 12.1.3. Interaction with the identified industries for finalizing broad specifications
- 12.2. Project Proposal

Please provide the following information in this section

- 12.2.1. Detailing the idea with Broad Technical Specification
- 12.2.2. Project Deliverable
- 12.2.3. Time frame and overall budget required
- 12.2.4. Preliminary Results (if any)
- 12.2.5. Project details in brief

Торіс	Description
The proposed approach	
Technology Readiness	At the initiation of the project:
	At the completion of the project:
Delivery Steps proposed:	Starting Point (Current Status)
	Step 1:
	Step 2:
	Target Point (Final Status)
Commercialization/	Product/ Technology/ Services
Outreach of the Project	Technology Transfer
	Commercialization
	Startup / Spinoff
	Deployment Level
	Outreach

12.3. Risk Analysis

Please provide the following information in this section

- 12.3.1. SWOT analysis
- 12.3.2. Potential Risks and Impediments Pre mortem
- 12.3.3. Regulatory/ legal/ ethical approval required

13. Stage III – Building Business Case and Plan

- 13.1. Executive summary
 - What is the need?
 - What is being proposed?
 - How it will be done/ achieved?

- What are the envisaged deliverables including enhancement of Technology Readiness Level (in bullets)?
- 13.2. Third-party Market Survey Business Plan and Report
- 13.3. The Proposed Work Plan: Project components, Work plan and Timeframe: (Modularizing the projects into sub-stages of 6 months each)

Work Plan	Sub Stage I 1-6 (months)	Sub Stage II 7-12 (months)

Sub-Stage	КРІ	Milestone/ SMART Goal
1		
Ш		

13.4. Potential risks and Mitigation in the development phase

S.No	Risks/Impediments Identified	Phase of the project	Impact on the project	Mitigation
1.	Provide exhaustive list of potential risks for increasing the success probability of the project. This may include legal/any other issues to be addressed and also potential risks as identified in the preliminary study.			

14. Stage V –

14.1. Testing/Validation plan for the proposed technology

S.No	Action Item	Approximate Timeline	Comments
1.		T_0 + weeks/months (T_0 -Date of completion of technology development)	

14.2. Regulatory/legal/ethical approval required for development/ testing/ commercialization

S.No	Approval Required	Project Phase	Approving body	Requirements for obtaining approval
1.	Obtaining regulatory approval, certification such as EMI/EMC (for electronic), FSSAI (for food products), BIS, CDSCO (for pharmaceutical drugs), PESO (for flammable, explosive or high- pressure materials to be stored), etc.			

15. Itemized Budget -

llaada	1 st	2 nd	Total
Heads	Financial Year	Financial Year	
[A] Capital			
Work & Services			
Apparatus & Equipment			
Total [A]			
[B] Recurring			
T.AIndia			
Chemicals, Consumables, ORE and Tech HR			
Maintenance			
Contingency			
Total [B]			
Grand Total [A+B]			

A. Itemized Justification of Budget (Cumulative)

- A: Capital:
- **B:** Recurring

16. Stage VI - Delivery and Deployment/Commercialization Plan

- 16.1. Project Delivery Plan
- 16.2. Deployment Plan
 - 16.2.1.1.1. Public partner
 - 16.2.1.1.2. Private partner

- 16.2.2. Socio-economic organizations
- 16.2.3. Target population
- 16.2.4. Any other

ENCLOSURE-2

GENERIC STRUCTURE OF A DETAILED PAPER/ DETAILED PROJECT REPORT (DPR)

(i) **Context/Background**: This section should provide a brief description of the sector/subsector as well as the national strategy and policy framework. This section should also provide a general description of the scheme/project being posed for appraisal.

(ii) **Problems to be addressed**: This section should elaborate the problem to be addressed through the project/scheme at the local/regional/national level. Evidence regarding the nature and magnitude of the problems should be presented, supported by baseline data/survey/ reports etc.

(iii) Aims and Objectives: This section should indicate the development objectives proposed to be achieved, ranked in order of importance. The outputs/deliverables expected for each development objective should be spelt out clearly.

(iv) **Strategy**: This section should present an analysis of alternative strategies available to achieve the development objectives. Reasons for selecting the proposed strategy should be brought out. Basis for prioritization of locations should be indicated (wherever relevant). Opportunities for leveraging government funds through public-private partnership or savings through outsourcing must be explored. This section should also provide a description of the ongoing initiatives, and the manner in which duplication can be avoided and synergy created with the proposed scheme/project.

(v) Target Beneficiaries: There should be clear identification of target beneficiaries. Stakeholder analysis should be undertaken, including consultation with stakeholders at the time of scheme/project formulation. Options regarding cost sharing and beneficiary participation should be explored and incorporated in the project. Impact of the project on weaker sections of society, positive or negative, should be assessed and remedial steps suggested in case of any adverse impact.

(vi) Legal Framework: This section should present the legal framework, if relevant, within which the scheme/project will be implemented, as well as the strengths and weaknesses of the legal framework in so far as it impacts on achievement of stated objectives.

(vii) Environmental Impact: Environmental Impact Assessment should be undertaken, wherever required, and measures identified to mitigate the adverse impact, if any. Issues relating to land acquisition, diversion of forest land, wildlife clearances, rehabilitation and resettlement should be addressed in this section.

viii) Technology: This section should elaborate on the technology choices, if any; evaluation of the technology options, as well as the basis for choice of technology for the proposed project.

(ix) **Managernent**: Responsibilities of different agencies for project management or scheme imptementation should be elaborated. The organization structure at various levels, human resource requirements, as well as monitoring arrangements should be clearly spelt out.

(x) Finance: This section should focus on the cost estimates, budget for the scheme/project, means of financing and phasing of expenditure. Options for cost sharing and cost recovery (user charges) should be explored. Infrastructure projects may be assessed on the basis of the cost and tenor of the debt. Issues relating to project sustainability, including stakeholder commitment, operation-maintenance of assets after project completion and other related issues should also be addressed in this section.

(xi) **Time Frame**: This section should indicate the proposed *zero* date for commencement and also provide a PERT/CPM chart, wherever relevant.

(xii) Cost Benefit Analysis: Financial and economic cost-benefit analysis of the project should be undertaken wherever such returns are quantifiable. Such an analysis should generally be possible for infrastructure projects, but may not always be feasible for public goods and social sector projects. Even in the case of latter, the project should be taken up for appraisal before the PIB and some measurable outcomes/deliverables suitably defined.

(xiii) **Risk Analysis**: This section should focus on identification and assessment of implementation risks and how these are proposed to be mitigated. Risk analysis could include legal/contractual risks, environmental risks, revenue risks, project management risks, regulatory risks, etc.

(xiv) Outcomes: Success criteria to assess whether the development objectives have been achieved should be spelt out in measurable terms. Base-line data should be available against which success of the project will be assessed at the end of the project (impact assessment). Similarly, it is essential that base-line surveys be undertaken in case of large, beneficiary-oriented schemes. Success criterion for scheme deliverables/outcomes should also be specified in measurable terms to assess achievement against proximate goals.

(xv) Evaluation: Evaluation arrangements for the scheme/project, whether concurrent, midterm or post-project should be clearly spelt out. It may be noted that continuation of schemes from one period to another will not be permissible without a third-party evaluation.

Last but not the least, a self-contained **Executive Summary** should be placed at the beginning of the document. In cases where only a Concept Paper or Feasibility Report is attached to the *EFC/PIB* proposal, it should cover the main points mentioned in the generic structure above.

FORMAT FOR EFC/SFC MEMORANDUM FOR APPRAISAL OF NEW SCHEMES

Summary Sheet

S. No.	Outline	Details
1.	Name of the Scheme	
2.	Nature of the scheme (CSS/CS/Scheme under umbrella)	
3.	Duration	
4.	Proposed Outlay	
5.	Funding pattern	
6.	Source of Funding	
7.	Objectives	
8.	Target Beneficiaries	
9.	Major Interventions/ Components	
10.	Name of schemes with which convergence is sought along with Ministries/ Departments	
11.	Manpower Requirement	
12.	Measurable outputs/ outcomes targeted at the end of scheme duration	

FORMAT FOR EFC/SFC MEMORANDUM FOR APPRAISAL OF NEW SCHEMES

Document's Checklist

S.No	Document	Attached	Annexure	Remarks (If any)			
		(Yes/No/NA)	Number				
1.	Concept Paper						
2.	Evaluation Report						
3.	Feasibility / pilot study report						
4.	Gap / Need Analysis Report						
5.	Stakeholder Consultation Report						
6.	Approval and Clearances (Such as Land Acquisition, Environmental Clearance etc.)*						
6.1							
6.2							
7.	Response to Comments						
	*to be enlisted as 6.1, 6.2 and so on by Ministry/Departments as applicable at approval stage						

1. General

- 1.1 Title of the Scheme
- 1.2 Sponsoring Agency (Ministry/ Department/Autonomous Body or Undertaking)
- 1.3 Proposed duration of the Scheme
- 1.4 Nature of the Scheme: Central Sector Scheme/ Centrally Sponsored Scheme (Please specify if it is under an umbrella)
- 1.5 Total estimated financial outlay of the proposed Scheme
- 1.6 Funding Pattern
- 1.7 Provide details of schemes under it along with proposed outlays. Details of subschemes (if any) under the scheme along with proposed outlays.

Details of the scheme (year-wise)

Umbrella Scheme	Scheme	Sub Scheme	FY	Proposed Outlay
(Column may be deleted if not applicable)		(Column may be deleted if not applicable)		

1.8 (A) Is the scheme created by restructuring/merger/renaming of previously existing scheme(s)/sub-scheme(s)? *If yes, please mention the name of the scheme(s) proposed to be merged/dropped/ rationalized?*

(B) Please mention whether the old scheme(s) was evaluated? If yes, please attach Evaluation report.

(C) What were the main findings of the evaluation and how are they incorporated in the scheme design (please use the table given below)?

Total r	Total no. of recommendation listed in evaluation report								
S.No.	Recommendatio n of the evaluation report	Has an action been taken on this recommendation ? (Yes/No)	If yes, please elaborate the action or revision in scheme proposal undertaken	If no, please explain the reasoning for exclusion of this recommendation					

- 1.9 Details of In-principle approval-
- 1.10 (A) Concept Paper details including findings of Gap/Need analysis and Feasibility/Pilot Study along with a summary justification for the new scheme.
 - (B) Details of stakeholder consultations undertaken. Please include details of state governments consultation, particularly in CSS scheme.
- 1.11 Overlap with any existing scheme/sub-schemes in this Ministry/Department/any other Ministry/Department? If yes, please fill below table highlighting the aspects in which there is an overlap and how will the scheme use this convergence to save public resources?

Name of Ministry/ Departments	Scheme/Sub- scheme Name (with which there is convergence)	Is there any (And details t	convergence a thereof)	How will the scheme use this convergence?	Other remarks		
		Design stage	Implementati on stage	M&E stage	others		
		For instance, in objectives, outcome, outputs, activities or target groups of the two schemes	For instance, in implementing agencies, human resources at any level, technologies, financial resources, PMUs, others	For instance, in monitoring bodies, monitoring mechanisms (MIS, data collection), joint evaluations, others			

1.12 Whether the proposal is secured against natural/man-made disasters like floods, cyclones, earthquakes, tsunamis, etc. If the proposal involves creation /modification of structural and engineering assets or change in land use plans, disaster management concern should be assessed, and specifically commented upon.

2. Outcome and Deliverables

- 2.1 Objectives of the Scheme
- 2.2 Indicate year-wise targets set for outputs and outcomes of the scheme along with the activities to be undertaken and inputs to be used in the form of measurable indicators in the below mentioned table. Data sources for each indicator must be clearly mentioned along with key assumptions and risks involved (if any) along with their severity as perceived by the proposer. Baseline data (Year and Value) should also be benchmarked and mentioned for all indicators.

	Objective Statement	Indicators	Means of Verification	Important Assumptions	Risks	s Involved	Baseline Year	Baseline Value			Target		
			(Data Source)		Risk Identified	Severity of Risk (Low/Medium/ High)			Fiscal Year "A-B"	Fiscal Year "B-C"	Fiscal Year "C-D"	Fiscal Year "D-E"	Fiscal Year "E-F"
Outcomes													
Output													
Activity													
Inputs													
Output Efficiency: - the ratio of targeted change in outputs to budgeted expenditure (to be calculated for each year) taken on key output indicators													

3. Target Beneficiaries

3.1 (A) Please specify the target beneficiaries in terms of location, area and segment of population, industries, companies, institutions, etc.

B) Please give the details of coverage of target population and basis for selection of the target beneficiaries.

3.2 Is there a specific intervention targeted at any of demographics mentioned in the below table?

Is there a specific intervention targeter the below mentioned demographics?	If yes, please elaborate of specific interventions targete			
Demographic	Yes/No	demographic. If no, please mention why?		
Marginalized social groups namely SC, ST, Persons with disability (Divyangjan), minorities and other vulnerable groups.				
Women				
North east, Himalayan LWE, Island territories and other backward areas.				

- 3.3 In case of beneficiary-oriented schemes, indicate whether the scheme is a Direct Benefit Transfer (DBT) scheme inter alia indicating the mechanism for identification of target beneficiaries through Aadhaar authentication, provision for online application and fund disbursement mechanism (Disbursement of funds should be done through Aadhaar Enabled Payment System (AEPS) to ensure Aadhaar authentication, and not merely Aadhaar seeding).
- 3.4 (A) Are Panchayati Raj Institutions and Urban Local Bodies involved in implementation?
 - (B) If yes, elaborate on their involvement.

(C) Please also comment on preparedness and ability of the local bodies to undertake this.

(D) If no, please mention the reason for the exclusion of PRis/ULBs in the implementation process.

4. Scheme Financing

- 4.1 Indicate the sources of finance for the Scheme: budgetary support, extra-budgetary sources, external aid, state share, etc. (Total amount year wise).
- 4.2 If external sources are intended, the sponsoring agency may be indicated, as also whether such funds have been tied up?

5. Cost Analysis

5.1 Please provide year-wise and component-wise cost estimates for the scheme in the below provided table and indicate how will they be shared by the state governments, local bodies, user beneficiaries or private parties. Also segregate them into recurring and non-recurring expenses

5.2 The basis of these cost estimates along with the reference dates for normative costing

5.3 In case pre-investment activities or pilot studies are being carried out, how much has been spent on these?

5.4 In case the scheme involves pay out of subsidy, the year wise and component wise expected outgo may be indicated

5.5 In case the land is to be acquired, the details of cost of land and cost of rehabilitation/resettlement, if any.

5.6 In case committed liabilities are created, who is to bear the same? In case assets are created, arrangements for their maintenance and upkeep

Scheme	Recurring/	Cos	st Estimat	te/Propo	sed Out	lay	Cost sha	ring at dif	ferent lev	els	Remarks
cost	Fiscal Year "A-B"	Fiscal Year "B-C"	Fiscal Year "C-D"	Fiscal Year "D-E"	Fiscal Year "E-F"	Central Share	State Share	Local Body/ 3 rd tier share	Others		

6. Approvals and Clearances

6.1 Requirement of mandatory approvals and clearances from various local, state and national bodies and their availability may be indicated in a tabular form (land acquisition, environment, forestry, wildlife etc.)

S.No	Approval/Clearances	Agency Concerned	Availability (Y/N)

7. Human Resources

7.1. Please fill below table to indicate the administrative structure for scheme implementation. Please also provide details of manpower requirement, outsourcing of services, hiring of consultants and associated costs." (Note: In case posts, permanent or temporary, are intended to be created, a separate proposal may be sent on file to Pers. Division of Department of Expenditure after the main proposal is recommended by the appraisal body)

	Agency	Role of the Agency in Administration of Scheme Implementation	Manpower Requirement (in no. of Personnel	Number of P Created	osts to be	Number of consultants to be hired	Details of outsourcing of services	Associated Cost and Funding Source	Remarks
				Permanent	Temporary				
Centre									
State									
Local									

8. Monitoring and Evaluation

- 8.1 (A) Please indicate the monitoring systems to be established for the scheme. Indicate all that are applicable and provide details thereof,
 - Constitution of Monitoring bodies or cells
 - Development of Scheme MIS
 - Establishment of protocol for regular performance reviews
 - Others, please specify

(B) Please indicate the arrangements of statutory and non-statutory audits. Indicate all that are applicable and clearly provide details of modes of conducting and other arrangements of the same.

Statutory Audits	
Non-statutory Audits	
Social audits	
Participatory Rural Appraisal	
Observational audits and	
Others, please specify	

8.2 Please indicate the arrangement for third-party/ independent evaluations (separately for base-line, mid-line and end-line evaluations) along with methodological approach (experimental, quasi-experimental, mixed methodology, others) to be adopted for evaluations. Please note that evaluation is necessary for extension of scheme from one period to another. Please specify the amount of funds earmarked for third party evaluation under scheme budget.

9. Approval Sought:

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•

•

Joint Secretary to the Government of India

Tel.	No
Fax	No
En	nail

- * Detailed Paper outlining the major elements and overall architecture of the proposed Scheme may be attached.
- ** Comments of the Financial Advisor of the Ministry/Department, NITI Aayog, Department of Expenditure and other Ministries/Departments may be summarized in a table given below. The table may be enclosed as an annexure of the EFC Memo. At the draft EFC memorandum stage, only comments of IFD of the Ministry/Department should be enclosed in the format

S.No	Comments	Is the incorporated i proposal (Y/N)?	comments n revised	If yes, please specify how it has been incorporated? If no, please why it has not been incorporated?
		**********	*****	

Coding of Projects

From FY 2024-25 onwards, Projects approved by the competent authority under various categories will be given Project Codes as per the description given below:

		Project	Code	
Project type	Category	Theme/ Directorate	Tranche/ Year/ Directorate	Project No.
CSIR-Fundamental and Innovative Research in Science of Tomorrow (CSIR-FIRST) Projects	FIR			
Focused Basic Research (FBR) Projects	FBR			
Niche Creating High Science/ High Technology Projects (NCP)	NCP	AA	BB	
Fast Track Translational (FTT) Projects	FTT			
Fast Track Commercialization (FTC) Projects	FTC			сс
Mission Mode Project (MMP)	ММР		DD	
Facility Creation Projects (FCP)	FCP			
HQ Coordinated Projects (HCP)*	НСР			
CSIR-New Millennium Indian Technology Leadership Initiative (CSIR-NMITLI)	NMT	DD	YY	
Bilateral and Multilateral Collaborative International Projects (BMCIP)	BMP			

^{*} Jigyasa & Skill Development exempted and will be coded as HCP002501 and HCP002502

Theme Codes

SNo.	Theme Name	Code (AA)		
1	Aerospace, Electronics, Instrumentation & Strategic Sector (AEISS)	01		
2	Agri, Nutrition & Biotech (ANB)	02		
3	Chemicals (including leather) and Petrochemicals (CLP)			
4	Civil Infrastructure & Engineering (CIE)			
5	Ecology, Environment, Earth & Ocean Sciences and Water (E30W)			
6	Energy (Conventional and Non-conventional) and Energy Devices (EED)			
7	Healthcare (HTC)			
8	Mining, Minerals, Metals and Materials (4M)	08		

Directorate Codes

SNo.	Directorate Name	Code (DD)
1	Central Planning Directorate (CPD)	51
2	Innovation Management Directorate (IMD)	52
3	Technology Management Directorate (TMD)	53
4	Science Communication and Dissemination Directorate (SCDD)	54
5	International S&T Affairs Directorate (ISTAD)	55

Tranche / Cycle Code: BB (Numeric): Presently 05 in case of FTT/FTC Projects Project No: CC (Numeric): 01 to 99

ENCLOSURE-4

PROJECT PROPOSAL FORMAT (For NMITLI Projects)

- 1. Executive Summary (please restrict to two pages)
- 2. Title of the project (heading)
- 3. Introduction / background
- 4. Premise/rationale on which the present proposal is based and justification for taking up the project
- 5. Objectives of the project
- 6. Status (please provide a brief on present status of development nationally and internationally including IPR status)
- 7. Novelty of the proposal
- 8. The proposed work plan give details of project components, work plan along with time frame
- 9. Networking of the institutions/laboratories along with their capabilities
- 10. Deliverables with yearly milestones
- 11. IPR (briefly project the possibility of developing new IPR from this project)
- 12. Leadership perspective briefly describe the global positioning of the technology and resultant leadership position and economic benefits to the country
- 13. Viability analysis
- 14. Budget requirements (total as well as individual institutions/laboratory along with year wise break-up covering manpower, consumables, travel, contingencies, overheads, Others (if any) and equipment

ENCLOSURE-5

योजना निदेशालाय वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद अनुसंधान भवन, 2, रफी मार्ग, नई दिल्ली -110001

No. 33/M/Guidelines/2020-21-CPD

March 08, 2021

कार्यालय ज्ञापन

Sub: SOP/ Guidelines for selection, implementation and monitoring of project proposals submitted FY 2021-22 (15th Financial Commission) onwards for consideration for implementation and funding (Facility Creation Projects (FCP) and project proposals submitted by CSIR-Units) — Reg.

Ref: 0M No. 331/M/Guidelines/2020-CPD dated June, 2020.

- 1. Competent authority has accorded approval to the following:
 - I. SOP/Guideline for selection, implementation and monitoring of Facility Creation Project (FCP) proposal submitted for consideration for implementation and funding to CSIR FY 2021-22 onwards (Annexure A); and
 - II. SOP/Guideline for selection, implementation and monitoring of project proposals submitted by CSIR-Units for consideration for implementation and funding to CSIR FY 2021-22 onwards (Annexure B)
- 2. The instructions issued time to time for financial and expenditure management would be applicable to these projects also.

-Sd-(Dr. Abhishek Kumar) Scientist

Copy to:

- 1. Directors of all CSIR labs
- 2. Heads of all CSIR Units/ Directorates/ Divisions/ Sections
- 3. US to DG, CSIR
- 4. PS to FA, CSIR
- 5. PS to JS, CSIR
- 6. CSIR website through Head, IT
- 7. Office Copy

SOP/Guidelines for selection, implementation and monitoring of Facility Creation Projects (FCP) submitted for consideration for implementation and funding to CSIR FY 2021-22 onwards

- I. The Facility Creation Project (FCP) proposal should be discussed and approved in the Research Council (RC) of laboratories and/or Advisory Committee (AC) of the CSIR-Unit to be submitted to CSIR for implementation and funding consideration;
- II. Screening Cum Expert committees will be formulated at CSIR HQ by CPD to examine, evaluate, shortlist, grade and recommend the proposals for funding by CSIR. The committee will also recommend the quantum of funding and tenure of implementation for considered project proposals;
- III. The recommended project/s (with the approval of the Competent Authorities) will be implemented as Major Lab Projects (MLP) and accordingly NILP number and respective 0M will be issued by the implementing laboratory/ unit.
- IV. The implementation of the recommended FCP will be monitored through Task Force (TF) specifically constituted for each approved projects separately. The Director/ Head of the nodal/implementing laboratory/ unit will be the Chairperson and Nodal PI of the nodal/implementing laboratory/ unit will be the convener of the TF. The TF will have following composition:
 - a) Chairperson;
 - b) External experts on the subject area/s as member (minimum 3);
 - c) CSIR expert on the subject area/s as member (minimum I);
 - d) COFA/F&AO (Finance) of the nodal/ implementing laboratory/unit as member;
 - e) HOD, CPD, CSIR HQ or his nominee as permanent invitee; and
 - f) Nodal PI of the nodal/ implementing laboratory/ unit as the member convener.
- V. The Terms of References (TOR) of the Task Force (TF) will be following:
 - a) Ensure the implementation of the project in a time bound and cost bound manner;
 - b) Periodically monitor and review the progress of the project including progressive expenditure vis-à-vis deliverables/output;
 - c) Ensure submission of half yearly performance report to CPD, CSIR HQ by 15th September and 15th April of every year; and
 - d) Any other activities assigned by DG, CSIR to the TF from time to time.

The tenure of the Task Force will be co-terminus with the project.

- VI. The Monitoring Methodology (**MM**) will be as follow:
 - 1) Task Force (TF) shall periodically meet to review the progress of the project. Though the periodicity of the meeting is left to the discretion of Chairperson, but it shall not less than 2 times a year (once in six months);
 - 2) TF shall monitor the micro details of project in terms of outputs, activities, yearly/ half yearly targets, quantifiable deliverables, costs etc. PERT and bar chart is required to be prepared in this regards for controlling the various activities of the project. TF may evolve suitable and monitor able parameters to effectively review the progress of the project. Further, TF may assess and advise the mid- course changes/corrections in the project to achieve the desired objectives;
 - Examining the periodic progress of project in terms of outputs, activities, yearly/ half yearly targets, quantifiable deliverables, costs etc., the TF may recommend the foreclosure of the project in deplorable progress situation; and
- I. The proceedings of the TF meeting shall be recorded and maintained by the member convener and communicated to the CPD, CSIR HQ for information and record.

SOP/Guidelines for selection, implementation and monitoring of Project Proposals submitted by CSIR-Units for consideration for implementation and funding to CSIR FY 2021-22 onwards

- I. The projects proposals should be discussed and approved in the Advisory Committee (AC) of the CSIR-Unit to be submitted to CSIR for implementation and funding consideration;
- II. Screening Cum Expert committees will be formulated at CSIR HQ by CPD to examine, evaluate, shortlist, grade and recommend the proposals for funding by CSIR. The committee will also recommend the quantum of funding and tenure of implementation for considered project proposals;
- III. The recommended project/s (with the approval of the Competent Authorities) will be implemented as Major Lab Projects (MLP) and accordingly MLP number and respective 0M will be issued by the implementing unit.
- IV. The implementation of the recommended project proposals will be monitored through Task Force (TF) specifically constituted for each approved projects separately. The Head of the nodal/implementing unit will be the Chairperson and Nodal PI of the nodal/implementing unit will be the convener of the TF. The TF will have following composition:
 - a Chairperson;
 - b External experts on the subject area/s as member (minimum 3);
 - c CSIR expert on the subject area/s as member (minimum I);
 - d COFA/F&AO (Finance) of the nodal/ implementing unit as member;
 - e HOD, CPD, CSIR HQ or his nominee as permanent invitee; and
 - f Nodal PI of the nodal/ implementing unit as the member convener.
- V. The Terms of References (TOR) of the Task Force (TF) will be following:
 - a Ensure the implementation of the project in a time bound and cost bound manner;
 - b Periodically monitor and review the progress of the project including progressive expenditure vis-à-vis deliverables/output;
 - c Ensure submission of half yearly performance report to CPD, CSIR HQ by 15th September and 15th April of every year; and
 - d Any other activities assigned by DG, CSIR to the TF from time to time.

The tenure of the Task Force will be co-terminus with the project.

- VI. The Monitoring Methodology (MM) will be as follow:
 - a. Task Force (TF) shall periodically meet to review the progress of the project. Though the periodicity of the meeting is left to the discretion of Chairperson, but it shall not less than 2 times a year (once in six months);

- b. TF shall monitor the micro details of project in terms of outputs, activities, yearly/ half yearly targets, quantifiable deliverables, costs etc. PERT and bar chart is required to be prepared in this regards for controlling the various activities of the project. TF may evolve suitable and monitor able parameters to effectively review the progress of the project. Further, TF may assess and advise the mid-course changes/corrections in the project to achieve the desired objectives;
- c. Examining the periodic progress of project in terms of outputs, activities, yearly/ half yearly targets, quantifiable deliverables, costs etc., the TF may recommend the foreclosure of the project in deplorable progress situation; and
- d. The proceedings of the TF meeting shall be recorded and maintained by the member convener and communicated to the CPD, CSIR HQ for information and record.

ENCLOSURE-6

FORMAT FOR PROJECT COMPLETION REPORT (For FBR/NCP/FIRST/FTT/FTC/MMP/HCP)

- 1. Title of the Project:
- 2. Category of the Project: FBR/NCP/FIRST/FTT/FTC/MMP/HCP (Tick any one)
- 3. Total approved cost of the project (Rs. in lakh):
- 4. Actual completion cost of the project (Rs. in lakh):
- 5. Nodal Laboratory:
- 6. Participating Laboratories:
- 7. Project Number:
- 8. Name of the Mission Director/Nodal Director:
- 9. Name of the Project Leader / Mission Coordinator (in case of MMP):
- 10. Name of the Principal Investigator (Provide for each Work Package in case of MMP):
- 11. Name of Team Members with designation (for each Work Package in case of MMP):
- 12. Date of commencement:
- 13. Planned date of completion:
- 14. Actual date of completion:
- 15. Duration of the project (Planned and actual):
- 16. Title of the Work Packages / Verticals (in case of MMP):
- 17. Objectives of the project (Provide w.r.t. each Work Package / Vertical in case of MMP):
- 18. Revised Objectives of the project, if any (with the approval of the competent authority)
- 19. Objectives not achieved along with justification for non-achievement:
- 20. Periodic review at Lab level (Director level/Task Force Level/RC/Lab Strategic Group):

S.No.	Date of review	Key Observations/Recommendations / Inputs offered	Action taken

(Copies of minutes may be placed at Annexure)

21. Periodic review at CSIR Hqrs level (Monitoring Committee/ External Review Committee):

S.No.	Date of review	Key Observations/Recommendations / Inputs offered	Action taken

(Copies of minutes may be placed at Annexure)

22. Significant Achievements

A. Output (against the targeted deliverables):

Proposed	Achieved

B. Outcome (against the targeted deliverables):

Proposed	Achieved	

23. Detailed analysis of results indicating contributions made towards fulfilling identified gaps in knowledge and/or technology/ technology development and research outputs:

24. Major applications:

- 25. S&T benefits accrued:
 - (i) Technology leads identified (for each lead provide separate documents as Annexure, if required)
 - (ii) Technologies/ processes developed with details and good-quality photographs
 - (iii) Technologies/ processes licensed with details

SNo.	Technology/ Process Name	Date of licensing/transfer	Firm/Agency Name	Licensing Fee earned	Royalty details, if any

- (iv) No of patents filed /granted/ licensed (Separately for India/ Abroad)
- (v) Total Number of Research Publications and Cumulative Impact Factor
- (vi) List of Research Publications

No.	Author/s	Title of Paper	Name of Journal	Vol	Page	Year	IF

- (vii) No. of Ph.D. produced
- (viii) No. of students trained
- (ix) Entrepreneurship Created
- (x) Contribution to Skill Development
- (xi) Additional Jobs created (for societal projects only) (Give details in Nos.)
- (xii) Additional Income Generated (for societal projects only) (Give details in Rs.)
- 26. Details of new facilities created
- 27. Details of external collaboration/ knowledge networking (national and international separately) established
- 28. Expected outcome (in coming 2-3 years) resulting from implementation of the project
- 29. Contribution towards Import substitution
- 30. Road map to utilize Human Resources and Infrastructure assets created
- 31. Reasons for delay/failure, if any, and steps envisaged for further programme
- 32. Future road map for implementation /deployment of the project outputs /activities (Include details of funding models, stakeholder's participation, timelines etc.)

Name & Signature (PI)

Name & Signature (Head, PME)

Signature Director

Note:

- (i) Provide a duly vetted and signed financial statement (by Director, PI and F&AO of the concerned Lab) indicating year-wise and total allocation and expenditure. In the case of multi-laboratory projects, the Director, PI and F&AO of the nodal lab may provide the duly vetted and signed financial statement.
- (ii) The PCR should be submitted with the approval of competent authority (Director) and must have signature of the concerned nodal PI on each page of PCR.

FORMAT FOR PROJECT COMPLETION REPORT (For NMITLI Projects)

- 1. Title of the Project:
- 2. Principal Investigator and Institute:
- 3. Consolidated Period of reporting:
- 4. Objectives of the project:
- 5. Experimental Work done: (in bullets- with brief description)
- 6. Deliverable Achieved vis a vis Objectives: (in bullets- with brief description if any)
- 7. Significant Achievements of the project:
- 8. Experimental Hurdles overcome /could not be overcome:
- 9. Technology/ies developed and/or Leads Obtained:
- 10. Patent/Publications made or in process:
- 11. Manpower Trained:
- 12. Budget Released by CSIR:
- 13. Funds utilized under the project:

FORMAT FOR PROJECT COMPLETION REPORT (For Facility Creation Project)

- 1. Title of the Project
- 2. Nodal Lab
- 3. Date of commencement (Date of CSIR HQ OM communicating approval of the project)
- 4. Total approved cost of the project (Rs. In Crore) (Please provide head wise details of Cost)
- 5. Total completion cost of the project (Rs in Crore) (Please provide head wise dentals of Cost)
- Financial statement of approved/ allocated funds and expenditure (year wise & total) (Please enclose copy of financial statement duly signed by Director, Head PME, CoFA, and Pl)
- 7. Lab Director
- 8. Principal Investigator (PI) & Co·PI
- 9. Participating Laboratories, If any
- 10. Project duration as per DPR
- 11. Actual date of Completion
- 12. Objectives as stated in the project proposal/DPR
- 13. Achievements against the objectives (Please enclose photograph of the Facility)
- Periodic review carried out on the project (Please enclose copies of minutes of all project reviews carried out at different levels (Task Force Level, Research Council, Lab Strategic Group, SEEMC-FCP of CSIR HQ) (Photographs and videos of the facilities during different stages of completion must be enclosed)

S.No.	Date on which Task force/ Research Council/ Lab Strategic Group/ SEEMC-FCP of CSIR HQ meeting held	Salient observations/ decisions

(Copy of minutes may be enclosed)

- 15. Road map for utilization of the facility post implementation of the project
- 16. Real time Web link for maintaining the user's list with date and time

Name & Signature (PI)

Name & Signature (Head, PME)

The above Facility Creation Project has been successfully implemented and has met the objectives of this project. The project completion report has also been placed in the Research Council Meeting held on {date} and the Research Council has noted and approved the same. The minutes of Research Council Meeting held on (date) is enclosed with this document.

Signature Director