

Common Research and Technology Development Hubs (CRTDH)

Establishment of
**Common Research and Technology Development Hubs (CRTDH) under
BUILDING INDUSTRIAL RESEARCH & DEVELOPMENT AND
COMMON RESEARCH FACILITIES (BIRD-CRF) Scheme**

Guidelines



**Government of India
Department of Scientific and Industrial Research (DSIR)
Ministry of Science and technology
<http://www.dsir.gov.in>**

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1.0 INTRODUCTION

One of the key determinants of competitiveness is innovation capabilities, which refers to capabilities both in developing new scientific and technological inventions, and also in carrying out incremental changes, systemic changes and changes in the manner of doing business. Many companies are unable to translate new technologies and ideas into marketable products and services posed by innovation challenges, as they are hard-pressed for want of suitable resources. In this respect, particularly smaller companies from the Micro and Small sectors remain deprived of taking part in innovation processes due to financial constraints, in spite of their innovation acumen. It is desirable that such companies are facilitated to pursue technological challenges, by providing suitable facilities to enable them continue with their innovation-related pursuits. With the vision of creating an enabling environment for nurturing Industrial Research and developing innovative products and processes, DSIR has launched the Scheme of 'Building Industrial Research & Development and Common Research Facilities (BIRD-crf)' in 12th Plan that supports creation of **Common Research and Technology Development Hubs (CRTDH)** dedicated for use by Micro and Small Enterprises (MSEs) to carry out innovation related activities.

2.0 AIMS AND OBJECTIVE

The major objective of CRTDH will be to enhance productivity and competitiveness of MSEs by providing assistance in technological problem-solving and capacity building. The CRTDH scheme aims to provide partial financial support as Grant-in aid to establish CRTDHs for industrial R&D innovation dedicated for Micro and Small Industries (MSEs). The infrastructure and equipment established at these CRTDHs would facilitate MSEs to conduct their research and development activities, including testing of innovative products and new technologies, with special focus on sectors such as Electronics/Renewable Energy, Affordable Health, Environmental interventions, Low cost machining and New materials / Chemical Processes.

3.0 SCOPE OF THE PROGRAM

a) The program aims to create CRTDHs in the following focus sectors:

Target Area 1 - Electronic/Renewable Energy	
Focus Areas	<ul style="list-style-type: none"> • Power electronics • Strategic electronics • Solar/Thermal Photovoltaic • MRT signaling • Railways etc.
Work plan	<ol style="list-style-type: none"> 1. Thrust areas to be identified such as Power electronics, strategic electronics, solar\Thermal Photovoltaic, Reactors, parabolic technology, MRT signaling, railways etc. 2. Create infrastructure and R&D support in technology capacity building for gasifier, PV systems, Polysilicon cells, wafer and modules etc. 3. Identify, collaborate, approach and support MSEs working in the identified thrust areas of electronic and renewable energy. 4. Provide customized R&D troubleshooting for MSEs.
Objective	Dedicated CRTDH to facilitate the following: <ul style="list-style-type: none"> • Conduct high quality and exhaustive research

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	<ul style="list-style-type: none"> • Disseminate first-hand research information • Create, Disseminate, Apply and Conserve Knowledge • Bring out innovative products
Outcome/Likely impact	<ol style="list-style-type: none"> 1. Facilitate MSEs to participate in building alternative systems for sources of energy. 2. Utilization of several renewable technologies to reduce Greenhouse Gas emissions 3. Developing energy efficient technologies to reduce energy consumption 4. Indigenous design, development and manufacturing capability 5. Developing cost effective processing equipment 6. Availability of specialized testing facilities to MSEs for innovative R&D results, capacity building and safe manufacturing practices (through workshops and hands-on training)
Target Area 2 - Affordable Health	
Focus Areas	<ul style="list-style-type: none"> • Diagnostics • Bio Pharmaceuticals • Medical Devices etc.
Work plan	<ol style="list-style-type: none"> 1. Thrust areas to be Identified such as cancer, Infectious diseases, Human genome, bioinformatics, R&D testing of drug candidates and rapid blood tests for rural areas and blood banks etc. 2. Establish research infrastructure for R&D innovation in affordable health, diagnostic tests and equipment such as Microarrays, patient monitoring devices specialized technology for biochemical tests etc. 3. Identify, collaborate, approach and support MSEs working in the identified thrust areas of healthcare. 4. Provide customized R&D troubleshooting for MSEs 5. Cater to India's growing demand for healthcare and awareness.
Objective	<p>Dedicated CRTDH to facilitate:</p> <ul style="list-style-type: none"> ▪ Conduct high quality and exhaustive research ▪ Disseminate first hand research information ▪ Create, Disseminate, Apply and Conserve Knowledge ▪ Bring out innovative product
Outcome/ Likely impact	<ul style="list-style-type: none"> ▪ Availability of specialized R&D testing facility, R&D infrastructure, BE & BA study, post translation (drug/vaccine candidate) ▪ R&D testing facilities through MSEs. ▪ Designing and development of innovative indigenous products to suit local market needs and diagnostic kits at affordable prices. ▪ Faster diagnosis leading to early treatment, awareness on preventive healthcare disorders. ▪ Availability of specialized testing facilities to MSEs for R&D results and R&D capacity building (through incremental development of R&D expertise in a manner of workshops and or hands on training). ▪ Reduce outsourcing in diagnostics and healthcare by specialized high end technology research.

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	<ul style="list-style-type: none"> ▪ Provide Healthcare to semi-urban and rural India. ▪ Facilitation of customized R&D for quality diagnostic research and health care.
Target Area 3 - Environmental interventions	
Focus Areas	<ul style="list-style-type: none"> • Water technology • Effluent treatment • Waste disposal • e-waste • Recycling technologies etc.
Work plan	<ol style="list-style-type: none"> 1. Thrust areas on environmental interventions to be identified, such as disposal of municipal solid waste, industrial and hospital waste, bio-medical waste, e-waste etc. 2. Establish research infrastructure for R&D innovation in the above mentioned areas. 3. Identify, collaborate, approach and support MSEs working in the above identified thrust areas of waste management. 4. Provide customized R&D troubleshooting for MSEs. 5. Cater to India's growing demand for converting waste into wealth.
Objective	<p>Dedicated CRTDH to facilitate:</p> <ul style="list-style-type: none"> • conduct high quality and exhaustive research • disseminate first hand research information • Create, Disseminate, Apply and Conserve Knowledge • Bring out innovative products
Outcome/Likely impact	<ul style="list-style-type: none"> • Availability of high quality tests, equipment facilities through MSEs. • Develop innovative indigenous cost-effective technological solutions. • Availability of specialized R&D and testing facilities to MSEs for R&D results and R&D capacity building (through workshops and hands-on training).
Target Area 4 - Low cost machining	
Focus Areas	<ul style="list-style-type: none"> • Machine tool design • Production and testing equipment • CNC machining • Metal forming techniques etc.
Work plan	<ol style="list-style-type: none"> 1. Thrust areas to be identified such as metal-cutting, metal-forming machine tools, conventional machine tools and computer numerically controlled (CNC) machines. 2. Facilitate development of technology for use of new and emerging materials. 3. Designing simple jigs and fixtures for increasing productivity. 4. Establish research infrastructure for R&D innovation in low cost automation. 5. Identify, collaborate, approach and support MSEs working in the identified thrust areas.

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	6. Provide customized R&D troubleshooting for MSEs.
Objective	<p>Dedicated CRTDH to facilitate:</p> <ul style="list-style-type: none"> • Conduct R&D on need based customized technology interventions for the development of innovative and inclusive technologies/products. • Sustaining the steps for successful implementation of low cost machining research results in MSE sectors • Capacity building of stake holders in cluster for improved technical planning and dissemination of R&D results including first hand research information for MSE clusters. • Bring out innovative products and processes
Outcome/Likely impact	<ul style="list-style-type: none"> • Facilities to MSEs for value additions at lower costs with the aim to solve the issue of specific user needs. • Improvement in the features of CNC machines, use of new materials for reducing cost and ease of machining etc. • Facilitating MSEs for developing Automation, handling systems and TPM-friendly machines. • Availability of specialized testing facilities to MSEs for R&D results, capacity building and safe manufacturing practices (through workshops and hands-on training). • Development of skilled manpower and expertise in automation. • Development of Indigenous R&D and proprietary technology with reduced costs and upgraded production systems. • Reduce outsourcing of technology and products.
Target Area 5– New Materials/ Chemical Process	
Focus Areas	<ul style="list-style-type: none"> • Chemical processes • Chemicals/ petrochemical <ul style="list-style-type: none"> ▪ Metal and Metallurgy ▪ Material testing etc,
Work plan	<ol style="list-style-type: none"> 1. Identify thrust areas and establish research infrastructure for R&D innovation in: <ol style="list-style-type: none"> i. New material development to improve efficiency and operations. ii. Chemical corrosion and metallurgy iii. Developing polymeric blends to improve disposability and safety iv. Cost reduction in chemical manufacturing, with improved quality and purity v. Chemistry of emerging energy sources vi. Technologies to decarbonise chemical energy production and reduce GHG emissions 2. Identify, collaborate, approach and support MSEs working in the identified thrust areas of material and chemical process. 3. Provide customized R&D troubleshooting for MSEs 4. Continuous Tech support and delivering solutions to MSEs

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Objective	Dedicated CRTDH to facilitate: <ul style="list-style-type: none">• Conduct high quality and exhaustive research• Disseminate first hand research information• Create, Disseminate, Apply and Conserve Knowledge• Bring out innovative products
Outcome/ Likely impact	<ul style="list-style-type: none">• Facilities to MSEs for material/chemical processing, characterization and treatment.• Availability of specialized testing facilities to MSEs for R&D outcomes, capacity building and safe manufacturing practices (through workshops and hands-on training).• Develop Indigenous R&D and proprietary technology to produce chemicals with reduced costs.• Developing corrosion resistant and cost effective materials, corrosion monitoring techniques and residual processing equipment.• Reduce outsourcing of technology and products.

b) The CRTDH would provide infrastructure and equipment facilities for MSEs to conduct their research and development including testing of innovative products & new technologies.

c) The CRTDH is expected to act as a linkage between MSEs technology requirement and institutional technology know-how, while ensuring participation of MSEs.

4.0 PROPOSALS INVITED

Well-defined proposals to establish CRTDH are invited through “Call for Proposals” on DSIR website:

5.0 ELIGIBILITY TO HOST CRTDH

- a) The Applicant Host Organization should be from National laboratories, Public funded bodies or Institutions having a distinct legal entity (as per Rule 228 of GFR 2017), which are willing and capable of setting up these CRTDHs in places located in the proximity of clusters of MSEs working in the targeted disciplines, who could avail the facility to carry out their research and technology development work.
- b) There should be adequate land and building facilities, earmarked for creation of CRTDH.
- c) The Applicant Host Organization should have the requisite expertise and experience in the identified sectors mentioned in the objective and scope of the Scheme as at sections 2.0 and 3.0 above. Organizations having prior experience in collaborating with MSEs would be preferred.
- d) Organisations where DSIR supported CRTDH is already in place, will be eligible to apply for funding for setting up another CRTDH after five years of completion of the DSIR supported CRTDH project. While applying for support by DSIR for another CRTDH, they will have to submit an “Impact Analysis” of the existing CRTDH by a independent third party, clearly stating the achievements as per the objectives of the CRTDH scheme of DSIR.

6.0 NATURE OF SUPPORT

- a) The support amount would be limited to 70% of the total cost of establishing the CRTDH (excluding land and building) and subject to a ceiling amount of Rs. 15.00 crore per CRTDH, in the form of Grant-in-aid from DSIR.

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- b) The financial support provided by DSIR shall be towards following items/activities:
- Cost of procurement of R&D equipment
 - Cost of infrastructure creation needed to operate R&D equipment
 - Cost towards R&D facilities such as
 - Design engineering centre,
 - Pilot plant and scale-up facilities,
 - Development of prototypes/processes
 - Consultancy services for augmenting technical knowledge and indigenous development
 - Testing and validation
 - Workshops/Training/Skill development and research information.
- c) Land and building cost should be borne by the Host Organization.
- d) The cost towards consumables and recurring costs to establish and operate the CRTDH should also be borne by the Host Organization.

7.0 DURATION OF ESTABLISHMENT AND OPERATION OF CRTDH

CRTDHs are normally supported for a five year duration. The Applicant Host Organization has to clearly indicate in the proposal, the time duration required for establishment of CRTDH as well as making it operational with achievable milestones in a phased manner.

8.0 SELECTION PROCEDURE

- a) Proposals received in prescribed format will be scrutinized by an initial screening committee constituted by DSIR for completeness with respect to the guidelines and relevance of the scheme.
- b) The proposals would be evaluated by three identified external domain experts. Experts will be provided with a relevant questionnaire to objectively mark/assess the proposal. Selection of Host Organizations will be through initial expert evaluation with objective assessment system.
- c) Duly recommended proposals will be placed before CRTDH Advisory and Screening Committee (CASC) constituted with the approval of the Secretary, DSIR.
- d) Proposal(s) cleared/recommended by CASC would be processed for financial concurrence of IFD and approval of the Secretary, DSIR. The decision, so or otherwise, will be communicated to the Applicant Host Organization.

9.0 RELEASE OF FUNDS

- a) Before release of funds, the Host Organization has to enter into an agreement/Memorandum of Understanding with DSIR that would clearly spell out the specific roles, responsibilities and obligations of both the parties.

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- b) The Host Organization has to sign “Terms and Conditions” governing the Grants-in-Aid for establishment and operation of CRTDH prior to release of the 1st installment, which will be enclosed with the letter of approval.
- c) After completion of all due formalities, 1st installment would be released to the Host Organization. DSIR funds will be released in accordance with the General Financial Rules (GFR) and Provisions, as applicable. The amount of the 1st installment shall be limited to a maximum of 60% of the total approved DSIR support, subject to confirmation of availability of land and building for the CRTDH with the Host Organization.
- d) Release of subsequent installments will be based on satisfactory performance, deliverables/milestones achieved, recommendation of the Project Guidance cum Review Committee (PGRC) and submission of audited accounts and Utilization certificate. In cases where satisfactory performance might not be achievable towards utilizing the amount released under the 1st installment, the subsequent installment would be released only after confirmation of operation of instrument(s) purchased out of the 1st installment, and other due commitments as applicable.

10.0 OPERATIVE MECHANISM of CRTDH

The CRTDHs will operate within the following broad mechanism:

- a) The CRTDH should start its operations within one year of first installment of grant is released by DSIR.
- b) Periodic monitoring and review of the progress of achievements of establishment and operations of the CRTDH will be through a Project Guidance cum Review Committee (PGRC) constituted by DSIR. This Committee will guide and suggest any modifications/ additions in the achievable targets directed towards set objectives, including recommendations for release of further installments, continuity / extension / short-closure of the project, etc.
- c) The day-to-day operations of CRTDH will be taken care of through a Management Committee (MC) headed by the Head of the Host Organization and/or his representative and comprising of members of eminence from among Industry representatives of MSEs from the concerned sector, Research and Academic experts and other Resource persons from the concerned sector, Finance and Management experts.
- d) The MC shall be empowered to device a business model useful for the CRTDH, including methodology of time-sharing, user charges and other operating parameters, well in advance before implementing each sub-project.
- e) The Host Organizations should clearly specify their plans on sustainability of the CRTDH. The CRTDH is not to be operated on commercial basis and is expected to operate on a cost plus basis.
- f) The CRTDH should have well qualified and skilled manpower of the Applicant Host Organization for taking up R&D activities as well as support activities. Alternatively, the concerned industry may deploy their own manpower for executing their R&D activities at the CRTDH.
- g) The Applicant Host Organization shall maintain a separate account for CRTDH.

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- h) Users of CRTDH will be assured of confidentiality through Non Disclosure Agreement (NDA) and/or secrecy agreements with the CRTDH.
- i) Establishment of CRTDH will be deemed to have been successfully completed when all the projected deliverables have been accomplished, duly recommended by the PGRC on submission of final audited statements of accounts.
- j) Closure of the project by DSIR will be done after receipt of audited accounts and utilization certificate from the CRTDH. Thereafter, annual progress reports for three years would be submitted by the CRTDH to DSIR.
- k) Under the conditions when the CRTDH remains under-utilized, the MC may allow Government laboratories or Institutions to utilize the facilities with approval of DSIR.

11.0 EXPECTED DELIVERABLES

The expected deliverables are as follows:

- a) Creation of state-of-art facilities for carrying out industrial research and innovation activities, that may comprise of a design engineering centre, pilot plant and scale-up equipment, support systems for development of prototypes/processes, augmenting technical knowledge and indigenous consultancy, specialized testing and validation, skill development and research information, etc. for the benefit of MSEs.
- b) Invoke industrial participation through networking and nation-wide publicity of the created facility. Each CRTDH is expected to cater to more than 200 MSEs within a time-frame of five years.
- c) Each CRTDH should set a target of enabling at least 10 MSEs make use of the facilities in the first year of its operation, gradually increasing to the proposed target.
- d) CRTDHs should work towards bridging the gaps between existing institutional know-how and R&D needs of MSEs to develop innovative products, and thereby help the industries expand their lean R&D portfolios.
- e) Each CRTDH will develop a business model for its sustainability so that it becomes self-sufficient in 5 years time after its establishment.

12.0 PROCEDURE FOR SUBMISSION OF PROPOSALS

The Applicant Host Organization has to submit the application in the prescribed format (**Annexure I**) in five copies. A soft copy, along with all annexures and enclosures, format as a **MS Word/PDF** file, is also to be submitted. The proposal should be forwarded by the Head of the applicant host organization and submitted to:

Dr.Sujata Chaklanobis
Head and Scientist 'G' (CRTDH),
Common Research and Technology Development Hubs (CRTDHs)
Department of Scientific and Industrial Research,
Technology Bhavan, New Mehrauli Road,
New Delhi – 110 016
Phone: 011 – 26590277, E.mail: priya@nic.in

S.No. II

ANNEXURE-I

Application for seeking partial financial support under BIRD-crf scheme of DSIR for creation of Common Research and Technology Development Hubs (CRTDHs) in SECTOR-----

(Please read the guidelines and instructions before filling up the application form)

1. General Information of the Applicant Host Organization

- 1.1. Name and Address of the Applicant Host Organization Institute/Organization
- 1.2. Name, Designation and Contact Details of the Head of the Applicant Host Organization Institute/Organization
- 1.3. Name, Designation and Contact Details of the Principal Investigator
- 1.4. Type of Organization (*Refer guidelines*)
- 1.5. Brief history of the Applicant Host Organization Institute including genesis, legal status, etc.
- 1.6. R&D background of the Applicant Host Organization Institute/organization
 - 1.6.1 Details of expertise and technologies developed
 - 1.6.2 Ongoing R&D activities and achievements, including patents and publications
- 1.7. Strengths and competency of Applicant Host Organization (in terms of infrastructure and manpower)
 - 1.7.1 Details of Existing land, building and R&D infrastructure
 - 1.7.2 Details of Existing R&D/skilled manpower
- 1.8. Details of Research Funding(s) received in last five years by the Applicant Host Organization:

Year	Project title	Funding agency	Amount received/approved	Status of project

2. Proposal Summary

- 2.1 Priority area under the focus sector (*Refer to section 3.0 of guidelines*)
- 2.2 Expected Target Beneficiaries of the CRTDH
- 2.3 Name and location of MSE cluster(s) in focus sector
- 2.4 Identified unmet R&D and Technology development needs of MSE cluster in focus sector. Attach prospective client interaction report(s).
- 2.5 Write-up on Applicant Host Organization’s R&D expertise, patents and publications in focus /priority sector.

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2.6 Proposal for creation of CRTDH

2.6.1 Rationale and Objectives

2.6.2 Write up on facilities to be created and activities to be facilitated/ supported

2.6.3 Details of allocated land and building for creation of the hub

2.6.4 Duration of project

2.6.5 Detailed break-up of project cost

S.No	Head	Total Estimated Cost		Source of Finance		
		Capital	Recurring	Contribution from Applicant Host Organization institute	Demand from DSIR	Any other, please mention
a.	Cost towards Land, Building, etc.				Nil	
b.	Cost towards procurement of R&D equipments					
c.	Cost towards establishment of Infrastructure					
d.	Cost towards R&D Facilities.					
	• Design engineering centre,					
	• Pilot plant & scale-up,					
	• Development of prototypes/processes,					
	• Consultancy for Technical knowledge and indigenous development					
	• Testing and validation					
	• Skill development and research information					
e.	Chemicals, Raw materials, Mechanical tools, Software tools					
f.	Manpower					
g.	Workshops/Training <i>(Demand from DSIR not to exceed 5% of total grant)</i>					
h.	Any other, please specify					

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2.6.6 Details of equipment to be procured from for CRTDH scheme (Year wise list out the items)

Year	S.No	Name of equipment	Function/Description/Use	Quantity	Specific requirement in proposal	Total estimated value
I						
II						

2.6.7 Business Model for self sustainability

2.6.8 Expected outcome (Qualitative and Quantitative)

2.6.9 Possible Risk factors

2.6.10 Regulatory approvals, if any

3. MONITORABLE YEAR WISE MILESTONES AND ANTICIPATED OUTCOMES/DELIVERABLES

S.No	Activity to be undertaken	Timeline	Indicators of progress/milestone	Expected MSE participation

4. ANY OTHER RELEVANT INFORMATION IN SUPPORT OF APPLICANT HOST ORGANIZATION INSTITUTE

5. DECLARATION:

I/We declare that all the statements made in this application are true, complete and correct to the best of my /our knowledge and belief. In the event of any information, found false or incorrect, my/our proposal will stand cancelled and all my/our claims will be forfeited. Further, it is stated that I/we have not received/applied for any financial assistance for the present proposal from any other agency.

Place:
Date:

(Signature of Head of the Institution)

S.No. III

ANNEXURE-II

Instructions for Applicant Host Organization

1. Applicant Host Organizations should go through the **scheme** guidelines and details available on the web site (<http://www.dsir.gov.in>) before filling up the application. The **application should be from** National laboratories, public bodies or institutions having a distinct legal entity as per GFR guidelines, and where MSEs will have access to carry out their R&D.
2. The Applicant Host Organization has to submit the application in prescribed format in (Annexure I) The hard-copy along with all annexures and enclosures and a soft copy in the prescribed **format (MS Word file)** is to be submitted.
3. Information in the application should be complete. If any column is not relevant, it should be marked as 'NOT APPLICABLE'. Incomplete applications shall not be entertained and would be summarily rejected.
4. Cost estimates to be given and the same need to be drawn realistically and full justification to be given.
5. Enclosures and Annexure should be labeled properly and should be attached in the sequence with the application with separators. The document holder should be super scribed with "CONFIDENTIAL - DSIR CRTDH PROPOSAL".
6. All figures for budget should be depicted as 'Rs. in lakhs' and with only two decimal digits. This should be followed strictly to avoid typographical errors.
7. Well-drafted proposals should be submitted. Incomplete applications are liable to be rejected.
8. In case the proposal goes through a complete evaluation process, the Host Organization will have to enter into an agreement with this department. Applicant Host Organizations are advised to go through the agreement clauses and ensure that they are acceptable. No changes are possible in the agreement format.
9. No interim enquiries shall be entertained. The decision taken by the department shall be final and would be intimated to the Applicant Host Organization through written communication as per the address given in the application.

S.No. IV

ANNEXURE-III

FORMAT OF AGREEMENT/MOU

KNOW ALL MEN BY THESE PRESENTS THAT WE (herein after called the “Obligiers” which term shall, unless excluded by or repugnant to the context, be deemed to include its successors, permitted assigns and all persons entitled to) thereby firmly bound to the President of India (hereinafter called the “Government” his successors and assigns) in the sum of Rs. lakhs (Rupees.....
.....lakhs only) for establishment of Common Research and Technology Development Hubs for the industry sector“.....
.....” well and truly, to be paid to the government on demand and without a demur, for which payment we firmly bind ourselves by these presents.

SIGNED this _____ day of _____ in the year two thousand and _____

WHEREAS on the Obliger’s request, the Government has as per Department of Scientific & Industrial Research, Ministry of Science & Technology letter NO..... dated (hereinafter referred to as the “Letter of sanction” which forms an integral part of these presents and a copy thereof is annexed hereto) agreed to make in favour of the Obligiers for the purpose of establishment of Common Research and Technology Development Hubs for the industry sector.....“a fee of Rs..... lakhs (Rupees.....lakhs only) out of which Rs. lakhs (Rupees.....lakhs only), have been paid to the obligiers (the receipt of which sum the obligiers do hereby admit and acknowledge) on condition of the obligiers executing a Agreement/MOU in the terms and manner contained hereinafter which the obligiers have agreed to do.

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NOW the condition of the above written obligation is such that if the obligers duly fulfill and comply with all the terms and conditions mentioned in the "letter of sanction", then the above written obligation shall be void and of no effect but otherwise it shall remain in full force, effect and virtue.

AND these present further witness as under:

- 1) The decision of the Secretary to the Government of India in the Department of Scientific & Industrial Research on the question whether there has been breach or violation of any of the terms or conditions mentioned in the letter of offer shall be final and binding on the obligers.
- 2) The Government has agreed to bear the stamp duty, if any chargeable on these presents.

Signed for and on behalf of

.....

NAME OF THE SIGNATORY

DESIGNATION

S.No. V

ANNEXURE-IV

Terms & Conditions governing financial support for establishment of CRTDH and its operations

1. This refers to letter No. datedfrom M/s (Name of the Host Organization).....
2. DSIR would provide financial support to a maximum of Rs..... lakhs to M/s (Name of the Host Organization)..... for establishment of CRTDH with payment schedule as detailed below

First installment:

(at the time of the commissioning of the work and signing of Agreement/MOU)

Second installment:

(on satisfactory completion of set targets and submission of audited Statement of Expenditure and Utilization certificate)

Third and Final installment, if any:

(on satisfactory completion of the current Phase)

3. The break up of the above support would be for the following items:

(Rs. in lakhs)

SI No.	Items	Amount
a.	Cost of procurement of R&D equipments I. II. III.	
b.	Cost of infrastructure creation needed to operate R&D equipment	
c.	<u>Cost towards R&D facilities such as</u> i. Design engineering centre, ii. Pilot plant & scale-up, iii. Development of prototypes/processes, iv. Consultancy for Technical knowledge and indigenous development v. Testing and validation vi. Workshops/Training/Skill development and research information	

4. The support will be utilized for above approved/items of expenditure/activities for MSE clusters under CRTDH project only. In no case whatsoever; such sums can be diverted from one item to another item or to any other project without prior approval of the competent authority in DSIR.

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5. The decision of the competent authority in DSIR in respect of CRTDH scheme will be final and binding upon the stakeholders.
6. In case of any dispute arising out of the financial support and/or the scope of work in terms of physical targets, the decision of competent authority in DSIR will be binding upon the Host Organization.
7. In case of any disputes arising between the parties related to CRTDH, these would be limited to the jurisdiction of Delhi High Court only.
8. DSIR would in no way be responsible and/or undertake any liability that may arise on account of any manpower, who may be engaged/deployed for work related to CRTDH.
9. Government of India (DSIR) reserves the right to withdraw, discontinue or curtail the grant if the progress of the CRTDH is not satisfactory.
10. The retention schedule of documents for CRTDH for RTI Act, 2005 may be as follows:
 - Rejected or not supported application: one year from the date of rejection
 - Approved proposals: Three years (after closure of the project/issuance of final sanction order)
11. A Project Guidance cum Review Committee (PGRC) constituted by DSIR shall periodically review the technical and financial progress of the project and recommend release of grants, continuity / extension / short-closure, etc. The day-to-day operations of CRTDH will be done through a Management Committee (MC), constituted with the due approval of DSIR and headed by the Head of the Host Organization and/or his representative and comprising of members of eminence from among Industry representatives of MSEs from the concerned sector, Research and Academic experts and other Resource persons from the concerned sector, Finance and Management experts, apart from DSIR. DSIR will have the power to reconstitute the Management Committee (MC), if considered desirable.
12. All the projects files are open for CAG audit inspection, which takes place every year. For day-to-day functioning, the Host Organization will constitute a Management Committee, with the approval of DSIR.
13. The Host Organization will submit six monthly technical and financial progress reports in the prescribed format to DSIR.
14. The cost related to consumables and manpower will be borne by the Host Organization on cost-plus basis. The CRTDH will not work on commercial basis.

FINANCIAL CONDITIONS:

15. Any unspent balance out of the amount released must be surrendered to the Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology (MoST).
16. However, depending on the progress of the project, unspent funds may be carried forward

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- to the next financial year for utilization for the same project with the prior written approval of the DSIR.
17. The grantee institution will provide all information/details, whatsoever, when DSIR or its representatives wish to visit the Centre to see the accounts/ infrastructure / facilities/use created out of the support of DSIR.
 18. Approval of the CRTDH project and the release of funds to the Host Organization is subject to an "Agreement/MOU" which should be submitted to DSIR by the Host Organization before release of 1st installment.
 19. The amount received from the DSIR would be kept in a separate account, the details of which shall be intimated to the DSIR, MoST. Transactions from the account shall only be for the purpose of the approved project. Any interest earned on the amount granted is to be returned to Consolidated Fund of India during each financial year. It is necessary that separate audited books of accounts be maintained for the expenditure incurred on the project and these books should be freely available to Government Auditors whenever required by them. Following conditions would prevail:
 - a. Any expenditure incurred prior to the issue of the sanction shall not be admissible against this grant.
 - b. Any remaining unutilized amount on completion of the project shall be refunded along with accrued interest immediately by the Host Organization to DSIR.
 20. For permanent assets, acquired wholly or partly out of the grant, an audited record should be maintained in the form of a register which should be made available to Government Auditors whenever demanded. The term "assets" will mean: (i) all immovable property; and (ii) movable property of a capital nature where the value exceeds Rs.1,000/-. The amount will not be utilized for construction of any building / acquiring land by purchase, lease etc / permanent asset like machinery required for augmenting general production facilities. Pilot plants, test equipment, test rigs, jigs, tools and fixtures, etc required for research purpose, however, may be built/made/acquired out of the DSIR, MoST grant, if so identified in the approved project proposal, or subsequently approved by the DSIR.
 21. The title of assets, if any, wholly or partly acquired out of the DSIR financial support will rest with DSIR, Government of India, and shall not be disposed off/leased out for use to any other parties without the specific written permission of the DSIR, MoST. The sale proceeds, if any, arising out of such disposal shall be intimated to the DSIR and shall be deposited in the account maintained for the amount received from the DSIR.
 22. All attempts should be made by the grantee institution to adhere to the specified time limit scheduled for each component of the programme, as jointly decided between the grantee institution and DSIR.
 23. The grantee institution would furnish to the DSIR, Authenticated Utilization Certificate and Audited SE pertaining to the financial support received by them, before release of any further installment of payment.

TRANSFERABILITY OF THE PROJECT:

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24. While the Host Organization cannot transfer the whole project or a part of project to any other organization, however it can, with the prior approval of DSIR, outsource a part of the work of the project to a research institute or industrial unit, in which case the payment made to such organization shall be on the basis of the quantum of work done for the project with prior approval by DSIR.

MONITORING:

25. The project will be periodically monitored by PGRC constituted by DSIR comprising of a group of experts nominated by the DSIR, MoST.

USE AND LICENSING OF KNOW HOW:

26. Copyright for design, publications, software generated from the project under CRTDH by MSEs would be vested with the concerned MSEs involved in the project.
27. Ownership of the IPR generated through the project, patent rights, know-how and other intangible assets generated through the project shall rest the concerned MSEs involved in the project. The DSIR, MoST does not own any responsibility for disputes arising out of IPR issues, however, the rules and regulations of NRDC or PFC of TIFAC will apply for those projects supported for patents by them.

REPORTING:

28. It is required that Statement of Accounts, duly audited by a Chartered Accountant, as of 30th September of each financial year, should be sent so as to reach DSIR, MoST by 31st October of that year. The audited annual statement of accounts of the project along with utilization certificate also shall be sent to the MoST, DSIR within 90 days of the close of each financial year.
29. If the project involves sponsors other than DSIR, such statements of accounts should show clearly the apportionment of expenditure between the various sponsors, in accordance with the agreed financial contributions of each sponsor to the project at the time of project initiation.
30. Quarterly reports of the progress of technical and physical work content of the project shall also be sent to the DSIR, MoST.
31. A Completion Report shall be submitted to the MoST, DSIR within 90 days of the conclusion of the project. This report shall be in two parts (i) Technical and (ii) Financial. The format of (i) should be finalized by the Host Organization in consultation with DSIR, while (ii) the latter consisting of a consolidated audited statement of accounts of all amounts spent on the project from the DSIR, MoST project amount released and Certificate of Utilization of all such amounts, along with a certificate from the auditors.

ESCALATION:

32. Any escalation in the cost of the project above and over the approved cost of the project will be borne by the Host Organization.

TERMINATION OF THE PROJECT:

33. The DSIR, MoST will have the right to terminate / close the project at any stage

If it is convinced that the fund released have not been properly utilized, or appropriate progress on the project is not being made, or the project is not being carried out as per the terms and conditions and / or as per the nature and scope of the work as defined in the approved project proposal.
34. In case of termination of the project for not proper utilization / unsatisfactory progress of the project / violation of terms as given above, the entire amount of the grant together with interest, as applicable under the provisions of GFR, and the amount received by disposal of the assets will be returned to MoST, DSIR.
35. In case of abandonment of the project due to non compliance of the terms and condition and/ or as per the nature of the work as defined in the approved project proposal by Host Organization, the Host Organization has to return the funds disbursed along with penal interest of 12% to DSIR. The rate of interest will be calculated from the date of first sanction.
36. If the project is abandoned for any techno-economic or any reason other than the above, based on the recommendations of the monitoring committee set up by the DSIR, MoST and approved by the DSIR, MoST then the unspent money from the DSIR, MoST amount released to the project as well as any interest accrued thereon and / or any amount recoverable by way of disposal of assets procured out of funds released by the DSIR, MOST shall be paid back to the DSIR, MoST.

MODIFICATION OF TERMS & CONDITIONS:

37. The above terms and conditions may be modified by the DSIR, MoST through mutual agreement.

Format for evaluation by Domain expert(s)
(To be filled by expert)

1. Name and details of the Expert :
(e-mail ID, mobile no., contact address)

2. Assessment of merits of the proposal based on:
 - 2.1 Needs of MSEs
 - Are the needs of MSEs appropriately identified?
 - What and how much is the contribution to advancement of existing technology?
 - What is the Innovation level?
 - What is the level of risk?
 - What is the expected participation of MSEs?
 - Is the proposal frame-work and design appropriate to the mentioned objectives of the CRTDH?
 - Is there possibility of IP generation?

 - 2.2 Infrastructure of the Applicant Host Organization
 - Does the Applicant Host Organization have appropriate experience that is relevant to the project?
 - Does the Applicant Host Organization have adequate land, building, etc. for establishment of the CRTDH?
 - Are the activities to be taken up in the research facilities to be created appropriate to the mentioned objectives?
 - Does the Applicant Host Organization have the requisite technological capabilities in terms of R&D equipment, qualified/skilled manpower, consumables, etc.?

 - 2.3 Achievability of milestones/deliverables
 - Are the timelines/milestones/deliverables set realistic and achievable?
 - Is there a plan to become self-sustainable after two years? How realistic it is?
 - Is the Mode of access of the facility to other users clearly defined?

 - 2.4 Justification of budget
 - What is the extent to which high-end equipment proposed to be procured is justified?
 - What is the extent of financial support from other agencies?

 - 2.5 Recommendations to CASC: Shortlisted /Rejected

STATEMENT OF EXPENDITURE

(Year means Financial Year i.e. 1st April to 31st March next year)

1. Sanction Letter No. _____
2. Total Project Cost Rs. _____
3. Sanction/Revised Project Cost (if applicable) Rs. _____
4. Date of Commencement of Project _____
5. Statement of Grant Received & Expenditure:

5(a). Grant received

Year	Grant received	Unspent Balance carried forward from previous years, if any	Interest accrued, if any	Total amount that was available for expenditure	Total expenditure incurred	Balance if any to be carried forward for next year
1	2	3	4	5(2+3+4)	6	7

(*) Give break up of DSIR grant under various heads for which related in sanction letter.

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COST DETAILS

6(a). Permanent Equipment/Assets etc.

Sl. No.	Name of Equipment/ Asset with model name, specifications etc.	Date of Procurement	Amount envisaged in the proposal	Actual (*) Expenditure	Other(**) expenses,	Total expenditure
---------	---	---------------------	----------------------------------	------------------------	---------------------	-------------------

Note: In case of imported equipment, please specify the c.i.f. cost of the equipment, custom duty, insurance, total landed cost, in-land freight charges etc., separately.

(*) This should include only the cost of equipment, insurance freight charges.

(**) Other expenses such as bank charges, agency commission etc. should be avoided through appropriate negotiations. If unavoidable expenses incurred, may be indicated.

(#) Overhead expenses (item wise details to be given)

Signature of
Project Head/Head of
Host organization with
Seal and date

Signature of
Project Head/Head of
Competent financial Authority
of Host organization with
Seal and date

Signature of
Chartered
Accountant/Accounts
officer with
Seal and date

AUDITOR'S CERTIFICATE

(In case of annual statement of expenditure)

Certified that financial accounts for the project have been audited by me/our firm and the details of expenditure given in the financial statements for the year, are correct.

Name & Signature of
Chartered Accountant
with Registration No. & Seal
Date :

GFR 12 – A
 [(See Rule 238 (1))]

FORM OF UTILIZATION CERTIFICATE
 FOR AUTONOMOUS BODIES OF THE GRANTEE ORGANIZATION

UTILIZATION CERTIFICATE FOR THE YEAR in respect
 of recurring/non-recurring
 GRANTS-IN-AID/SALARIES/CREATION OF CAPITAL ASSETS

1. Name of the Scheme
2. Whether recurring or non-recurring grants
3. Grants position at the beginning of the Financial year
 - i. Cash in Hand/Bank
 - ii. Unadjusted advances
 - iii. Total
4. Details of grants received, expenditure incurred and closing balances: (Actuals)

Unspent Balances of Grants received years [figure as at Sl. No. 3(iii)]	Interest Earned thereon	Interest deposited back to the Government	Grant received during the year			Total Available funds (1+2-3+4)	Expenditure incurred	Closing Balances (5-6)
			Sanction No. (i)	Date (ii)	Amount (iii)			
1	2	3	4			5	6	7

Component wise utilization of grants:

Grant-in-aid-General	Grant-in-aid-Salary	Grant-in-aid-creation of Capital assets	Total

Details of grants position at the end of the year

- i. Cash in Hand/Bank
- ii. Unadjusted Advances
- iii. Total

Certified that I have satisfied myself that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

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- (i) The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements/accounts.
- (ii) There exist internal controls for safeguarding public funds/assets, watching outcomes and achievements of physical targets against the financial inputs, ensuring quality in asset creation etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.
- (iii) To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines.
- (iv) The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.
- (v) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
- (vi) The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
- (vii) It has been ensured that the physical and financial performance under..... (name of the scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/targets achieved, statement for the year to which the utilization of the fund resulted in outcomes given at Annexure – I duly enclosed.
- (viii) The utilization of the fund resulted in outcomes given at Annexure - II duly enclosed (to be formulated by the Ministry/Department concerned as per their requirements/specifications.)
- (ix) Details of various schemes executed by the agency through grants-in aid received from the same Ministry or from other Ministries is enclosed at Annexure – II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date:
Place:

Signature

Name.....
Chief Finance Officer
(Head of the Finance)

Signature

Name.....
Head of the Organization

(Strike out inapplicable terms)

UTILIZATION CERTIFICATE

Certified that out of Rs._____ of grants-in-aid sanctioned during the year _____ in favour of _____ through the DSIR's letter No._____ and Rs._____ on account of unspent balance of the previous year carried forward, a sum of Rs._____ has been utilized for the purpose of _____ for which it was sanctioned and that the balance of Rs._____ remaining unutilized at the end of the year has been surrendered to Government (vide challan no._____ dt._____) / has been surrendered to DSIR/ will be adjusted towards the grants-in-aid payable during the next year / will be carried forward to the next year.

2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned by the MOST have been fulfilled / are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised.

- 1.
- 2.
- 3.
- 4.
- 5.

Signature of
Project Head / head of
Host Organization with
Seal and Date

Signature of
Competent financial
Authority of Host
Organization with Seal
and Date

Signature of
Chartered
Accountant/Accounts
officer with Seal and
Date

S.No. IX

Format for submitting half Yearly progress report

IMPORTANT POINTS:

- i. One copy of the report in the given format are required to be submitted.
- ii. The report should be sent even if project has not become fully operational. Please write NIL against items where there is nothing significant to report or if a particular item is not relevant.
- iii. The report should cover the work during the period ending 30th September every year.
- iv. Timely submission of report is essential to facilitate the release of funds.
- v. The report should be in the format given below with cover page followed by report under the sections indicated below.
- vi. The report should be discussed and finalized by the project team before dispatch to DSIR.

Title of the project: _____

DSIR Sanction letter:No. _____

Date of start: _____ Total cost of the project Rs. _____

Report for the period: From _____ to _____

Name of the Head of the Host Organization: _____

Name of the Host Institution _____

- 1. Objectives of the project (as stated in the sanctioned project proposal)
- 2. Summary of progress reported in the previous reports, if any.
- 3. Details of manpower involved in the project.

Name & Qualification	Designation	Work allotted

- 4. Financial expenditure report

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5. A detailed write up on the technical and financial progress of the project explaining reasons for shortfalls, if any and measures taken to correct the shortfalls. Write-up may include self assessment of the progress and revised dates of completion of project and activities.
6. Schedule of Research and technology development activities as targeted / achieved.

Activity	Progress till date.....		%		Remarks
	Start	Finish	Target	Actual	
a.					
b.					
c.					
d.					
e. Procurement of imported materials/ components etc., if any					
f. Fabrication, installation & commissioning of prototype/pilot plant.					
g. Performance/Validation trials / tests.					
h. Any other, please specify					
i. Final report					

6. Date(s) on which the report was discussed by the project team.

Name & Signature of Project Manager

Remarks of the Head of the Host Organization

Name & Signature of Head of the Host Organization with seal

Covering Letter and Checklist
for the CRTDH Project Applicant Host Organizations

To:

Head CRTDH (BIRD-crf),

.....
.....

Subject: Proposal for creation of Common Research and Technology Development Hub in
..... sector

Dear.....

I am herewith submitting my/our application for Grant-in-aid under CRTDH insector.

The following documents are enclosed (Check the box, if attached)

- Signed application.
- Undertaking from the Host Organization
- Detailed proposal including technology needs of MSEs, technology infrastructure to be created, MSE cluster size to be benefitted, highlight R&D and innovation advantage to MSEs
- Proposal Summary
- Documentary proof of interest (Client interaction reports) by MSE cluster
- Business model to run facility on cost plus basis
- Bar Chart with milestone and Deliverables
- Documentary proof of available infrastructure with Applicant Host Organization
- List of patents/publications
- Any other documents, please specify.....

(Signature of Head of the Applicant Host Organization)

S.No. XI

Date:

ANNEXURE-X

(FORMAT OF THE ACCEPTANCE LETTER)

Ref. No.....

Dated.....

Head
Common Research and Technology Development Hub
Department of Scientific & Industrial Research
Technology Bhavan
New Mehrauli Road
New Delhi – 110 016

Reference :- DSIR letter No. ... dated.....

Subject: Establishment of CRTDH in the industrial sector.....

Sir,

We accept to undertake the establishment of CRTDH in the industrial sector..... towards DSIR contribution of Rs..... (Rupeesonly) as contained in your letter referred above.

We accept in full the terms and conditions contained in your above referred letter, along with those contained in **Annexure** ____ attached thereto.

We also agree to execute the bond referred in your above letter. A copy of the terms and conditions duly signed are returned herewith indicating our acceptance of the same.

Sd/-

(Authorized representative of the grantee institution)