Terms and Conditions for support under PhD Scheme

- i. The support will be for additional PhD candidates taken by an institution. No support would be provided for current levels of enrolment of the PhD programme.
- ii. The candidates enrolled/ registered for PhD during the period of the scheme would only be eligible to apply for the financial support.
- iii. The support under the scheme will be provided to the institution granting the PhD degree and no direct funding support will be provided by Government of India to the PhD candidates or faculty members or to the Departments in the supported institution. The institution will be responsible for seeking financial support and for furnishing utilization certificates of the funds released and based on the scheme parameters, and as per conditions of the sanction of grant-in-aid.
- iv. The PhD candidates who successfully complete their PhDs, either as full time or parttime, and are provided financial assistance under the scheme shall be counted towards achieving the target of the scheme.
- v. IPR generated under the scheme will be governed by existing rules and regulations of Government/UGC/CSIR.
- vi. All institutions who will participate would be subjected to Audit of their accounts/records in respect of the scheme as per government norms.
- vii. Assets created under the scheme using the research grant to the participating institutions would be used by institutions for the research and development activities in these institutions after the end of the scheme.
- viii. For every five candidates supported by the Department of electronics and IT under this scheme, at least one candidate would be supported by industry/State Government concerned. It shall be the responsibility of participating institution to work with industry/State Government to enlist the PhD candidates, which are supported by the industry/State Government. The institution is free to determine the terms and conditions of the PhD candidate enrolled through industry/State Government support. However, such support shall not be less than the support provided to PhD candidates as per the PhD Scheme' of Deity. DeitY may, however, consider waiver of this ratio in deserving cases.
- ix. The candidate would be eligible for Fellowship for the period during which the candidate is in good standing, and fulfills the requirements of the PhD successfully. The maximum period for which the support would be available for any fulltime candidate would be five years or till the completion of PhD whichever is earlier.

- x. The participating Institution will ensure that a candidate receiving fellowship under this scheme is not receiving any financial support for PhD from any other scheme of Government of India/States etc at the same time. The candidates who have availed support for their PhD from any other scheme of Government of India/State etc will automatically stand disqualified for support under this scheme.
- xi. The support for attending international conferences for full-time PhD candidates shall be subject to availability as per overall ceiling of 1000 participations. The above support would be to cover the travel and other expenses for attending International conferences, where the research paper of the PhD candidate has been accepted for the presentation by the candidate. A list of renowned International conferences related to the areas of ESDM and IT/ITES would be prepared by the 'Academic Committee' for the Scheme for the purpose of this support.
- xii. Necessary provisions for teaching by full-time PhD candidates at undergraduate/postgraduate level would be formulated by the Academic Committee for the scheme set up by DietY. These will be adopted by the participating Institutions under the PhD Scheme.
- xiii. The selection criterion of the PhD candidates to be supported under the scheme will be devised separately by the Universities/Institutions in consultation with the 'Academic Committee' setup by DeitY. However, a balance would be maintained between basic research and applied research. The 'Academic Committee' setup by DeitY under the HRD Division, DeitY would look in to this issue from time to time and make suitable recommendations.
- xiv. Other details of terms and condition in respect of the scheme would be guided by "Terms & Conditions governing Grant-in-aid for funding R&D Projects" (of DeitY) where ever applicable (a copy is at Appendix-II).

Department of Electronics & Information Technology (DeitY) Ministry of Communications & IT Government of India

Terms & Conditions governing Grant-in-aid for funding R&D Projects

I. Applicability

These terms & conditions apply to the institutions who receive grant-in-aid from DeitY for undertaking R&D projects.

II. Definition

In these instructions:

- i. The "institution" means any technical, scientific or academic establishment where research work is carried out through funding by DeitY. (including R&D Laboratories, Autonomous Scientific Societies etc.)
- ii. "Inventor" means researcher/ employee of the Institution whose duties involve carrying out scientific or technical research work in an R&D project funded by DeitY.
- iii. "Intellectual Property Rights" include patents, Trademarks, registered designs, copyrights and layout design of integrated circuits.

III. General Conditions

- 1. The grant is for undertaking the specific project as approved by DeitY and shall be subject to the following conditions:
 - i. The grant shall be spent for the project within the specified time
 - ii. Any portion of the grant which is not ultimately required for expenditure for the approved purposes shall be duly surrendered to DeitY.
- 2. For a project being executed by DeitY grant, Application by grantee institution for any other financial assistance or receipt of grant/loan from any other Agency/ Ministry/Department for the same project should have the prior permission/approval of DeitY.
- 3. The grantee institution is not allowed to entrust the implementation of this project for which grant-in-aid is received, to another institution and to divert the grant-in-aid received from DeitY as assistance to the later institution. However available IP core etc. could be procured with due payment of license fee as per the recommendations of PRSG.
- 4. The investigator(s) should not enter into collaboration with a foreign party (individual/academic institution/ industry) in execution of this project without prior approval of DeitY.
- 5. The grantee institution(s) shall make all efforts to protect the Intellectual Property Rights (IPR) being generated through the research project and follow the section "Guidelines for IPR" as laid by DeitY.

- **6.** The grantee institution, while undertaking the technology transfer/commercialization activities, shall follow the procedure laid down by their own institution. In case there is no such procedure/framework within the grantee institution, a transparent mechanism based on the guidelines indicated at section "Guidelines for Technology Transfer/ commercialization" shall be followed.
- 7. In case the grantee institution does not license the patent/ commercialise the technology within a period of 5 years from the time of obtaining the patent/ development of technology, the grantee institution will make available the patent/technology in public domain for usage by Indian companies/MSMEs/startups/entrepreneurs/citizens.
- 8. The Grantee institution should indemnify DeitY from any legal and/or financial incumbrance arising out of any infringement of IPR/ licensing of IPR/ technology transfer/ commercialization.
- **9.** Any dispute on any matter related to the implementation of the project, the decision of Secretary, DeitY, shall be final and binding on the grantee institution.
- 10. DeitY reserves the right to modify these terms and conditions governing the grant-in-aid from time to time reflecting the directions of the Government of India.

IV. Monitoring & Review of the project

DeitY shall appoint a Project Review and Steering Group (PRSG) comprising of representatives from DeitY and other experts to periodically review and monitor the technical and financial status of the project. PRSG will periodically monitor the project in all respects including technical and financial progress of the project.

V. Acquisition & Management of Assets

- 1. The grantee institution shall maintain an audited record in the form of a register in the prescribed proforma for permanent, semi-permanent assets acquired solely or mainly out of the DeitY grant. The applicable procedures for procurement shall be followed for acquisition of assets.
- 2. The assets referred to above will be the property of DeitY and should not, without prior sanction of DeitY, be disposed off or encumbered or utilised for the purposes other than those for which the grant has been sanctioned;
- 3. The grantee institution shall send a list of assets referred above to DeitY at the end of each financial year as well as at the time of seeking further instalments of the grant;
- 4. Should at any time grantee institution cease to exist, such assets etc., shall revert to DeitY;
- 5. At the conclusion/ termination of the project, the Government of India will be free to sell or otherwise dispose off the assets which are the property of the Government. The Institution shall render to the Government necessary facilities for arranging the sale of these assets. The Government of India has the discretion to transfer the assets to the concerned institution or any other institution if it is considered appropriate.

VI. <u>Utilization of grants and Audit</u>

- 1. The grantee institution should maintain separate audited account for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest, thus earned should be reported to DeitY. The interest so earned will be treated as a credit to the grantee institution to be adjusted towards future instalment of the grant; DeitY or its nominee/s will have the right of access to the books and accounts of the grantee institution for which a reasonable prior notice would be given;
- 2. The grantee institution shall render an audited statement of accounts and utilization certificate to DeitY, every year. The audited statement of accounts relating to grants given during financial year together with the comments of the auditor regarding the observance of the conditions governing the grant should be forwarded to the DeitY within six months following the end of the relevant financial year;
- 3. The utilisation of grant for the intended purposes will be looked into by the Auditor of grantee institution according to the directives issued by the Government of India at the instance of the Comptroller and Auditor General and the specific mention about it will be made in the audit report;
- 4. The grantee institution shall render progress-cum-achievement reports at interval of not exceeding six months on the progress made on all aspects of the project including expenditure incurred on various approved items during the period.
- 5. The grantee institution will refund unspent balance in addition to the interest, if any accrued on the unspent balance in the total outlay of the project.
- 6. Ministry or Department will be at liberty to take appropriate action under the Rule 212(1) of GFR 2005 relating to utilization of funds in the specified time and where such certificate is not received from the grantee within the prescribed time (reference General Financial Rules 2005).

VII. Guidelines for managing IPRs:

- 1. The IPR arising out of sponsored project(s) will be with grantee institution(s). While the patent may be taken in the name(s) of inventor(s), the institution(s) shall ensure that the IPR is assigned to institution(s). In cases where the funding/resourcing of researchers have been done jointly with other organizations, the IP rights would be appropriately shared among them.
- 2. The Government of India/Govt. bodies (including its PSUs, Govt. autonomous societies & section 25 companies) shall have right to obtain a royalty-free license for the Intellectual Property for deployment/use of the same for non-commercial purposes. However, in case, IP is proposed for commercial usage, the terms of licensing may be mutually agreed with the grantee institution(s) possessing IPR.
- 3. The grantee institution shall submit the financial requirements for filing of IPR as part of the R&D proposal. The contingency head could be used for provisioning of the expenditure for filing of IPR with a ceiling of Rs. 15 Lakhs for the cost of initial filing, but excluding for the annuity fee. International Patent filing will be permitted. The amount will be released based on the recommendations of PRSG constituted by DeitY

for the concerned project. If, for any reason, it is not possible to meet the expenses from the project grant, like in the case of the need for filing of IPR arising after the closure of the project, an application may be made separately by the institution to DeitY for sanction/reimbursement of the expenses incurred in filing of the IPR.

- 4. The grantee institution shall inform DeitY about the patents filed/obtained and IPR arising out of the R&D project on annual basis over the project duration and subsequent 5 years period after the project closure.
- 5. The grantee institution shall provide information to DeitY about trading/ selling/ transferring /licensing the IP rights, within a period of 6 weeks from conclusion of the agreement relating to such a commercial event.
- 6. The grantee institution shall take appropriate licence in case of export of 'Special Chemicals, Organisms, Materials, Equipment and Technologies' (SCOMET) items as per the prevailing provisions of Foreign Trade Policy from Directorate General of Foreign Trade, under Department of Commerce, Govt. of India.
- 7. As the R& D is supported by public fund, the grantee institution should ensure that the interests of India and its citizens are fully protected, while licensing of patents/transfer or commercialization of technology.
- 8. The institution is permitted to retain the benefits and earnings arising out of the IPR for plough back to pursue research/research related activities.
- 9. Not withstanding the above, DeitY reserves the right to take over ownership of the rights of the Intellectual property arising out of this project, in the interest of the Indian sovereignty, without any compensation to the grantee institution.

VIII. Guidelines for Technology Transfer/commercialization:

The Grantee institution may use the following guidelines in case there is no laid down procedure within their own institution:

- 1. The transfer of technology may normally be undertaken by the central office of the grantee institution equipped to handle legal issues with regard to technology/ IP licensing.
- 2. The grantee institution shall constitute a Transfer of Technology (ToT) Committee for evaluation of the applications for ToT and for working the appropriate revenues expected out of the ToT
- 3. Prior to seeking the expression of interest for technology transfer/commercialization, there should be sufficient disclosure of the technical details, features and capabilities of the project through advertisement, publication on the websites of the Institution and of DeitY, and exhibitions, if any held on the related themes during the relevant period. The ToT proposal may be given wide publicity in one national daily besides in journals relating to the theme and by writing to the industry associations related to the theme.
- 4. Normally, a period of 6 weeks shall be given for interested parties to file their applications relating to Expression of Interest and a format for the application is

attached in Annexure-I which may require customization based on the technology/product/service/prototype proposed to be transferred by the grantee institution.

- 5. The ToT Evaluation Committee shall undertake a techno-commercial evaluation of the proposals received, adopting a 2-stage process.
- 6. The ToT committee formed by the grantee institution will work out the cost of ToT on case-to-case basis considering the ground realities like i) development cost of the project ii) market demand of the technology/product iii) ability of the industry to pay for the technology iv) work involved from prototyping to packaging. The cost of capital equipment will be excluded from the total cost of development. Such an estimated cost shall be used as the Internal Bench Mark (IBM) for evaluating the ToT fee and royalty, in Stage 2.
- 7. After due diligence by the ToT committee a technology transfer/ licensing agreement shall be signed which shall include license of IPRs through existing legal procedures.
- 8. It is desirable that technology be transferred on a non-exclusive basis. Exclusive licensing should be in the rarest of rare cases based on sufficient justification by the ToT Evaluation Committee and approval by the Head of the institution/ Competent Authority and with the approval of DeitY.
- 9. The institution is permitted to retain the benefits and earnings arising out of the technology transfer/licensing of IPRs for ploughing back to pursue research/in related areas.

IX. Guidelines for publication of results

- 1. Investigators wishing to publish technical/ scientific papers based on the research work done under the project, should acknowledge the assistance received from this Department and a copy of the communicated/published paper be sent to DeitY.
- 2. If the results of research are to be legally protected for the intellectual property, then its publication can be undertaken only after due care is taken for legal protection of the intellectual property rights.

Note:

- 1. While submitting the project proposal, a certificate of acceptance of terms and conditions and undertaking to follow the guidelines as above needs to be given by the chief investigator and endorsed by the competent authority of the institution. For any deviation from the terms & conditions and guidelines, the grantee institution will take the permission/approval of the competent authority of DeitY.
- 2. The guidelines for managing IPR and Technology Transfer/commercialization will not be applicable for the following exceptions and specific approvals have to be taken in respect of IPR and ToT:
- i) The R&D projects of strategic applications
- ii) The projects jointly funded by/for strategic departments like defense, space and atomic research etc.

Invitation for Expression of Interest by grantee institution (Ref. VIII –Guidelines for Technology Transfer/commercialization para-3 of Terms & conditions governing grant-in-aid for funding R&D Projects)

Instructions to the Bidders to be provided by the grantee institution

The applications are invited for the purpose of Technology Transfer/ commercialization from the organizations with relevant experience.

- 1. The information to be furnished for Expression of Interest is given in Annexure-I (which may require customization based on the technology/product/service/prototype) being transferred. Interested parties can submit the EOI along with Annexure-I duly filled in with all relevant supporting documents as mentioned in Para 3.0 of EOI document.
- 2. A Pre-bid meeting of all the Bidders will be convened on The purpose of this meeting will be to clarify the requirements as envisaged by the grantee institution and also to address the queries if any.

3.	The EOI's	submitted	should	be	sealed	proper	ly and	marked	"EOI	for	TOT	of	prod	luct/
	technology/j						-						_	till
	Details of th	ne contact po	erson											
	The EOI bid	ls shall be o	pened o	n	(date)_			ıt	(ti	ime)				

Institution may at its discretion – extend this deadline for the submission of EOI by amending the EOI documents, in which case all rights and obligations of Institution and bidders previously subject to the deadline will thereafter be subjected to the deadline as extended.

- 4. To assist in the examination, evaluation and comparison of EOI, Institution at its discretion can ask the bidder for the clarification of its EOI. The request for clarification and the response shall be in writing. However no post submission of EOI, clarification at the initiative of the bidder shall be entertained. Authority reserves the right to visit the facilities of the bidders if required.
- 5. Bidders if they chose, may prior to submitting their Expression of Interest, visit Institution with prior appointment.
- 6. Bidders may be called for making a presentation before the committee.
- 7. The grantee institution may visit bidder's facilities for the assessment
- 8. The grantee institution will issue tender documents to short-listed bidders for the submission of financial bids.
- 9. At any time before the submission of EOI, the grantee institution may carry out amendment(s) to this EOI document and/ or the schedule. The amendment will be made available on the website (Website details) and will be binding on them. The Authority may at its discretion extend the deadline for the submission of proposals.
- 10. The Authority reserves the right to accept or reject any application without assigning any reason thereof.
- 11. Bids that are incomplete in any respect or those that are not consistent with the requirements as specified in this document or those that do not adhere to formats, wherever specified may be considered non-responsive and may be liable for rejection and no further correspondences will be entertained with such bidders.
- 12. Canvassing in any form would disqualify the applicant.

13. For any clarifications on the Expression of interest document, the following may be contacted
through e-mail/FAX/Letter:
Details of the contact persons
Competent authority
Grantee Institution

Details to be provided by the grantee institution for the bidders

1.0 INTRODUCTION

- (i) Brief about the institution
- (ii) Brief description about the product/technology/prototype to be transferred.
- (iii) Current status of product/ technology/protype

2.0 Scope of work & Facilities:

2.1 Extent of work

The Expression of interest (EOI) is for participation of ______(purpose to be defined)) with the scope of work as listed:

2.2 Documentation:

- (i) Institution will provide its documentation for all sub-system as per scope of work.
- (ii) The identified industry is expected to prepare detailed documents of fabrication, development & testing of various sub-systems in consultation with the institution, however the final documentation is entirely the responsibility of bidder.

2.3 Facilities available at institution for fabrication/programming/ packaging

3.0 EXPRESSION OF INTEREST

- 3.1 Institution invites "Expression of Interest in the format given in Annexure-I (which may require customization based on the technology /product/ service /prototype being transferred). The industries will be shortlisted based on the information furnished in Annexure I and assessment by the TOT committee.
- 3.2 The submission of the EOI shall include all such documents that are specified herein to prove the authenticity of their offer and any claim made therein. The burden of proving such claims shall lie with the bidder.
- 3.3 All cost and expenses associated with submission of EOI shall be borne by the bidder while submitting the EOI and Institution shall have no liability, in any manner in this regard, or if it decides to terminate the process of short listing for any reason whatsoever.

<u>ANNEXURE-I (Ref. VIII –Guidelines for Technology Transfer/commercialization para-4 of Terms & conditions governing grant-in-aid for funding R&D Projects)</u>

The following details should be submitted along with EOI.

Part-A

A.	Company Profile					
1.	Name of the Organization:					
	Website					
2.	Name of the Contact Person:					
	Name:					
	Address					
	Telephone:					
	Fax:					
	E-Mail:					
3.	Year of Incorporation					
4.	Type of Organization					
	a. Public Sector/ Limited/Private Limited/ Partnership/ Propritery/					
	Society/ Any other					
	b. Whether 'Foreign Equity Participation (Please give name of					
	foreign equity participant and percentage thereof)					
	c. Names of Directors of the Board/ Proprietors					
	d. Name and address of NRI(s), if any					
5.	Category of the firm: Large/Medium/Small scale unit					
6.	Address of the Registered Office:					
7.	Number of Offices with addresses (Excluding Registered Office:					
	India					
	Abroad					
8.	Certificate of registration as a manufacturing unit					
9.	Permanent Account Number					
10.	Sales Tax Number/ VAT					
11.	Status of ISO9001/ISO13485 Certification					

Technical Collaborations:

В.	ESSENTIAL REQUIREMENTS
1.	The organization must be a reputed firm/company/SME/startup/R&D company incorporated in India with standing of at least 2 years.
2.	The turnover is to be a supported by financial statements of accounts/ Annual reports duly certified by a Chartered accountant/ Balance sheets of last 3 years/ Income tax returns for the last 3 years period.
3.	Company profile, giving details of current activities and management/ personnel structure including evidence of incorporation. The company should be registered and ISO 9001/ ISO13485 or equivalent certified.
4.	Details of absorption of technology for a product/ knowhow that has been taken up on production scale in the past may also be given
5.	The manpower strength (Technical: Mechanical, Electrical, Electronics, Software & Non-Technical etc.) at various levels to be furnished Technical: a. B.E./ B.TECH/PhD b. DIPLOMA c. SKILLED TECHNICIANS d. UNSKILLED Non-technical:
6.	The list of machine tools /equipments/softwares/facilities available related with work to be furnished.
7.	The in-house technological expertise available to be furnished
8.	The list of equipments available for inspection and quality control to be furnished.
9.	The industry should have adequate space for undertaking this work. Available space- Covered & Open to be furnished.
10.	List of products/technologies worked with as regular activity in last three years. Give the list of products/technologies with general specifications and the customers.
11.	List of PSUs/ Govt. customers – with contact details (Address, Telephone .no., Contact Person)

12.	The details of sales, marketing and maintenance network to be furnished
13.	The list of technical collaborators for various ongoing products may be furnished
14.	The bidder shall provide details of the sub-vendors in case they propose to employ for Part-work.
C.	Expression of Interest: Spell out the extent of interest
D.	The ToT will be done stage-wise: The preferred stages may be furnished.
Е.	The ToT fee and royalty, payment schedule

I hereby declare that the above information is true to the best of my knowledge.

Signature with Name & Seal:

Place:

Date:

This issues with the concurrence of JS/FA and approval of Secretary, DeitY as on 8.10.2013 and subsequently clause (9) of Section VIII "Guidelines for Technology Transfer/commercialization" concurred by JS/FA and approved by Secretary on 24.12.2013.

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F. No. 1(5)/2012-HRD (Vol.IV)

Government of India

Ministry of Communications and Information Technology Department of Electronics and Information Technology

6, CGO Complex, New Delhi - 110003

Dated: 04.03.2014

To

The Pay & Accounts Officer

Pay and Accounts Office Department of Electronics and Information Technology **Electronics Niketan** New Delhi - 110 003

Subject: Administrative Approval

Sir,

I am directed to convey the Administrative Approval of the Competent Authority for implementation of the 'Scheme to enhance the number of PhDs in the Electronic System Design and Manufacturing (ESDM) and IT/IT Enabled Services (ITES) sectors ['The PhD Scheme']' at a total estimated cost of Rs. 401 crore (Rupees Four Hundred one crore only) over a period of nine years. The details of the PhD Scheme are given in the Annexure enclosed.

This issues with the approval of the Cabinet Committee on Economic Affairs (CCEA) vide Communication No. CCEA/11/2014(i) dated 3.3.2014.

Yours faithfully

(Dr. Ajay Kumar) Joint Secretary

Copy to:

- 1. The Principal Director of Audit (Scientific Departments), AGCR Building, IP Estate, New Delhi - 110001.
- 2. **Drawing & Disbursing Section, Deity**
- Finance Section, DeitY 3.
- **Budget Section, DeitY** 4.
- 5. IT Research Academy (ITRA)
- 6. All GCs of DeitY
- 7. Chief Executive Officers of all autonomous bodies under DeitY
- 8. Director (Cabinet), Cabinet Secretariat, Rashtrapati Bhawan, New Delhi.
- 9. Joint Secretary, Prime Minister's Office
- Sanction Folder 10.

(Dr. Ajay Kumar) Joint Secretary

A Scheme to enhance the number of PhDs in the Electronic System Design and Manufacturing (ESDM) and IT/IT Enabled Services (ITES) ['The PhD Scheme']

1. Background

- 1.1 The National Policy on Electronics (NPE 2012), and The National Policy on Information Technology (NPIT 2012) give special thrust on significantly increasing the number of PhDs in the country to enable India to compete globally in the coming decades, to develop an ecosystem of research, development and IP creation in these knowledge intensive sectors. The NPE 2012, interalia, sets an objective of creating 2500 PhDs annually by 2020 in Electronics System Design and Manufacturing (ESDM) and related fields. The NPIT, 2012 envisaged to set up Centers of Excellence in institutes of higher learning to promote high-end research in specialized ICT areas and producing quality doctoral and postdoctoral level researchers. There is need for a special programme to create necessary capacities to achieve the target. The scheme proposes to meet these objectives.
- 1.2 The proposed scheme is also expected to encourage working professionals and non PhD faculty members to pursue PhD in the ESDM or IT/ITES sectors.

2. Objective

- 2.1 The scheme aims at generating a total of 1500 PhDs for <u>each</u> of ESDM and IT/ITES sectors over a period of 5 years.
- 2.1.1 Out of the above, 500 PhDs for <u>each</u> of ESDM and IT/ITES sectors would be full-time PhD candidates have fellowship support as described in the scheme; and
- 2.1.2 The other 1000 PhDs for <u>each</u> of ESDM and IT/ITES sectors would be part-time PhD candidates who would receive one-time incentive as described in the scheme.
- 2.2The scheme will also identify and support 200 Young Faculty to encourage and recognize Young Faculty involved in research and technology development in the areas of ESDM and IT/ITES with the objective to retain as well as attract young faculty in these sectors.
- 2.3The scheme would mainly focus on themes which have direct relevance to the NPE 2012 and the NPIT 2012 (the ESDM and IT/ITES policies), through applied research aimed at promoting and development of innovative products for the market.

3. Institutions Eligible for support

- 3.1 All Indian Institutes of Technology (IITs), National Institutes of Technology (NITs), Indian institute of Science (IISc), all Indian Institutes of Science Education and Research (IISERs), Central Universities, Deemed Universities under Central Government, Colleges/Institutions of national importance will be eligible for support under the scheme.
- 3.2 A University created under a Provincial Act, State Act, State Universities, Private Universities, Private Deemed Universities, "Colleges that are allowed to offer PhD", and other academic and R&D institutions will need to get recognized by the Academic Committee under the scheme to be eligible for support under the scheme.

3.3 The minimum requirement for the Institutions/Universities/Research Centers etc. for being eligible for support under the scheme will be compliance to the "UGC's Minimum Standards and Procedure for award of M. Phil/Ph.D. Degree, Regulation, 2009" (ref. The Gazette of India July 11, 2009 Part III Sec 4) as amended time to time.

4. Financial Support

- 4.1 Financial support to the following would be provided under the scheme
- 4.1.1 Full time PhD candidates:
- 4.1.2 Part-time PhD candidates;
- 4.1.3 Institutions registering PhD candidates under the scheme; and
- 4.1.4 Identified Young Faculty for undertaking research and technology development
- 4.2 The quantum of financial support that be provided to the above four categories will be as follows.
- 4.2.1 Full-time PhD candidates.
- 4.2.1.1 **Fellowship** @ Rs. 22,500 per month in 1st and 2nd year, and @Rs. 25,000 per month in 3rd, 4th, 5th years of PhD.
- 4.2.1.2 Annual contingency grant/support: @ 30,000/- per year per full time PhD candidate for consumables etc.
- 4.2.1.3 Reimbursement of Rent (RoR): For those fulltime PhD candidates who are not provided accommodation or choose not to avail the accommodation provided by the institution. The RoR would be on reimbursement basis, based on actual and subject to a ceiling based on location of the institution registering the PhD candidate. The ceiling would be 30%, 20%, and 10% of the fellowship amount as per the Government of India norms for class X, Y or Z cities respectively.
- 4.2.1.4 Support for attending International conferences: Support for attending up to two renowned international conferences per full-time PhD candidate: @ up to maximum support of Rs. 50,000/- for each international conference would be provided. The total support under the scheme is for 1000 such participations fulfilling the norms defined in the scheme on first come first serve basis.

4.2.2 Part-time PhD candidates

4.2.2.1 Part-time candidates who do not avail of any PhD Fellowship/scholarship/stipend from any Central or State Government shall be provided a one-time incentive of Rs 2.5 lakh on successful completion of the PhD degree.

4.2.3 Institutions registering PhD candidates

- 4.2.3.1 **Infrastructure grant** for up gradation/creation of the laboratory, equipment etc. (excluding civil construction/expansion of the building) @50% of the actual cost subject to a ceiling of Rs. 5 lakhs per full time candidate under the scheme. This grant would be one-time.
- 4.2.3.2 **Institutional over heads**: @ Rs. 25,000/- per year per full time candidate under the scheme for a maximum of five year for each candidate.

4.2.4 Young Faculty Research Fellowship

- 4.2.4.1 Research Fellowship @ Rs. 20,000 per month, in addition to regular income, for a maximum of five years.
- 4.2.4.2 Contingency/research grant of Rs. 5 lakhs per annum for presenting paper and research-work at national and international conferences and other research expenses for a maximum of five years.

5 Terms and Conditions for support of PhD candidates

- 5.1 The support will be for **additional** PhD candidates taken up by an institution. No support would be provided for current levels of enrolment in the PhD programme.
- 5.2 The candidates enrolled/registered for PhD during the period of the scheme would only be eligible to apply for the financial support.
- 5.3 The number of PhD candidates that an institution can take up under the scheme will be determined Department wise based on number of Faculty members available to guide/mentor/advice the PhD candidates and the current levels of enrolment. It will not be permissible to take more candidates in one Department in lieu of vacancies in another Department. Departments which are primarily in the area of ESDM or IT/ITES as the case may be are automatically eligible for assistance under the scheme. In other Departments, PhD candidates who are working in the area of ESDM and IT/ITES would be eligible for support subject to criteria provided in the scheme.
- 5.4 ESDM and IT/ITES are meta technologies, and the work in these sectors also span other sectors. Departments which are primarily not in the area of ESDM or IT/ITES, may also take advantage of the scheme, provided the research work being pursued by the identified PhD candidate is related to ESDM or IT/ITES. Such requests for support to other Departments will be considered by the 'Academic Committee' to be constituted by the Department of Electronics and IT (DeitY) for the purposes of this scheme. However the total number of candidates supported in other Departments will not exceed the total number of support provided to the Departments (in the same institute/University) which are primarily in the area of ESDM or IT/ITES.
- 5.5 Student/Faculty (S/F) ratio for any Department of the institution will be the determinant of the number of PhD candidates that can be supported in the said Department. This ratio will be determined by an 'Academic Committee' to be constituted by the Department. The Faculty members for the purpose of this ratio will be those faculty members who are qualified as per UGC norms to guide/advise PhD candidates work under them.
- 5.6 For the purposes of this scheme, the maximum number of PhD candidates which a given Department of a given institution may take will be equal to S/F ratio multiplied by the number of faculty members say M. The total number of enrolled PhD candidates in the Department, at the commencement of the scheme, be T. The average annual enrolment of PhD candidates, in the Department, over the past three years be A. While determining A, the fractions would be rounded off. The additional number of PhD candidates that a Department of an institution may enroll per year will be ((M multiply S/F) minus T minus A))/5, where 5 represents the number of years which a PHD candidate is expected to spend in the programme.
- 5.7 For every five candidates supported by the Department of Electronics and IT under this scheme, at least one candidate should be supported by industry/State Government concerned. It shall be the responsibility of participating institution to work with industry/State Government to enlist the PhD candidates which are supported by the industry/State Government. The institution is free to determine the terms and conditions of the PhD candidate enrolled through industry/State Government support. However, such support shall not be less than the support

- provided to PhD candidates as per 'the PhD Scheme' of DeitY. DeitY may, however, consider waiver of this ratio in deserving cases.
- 5.8 The candidate would be eligible for Fellowship for the period during which the candidate is in good standing, and fulfills the requirements of the PhD successfully. The maximum period for which the support would be available for any fulltime candidate would be five years or till the completion of PhD whichever is earlier.
- 5.9 The participating Institution will ensure that a candidate receiving fellowship under this scheme is not receiving any financial support for PhD from any other scheme of Government of India/States etc. at the same time. The candidates who have availed support for their PhD from any other scheme of Government of India/States etc will be automatically be stands disqualified for support under this scheme.
- 5.10 The support for attending international conferences for full-time PhD candidates shall be subject to availability as per overall ceiling of 1000 participations. The above support would be to cover the travel and other expenses for attending International conferences, where the research paper of the PhD candidate has been accepted for the presentation by the candidate. A list of renowned International Conferences related to the areas of ESDM and IT/ITES would be prepared by the 'Academic Committee' for the Scheme for the purpose of this support.
- 5.11 Necessary provisions for teaching by full-time PhD candidates at undergraduate/postgraduate level would be formulated by the Academic Committee for the scheme. These will be adopted by the participating Institutions under the PhD Scheme.
- 5.12 The selection criterion of the PhD candidates to be supported under the scheme will be devised separately by the Universities/Institutions in consultation with the 'Academic Committee' setup by DeitY. However, a balance would be maintained between basic research and applied research. The 'Academic Committee' setup by DeitY under the HRD Division, DeitY would look in to this issue from time to time and make suitable recommendations.

6 Terms and conditions for Young Faculty Research Fellowship

- 6.1 An Institution would be **eligible** for one Young Faculty Research Fellowship grant for every 5 full time PhD Candidates supported under this scheme in the institution in a given year.
- 6.2 Young Faculty Research Fellowship is meant for those who have a proven trackrecord as evident from their research publications and recognitions. The Young
 Faculty must have 'a regular position in the Institute and should be engaged in
 research' or 'must be in a position on a regular scale, which leads to a regular
 position in the Institute and should be engaged in research'. If he /she is availing any
 other fellowship, he/she will have to opt for only one of the fellowships.
- 6.3 The details of qualifications, age limits and selection mechanism of such young faculty would be defined separately by the 'Academic Committee'.

7 Terms and conditions relating to participating institutions

- 7.1 The support under the scheme will be provided to the institution granting the PhD degree and no direct funding support will be provided by Government of India to the PhD candidates or faculty members or to the Departments in the supported institution. The institution will be responsible for seeking financial support and for furnishing utilization certificates of the funds released and based on the scheme parameters, and as per conditions of the sanction of grant-in-aid.
- 7.2 The PhD candidates who successfully complete their PhDs, either as full-time or part time, and are provided financial assistance under the scheme shall be counted towards achieving the target of the scheme.
- 7.3 The participating institution shall ensure that a PhD candidate supported under the scheme is not funded from CSIR/UGC.
- 7.4 IPR generated under the Scheme will be governed by existing rules and regulations of Government/UGC/CSIR.
- 7.5 All institutions who will participate would be subjected to Audit of their accounts/records in respect of the scheme as per government norms.
- 7.6 Assets created under the scheme using the research grant to the participating institutions would be used by Institutions for the research and development activities in these institutions after the end of the scheme.

8 Governance Mechanisms

- 8.1 **Academic Committee:** An 'Academic Committee' can be constituted by DeitY to perform various roles assigned to it in this scheme.
- 8.2 Online Platform: An online platform will be created by DeitY to facilitate interaction between Academia and Industry in order to cater to the research needs of the industry in the ESDM and IT/ITES. This platform would, interalia,
 - a) Help in seeking inputs from industry about areas in which PhDs are needed;
 - b) Enable/encourage joint research by academic institutions and industry; and
 - c) create a database /information system/MIS for efficient monitoring of the scheme.
- 8.3 **Implementation Agency:** To provide secretariat and managerial support, a suitable and capable agency is proposed to be engaged. Information Technology Research Academy (ITRA), a Division of 'Media Lab Asia', a Section-25 not-for-profit organization of Department of Electronics & Information Technology, Government of India, would be responsible for providing implementation support as such other roles as assigned by DeitY from time to time.
- 8.4 **Project Review and Steering Group (PRSG):** Periodic review (around in six months) of the scheme would be done by the PRSG setup by, the HRD Division, DeitY.
- 8.5 **PhD Cell:** To provide support in DeitY for such work provision for separate PMU shall be created in the form of "PhD cell" under the HRD Division, DeitY. The PMU would interalia:

- a) Take steps to monitor the scheme towards fulfillment of the qualitative and quantitative objectives;
- **b)** Provide secretariat support for holding meetings of the Academic committee and the PRSG and other meetings related to the implementation of the scheme;
- c) Provide support for creating the online platform/database/MIS
- **d)** Support required for methods to develop entrepreneurship skills in the PhD Candidates enrolled under the scheme.
- e) Support required to provide appropriate linkages with various existing/proposed schemes like: C2S, ISEA-Phase II, ITRA, C-Met, SAMEER, C-DAC, ICT Academies etc.
- f) Support required for appropriate linkages of the scheme with Venture Capital linked research development under the proposed EDF Scheme of DeitY
- g) Support required for managing IPR generated under the scheme

9 Miscellaneous

- 9.1 Collaborations with internationally reputed academics and R&D Institutions will be encouraged.
- 9.2 Impact assessment in the fourth year after the start of the scheme would be done by a third party (institution/body of repute for such purpose such as IIM etc.).
- 9.3 Detailed guidelines regarding operationalization of the scheme would be issued by the HRD Division, DeitY after the approval of the scheme

10. Duration of Scheme

10.1 The duration of scheme would be for five years for the purposes of selecting PhD candidates for support under the scheme. However, the funding would be continued till 9th year for the commitments already made during the scheme period.

(Dr. Ajay Kumar) Joint Secretary