Technology Information Facilitation Programme (TIFP)

Introduction:

Technology Information Facilitation Programme (TIF) is one of the components of Technology Promotion, Development and Utilization (TPDU) Programme of the Department of Scientific and Industrial Research (DSIR). The broad objective of the programme is to generate endogenous capacities for the development and utilization of digital information resources and provide inputs to S&T research and industrial development.

In todays scenario, given the quality of connectivity, it is being strongly felt that the Programme should endeavour to strengthen the resource base of available information and provide a mechanism for optimal utilization of the resources in the country. TIF would also facilitate collaborative research among industries and institutions.

Information and Communication Technologies (ICT) are now internalized to the socio-economic fabric of the country. These all-pervasive technologies can be fruitfully applied to all sectors of the economy, and the community of the scientific & industrial research workers could be one of the major beneficiaries.

In the recent past, public and private sector companies have made significant investments to develop infrastructural facilities including telecom networks. It however needs to be considered how best such infrastructure could be utilized for scientific & industrial research and how the new ICT tools are to be used for application to a variety of domains in the Indian environment.

TIF is, therefore, will be implemented as a co-operative and collaborative venture and built around the existing infrastructure, wherever possible. In this the strategy would be to:

- Concentrate on creation of Indian S&T content,
- · Avoid duplication of efforts,
- · Ensure minimum overlapping,
- · Promote maximum utilization of existing facilities, and
- · Utilize the internet technology,

Objectives

The specific objectives of TIF programme are to:

- develop appropriate endogenous information capacities to support the R&D activities,
- support the production of local content and promote use of indigenous knowledge,
- promote information and knowledge networking at local, regional and national levels to facilitate flow and sharing of information resources,
- map the national S & T productivity in relation to the international trend,
- support education, training and R & D in digital content development and utilization, and
- promote national and international cooperation in related areas.

Strategies and Activities

The objectives of TIF are proposed to be achieved through a set of strategies and specific activities under each strategy. The strategies and the activities under each given strategy are as listed below:

- Development of endogenous capacities
 - Promotion of content development
 - Industrial trend reports
 - Information support for industrial clusters
- · Digital and indigenous knowledge base
 - National websites/ servers
 - Indian digital library of theses and R&D publications
 - Documentation of traditional knowledge and folk wisdom
 - Information for community digital provide and opportunities
- Establishing knowledge net
 - Promotion of information access and sharing
 - Virtual systems

- Electronic publishing of selected Indian S&T materials
- Open archive initiatives a web alternative to scholarly communications
- Mapping of national S&T productivity
- Education, training and R&D
 - Surveys and R&D studies
 - Manpower development programme
- · International activities

Promotion of Content Development

Indian capabilities have gained international recognition in the field of ICT, particularly in software development. India also has a large population of domain experts in every field of science and technology and almost all of them have adequate proficiency in English. This provides an enabling environment for content development to meet the national and international demands. However, this latent potential for content development is yet to be transformed into significant business opportunities. Non-availability of the requisite know-how including entrepreneurial and marketing capabilities is considered to be one of the major reasons for the current situation. Capacity development in the area of content development is therefore considered important and the institutions having the requisite infrastructure and technical competence would be assisted to take-up capacity building in content development. In particular, TIF would support specific projects on the following:

- · Research and development in the content development, design and methodology
- Training and skill development programmes on all aspects of content development including the technical know-how, entrepreneurship and marketing, etc for scientists, students, retired specialists, house wives, etc
- Experimentation with technologies and systems for content development in Indian languages
- · Surveys and studies for assessment of priorities in content development
- Setting up content development facilities leveraging the strengths of ICT, domain expertise and fresh young alumni

Industrial Trend Reports

DSIR has prepared a series of industrial trend reports, though many of these are presently outdated. DSIR would provide assistance to professional institutions and experts for selectively updating of such reports which are of current interest and preparing of new ones. These reports need to be published in e-format.

Information Support for Industrial Clusters

Providing Science & Technology Information support to small and medium enterprisers (SMEs) in Industrial clusters producing common range of products by leveraging the concept of virtual information system and knowledge management will be covered under TIF Programme.

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National Websites / Servers

Collection, collation and hosting of nationally generated contents on Science & Technology in national websites/servers will be a major activity on creation of digital content and indigenous knowledgebase.

Indian Digital Library of Theses and R&D Publications

Establishing suitable mechanism for capturing full text information of dissertations/theses and R&D reports of Government funded projects and publishing such material the same through electronic media will be a part of TIF Programme.

Documentation of Traditional Knowledge and Folk Wisdom

Significant efforts are already underway in several institutions to document and capture the essence of traditional knowledge existing in different societies across the country. These efforts have to be expanded and the knowledge base existing in different communities has to be systematically documented and organised into databases.

Information for Community- Digital Provide and Opportunities

The diffusion of ICT for community good so as to reduce digital divide and enhance digital opportunities for all is an activity proposed to be pursued under the TIF Programme. It includes:0-

Systematic documentation of efforts and experiments for bridging the digital divide

- · Identification of best practices and lessons after analyses of various efforts/experiments
- Linking the technology developers with the users of information at the lowest levels
- Experimentation with various modes of content for information kiosks

Promotions of Information Access and Sharing

A number of Scientific Institutions in the country have been engaged in the development of databases on their subject domains. Similarly, several scientific libraries in the country possess invaluable collection of scientific materials. The TIF proposes to promote the scientific organisation of these resources and introduction of data sharing mechanisms or activities.

Virtual Systems

The concept of virtual information systems has wide applications in a variety of situations in R&D and academics. It could be a knowledge network, connecting the information resource base of a set of institutions. The products and services could be shared by participating institutions and also by those not contributing to the system. It could be a virtual laboratory networking several specialized laboratories. Similarly, virtual teaching facilities would also be promoted by TIFP.

Electronic Publishing of Selected Indian S&T materials

Indian journals, barring a few exceptions, suffer from poor visibility and readership. This malady is disincentive to the Indian S&T workers to publish their significant contributions in Indian journals. Publishers also face problems in making upfront investments on printing, dispatch and storage of back runs. Electronic publishing can therefore help improving the situation.

The following activities are contemplated under TIF.

- Publish select Indian journals on CD-Rom and make a worldwide pitch to market them
- Create a website to host electronic version of select Indian journals and also the back issues of those Indian journals with high impact factor

Open Archive Initiatives (OAI) a web alternative to scholarly communications

There has been a growing realization that with the growth of internet use, the printed journals may no more be able to survive as a primary means of scholarly communication. The electronic medium offers faster, wider and cheaper means of communication as compared to the printed medium. It is therefore proposed to support Open Archive Initiative of journal articles published in India. Academic and Research Institutions would be encouraged to set up institutional or national open archives in particular disciplines covering disciplines in which India has strength like mathematics, statistics, and geo-science, etc.

Mapping of National S&T productivity

The health of Indian science will be regularly studied through the National Mapping of Science programme. Use of Scientometric techniques for application on patent information will be explored. Efforts will be made to develop new techniques and tools of analysis. In order to give a fillip to the programme, it is proposed to establish a common facility for Scientometric studies. The full potential of Scientometrics remains to be realized in India. The National Scientometric Facility has to subscribe to the data sets and procure required hardware and software for analysis. Standardization of data elements, synthesis of results from different databases, training and other such activities of integration and accumulation can then be taken up on a cost-effective basis.

The skill base hitherto limited has to be enhanced through elaborate manpower development.

Surveys and R&D Studies

It is necessary to undertake studies and surveys to identify user needs assess new technologies, and to develop new tools and techniques. In addition, it is also necessary to take up sector specific studies to assess the implications and impact of IT and media convergence. Such studies would help to evolve policy parameters to assess the sectoral implications of ICT, evolve new indicators to measure the changes, to explore new opportunities and so on.

Education & Training

The Human Resources Development activities would target two sets of professionals -- information users, and information managers/handlers. Through the MPD programme, it is intended to raise the intellectual skills of knowledge workers to a level at which the beneficiaries would be effective at their own initiatives. In order to raise the skills, DSIR propose to take up both formal and informal programmes on the following lines.

- Promote skill development of information practitioners and subject specialists in new information resources and use of tools for knowledge management.
- Annual national conference to facilitate interaction among information service providers, Information users and information industry. Organize a series of annual international workshop on IT and exploitation of S&T information resources in developing countries
- Establish a regular and long-term training facility on Knowledge Management in national institutions to provide quality education to students in preparing them to take up jobs such as digital librarians, content managers, information economists, human-computer interface specialists, etc.
- Undertake User Education on various sources of information for practicing S&T workers.

• Publish an information bulletin to disseminate information on new technologies, and research results, etc.

Proposals Eligible for Assistance

Although each research project is important for national development, the DSIR under its Industrial R&D and Technological Information Facilitation (TIF) Programme provides assistance only for those projects which have a direct relevance to the programme objectives. The activities listed in the previous sections and in particular information content related activities would be given priority in providing assistance under the programme.

Institutions Eligible for Assistance

Professional/research institutions with qualified engineers, scientists, information professionals, statisticians and economists and belonging to one of the following categories are eligible for assistance under the scheme.

- Institutions receiving annual recurring grants from the Central or State Government Agencies including the Council of Scientific and Industrial Research, Indian Universities, academic institutions, R&D institutions, Public Sector Undertakings, etc.
- Institutions registered as professional societies under the Societies Registration Act.
- · Institutions incorporated under the Companies Act, and
- Professional & industry Associations.

Quantum of Financial Assistance and Method of Release

Assistance can be by way of financial support (partial or full) and technical guidance. The type of assistance required by the institution should be clearly indicated in the proposal. However, financial assistance will be provided only for meeting expenditure on Manpower, Equipment, Consumables, internal travel and other miscellaneous expenditure. No support is provided towards basic infrastructure and buildings. The assistance will be released on installments and will be linked to specific milestones to be achieved as per time schedule indicated in the proposal. The release would also be dependent on the completion of formalities like submission of progress reports, Statement of Expenditure and Utilization Certificates.

Submission of the Proposals

To facilitate quick processing, proposal should be prepared and submitted in the format prescribed in this document, to facilitate quick processing. The following documents/ papers are also required to be submitted along with the proposal.

	Format No	No of copies
A letter of forwarding the project proposal and an undertaking from the head of the institution	I	1
Certificate of responsibility and commitment from Investigators	В	1
Technical and financial details of the proposal	I	5 Hard Copies and also electronic copy to srv@nic.in

Institutions, other than Government, are required to attach the following:

- o A Copy of registration certificate
- A Copy of Annual report of last 3 years
- A Copy of the Auditor's report of last 3 years

The proposal may be submitted any time during the Financial year. It would take about 3 months for the Department to take a final decision.

Duration of the Project

The project should be time-bound, normally for duration of less than 3 years.

Sanction of the Project and Release of Funds

The project proposals received for assistance would be considered by the Technical Advisory Committee (TAC) of the Department. The Committee may also take the advice of an internal Screening Committee duly constituted for the purpose and/or the advice of external experts and/or the Department concerned with the subject matter. The proposals, which are accepted by the TAC, will be further processed for administrative/financial approval and sanction letter would be issued indicating the amount of assistance under different budget heads, schedule of payment and other conditions of assistance. The institutions receiving the assistance are then

required to accept the conditions formally and sign a bond in a judicial stamp paper of Rupees Ten only or an MOU as the case may be. On signing the agreement and its submission, the first installment of assistance would be released.

Progress Reports and Utilisation Certificates

A quarterly progress report indicating the physical and financial progress of the project, and financial report has to be submitted by the institutions receiving assistance from the Department. The Principal Investigator must ensure that progress reports in the prescribed format (Format D) reach the department by 15th of the month beginning every quarter. The institution is also required to submit a utilization certificate (Format E & F) duly signed by the Head of the Institute/ Registrar of University in case of Government / Government affiliated bodies, universities and deemed universities while claiming second and subsequent installments. In case of other types organisations including NGOs, the utilization certificate will be certified by a Chartered Accountant for release of second and subsequent installments.

Dissemination of Project/ Study/Survey Reports

The DSIR will have the right to make available the copies of the project/ study/survey report to the users including Central and State Government agencies and the National Library. It may also place a summary of the report on its website. However, DSIR will not be responsible for the findings or opinions expressed in the report and the host institution, which prepares such report, will be responsible for the intellectual content and claims.

The host institution is also required to send the primary and secondary data collected as a part of the project to the Ministry in a CD and as an ASCII file or as any other commonly used database files.

The institution is also free to publish their study/survey report. However, it should be clearly acknowledged on the first page of the report/ document that the document has been prepared with financial support provided by the Department of scientific and Industrial Research. It should also contain a disclaimer that the Ministry is not responsible for the findings and opinions expressed in the document.

In the case of workshops/ seminars, the sponsors name Department of Scientific and Industrial Research has to be prominently displayed on the banners and any other documents like brochures, course work, workshop schedule, attendance certificates, reports, etc, prepared by the institution.

Other conditions of assistance

- The amount of assistance would be released in favour of the institution or university or the executing agency and not to the Project Director or the Researcher. Thus all sanctions of the Ministry will be issued in favour of the institution.
- After a project proposal is approved by DSIR, the Executing Agency shall not accept any new sponsor or obtain
 funds from agencies other than those from whom such funding was envisaged in the approved project proposal,
 except with the prior written permission of DSIR. Similarly, the share in the project cost of any other sponsor or the
 share of any collaborating agency(s) will not change from that agreed upon at the time the project was sanctioned,
 except with the prior written permission of DSIR.
- Evaluation of the performance of the project will be made periodically by DSIR for which Executive Agency will extend all necessary facilities and cooperation.
- On completion of the project, the executing agency shall submit to DSIR a detailed Completion Report (in duplicate) within 60 days of the conclusion of the project. This Report should be in two parts (i) Technical and (ii) Financial. The format of (i) should be finalized by the Executing Agency in consultation with DSIR, while (ii) should consist of a consolidated audited statement of accounts of the expenditure incurred by the Executive Agency from the DSIR project grant and Certificate of Utilization of all such amounts, along with a certificate from the auditors of the Executing Agency.
- The persons employed in the project shall belong to the host institution or shall be on an appropriate contract with the
 host institution. The conditions of their service will be governed in accordance with the rules and orders of the
 institution. The Government of India will in no way be responsible for the continuance of the services or absorption of
 such staff just because the Sponsor agrees to defray the part of the expenditure towards salaries and wages.
- The Department of Scientific & Industrial Research (DSIR) reserves the right to terminate the grant at any stage if it is convinced that
 - o the grant has not been properly utilized
 - o appropriate progress has not been made and
 - o 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.
- International travel is not permissible under the project.
- The institution will provide the required infrastructure facilities like accommodation, furniture, computer, library, laboratory equipments, communication facilities and secretariat services. The overheads for providing these facilities will be normally 15% of the project cost or the percentage fixed by the Government from time to time.
- The Project Director and other experts mentioned in the project proposals should not be changed without the prior approval of the Ministry.
- For permanent and semi-permanent assets, acquired wholly or partly out of the grant, an audited record, in the form of a register shall be maintained by the Executing Agency. The term "assets" means: (i) all immovable property; and

- (ii) movable property of a capital nature where the value exceeds Rs 10,000/-. The grant will not be utilized for construction of any building or permanent asset like machinery required for augmenting general production facilities.
- All assets including equipment acquired and prototypes fabricated from the grant will be the property of Government
 of India and should not without the prior sanction of the Department of Scientific and Industrial Research, be
 disposed of, or utilized for purposes other than those for which the grant has been sanctioned.
- The Organization should maintain a separate account for the project. The grant should be kept in a bank account and the interest earned should be reported to the Department of Scientific and Industrial Research. The interest thus earned will be treated as a credit to the organization and will be adjusted towards further installments of the grant.
- The Controller and Audit General will have the right to access to the books of accounts of the organization for grants received from the government.
- If the Principal Investigator wishes to leave the organization where the project is based, the organization/ investigator
 will inform the same to DSIR and in consultation, evolve steps to ensure successful completion of the project, before
 relieving the project investigator. The Investigator should submit five copies of the complete and detailed report of the
 work done by them on the project before his/her leaving the organization.
- The know-how generated from the project would be the property of Government of India (GOI) and any receipts by
 way of sale of know-how, utilization of know-how for production, royalties, etc shall belong to GOI. The GOI may at its
 discretion allow a portion of such receipts to be retained by the organization.
- The institution receiving grants from the Government are governed by the General Financial Rules of the Government including auditing of the accounts.
- Submission of quarterly financial and physical progress reports to DSIR is obligatory on the part of the Project
 Director/ Investigator, failing which the Department has the right to terminate the project with full refund of amounts
 already disbursed.
- There should not be any time over-run at any stage and the project should be formulated accordingly. DSIR reserves the right to terminate project for time over-run without sufficient technical grounds.
- In case of non-compliance of terms and conditions as laid down in the sanction letter, the institution will have to return the entire money along with penal interest of 10% per annum.

List of Projects Supported

Click here to see the list of Projects Supported under TIFP [13 JUL 10]

Guidelines for Submission of Project Proposals for Financial Assistance

Download as RTF or PDF

DSIR invites Project Proposals from interested institutions on Establishment of Incubation Centre for Content Development and Management under Technology Information Facilitation Programme [21 MAY 07]

For additional information, Contact:

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