IARDP Operating Guidelines & Terms of Reference

1. Introduction

Industry-Academia Research & Development Programme (IARDP) of Indo-French Centre for Promotion of Advanced Research (CEFIPRA) was launched in 2002 to support collaborative research programme involving Industry & Academia of both the countries.

It has worked as an enabling platform for the industrial organizations in India & France to realize their potential in terms of product and process development. It has facilitated innovation, risk taking for Industries and also bringing the private industry, public institutions and the government under one roof to promote the research and innovation between India & France.

The projects supported under the programme have resulted in prominent outcomes in the form of some products which have already come to the market and some promising research leads seeing a ray of hope for commercialization.

2. Aim

To promote linkages between **Industry***(SME/MSME/Big industry) and **Academia** of France and India by enhance the competitiveness of the Industrial partner and leveraging the research skills of Academia.

3. Objective

To promote the development of new processes or products or the improvement of existing processes or products, through industry centric proposal focusing its need for society benefit. It's expected that the proposed ideas should have deliverables like demonstration of proof concept & prototype building up to <u>Technology Readiness Level (TRL 4-5)</u>.

4. Thrust area

- Artificial Intelligence and Machine Learning (Supercomputing, Cloud Computing, Artificial Intelligence, Miscellaneous)
- Renewable & Clean Energy (Hydrogen, Renewable Energy Technologies Solar & Wind Power)
- Smart Mobility (Energy Efficient Transport and Logistics)
- **Agricultural Science and Technology** (Food Safety Climate Change, Agro-Ecological Farming)
- Sustainable Nutrition
- **Affordable Health Care** (Cancer Studies, Neurosciences, Biotechnology, Biomedical Engineering, Public Health, Medical Waste Treatment Technology, One Health)
- **Technology for the SDGs** (Sustainable Buildings, Plastic Pollution, Marine Science and Ecological Science)
- Waste Management & Circular Economy

5. Submission: The proposals will be submitted and processed for evaluations through an on online submission system of CEFIPRA.

6. Eligibility

The project proposals submitted in the framework of this programme should preferably involve at least one industrial partner and one research institute each from India & France preferably (2+2 Model).

However, project proposals not fulfilling this 2+2 model are also eligible (at least one industrial partner either in France or in India and a research institute from the other country) but the proposal documents shall clearly justify the situation for not fulfilling this 2+2 model. Further, the scope of work and responsibilities of each participating partner in the project proposal must be highlighted.

> Essential Features

The proposals must be innovative and industry-driven towards the development or substantial improvement of new products, processes, etc.

The proposal must describe the proof of concept (already accomplished) in the proposal itself and also outline the possible road map on how to commercialize the outcome of the collaborative efforts being funded by CEFIPRA under the IARDP programme.

Project shall have at least one Industry/Company and one Public Research Organization from India and France each as Joint Applicants (2+2 model) and can have Co-Applicants and Collaborators from Academia, Research Institution, National Laboratory, Clinical Establishment, For Profit Company, Not-for-Profit Organization, Society, LLP, Trust or Foundation.

The applicants shall define a Coordinator or Principal Investigator on Indian side and French side and both are lead investigators and main contributor to as they have ownership of the project if the application is successful. Correspondences about the application/Project will be with the Principal Applicant from India/France respectively.

A Collaborator is an individual who will supply technical advice, reagents, samples or data for the project, but who would also normally be involved in the day-to-day execution of the project (unlike joint applicants and co-applicants). Collaborator involvement should be governed by appropriate legal agreements.

All the Co-Applicants shall be entities established under the relevant Law of the Land.

Applicants and the Co-applicants shall enter into a Joint Research Agreement before disbursement of funds, it should include a clear determination of Intellectual Property management Plan such as sharing of the rights, interests, protection and maintenance cost and royalties as well as other liabilities among themselves.

Eligibility for academic collaborator

Principal Collaborators and Joint Collaborators have to hold a permanent position as scientists/ Faculty members in universities/ deemed universities, academic institutes and national research and development laboratories/institutes.

Eligibility for Industry collaborator

- Except for those who are registered as MSME*, the Industry/industries should be committed to invest at least 10% of the project proposal cost in cash as their contribution. The industrial partners who would like to take exemption from this mandatory requirement (of contributing at least 10% of the project proposal cost in cash and not in kind) for example, MSMEs, they must provide the government registration certificate of being the MSME.
- An Indian Company definition of **SME/MSME/and Big Industry**** is defined as one which is registered under the Indian Companies Act 1956 and in which more than 51% of the ownership is held by Indian Citizens (not OCI or PIO).
- French Company is defined as one which is registered with the Register of Commerce and Companies, France.

7. Duration and Funding support

- i. The duration of the solution-driven proposals should be maximum for 3 years
- ii. The total funding for project for all partners will be maximum Euro 200.000 (Equivalent amount in Indian INR) for entire duration of the project
- iii. It is mandatory for the PIs to submit IP Management Plan/Consortium Agreement within (maximum) six months of approval.

> For Indian institute collaborator

- Manpower Head (Budget is as per CEFIPRA norms for PhD/RA)
- Consumables & Contingency
- Equipment (Minor equipment only)
- Travel (Budget is as per CEFIPRA norms)
- Overheads(as per CEFIPRA norms)

> For French institute collaborator

- Manpower Head (Budget is as per CEFIPRA norms only for PhD)
- Recurring (Consumables & Contingency)
- International Travel (As per CEFIPRA norms)
- Overheads(as per CEFIPRA norms)

Support for Industrial Partner from CEFIPRA may be considered on case to case basis. One lead PI from Industry should be assigned for the duration of the project.

Note: Industry partner are expected to provide support for the project. They may indicate the support in terms of

- Knowledge
- Financial
- Infrastructure Support
- Manpower for R&D

However, in case the funding support to Industries is provided from CEFIPRA, only the following head will be considered:

- International Travel for Industry PIs (as per CEFIPRA travel guidelines); funds will be released to academic institutes of either India/France for managing. In case of 1+1 model, the funds for the same will be released to academic institute of other side or CEFIPRA will take care of the visits under the project.
- Manpower, Equipment and Recurring (Consumables + Contingency) and Overheads will not be provided to Industries.

The proposal should provide detail investment planned by industries for the project. Further, during the review of projects, the contribution provided by Industry partner should be clearly indicated/presented.

Detailed guidelines for funding

The budget estimate should be as realistic as possible.

The year-wise break-up of the budget should be in conformity with the phase-wise break-up of the project activities given in the work plan. The budget will be released to the institutions of the corresponding collaborators. The budget should be consolidated institution wise. Similarly the industry should release their contribution as proposed. The audited SE/UC to be submitted by Industry partner indicating the amount contributed as proposed in budget.

How to Apply

Process for submitting the full proposals online is detailed below:

The collaborators must submit a full joint proposal on online submission system of CEFIPRA (URL: www.cefipraonline.in).

- 1. If you are a registered user, log-in using the credentials, else you need to register your institution with by clicking on New User Registration.
- 2. In case of new user registration, a computer generated password would be sent to the email-id provided at the time of registration. The password can be changed later.
- 3. Once you login, you would be navigated to the page displaying Industry-Academia Research & Development Programme link.
- 4. Click on the Industry-Academia Research & Development Programme link

The proposals should be identified with a common short name/acronym, and a joint (common) Concept Proposal, Project Description and Check List should be enclosed. It is important that proposals are well crafted and provide substantive description of the research plan for a fair review of the scientific/technical plans and approaches. The deliverables should be demonstration of proof of concept & prototype building (up to TRL 4-5). Please upload only mandatory attachments like Check list, Project description and Concept proposal.

The French PI is suggested to get in touch with the concerned officer of his/her institution about the project proposal that he/she is preparing to submit to the CEFIPRA in order to facilitate the final clearance by the French Government

Evaluation Procedure

- Initial screening by CEFIPRA
- Pre-selection by Industrial Research Committee Members
- Peer-review in France & India
- Decision by the Industrial Research Committee Members in its meeting based on peer review reports & Committee's own judgment

Procedures for starting the project after the recommendation of Industrial Research Committee (IRC)

- 1. Acceptance by Governing Body of CEFIPRA
- 2. Indian side should submit the signed copy of check list required obtaining for the clearance from Government of India (Link of Checklist)

- 3. Sensitivity & Security Clearances by both Governments
- 4. Receipt of signed copy Intellectual Property (IP) Management Plan/Consortium Agreement from the Principal Collaborators of the project.
- 5. Release of funds for first year.

Submission/implementation of projects under CEFIPRA programmes by same collaborators:

If collaborators have submitted/implemented a CEFIPRA project, they can apply again if they fulfil the following conditions:

- If a scientist is already working in a project under Industry Academia Research & Development Programme (IARDP) as Principal Collaborator (PC) or Joint Collaborator (JC), he/she cannot submit another project under the same programme as PC or JC.
- There is no bar in applying for projects under other programmes of CEFIPRA while implementing a project under Industry Academia Research & Development Programme (IARDP).
 - o If a scientist apply as a Joint Collaborator or Principal Collaborator in two different project proposals at a time, and in case both the proposals are approved, the scientist must opt for either one of the project. Any Scientist who has implemented three projects under CEFIPRA programme as Principal Collaborator cannot apply for a fourth project.

Restriction other than the above in applying for an Indo-French project:

Indian and French Knowledge Collaborators/Partners are expected to be under service in their institution at the time of completion of the project. Scientists close to their superannuation should have a younger joint collaborator in the project proposal.

"Applicants are requested to pre-check their proposals for plagiarism before uploading. Proposals found containing plagiarised content will be rejected"

Detailed guidelines for funding of projects under Industry Academia Research and Development Programme (IARDP):

The budget estimate should be as realistic as possible. The maximum quantum of budget for the project can vary upto a maximum of Euro 200.000 (including both sides) for the entire duration of the project. Estimate should be justified, and in agreement with the objectives of the project. The year-wise break-up of the budget should be in conformity with the phase-wise break-up of the project activities given in the work plan. The budget will be released to the institutions of the corresponding collaborators. The budget should be consolidated institution-wise.

Under the infrastructural facilities, details of lab space, equipment, supporting man-power, etc., which would be made available to the collaborating scientists should be mentioned. Similarly, as far as possible,

existing man-power should be utilized and hiring of additional man-power should be restricted to the minimum.

Student/Post-doc to work in the laboratories of the Collaborators in India/France

Salary for Indian side should be mentioned for JRF/SRF/RA for the duration of the project by the Principal Collaborator. One JRF/SRF/RA can be asked by Joint Collaborator if he/she is not from the same institution of Principal Collaborator. It should be indicated separately. Personnel expenses are restricted to post-doctoral/doctoral positions permitting effective exchange of personnel between India and France. The fellowships will be determined by CEFIPRA as per the recommendations of the Industrial Research Committee. Please do not include salaries / wages of the regular staff of the institutions where the research is to be carried out, as these will not be paid or reimbursed by CEFIPRA.

For Indian side, the salary applicable for JRF/SRF/RA has been adopted by CEFIPRA as per DST guidelines. The total amount including fellowship, social security, travel and other charges provided for Post-doc or doctoral student is Euros 60000 for French side. Fellowships for PhD student will be Euros 1500/- per month and for Post-doc, it will be Euros 2000/- per month.

The fellowship and social security charges for Indian students working in French Lab will be routed through Campus France. Renewal of carte de séjour will be reimbursed to the students by CEFIPRA through Campus France.

For French students working in French Lab, the sanctioned salary component will be transferred to the concerned French institution which has to take care of fellowship and all other related expenses of the students including travel from the total amount on Euros 60.000/-.

Support for equipment

As far as possible the equipment available in the institutions of the Principal/Joint Collaborators must be used for the project. However, any minor equipment and accessories which are essential for the project within the limit of maximum of 10% of total approved budget of the project (Upto Rs. 15,00,000/-) will be considered for support. No equipment support is provided to French side. Strong Justification with realistic quotes has to be submitted along with the request for equipment. The quote should be submitted offline to CEFIPRA office separately and has to purchase within 90 days of receiving the grant.

Recurring expenses

Consumables and contingency Cost of Consumables & contingency expenses are to be submitted. Domestic and International Travel for the collaborators in India and France Project related domestic travel within India/France, International travel from India to France and France to India would be supported from place of work to place of work. Principal Collaborators/ Joint collaborators of the projects are not allowed to avail more than two visits without proper justification and Committee's recommendation. For Indian Ph.D/Post-Doc student visiting France under CEFIPRA's project for short time (up to-89 days)-the total amount Fellowships for PhD student will be Euros 1500/- per month and for Post-doc, it will be Euros 2000/- per month.

As per the prevailing procedures, the proposal including the budget is assessed and recommended by the Industrial Research Committee of CEFIPRA.

The Principal Collaborator of the supported projects will be called for progress review to assess the progress of the project. If the IRC is conducted in France, the French PI will be invited for presentation of progress and vice versa. The continuation of the project will be decided by the Committee during the progress review based on the progress made under the project. If half of the budget allocated to visits is not utilized by midterm of a project, the unutilized budget may be forfeited unless justification is provided by the PIs of the project.

Terms for Pre-Closure of Projects

If Principal Collaborators want to pre-close a project OR Council recommends for pre-closure, the guidelines to be followed are:

- 1) If Industrial Research Committee finds that the project is not likely to lead successful completion and is recommended for pre-closure of the project:
- a) The IRC may review the progress of the project as and when required and if it is realized that the project is not leading to successful completion/any scientific & technological advancement, the IRC may recommend pre-closure of the project. In that case, the unutilized funds available with the Principal Collaborators, as on date of receipt of communication regarding this from CEFIPRA, to be returned to CEFIPRA along with the interest earned from the released funds.
- b) Due to the exigency of one or more of the force Majeure events, CEFIPRA may preclose the project in consultation with all the concerned members of Industrial Research Committee.

2) If Pre-closure of the project by Principal Collaborators due to their own specified reasons

All the Principal Collaborators are required to give justifications/reasons for pre-closure of the project in specified time manner. The Principal Collaborators will be required to refund the amount released to them with interest, to CEFIPRA.

Projects implemented under the programme shall be subject to the general project implementation guidelines as well as any particular conditions stipulated by IRC & Director, CEFIPRA, from time to time.

ON ANY MATTER THAT HAS NOT BEEN COVERED HERE, THE DECISION OF DIRECTOR, CEFIPRA, SHALL BE FINAL AND BINDING