

Request for proposals

for supporting

**Development, validation & pre-commercialization of
products/technologies**

under

i4 (BIPP & SBIRI) and PACE (AIR & CRS)

from

Industry and Academia

Last date of Proposal Submission: 15th May 2024 (up to 5:30 pm)



जैव प्रौद्योगिकी उद्योग अनुसंधान सहायता परिषद
(भारत सरकार का उपक्रम)
Biotechnology Industry Research Assistance Council
(A Govt. of India Enterprise)

About the schemes.....

i4 (Intensifying the Impact of Industrial Innovation) programme

The programme supports biotechnological product/technology development by strengthening R&D capabilities of start-ups/companies/ LLPs. It provides impetus for pulling the translational ideas past PoC and taking them further along the innovation chain for validation, scale-up, demonstration and pre-commercialization of products and technologies. The programme is operated through two schemes:

- 1. Small Business Innovation Research Initiative (SBIRI)**
The scheme facilitates early-stage research undertaken by industry/start-ups/LLPs either alone, or in collaboration with academia in the field of biotechnology for developing a product or a technology
- 2. Biotechnology Industry Partnership Programme (BIPP)**
Supports late-stage research, validation, demonstration and pre-commercialization of product/technology

PACE (Promoting Academic Research Conversion to Enterprise)

The Programme encourages/supports academia to develop technology/product (up to PoC stage) of societal/ national importance and its subsequent validation by an industrial partner. The Programme has two components as below:

- 1. Academic Innovation Research (AIR):**
The objective of Academic Innovation Research (AIR) scheme is to promote development of Proof-of-concept (PoC) for a process/product by academia with or without the involvement of industry/LLP
- 2. Contract Research Scheme (CRS):**
Contract Research Scheme (CRS) aims at validation of a process or prototype (developed by the academia) by the industrial partner/LLP

Under the present call of **i4 (Intensifying the Impact of Industrial Innovation)** and **PACE (Promoting Academic Research Conversion to Enterprise)** schemes, proposals are invited in the areas of:

- **Devices and Diagnostics**
- **Pharma/Biopharmaceuticals**
- **Agriculture and Secondary agriculture**
- **Industrial biotechnology**
- **Environmental biotechnology**
- **Veterinary Sciences**
- **Aquaculture**

While the applicants are free to submit proposals as per their choice, they are encouraged, but not restricted to apply in following areas:

- Application of big data, artificial intelligence, telemedicine, block-chain platforms, smart devices in healthcare
- Technologies incorporating biotechnological interventions for the development of specialty chemicals, enzymes, bio-therapeutics, etc.
- Engineering microbes for conversion of biomass into biofuel
- Agri-biologicals for use in agriculture using biofertilizers/plant nutrition products, biostimulants/plant growth enhancement products and biopesticides/biocontrol products
- Development of process/technologies for enhancing the productivity of oilseeds (specially oil palm), millets and pulses through biotechnological tools
- Development of 3D cell culture and 3D cell models for generation of more relevant information for drug screening
- Cost-effective and safe innovations for clinical sample collection, handling, storage and transportation
- Multiplex, modular, multi-pathogen disease detection platforms/systems for use at the primary and secondary level that reliably distinguish, and detect infections from clinical specimens (e.g., whole blood, urine, stool, and nasal swabs) for indications such as TB, vector borne and other infections.
- Development of cost-effective therapies for combating Anti-Microbial Resistance for indications such as neonatal sepsis, respiratory infections, UTI, etc.

Types of projects supported:

- Products/Technologies should have well established Proof of Principle for AIR & SBIRI and Proof of Concept for BIPP & CRS proposals
- Projects proposing a process/product innovation should have significant potential impact or commercial potential
- Developed process should be sustainable from an economic and environmental point of view and should be scalable
- The Technology Readiness Level (TRL) at the end of the project should be:
 - **Minimum TRL 3** (Proof of concept established) for AIR
 - **up to TRL 6** (Early-stage validation) for SBIRI
 - **TRL 7 and above** (Late-stage validation up to pre commercialization) for BIPP

What is not supported?

- Concepts/exploratory research ideas without proper Proof-of-Principle (AIR and SBIRI) and Proof-of-Concept (CRS and BIPP)

- **Proposals without preliminary data and potential for product/technology development will NOT be supported.**

Who can apply?

PACE:

- Academic Institute, University, NGO or Research Foundation, registered/ accredited by a government body can apply either alone, or in partnership with academia or industry (*while involvement of industry is optional for AIR Scheme, it is mandatory to have an industrial partner for CRS*)
- Under the scheme, academia (Public or Private Institute, University, NGO, Research Foundation or trust/society), National research laboratories having a well-established support system for research shall be the primary applicant. The applicant can apply either:
 1. Individually, or
 2. Jointly with academic and/or industrial partner

PACE - AIR:

Eligibility Criteria for applicant (organization):

- For Public or Private Institute, University, NGO, or Research Foundation, proper registration/ accreditation from a government body is mandatory like UGC affiliation certification, AICTE, CSIR /DSIR/SIRO certificate etc.

Eligibility criteria for Project Investigator:

- The PI has to be a permanent Faculty of the applicant entity.
- PI must have completed at least one or more extramural funded project in India with cumulative project duration of 3 year & in the same research area of the project proposed. Projects must have been funded by Govt. funding agencies or Industry. Project/s executed as PI (and not as Co-PI) will only be considered to establish eligibility. Related Sanction order or funding note to be uploaded as a proof.
- PI must have authored at least one publication (not abstract) indexed in Scopus/web of science/research paper published in peer reviewed journal as first or lead author, or patents (filed) in the same research area of the project proposed for AIR. (*Conference papers and review papers will not be considered to establish eligibility*)
- For further details on scheme guidelines please refer to scheme document: https://birac.nic.in/webcontent/1686918070_Revised_PACE_Guidelines.pdf

PACE-CRS:

1. Academia* has to be the Primary Applicant with one or more partners of which at least one is a company**

* *For Public or Private Institute, University, NGO, or Research Foundation, proper registration/accreditation from a government body is mandatory*

** *Participating company should be registered under the Indian Companies Act, 2013 with at least 51% Indian shareholding i.e., shares of the Company should be held by Indian Citizens holding Indian passport (Indian citizens do not include Person of Indian Origin (PIO) and Overseas Citizenship of India (OCI) holders).*

2. The applicant Company should have adequate in-house facility to address the project implementation (which shall be evaluated during the site visit) or incubated with any of the recognized incubation facility.

SBIRI and BIPP

Eligibility

1. The proposals can be submitted

- a) Solely by a Company* incorporated under the Companies Act, 2013 or Limited Liability Partnership (LLP)** incorporated under the Limited Liability Partnership Act, 2008 or Joint Ventures either in the form of Company/ LLP
- b) by any of the above entities jointly with other private or public partner(s) (Universities or Institutes)

* *Minimum 51% of the shares of the Company should be held by Indian Citizens holding Indian passport (Indian Citizens do not include Person of Indian Origin (PIO) and Overseas Citizenship of India (OCI) holders)*

** *Minimum half of the persons who subscribed their names to the LLP document as its Partners should be Indian citizens.*

2. ***The Applicant Company/LLP should either:***

- a) Have adequate in-house facility to address the project implementation (which shall be evaluated during the site visit) or
- b) Incubated with any of the recognized Incubation Facility

3. ***For Academic collaborator:***

Eligible Academia shall mean an entity which is having proper establishment documents:

For Public or Private Institute, University, NGO, or Research Foundation, proper registration/ accreditation from a government body is mandatory like UGC affiliation certification, AICTE, CSIR /DSIR/SIRO certificate etc.

Ineligibility

1. Applicant who had withdrawn their proposal after approval from Apex committee or whose project was foreclosed due to inadequate funds or any other irregularity would be debarred from submitting fresh proposals for next 2 calls (1 year).

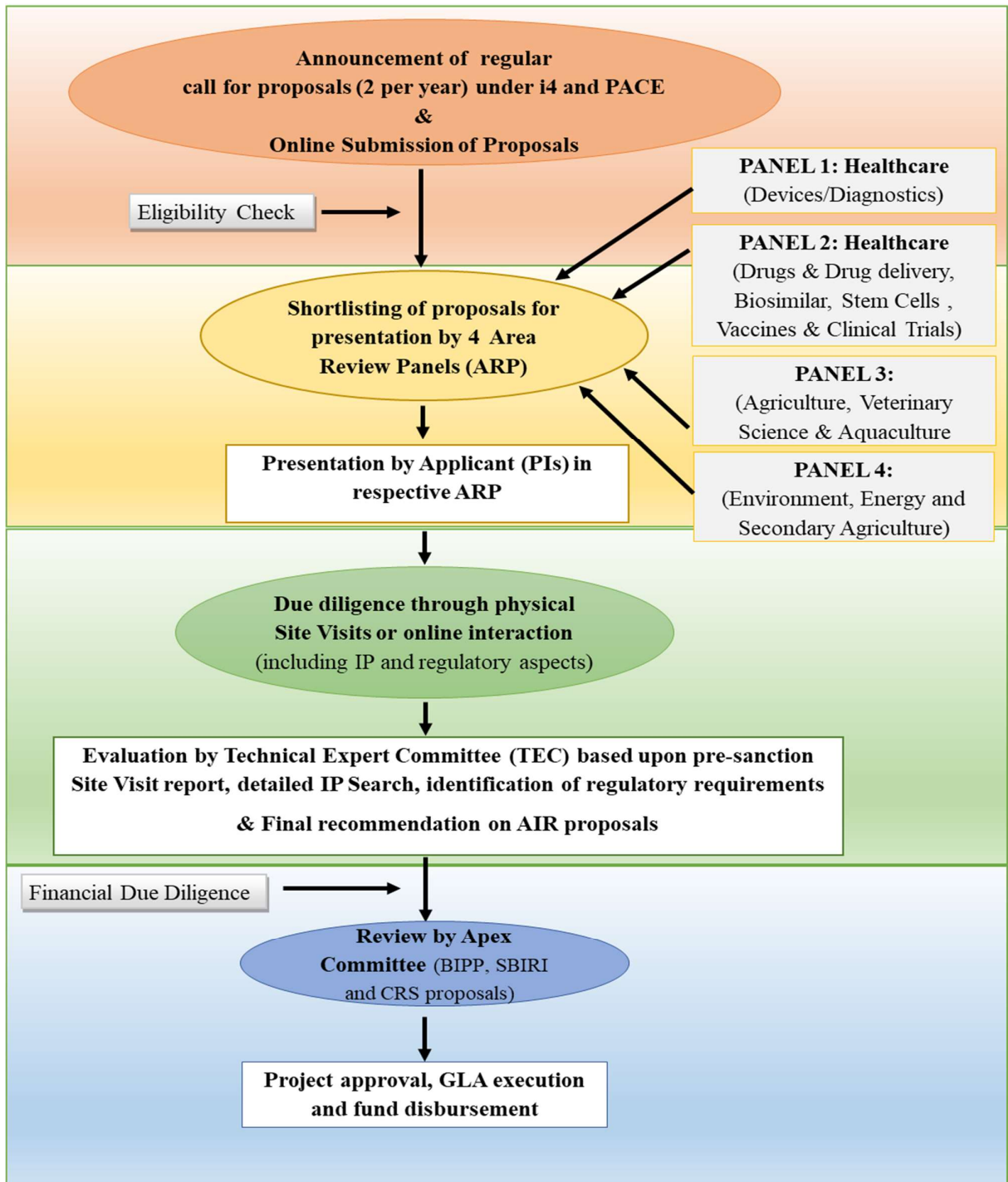
2. Proposals submitted by a company/subsidiary/sister concern either as main applicant or collaborator, who has been fund recipient in any of the schemes of BIRAC in past and has defaulted on (i) repayment of loan and/or interest, or is irregular with regard to repayment of instalments (ii) payment of unspent balance (if any) in the earlier BIRAC supported projects (iii) payment of Royalty to BIRAC would not be considered for financial assistance by BIRAC.
3. Proposal of any company having a Director of a defaulting company (as detailed above in point no. 2) would not be considered for financial assistance by BIRAC.

Duration of Project

- Up to 24 months for proposal submitted under AIR.
- No ceiling on project duration under CRS, SBIRI and BIPP schemes.

Evaluation Process of i4 and PACE schemes

Operational Mechanism



**Please note that the decision of the committee at any stage of the evaluation would be final and reconsideration requests would not be entertained. The applicant may reapply in the next call providing clarifications to the committee's comments/recommendations*

Funding

Funding support will be in the form of Grant-in-Aid and is **scheme specific**. Kindly refer to the guidelines of respective schemes for more details by visiting <http://www.birac.nic.in>

Fund Disbursement Policy

The fund disbursement is milestone based and will be released in 4-5 installments as per the timeline of the project.

Installment No.	When	Amount (for proposal more than 12 month)	Amount (for proposal less than 12 month)
1	Signing of Contract	30% of project cost	30% of project cost
2	Completion of 1st Milestone	20% of project cost	30% of project cost
3	Completion of 2nd Milestone	20% of project cost	30% of project cost
4	Completion of 3rd Milestone	20% of project cost	NA
5*(Final)	Completion of project and submission of final report	10% of project cost	10% of project cost

**Since the last installment is released after conclusion of the project, its nature would be reimbursement.*

Duration of Call for Proposals

The call would open on 1st April 2024, and shall close on **15th May, 2024 at 5:30 pm.**

Additional information

For details related to TRL definitions, schemes and submission of proposals, please log on to <http://www.birac.nic.in>

Scheme guidelines can be accessed at following location:

BIPP:

https://birac.nic.in/webcontent/1711011839_BIPP_scheme_guidelines_21_03_2024.pdf

SBIRI:

https://birac.nic.in/webcontent/1581738430_SBIRI_new.pdf

PACE:

https://birac.nic.in/webcontent/1686918070_Revised_PACE_Guidelines.pdf

Note: In case of any dispute/ ambiguity/ confusion that may occur in the process of shortlisting/ selection, the decision of BIRAC shall be final and binding on all.

Contact

GM & Head-Investment
Biotechnology Industry Research Assistance Council (BIRAC)
5th Floor, NSIC Business Park,
NSIC Bhawan, Okhla Industrial Estate,
New Delhi –110 020

Phone : 011 - 29878000

e-mail : investment.birac@gov.in