



Innovate UK



CALL FOR PROPOSALS/COMPETITION GUIDANCE FOR APPLICANTS

Newton-Bhabha Fund: India-UK Research and Innovation Bridges

**A bilateral framework providing financial support for Indian
and UK Organisations**

**Department of Biotechnology (DBT), Government of India,
Innovate UK and Research Councils UK**

November 2015

Executive summary

Innovate UK, the Research Councils UK (RCUK) and the Department of Biotechnology (DBT), Government of India are to invest up to £10 million in collaborative industrial research and development projects to stimulate innovation in response to some of India's most critical agri-food challenges. Specifically, the scope is focused on finding new commercial solutions to agri-food challenges that exist at the post-harvest stage, within India.

This call for proposals/competition will specifically support novel commercial solutions that emerge from the translation of existing, excellent research. It will support projects that bring together businesses, academic and other research organisations, public sector bodies and other organisations from India and the UK to collaborate on the development of innovative commercial products, processes or services. The principal market a project must consider is India.

Newton Fund background

The Newton Fund is a Ministerial-led, high profile programme managed by the UK's Department for Business, Innovation and Skills which aims to strengthen research and innovation partnerships between the UK and 16 emerging (knowledge) economies. The partnership countries are Turkey, Brazil, Chile, China, Colombia, Egypt, **India**, Indonesia, Kazakhstan, Kenya, Malaysia, Mexico, Philippines, South Africa, Thailand, and Vietnam. A total of £375 million will be spent by the UK through the Fund over a 5-year period (2014-2019), with matched funding/effort being provided by the partner countries. The Fund forms part of the UK's Official Development Assistance (ODA), i.e. the UK's support to developing and emerging economies for their socio-economic development (www.newtonfund.ac.uk).

The Newton Fund comprises of 3 broad pillars of activity:

- Pillar 1 (People): improving capacity in research and science, individually and institutionally
- Pillar 2 (Research): facilitating research collaborations on critical socio-economic development challenges in partner countries
- Pillar 3 (Translation): creating collaborative solutions to socio-economic development challenges and strengthening innovation systems.

With India, the Fund is called the Newton-Bhabha Fund, recognising the scientific excellence existing within India, pioneered by the likes of the nuclear physicist Homi J Bhabha.

This is the first jointly funded competition with the Department of Biotechnology, Innovate UK and RCUK.

About the funders

Department of Biotechnology (DBT), Government of India

The Department of Biotechnology (DBT) is the nodal agency under the Ministry of Science & Technology, Government of India for the promotion of research, development and innovation in the field of biotechnology. DBT funds and supports all Indian universities, research organisations, non-governmental organisations and industry working in the area of biotechnology.

Innovate UK

Innovate UK is an executive non-departmental public body established by the UK Government in 2007, and sponsored by the Department for Business, Innovation and Skills (BIS). The activities of Innovate UK are jointly supported and funded by BIS and other government departments, the devolved administrations (Scotland, Wales and Northern Ireland) and research councils.

The role of Innovate UK is to support and stimulate business-led innovation in the areas which offer the greatest scope for boosting UK growth and productivity. It promotes, supports and invests in technology research, development and commercialisation. It also spreads knowledge, bringing people together to solve problems or make new advances. Innovate UK advises Government on how to remove barriers to innovation and accelerate the exploitation of new technologies, and works in areas where there is a clear potential business benefit, helping today's emerging technologies become the growth sectors of tomorrow.

For more information about Innovate UK, please visit our website at:

<https://www.gov.uk/government/organisations/innovate-uk>.

Research Councils UK

Research Councils UK (RCUK) are responsible for investing public money in research in the UK to advance knowledge and generate new ideas which lead to a productive economy, healthy society and contribute to a sustainable world. Each year the Research Councils invest around £3bn in research covering the full spectrum of academic disciplines from the medical and biological sciences to astronomy, physics, chemistry and engineering, social sciences, environmental sciences and the arts and the humanities. RCUK supports over 50,000 researchers including 19,000 doctoral students, around 14,000 research staff, and 2,000 research fellows in UK universities and in their own Research Institutes.

Research Councils UK are the main UK delivery partner for the Newton Fund and are working strategically with partner countries to develop a series of research activities to address challenges defined by the overarching ambitions of the Fund. For more information about RCUK, please visit our website at: www.rcuk.ac.uk.

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Section 1

How to use this document

This document contains the eligibility criteria, key dates, competition process and application form details specific to this call for proposals (CFP)/competition.

Under the rules of this CFP/Competition, collaborative applications of Indian and UK partners should have a named Indian Lead partner and a named UK Lead partner. The Lead partner for India and the Lead partner for the UK should **submit a single application form per project to Innovate UK** along with additional supporting information. This guidance is common to both Indian and UK partners for this CFP/Competition.

- **Section 1** - information on eligibility, timescales and terms and conditions common to both Indian and UK partners.
- **Section 2** - information on the application and assessment process.
- **Section 3** - details on how to complete the application form – identical to both UK and Indian parts of the project.

Please ensure that you read all parts of this guidance carefully before submitting your application.

1.1 Competition overview

Funding under this competition will be made available for collaborative research and development projects (what we are calling “Research and Innovation Bridges”), that propose solutions to key challenges India is facing in its agri-food value chain, at the ‘post-harvest’ stage.

Successful Research and Innovation Bridge projects must demonstrate the clear translation of existing, excellent research into products, processes and services with high industrial relevance and commercial potential. This competition/CFP is not about funding basic research.

The competition will fund projects with commercial solutions to challenges in the following sectors:

- Affordable food packaging and improved food packaging systems.
- Post-harvest handling and processing, including ‘minimal processing’ and processes to control ripening and post-harvest spoilage and damage.
- Process technologies to enable new products, from food supply chain waste.
- Green technologies for food distribution.

Projects will be identified through a two-stage application and assessment process involving the submission of an expression of interest, followed by submission of a full-stage application by successful shortlisted applicants.

Please note that full details of what is required at both expression of interest and full-stage application stage are given in Sections 2 and 3 of this document. At both stages, applicants will be required to complete the same 10 question application form.

Up to £10 million will be made available under the competition (up to £5m from Innovate UK and RCUK to UK participants and up to £5m from DBT to Indian participants). We expect to give grants of up to £1m to £1.5m per project (this is the combined total of both UK and Indian funding.) Projects should last up to 24 months.

1.2 Finding partners and other support

Meeting Mojo platform

Innovate UK, in conjunction with the Knowledge Transfer Network (KTN), has launched an online Meeting Mojo platform to enable applicants (UK or Indian) to find partners.

- All interested applicants should create a profile on Meeting Mojo and search for partners in the database specific to this India-UK Call. When you find a potential partner, you can message them to determine whether you are a good match to apply as part of a project team.
- Please follow the link below and register, giving your full details. NOTE: It will take up to 24 hours to be approved by the site admin before you can then search for partners.
- Please use the following Meeting Mojo link: <http://india-uk-bridges-newtonfund.meeting-mojo.com/>
- The Meeting Mojo link is also available on the Innovate UK India competition webpage under the “Finding Partners” section.

Enterprise Europe Network

The Enterprise Europe Network operates in the UK and India and can help to find potential project partners. Further details can be found at <http://een.ec.europa.eu/>

UK Intellectual Property Office (UK IPO)

UK applicants with queries about intellectual property in India can contact the UK’s Senior Intellectual Property Officer in India, details as below. ***This support is limited to UK applicants only.***

Intellectual Property and doing Business in UK/India

For queries from UK applications related to Intellectual Property and doing business in India, please contact the UK’s Intellectual Property Officer in India, as below.

Please reference this competition when communicating to the UK IPO representative:

 Intellectual Property Office

Dr. Vijay Iyer | Senior Intellectual Property Adviser | British Deputy High Commission
C/32, G Block, Naman Chambers | Bandra Kurla complex | Bandra (E) | Mumbai 400051 | Maharashtra
Email: vijay.iyer@fco.gov.uk | [Visit my blog](#) | www.gov.uk/ipo

1.3 Competition scope

1.3.1 India context

India is a country of vast geography and diversity, with a growing, young population driving consumption. Its enormous one billion plus population and agri-food diversity brings challenges and opportunities related to sustainable food production and supply, and maintaining a healthy population.

For example, India was ranked No. 1 in the world in 2012 in the production of bananas, mangoes, papayas, chickpea, ginger, okra, whole buffalo, goat milk and buffalo meat. It ranks second in the world in the production of sugarcane, rice, potatoes, wheat, garlic, groundnut (with shells), dry

onion, green pea, pumpkin, gourds, cauliflower, tea, tomatoes, lentils, wheat and cow milk¹. Yet it still faces a shortfall in domestic food supply in order to meet changing consumer requirements and to support its growing population.

The country is also home to more than 25% of the world's hungry poor and more than 40% of children below five are undernourished (approximately half the population remain in food poverty ie. are malnourished). Around 80% of the population are thought to be vitamin D deficient and high levels of micronutrient deficiency (particularly iron, zinc) exist. On the other hand, clinical presentation of conditions linked to over-consumption is an increasing challenge. The country shows the highest numerical levels of type 2 diabetes in the world (a condition normally associated with affluence in India): 30+ million people are diagnosed, with a further 30+ million thought to be undiagnosed.

Whilst the shortfall in food supply can partly be met by increasing yields, *post-harvest food loss*, which is as high as 40% of perishable produce in India (according to some estimates²), must also be addressed in order to maximise the available food reserves, tackle issues of hunger and undernourishment, limit price rises and stimulate development in rural communities. Food waste and spoilage are key challenges behind this 40% wastage, post-harvest.

A critical factor impacting India's agricultural sector is its average farm size. Land ownership is highly fragmented, with 62% of farmers holding less than one hectare of land. The number of marginal farmers with landholdings below one hectare has increased rapidly by 49% from 1990–2010 to a total of 92 million marginal landholdings. The average marginal landholding size is just 0.38 hectares³. From an agri-food system perspective, India's landscape is defined by small-batch production, with some pockets of high volume production. It is characterised by extensive rather than intensive farming methods.

Customs and tradition also play a part in creating food wastage. Less than 15% of food in India is purchased through outlets familiar in the western world. India's home-grown supermarkets account for only 2% of food and grocery sales⁴. Food is generally cooked from fresh (or near fresh) with minimal pre-processing, although there has been an increase in habits related to convenience and snacking. The wide availability of cheap labour has meant that there is a limited developed supply chain using advanced handling, a partial reason for high spoilage levels. Preservation is generally viewed as a processing technique and systems for cold chain logistics remain underdeveloped except in certain pockets, and where international players have required them to meet their own expectations.

There is an urgent need to establish integrated supply chains across India in order to harvest, pack, store and transport food more efficiently and hygienically, thereby extending a product's life, along with its nutritional and economic value.

1.3.2 Scope

The competition aims to tackle key challenges existing at the post-harvest stage in India's agri-food sector, that impact on food security, and are limiting the country's ability to maintain a healthy, fast growing population. (Note that 'post-harvest' is not restricted to crops but includes dairy, meat and

¹ <http://www.makeinindia.com/sector/food-processing/>

² Discussions between Indian and UK stakeholders, December 2014

³ All statistics in this paragraph are from: <https://www.vodafone.com/content/dam/sustainability/2015/pdf/connected-farmers.pdf>

⁴ <http://www.economist.com/news/business/21625799-modern-food-retailing-has-struggled-win-customers-indias-old-fashioned-merchants-long>

fish. At-farm post-harvest treatment to reduce storage and transport wastes are in scope. Primary agricultural production, however, is out of scope.)

The following priorities under the broad theme have been identified:

- Affordable food packaging and improved food packaging systems
- Post-harvest handling and processing, including 'minimal processing' and processes to control ripening and post-harvest spoilage and damage
- Process technologies to enable new products from food supply chain waste
- Green technologies for food distribution

Tackling these challenges would support India to strengthen its agri-food value chains.

Affordable food packaging and improved food packaging systems

Insufficient and inefficient packaging of food in India is a contributory factor in its current food spoilage and waste situation. There is a need to develop sustainable packaging solutions to protect food from adulteration, spoilage etc (e.g. through the use of tamper evidence and counterfeiting measures), whilst ensuring there is a balance between protection and excessive packaging becoming unwanted/non-reusable waste.

Under this theme, proposals are invited which will see the commercialisation of improved forms of packaging and packaging materials that reduce food spoilage, waste and damage. These may include, for example, solutions to improve ease of transportation; extend shelf life; address humidity control, disease control or pest infestation; ensure authenticity and quality; package for dispensability (e.g. re-sealable and tailored for specific populations, markets); be reusable or turned into a value-added waste stream.

Priority will be given to proposals for eco-friendly packaging. Affordability of the packaging product or service to the Indian customer (of the packaging) should be a primary consideration in proposals.

Post-harvest handling and processing, including 'minimal processing' and processes to control ripening and post-harvest spoilage and damage

The high levels wastage of food grains, fruit and vegetables and foodstuffs in India is partly due to the lack of modern, suitable processing infrastructure, within an efficient supply chain. Loss occurs at every stage of the supply chain. Following harvest, about 60-70 percent of food grain is stored on farms for variable periods, normally in traditional structures and at unsuitably high moisture levels. This makes them particularly vulnerable to infestations of pests and microbial degradation. Significant losses also occur during processing, where the number of mills is insufficient to meet demand, and most processing units are small and use outdated technologies. The highest rates of loss are in perishable fruits and vegetables, where there is a lack of proper storage facilities, absence of proper handling, transportation, pre- and post-harvest treatment and processing.

Under this theme, proposals are invited which address post-harvest handling and processing issues to reduce post-harvest waste, spoilage and damage, including of foodstuffs. Proposals should take into account the nature of India's farming landscape, and the need for affordable, cost-effective, decentralised commercial solutions that link into the existing networks of agricultural markets across the country.

Process technologies to enable new products from food supply chain waste

There is significant scope for collaboration to identify and exploit new value-added extracts and products/co-products from food waste across the chain (including both spoiled produce and spent (used) food).

The majority of the population still prefer to buy fresh produce, but increasing numbers of people are wanting to buy processed foods for convenience and fashion. Part of the challenge is balancing the value-add market (e.g. beta glucans from seed waste; extraction of oils; structuring materials) with improving nutrition through fortification whilst preserving / maintaining natural characteristics of the product. The importance of minimizing the number of interventions, energy input and resource efforts should therefore be carefully considered.

Indian-UK partnerships could be used to help identify potential key markets and opportunities and to bring the long term fundamental research base from the UK to support applied or development based research and the commercialisation of novel products or services in India.

Under this theme, proposals are invited which enable new product development from food supply chain waste through the application of process technologies, including waste valorisation.

Green technologies for food distribution

Inadequate cold chain storage and inefficient distribution account for losses in fruits and vegetables, milk, fish, livestock and foodstuffs in India. Whilst India has witnessed a marked increase in the production of perishable high nutrition products like fruits, vegetables, meat and poultry products etc., its cold chain storage and distribution network has not kept pace (except in the dairy sector). A resultant demand-supply mismatch has emerged across these agricultural commodities, frequently contributing to wide spread price fluctuations and inflation.

A lack of suitable packing facilities located close to farmers (to prepare and pre-condition fresh farm produce) and lack of suitable, adequate transport connectivity (connecting farmers with the distribution network) are two particular challenges currently impacting India's cold-chain situation.

Refrigerated transport is a crucial element transport connectivity and the cold-chain, which must be developed in order to ensure that food can reach the large urban markets in acceptable quality. Currently, India has less than 20,000 refrigerated trucks on the road. However, diesel-powered cooling, particularly transport refrigeration units are disproportionately polluting and to increase their numbers would have a negative impact upon air quality and climate change. Clean cold technologies, including liquid air, could offer a viable alternative (enabling emerging economies like India to leapfrog established fossil-fuelled equipment).

Under this theme, proposals are invited which address food and foodstuffs distribution challenges in India through the application of green, clean technologies, resulting in novel commercial products or services.

1.3.3 A Research and Innovation Bridge (R&I Bridge)

Innovate UK/RCUK/DBT will fund consortia collaborations of businesses, research organisations, and non-profit organisations from the UK and India (each consortium containing participants from both the UK and India), which seek to nurture innovative solutions in response to this competition's scope, through the translation of existing, excellent research. Each grant made to a single consortium under the competition will be called an R&I Bridge.

It is recognised that solutions to socio-economic challenges come in several shapes and forms: the primary focus of a Bridge will be on enabling innovative *commercial* solutions to emerge, in the form of new products or services to address the challenge of climate change related to urbanisation, or new processes that enable commercial cost-efficiency in the challenge.

It is anticipated that the Bridges will build upon existing areas and models of academia-industry translation strength in the UK, currently being propagated by Innovate UK and RCUK, or other significant funders such as the EU; and similar on the Indian side.

An R&I Bridge should:

- Accelerate the deployment of knowledge and the exploitation of research in order to create new products, services and processes that are solutions to real challenges India is facing.
- Encourage economic development by improving knowledge exchange between academia, businesses, public services, and non-profit sectors in and between the UK and India, with the objective of creating relationships that should last longer than the grant funding available.
- Enable the acquisition of new innovative research skills/methodologies.
- Draw attention of businesses to new and emerging opportunities and challenges.

The planned results of the competition are as follows:

- Innovative technology-based solutions to agri-food challenges that have primary applicability in India, have progressed closer to commercialisation. These solutions positively impact upon the particular challenge they seek to address, thereby and ultimately improving socio-economic development in the country.
- The bilateral R&D community, in targeted markets and sectors, demonstrates an increased awareness of Indian and UK science and innovation capabilities.

1.4 Eligibility

1.4.1 Common eligibility criteria

A collaboration proposing an R&D project that meets the requirements in this section is eligible to apply to this competition and does so in accordance with the national laws, rules, regulations and procedures of their jurisdiction or country.

Project Composition

- Projects must be collaborative, containing partners from both India and the UK.
- Project duration should be up to 24 months.
- Projects must be innovative and market-driven, leading to the proposed development of a new product, service or process, leading ultimately to commercialisation.
- Projects must articulate clear commercial goals and associated commercialisation strategies.
- Projects must have identical start and end dates for both UK and Indian applicants (both funders reserve the right to withdraw the grant if these dates are not kept to).

Each proposal must include *as a minimum*:

- An **Indian** business partner
- An **Indian** research organisation/academic institution/organisation
- A **UK** business partner
- A **UK** research organisation

Within these four, there should be:

- An **Indian** registered organisation Project Lead (**IPL**), leading the Indian part of the project and communicating with the UK Project Lead. The IPL can be a business, research organisation or academic institution/organisation. The collaboration must be led by organisations in India whose primary focus is on the translation and commercialisation of research and/or knowledge. This competition is not about funding basic research.
- A **UK** Project Lead (**UKPL**), who is a UK registered organisation, leading the UK side of the project and communicating with the Indian Project Lead. The UKPL can be a business or an RO who can demonstrate a clear route to commercialisation and whose primary focus is on the translation of research and/or knowledge. This competition is not about funding basic research.

Expressions of interest or full-stage applications that do not contain this minimum partnership of 1 UK business partner, 1 UK research organisation, 1 Indian business and 1 Indian research organisation/academic institution will be considered to have not met the minimum eligibility requirements and will not be put forward for assessment.

1.4.2 Applicants from India

Eligible Indian applicants are:

- Indian-registered companies
- Government of India-supported / Government of India-recognised academic institutions, universities, organisations
- Indian public-sector undertakings (PSUs)
- Not-for-profit DSIR/SIRO recognised R&D trusts / foundations / NGOs.

Please note the following:

Industry partners:

- i. Should be an Indian Company registered under the Companies Act 2013 and in which 51% (or more) of the ownership is held by Indian citizens.
- ii. Company should have in-house R&D unit recognised by DSIR (Department of Scientific and Industrial Research) or should have applied for the same. First release of grant will be made only after obtaining DSIR recognition.

Academic partners:

- i. Public and/or Private Universities and Research Institutions having a well-established research support system, for basic or applied research.
- ii. Registration/recognition/accreditation/certification from a Government of India body will be mandatory.

Ineligible Organisations:

- Companies headquartered and owned outside India and their subsidiaries in India, or vice versa, are not eligible to receive funding from DBT under this programme.
- Research centres and academic organisations headquartered and owned outside India and their subsidiaries in India, or vice versa, are not eligible to receive funding from DBT under this programme.

1.4.3 Applicants from the UK

Eligible UK applicants are:

- UK companies of any size, registered, based and operating in the UK.
- Academic institutions, other research organisations including research and technology organisations, public sector bodies (that might include city governments for example) and charities/non-profit organisations undertaking research activity in the UK are also eligible to participate as per Innovate UK's funding rules: <https://interact.innovateuk.org/guidance-for-applicants>

UK institutions must be able to demonstrate that the Research and Innovation Bridge will build upon a portfolio of research and development funded either by Innovate UK and/or Research Councils UK or other significant funders, such as the EU and the Wellcome Trust, for example.

1.4.4. India/UK partnerships

- To be eligible for this competition, projects must be focused on industrial research. A full definition of this research category is available here: <https://interact.innovateuk.org/-/funding-rules>. Work packages that include elements of Experimental Development will be considered within projects that predominantly target Industrial Research.
- UK Project Leads (UKPL) must collaborate with an Indian Project Lead (IPL) to form a consortium to deliver the project. There is no restriction on the number of partners in either the UK or India.
- Projects must articulate clear commercial goals and associated commercialisation strategies.
- Proposals must demonstrate the joint India-UK project team's expertise and capacity to manage the proposed project in their respective countries.
- Building on the principles of a true bilateral partnership, all projects should demonstrate equivalence in effort from the India and UK partners.
- Successful project participants will be expected to demonstrate that all partners contributing to the R&D project have agreed on IP Rights and the commercialisation plan as part of the final grant agreement process.
- Innovate UK and DBT will expect successful project participants to put in place a collaboration agreement amongst all project partners as part of the conditions of taking up the grant offer.

1.5 Funding

DBT, Innovate UK and RCUK will implement an integrated, merit-based project evaluation and selection process using their existing assessment processes. DBT, Innovate UK and RCUK will then together identify the final list of successful applicants. A positive funding decision for R&D projects that request funds from all organisations will trigger:

- Innovate UK and RCUK to allocate funds to UK industry, UK research and other UK participants; and
- DBT to allocate funds to Indian participants.

Funds will be provided in accordance with the applicable laws, rules, regulations and procedures established by each organisation, and/or in each jurisdiction/country.

Although the individual type and value of individual contributions allocated to a India-UK R&D project may vary, each bilateral project must demonstrate equivalent total effort from each participating country.

1.5.1 Financial support – DBT (India)

Expected costs/grant:

Total project funding as Grant for Indian applicants is up to INR 7.5 crores (maximum) with 50% contribution from the Industry. Projects larger than INR 3.0 crores will be given in collaboration with BIRAC.

Proportion of total eligible cost per type of applicant:

The Industry-Academia distribution in India should be entirely as per the demands of the project objectives and requirements.

Details:

- Indian-registered companies, Government of India supported / recognised academic institutions / universities / organisations / PSUs (Public Sector Undertakings), not for profit DSIR/SIRO recognised R&D trusts / foundations / NGOs **will be eligible for grants-in-aid.**
- Funding will be provided as grants-in-aid to Industry as well as academia. DBT's contribution to the industry will follow Biotechnology Industry Partnership Programme (BIPP) norms as detailed below:
 - DBT's support to Industry shall not exceed 50% of the total project cost, 50% of the contribution will mandatorily come from the Industry.
 - IC (international cooperation) of DBT will not consider any project with a total budget of more than INR 3.00 crores. Rather, projects with a total budget of more than INR 3.00 crores will be funded by BIRAC in collaboration with IC.
- The duration of the projects would be for a period of up to 2 years.
- In the case of start-ups or companies, which cannot contribute 50% of the project cost, they can be funded upto INR 25.0 lakhs as Grant-in-Aid for proof of concept in which 80% can be GIA and balance company contribution. Once PoC is successful, subsequently main project can be considered for further funding.
- The cost breakup for the DBT component of the proposal shall be: Capital costs to be limited to 30% of the DBT cost; Manpower costs also to be limited to 30% of the DBT cost; balance will cover consumables and travel costs. Overhead costs will not be permissible.
- All releases will be milestone based. First release shall be made on signing of the agreement and will be 30% of DBT contribution. All further releases will be subject to satisfactory monitoring report by the technical and financial expert teams.
- The fund release will be made by DBT.

1.5.2. Financial support – Innovate UK (UK)

The UK funding element will come from the Newton Fund and therefore UK applicants must be able to demonstrate that there is a clear economic and societal benefit to India from their proposed project. This is in line with the Newton Fund forming part of the UK Government's Official Development Assistance budget. More details here: <http://www.newtonfund.ac.uk/about/what-is-oda/>.

Expected costs:

We expect total eligible project costs from all UK partners in a project to be between £800,000 and £1 million. We may consider projects outside of this range if appropriately costed (on prior communication with Innovate UK).

Proportion of total eligible cost per type of applicant:

- The business proportion of total eligible project costs must be 50% or higher.
- Research organisations, public sector organisations and charities (undertaking non-economic activity) can together claim up to 50% of total eligible project costs.

Type of research and percentage of eligible costs funded:

- Projects must be focused on industrial research. A full definition of this research category for UK applicants is available at: <https://interact.innovateuk.org/-/funding-rules>.
- Work packages that include elements of Experimental Development will be considered within projects that predominantly target Industrial Research.
- As per Innovate UK's rules, businesses can attract the following percentages of eligible costs from public funding for Industrial Research and Experimental Development:

Applicant Business Size	Industrial Research	Experimental Development
Micro/small ⁵	70%	45%
Medium	60%	35%
Large	50%	25%

- ROs including Research and Technology Organisations undertaking non-economic activity) can claim up to 100% of eligible costs (Universities – 80% of Full Economic Costs as determined via the JeS application system); Public Sector Organisations or Charities undertaking non-economic activity: 100% of eligible costs.

State Aid:

- The funding percentages outlined above are compliant with EU State Aid rules.
- For more information on funding and state aid definitions please see: <https://interact.innovateuk.org/-/funding-rules>

Official Development Assistance (ODA) Compliance

- All submitted applications must be checked for ODA compliance. Details on ODA compliance for

⁵The definition of micro, small and medium-sized enterprises used by Innovate UK is contained in the European Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (2003/361/EC), which took effect on 1 January 2005 or any subsequent definition provided by the Commission. This can be found at: http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm

Newton Fund projects can be found here: <http://www.newtonfund.ac.uk/about/what-is-oda/> If projects are not deemed by Innovate UK to be compliant with ODA, Innovate UK reserves the right to not submit the application for assessment.

1.6 Application overview

This is a two-stage competition that opens for applicants on 23rd November 2015:

- Stage 1: Expression of Interest – **Applicants collaborate to submit a single application per project to Innovate UK**, which is assessed separately by Innovate UK and DBT assessors. Assessment results for Innovate UK and DBT will be compared and a joint ranked list of results produced.
- Stage 2: Full Stage –Top ranking applications from Stage 1 will be invited to submit a full stage application and supporting documentation to Innovate UK. This will again be assessed separately by Innovate UK and DBT assessors, and a joint ranked list of results produced.

Competition Registration:

Each applicant consortium must nominate one of their two Project Leads to register for the competition. The nominated Project Lead must register through the Innovate UK competition website, at least one week before the competition closes

https://interact.innovateuk.org/competition-display-page/-/asset_publisher/RqEt2AKmEBhi/content/india%E2%80%93uk-research-and-innovation-bridges-competition-agri-food

Upon registration the nominated Project Lead will be emailed an application form template which must be completed in collaboration with their consortium partners in UK and India.

The joint proposal must reflect a combined effort from both the UKPL and IPL, be written in English, and submitted to Innovate UK using the proscribed process by the stated application submission date 12 noon UK time.

Ineligible/Rejected applications

Applications will also be rejected if:

- They do not meet the stated competition eligibility criteria as set out in this document, including ODA compliance.
- They are not in the prescribed template, or are hand-written or are submitted by email.
- They are submitted to the incorrect organisation or use the incorrect application form for the competition.
- They are submitted after the deadline for submissions as stated in this document.
- Only one side (i.e. one country) has contributed its part of the proposal/application.
- They are not submitted in English.

Should you require any further information or have any query regarding the joint submission process, please contact the helpdesk for your country for further information – details of which are at the end of this document.

1.7 Key dates

If you are intending to submit an application to this competition, please make a note of the key dates below.

The deadlines below are absolute and final. **In all cases, the submission deadline times will be 12 noon (UK time) in the UK.**

Any applications after this time will not be accepted.

Competition opens	23 November 2015
Registration deadline for UK applicants	Noon 20 January 2016
Expressions of Interest (EOI) deadline	Noon 27 January 2016
Stage 2 opens for invited applicants	11 April 2016
Deadline for invited applicants	Noon 14 June 2016
Release date of Competition results	August 2016 (provisional)

Important Note:

Please do not leave your submission to the last minute.

If any technical difficulties arise or if you identify any errors in your submission, we will not be able to grant an extension to the above deadlines.

It is your responsibility to ensure you follow the competition guidance rules and in doing so allow sufficient time to complete all of the competition requirements described in this document.

1.8 The assessment and evaluation process for this CFP/competition

Innovate UK will operate the competition process on behalf of Innovate UK, RCUK and DBT.

1.8.1 Assessment process

It is the responsibility of the appointed Project Leads to ensure that all of the necessary information for the proposal/application has been gathered from UK and Indian partners and is uploaded to the Innovate UK secure site and the DBT site prior to the application deadline. If there is specific information missing in an eligible application, Innovate UK may at its discretion contact the applicant point of contact (as indicated in their application form) requesting the missing information within a specified timescale.

Innovate UK and DBT will initially screen all the proposal/application received by the application deadline for completeness of information as per the CFP/competition guidelines. Applications which do not meet the basic/key criteria as outlined in these guidelines will be excluded from the on-going competition process. In addition, proposals/applications in which only one of side (i.e. one country) has submitted its part of the proposal/application will be deemed ineligible for the RFP/Competition and notified accordingly by the respective funding agency.

Innovate UK and DBT will then compile lists of the complete proposals/applications received by each agency, and share them with each other. The final list of complete proposals/applications to be put forward for assessment will be agreed-upon between DBT and Innovate UK. These proposals/applications will then undergo assessment in their respective countries.

1.8.2 Evaluation and selection of R&D projects

To ensure the effective delivery of the CFP/Competition and reinforce the principles of bilateral partnership, DBT (for India) and Innovate UK/RCUK (for UK) will conduct parallel but independent evaluations of all applications based on the project criteria and requirements specified in the CFP/competition guidance, followed by a joint review. Together, the funding partners will make a joint recommendation on projects to be shortlisted for funding, based on the feedback and recommendations received from DBT (India) and Innovate UK expert assessors.

Assessors in both countries will review the common application form (and associated supporting documentation, where appropriate).

In the UK

All applications will be evaluated according to Innovate UK's standard assessment process, full details of which are available at: <https://interact.innovateuk.org/-/what-happens-when-you-have-submitted-your-application-> .

Each application is assessed by up to five independent assessors against the same set of gateway and criteria questions. Each assessor is required to complete and submit a score-sheet with comments for each application they are assigned to assess. A report is then compiled to identify ranked order of all applications.

A panel of independent assessors may be convened to discuss any applications that require clarification around scope, quality, feasibility or fundability. Applicants are not required to attend.

In India

All applications will be evaluated through Department of Biotechnology's standard peer review/committee based evaluation procedure.

Joint Review

Following the independent evaluations in India and UK, a joint review committee will be held, comprising representatives from the Indian and UK funding agencies. Final decisions on joint approvals will be made at that time for both EOI and full stage. This will be based on a composite score. If the majority of assessors in either India or the UK do not recommend a project for funding, it will not be accepted as successful at either stage of the competition. All funding partners reserve the right to take a portfolio approach to funding.

DBT (India) and Innovate UK/RCUK will communicate the final decision in writing (via e-mail/letter) to all the IPL and UKPL applicants respectively.

Section 2

2.1 Information for applicants

2.1.1 How to apply for this competition



REGISTER

To enter this competition, your project should appoint one of the Project Leads (either from the UK or India) who must register via the competition website at <https://interact.innovateuk.org/>

You will receive an email acknowledgement of your registration immediately and then an additional email containing a username and password for our secure upload facility, along with a unique application form and number. Following your registration acknowledgement, please allow up to 48 hours for receipt of your email application form.

Please note: As stated in the above Key Dates section, the last date to register for a competition is noon UK time, 7 days prior to the close date.

Applicants collaborate to submit a single application per project to Innovate UK, which is assessed separately by Innovate UK and DBT assessors.

Multiple project applications

If you wish to apply for funding for more than one project, register once and then request additional application forms by emailing Innovate UK's Customer Support Service support@innovateuk.gov.uk. You will then be able to make separate submissions by completing a unique application form for each separate project, ensuring the appropriate application form is uploaded to the site under the correct application number.

Please note: repeat applications for the same project will be classed as ineligible and not sent for assessment.



DOWNLOAD
documents

Once you have received your unique username and password, you can log into the secure website to access additional documentation relevant to the competition.



COMPLETE
documents

Stage 1 – Expression of Interest (EOI)

This stage requires you to submit the following documents:

- EOI Application Form - supplied with your unique application number for this competition

Stage 2 – Full Stage (invited applicants only)

This stage requires you to submit the following documents:

- Application Form - supplied with your unique application number for this competition
- Project Appendices - (please see Section 3 of this document for more information)
- Partner Finance Form - for every non-academic partner in your project
- Je-S Submission pdf Output Document - for every UK academic partner in your project (if any)
- If your application includes UK academic partner(s) **and** your proposal involves the use of humans or animals you **must** complete and submit an additional “Ethical Information” form with your full stage application.

The appendices allow you to provide additional supporting information on your project. The finance forms provide details on your project costs for each partner in your project consortium. For information on eligible project costs and the partner finance forms please click here

<https://interact.innovateuk.org/-/project-costs>



UPLOAD
documents

Please ensure that you allow plenty of time to upload your completed documents for submission to the competition. Our submission close dates can be very busy which means that upload can take some time. We recommend that you upload your application in plenty of time as the deadline is final.

To upload your application documents, log on to the secure website using the details supplied with your secure username and password. See detailed instructions here:

<https://interact.innovateuk.org/-/submitting-your-application>

If repeat applications for the same project are submitted, then only the repeat applications will be ineligible and not assessed.



NOTIFICATION
received

Once the competition submission deadline is reached, your application is sent for assessment. We will notify the nominated Lead (who registered for the competition) of the outcome of your application on the date stated in the timeline.



FEEDBACK
received

You will be able to access feedback on your application from the assessors by logging into the secure site on or after the date published in the key dates section. For further information on what happens after you submit your application please click here: <https://interact.innovateuk.org/-/what-happens-when-you-have-submitted-your-application->

We will give feedback to unsuccessful applicants approximately 4 weeks after you have been notified of the decision. The lead applicant can access the feedback by logging on to the secure website where you uploaded your application documents. It is the responsibility of the lead partner to communicate the feedback with the rest of the consortia. No additional feedback can be provided and there will be no further discussion on the application.

2.1.2 Finance forms and project costs

Information on project finances is available in the guidance 'Your Project Costs' on our website: <https://interact.innovateuk.org/-/project-costs>

2.1.3 How to find out more (Data Protection Act 1998, Information Security, etc)

If you require further information or have a query regarding this competition, please contact the Customer Support Services on:

E-mail: support@innovateuk.gov.uk

Tel: 0300 321 4357

Section 3

3.1 The application form & submission documents

3.1.1 The application documents - overview

This section explains the structure of the application form and offers guidance on the information to include in each section.

Submission of a completed application form is mandatory. Applications in any other format will not be accepted. Upon registration, the Project Lead nominated to register on behalf of the applicants will receive a unique application form and user ID for the proposal.

- Stage 1: Expression of Interest – **Applicants collaborate to submit a single application per project to Innovate UK**, which is assessed separately by Innovate UK and DBT assessors. Assessment results for Innovate UK and DBT will be compared and a joint ranked list of results produced.
- Stage 2: Full Stage – Top ranking applications from Stage 1 will be invited to submit a full stage application and supporting documentation to Innovate UK. This will again be assessed separately by Innovate UK and DBT Assessors.

The Indian and UK project leads for a project should ensure that they collaborate with all consortium members to complete the competition documents.

Applications should include a technical, business and financial component. The technical component describes the innovation, gives details of the proposed technical approach and contains a research Program Plan. The business component covers the market analysis, commercialization plans, and benefits to project participants, project organization, and the management plan. The financial component covers the cost of the project, the funding required and why public support is needed.

The proposal will also provide a description of the companies and other participants. It is important to be clear, concise, and to the point when filling each section so to best present the merit of your project in an effective manner.

Please note: The application form questions, as detailed below, are used at both Stage 1 and Stage 2 of the competition. Applicants collaborate to submit a single application per project to Innovate UK at both stages of the competition.
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The structure of the application form is as follows:

- Application details
- Summary of proposed project
- Gateway question: scope
- **Section 1 – The business proposition (4 questions)**
- **Section 2 – Project details (4 questions)**
- **Section 3 – Funding and added value (2 questions)**
- Public description of the project
- Other funding from public sector bodies
- Finance summary table

Sections 1 to 3 of the application form, highlighted above, address specific questions. These are listed in the following tables with guidance notes. When you submit your application form, it will be assessed according to how well it answers the specific questions. Each question has an equal weighting of 10 marks per question.

It is important that you address and respond to each question clearly. To help you, the guidance below provides an explanation of what is required for each question. The guidance notes are not intended to be exhaustive; you should develop your own responses based on your own skills, knowledge and experience.

When completing the application form it is important to take into account that the space provided is to enable you to give the specific amount of information for each question as you feel appropriate for the application. You are encouraged, therefore, to utilise fully all available space and any appendices at your disposal.

Please ensure that you upload the final and complete version of your application by the deadline. It is your sole responsibility to ensure you upload the application form intended for submission and assessment and not a blank or incomplete form.

Key tips

- number the answers to each question
- use headings for the answer to each question

Important: Please note the following process requirements for the application form:

- You may only use the application form provided. It contains specific information including a unique reference number for your project.
- The application form contains specific fields and it is important that you complete each field and present a fully completed form. Incomplete forms will be rejected.
- The application form must not be altered, converted or saved as a different version of Microsoft Word.
- The space provided in each field of the form is fixed and you must restrict the content of your responses in each of the fields to the space provided. The typeface, font size and colour are predetermined and cannot be changed. Illustrations and graphics cannot be included in the application form. **Please check your completed application form in PRINT VIEW: any text that can't be seen in this view or when the form is printed will not be assessed.**
- The light grey shaded fields are completed automatically from other information entered on the form, e.g. the total columns of a table. These cannot be overwritten.

Application details	
Field	Guidance
Competition title	This field will show the full name of the Competition to which the form applies. You do not need to enter anything here
Project title	Enter the full title of the project
Project timescales	Enter the estimated start date and its planned duration. These are indicative at this stage and are not guaranteed
UK Project Lead (UKPL) organisation name	Enter the full registered name of the UK lead partner for the project and the company number (as provided by Companies House). Please note that (if your application is successful) the lead organisation will be the main point of contact between the Innovate UK and the UK project team.
Have any of the project partners previously received Newton funding?	Please select Yes/No. If yes is selected, please confirm which project partner has previously received Newton funding or is in the process of receiving Newton funding, from which Delivery Partner and under which Newton Fund activity.
UK Project Lead (UKPL) organisation contact details	Enter the full name, postcode, e-mail address and telephone number of the main point of contact between the Innovate UK and the UK Project Lead (UKPL)
Indian Project Lead (IPL) organisation name	Enter the full registered name of the Indian project lead (IPL) organisation for the project
Indian Project Lead (IPL) contact details	Enter the full name, postcode, e-mail address and telephone number of the main point of contact between DBT (India) and the IPL
Appendices	The specific requirements for Appendices are provided in Section 3.3 of this document
Summary of proposed project (not scored)	
Question	Guidance
Please provide a short summary of the content and objectives of the project including what is innovative about it.	This is an opportunity to provide a short summary of the key objectives and focus areas of the project. It is important that this summary is presented in reference to the main outline of the project, with sufficient information to provide a clear understanding of the overall vision of the project and its innovative nature. This summary is not scored, but provides an introduction of your proposal for the benefit of the assessors.
Gateway question: Scope (not scored, Yes/No answer)	
Important note: If the majority of evaluators/assessors consider that the answer to the Scope Gateway question is 'No', then the application will not be approved for funding. Guidance on the 'Gateway Question: Scope' question is, therefore, critically important and is provided below	
Question	Guidance
Gateway question: Scope - How does this application align with the specific competition scope?	All applications must align with the specific competition scope criteria as described in the relevant competition Brief. Note: To demonstrate alignment, you need to show that a clear majority of the project's objectives and activities are aligned with the specific competition. In forming their judgment on this, the assessors will also consider whether the application addresses the research objectives and topics it claims to. It is important,

	therefore, for you to understand fully the background, challenge and scope of the competition, as outlined in this document.
Section 1: The business proposition	
(10 points per question = 40 points in total)	
Question	Guidance
1. What is the business opportunity that this project addresses?	Outline the business opportunity and what the project team needs to do to successfully address it within the desired timeframe and cost. Describe the nature of the problems or issues facing you and/or your potential customers and how the intended outputs of the project will address these problems and issues.
2. What is the size of the market opportunity that this project might open up?	Describe the size of the market opportunities that this project might open up, including details of: • current nature of the specific market(s) at which the project is targeted (for example, is it characterised by price competition amongst commoditised suppliers? Is it dominated by a single leading firm?) • the dynamics of the market including quantifying its current size, actual and predicted growth rates • the projected market share for the project outcome, with justification in the light of any potential competitors • the potential to create value-added for the UK and/or India. Describe and clearly quantify the return on investment that the project could achieve and provide relevant source data references. Where possible, provide evidence for your statements about the addressable market for project outcomes and outline your strategy for developing market share. For highly innovative projects (see question 6) where the market may be unexplored, explain: • what the route to market could or might be • what its size might be • how the project will seek to explore the market potential.
3. How will the results of the project be exploited and disseminated?	List or describe the potential exploitable outputs of the project, such as: • products or services • processes • applications Then describe how these outputs will be exploited including, where applicable, the route to market; protection of intellectual property rights; reconfiguration of the value system; changes to business models and business processes and other methods of exploitation and protection. Where helpful to the exchange of best practice, and not damaging to commercial interests, the results from this work should be

	made public on a voluntary basis and a strategy for dissemination of generic outputs from the funded project should be included. PLEASE NOTE: Where UK research organisations are involved in a project and funded for undertaking non-economic activity, we will expect to see evidence in the answer to this question of plans to disseminate their project outputs over a reasonable timescale. The requirement for dissemination of research results intends to secure wider benefit from the higher level of public support given to research organisations. For further information, please click here: https://interact.innovateuk.org/-/funding-rules
4. Why is the project eligible for Official Development Assistance (ODA) funding? What beneficial outputs is the project expected to deliver to those inside and outside of the consortium, and over what timescale?	To be eligible for a Newton Fund grant, applicants must clearly explain and give evidence for why and how their project fits within scope for Official Development Assistance (ODA). A project should not only demonstrate high industrial relevance and commercial potential, but must also demonstrate that it will have a positive impact upon the economic development <i>and</i> social welfare of the Newton partner country, beyond primary commercial interests. Proposals that do not demonstrate how they aim to further sustainable development (and thereby contribute to a reduction in poverty), or improve the welfare of the Newton partner country's population, will be considered out of scope. For Question 4 applicants must clearly state and give evidence for how their project will: • Create outputs to be carried out in the Newton Fund partner country • Create outputs leading to clear and widespread socio-economic benefit for the population of the Newton Fund partner country, Benefits to those outside the consortium and to consortium participants should be considered and you should make a clear distinction between the two. All applications must clearly demonstrate that wider socio-economic benefits will accrue outside of the consortium in the Newton partner country in a short- to medium-timeframe (3-15 years); and clearly elaborate what those benefits are and to whom. For further information on Official Development Assistance and ODA compliance please see: http://www.newtonfund.ac.uk/about/what-is-oda/

Section 2: The project details	
(10 points per question = 40 points in total)	
Question	Guidance
5. What technical approach will be adopted and how will the project be managed?	Provide an overview of the technical approach including the main objectives of the work. Describe the main areas of work together with their resource and management requirements. In evaluating this the assessors will consider these questions: • is the technical approach and methodology appropriate to the needs of the project and are the innovative steps achievable through the proposed approach? • is the project plan sufficient in comparison to the complexity of the project? For example, is there sufficient detail to understand the tasks involved and the resources required? • is the timing of key milestones realistic? • is there demonstration of sufficient resource commitment and capability to undertake the project? • are clear management reporting lines identified? Describe rival technologies and alternative R&D strategies and describe why your proposed approach will offer a better outcome. You must provide a milestone based project plan for the project. Please submit it using Appendix B, not in the space provided to answer this question. For detailed guidance on what to include in the plan, please see Section 3.4.
6. What is innovative about this project?	Identify the extent to which the project is innovative both commercially and technically. In evaluating this section assessors will consider these questions: • does it push boundaries over and beyond current leading-edge world science and technology? • is it looking to apply existing technologies in new areas? Highlight and explain the timeliness and novelty of the research aspects of the project in an industrial and/or academic context. Describe any evidence you have to substantiate your belief that the intended work is innovative. This could include the results of patent searches, competitor analyses, literature surveys etc. If applicable, you should also outline your own background intellectual property rights, as related to the project. You may additionally consider: • What is current "best practice"? • What are current limitations to innovation and how will the project overcome them? This is an opportunity to elaborate on the shortcomings that exist in the proposed area of innovation as a prelude to the description of the innovation and how it can overcome these shortcomings. Current limitations could include: high cost, sub-optimal performance,

	lack of attention to specific market opportunities, e.g. poor suitability to high-or-low-end markets, size, compatibility, nonconformance to standards, etc; • Diagrams and tables could be included in Appendix B to help describe the innovation. What is the patent situation, including background patents and the potential for new patents? Are there any obligations to other agencies which have supported any part of the innovation development? • Which standards relate to the developed product? Will the proposed product meet current and/or emerging standards?
7. What are the risks (technical, commercial and environmental) to project success? What is the project's risk management strategy?	DBT (India) and Innovate UK both recognise that projects of this type are inherently risky, but seek assurance that the projects they fund have adequate arrangements for managing this risk. Focus, therefore, on the arrangements for managing and mitigating risk as follows: • identify the key risks and uncertainties of the project and provide a detailed risk analysis for the project content and approach, including the technical, commercial, managerial and environmental risks as well as other uncertainties (e.g. ethical issues) associated with the project. The main risks should then be rated as High/Medium/Low (H/M/L) • state how the project would mitigate these key risks. You should address all significant and relevant risks and their mitigation • identify key project management tools and mechanisms that will be implemented to provide confidence that sufficient control will be in place to minimise operational risk and, therefore, promote successful project delivery. This should include the arrangements for managing the project team and its partners.
8. Does the project team have the right skills and experience and access to facilities to deliver the identified benefits?	Describe the track record of the project team members in UK and India undertaking and exploiting the results of research and development projects, to show your capability to develop and exploit the technology. In evaluating this, the assessors will consider whether: • the project team has the right available mix of skills and experience (in both countries) to deliver the project successfully • the project team's formation objectives are clear and if it would have been formed without this funding support • there is additional benefit demonstrated from the collaboration, for example, increased knowledge transfer; and if the consortium is greater than the sum of its parts – how the organisations working together will achieve more than if they were working individually.

Section 3: Funding and added value (10 points per question = 20 points in total)	
Question	Guidance
9. What is the financial commitment required for the project?	Indicate the anticipated project cost making clear the level of contribution from any project participants and the level of funding required from DBT (India), RCUK and Innovate UK. This information should be provided in the financial summary table in the application form. If a project partner is not proposing to claim grant, then it must still show its costs in the finance summary table and describe them in the answer to this question so that the assessors can evaluate the whole project. However, the detailed finance forms will not be required for UK partners not requesting grant. Supporting information and explanation for project costs should be provided in this section of the form. Detailed cost information is required in the finance forms for each country. The information and explanation must be consistent with the category of research & development being undertaken within each work package. UK partners: Please see the guidance section of the Innovate UK website for further details on UK funding: https://interact.innovateuk.org/-/funding-rules Indian partners: Please see: www.dbtindia.nic.in Important: If the project spans more than one type of funding (for example, because significant work packages are in both industrial research and experimental development), you must describe and justify the breakdown of costs between them within the answer to this question. In evaluating this the assessors will consider the following questions: • Is the budget realistic for the scale and complexity of the project? • Does the financial support from this competition fit within the limits set by the specific competition? • Is a financial commitment from other sources demonstrated for the balance of the project costs? • Has a realistic budget breakdown been provided? • Have any work package breakdowns been described and justified adequately? UK partners: detailed guidance on eligible and ineligible project costs is provided on the Innovate UK website: https://interact.innovateuk.org/-/project-costs Please note: For UK Research Organisations, the costs of Post Graduate Research Students are no longer eligible to be included in project costs. This is in line with current Research Council

	guidelines. Please refer to the guidance via the above link for further details Indian partners: All eligible costs non-recurring and recurring shall be funded. Recurring cost shall include cost of consumables, Manpower (Research fellows, post-doctoral fellows, contractual labour), travel costs, prototype development, outsourcing activity etc. Ensure that all key points relating to the finances of your project that you wish the assessors to consider are included in the main body of your application form, or in the relevant appendix, as these are the key documents used within the assessment process.
10. How does financial support from DBT (India) and the Innovate UK add value?	The project should have an obvious advantage and added value resulting from the technological cooperation between the participants from the two countries (e.g. increased knowledge base, commercial leads, access to R&D infrastructure, etc.) You will need to provide evidence that: • successful delivery of your project will increase the total amount of money the project team spends on research & development in UK and India And either: • why the funding is required for the project to be able to proceed or • how DBT (India) / Innovate UK & RCUK funding would allow you to undertake the project differently (e.g. more quickly, on a larger scale etc.) and why this would be beneficial to India and the UK The project should demonstrate the contribution of the participants from both countries on an equal base, and the project must be equally significant to both UK and Indian participants.
Public description of the project (not scored)	
Question	Guidance
If your application is successful, DBT (India) and the Innovate UK will publish the following brief description of your proposal. Provision of this description is mandatory but will not be assessed.	To comply with DBT (India) and UK Government practice on openness and transparency of public-funded activities, DBT (India), Innovate UK and RCUK will publish information relating to funded projects. Please provide a short description of your proposal in a way that will be comprehensible to the general public. Do not include any commercially confidential information, for example intellectual property or patent details, in this summary. Whilst this section is not assessed, provision of this public description is mandatory. Funding will not be provided to successful projects without this.

Finance summary table

Column 1 Organisation name	Please provide the full names of the (lead) organisations (both UK and India on separate rows) and any participants in the project consortium (organisation names as noted in Companies House/CIN) on separate rows below.																																				
Column 2 Organisation registration number	UK partner: Companies should provide the Company Registration Number (as noted in Companies House). UK Research Organisations should enter their RC number/Charitable status/legal entity registration number etc. Indian partner: Companies should provide the Corporate Identity Number (CIN) issued by the Ministry of Corporate Affairs.																																				
Column 3 Enterprise category	UK partner: Please select your Enterprise Category. (SME definition below is based on the EU definition for UK applicants. For other definitions, please check the competition website: https://interact.innovateuk.org/-/funding-rules <table><tr><th>Enterprise category</th><th>Headcount</th><th>Turnover</th><th></th><th>Balance sheet total</th></tr><tr><td>Medium sized</td><td><250</td><td><= €50 million</td><td rowspan="3">or</td><td><= €43 million</td></tr><tr><td>Small</td><td><50</td><td><= €10 million</td><td><= 10 million</td></tr><tr><td>Micro</td><td><10</td><td><= €2 million</td><td><= 2 million</td></tr></table> Indian partner: Please select your Enterprise Category: Large / Micro, Small and Medium Enterprises (MSMEs) As per Micro, Small & Medium Enterprises Development (MSMED) Act, 2006, MSMEs are classified in two categories: a) Manufacturing Enterprises - The enterprises engaged in the manufacturing or production of goods pertaining to any industry specified in the first schedule to the industries (Development and regulation) the Companies Act, 1951 or employing plant and machinery in the process of value addition to the final product having a distinct name or character or use. The Manufacturing Enterprise are defined in terms of investment in Plant & Machinery . b) Service Enterprises: The enterprises engaged in providing or rendering of services and are defined in terms of investment in equipment . <table><tr><th></th><th>Manufacturing Sector</th><th>Service Sector</th></tr><tr><td>Enterprises</td><td>Investment in plant & machinery</td><td>Investment in equipment</td></tr><tr><td>Micro</td><td>Up to INR 2.5 million</td><td>Up to INR 1 million</td></tr><tr><td>Small</td><td>Between INR 2.5 million to INR 50 million</td><td>Between INR 1 million to INR 20 million</td></tr><tr><td>Medium</td><td>Between INR 50 million to INR 100 million</td><td>Between INR 20 million to INR 50 million</td></tr></table>				Enterprise category	Headcount	Turnover		Balance sheet total	Medium sized	<250	<= €50 million	or	<= €43 million	Small	<50	<= €10 million	<= 10 million	Micro	<10	<= €2 million	<= 2 million		Manufacturing Sector	Service Sector	Enterprises	Investment in plant & machinery	Investment in equipment	Micro	Up to INR 2.5 million	Up to INR 1 million	Small	Between INR 2.5 million to INR 50 million	Between INR 1 million to INR 20 million	Medium	Between INR 50 million to INR 100 million	Between INR 20 million to INR 50 million
Enterprise category	Headcount	Turnover		Balance sheet total																																	
Medium sized	<250	<= €50 million	or	<= €43 million																																	
Small	<50	<= €10 million		<= 10 million																																	
Micro	<10	<= €2 million		<= 2 million																																	
	Manufacturing Sector	Service Sector																																			
Enterprises	Investment in plant & machinery	Investment in equipment																																			
Micro	Up to INR 2.5 million	Up to INR 1 million																																			
Small	Between INR 2.5 million to INR 50 million	Between INR 1 million to INR 20 million																																			
Medium	Between INR 50 million to INR 100 million	Between INR 20 million to INR 50 million																																			
Column 4 Postcode	Please provide the postcode of each organisation participating in the project.																																				
Column 5 Contribution to the project by each organisation (£)/(INR)	Please list the total contribution to be made to the project by each organisation. For the UK submission, all applicant figures in cols 5-9 must be in £ at the stated exchange rate. For Indian submission, all figures in cols 5-9 must be in Indian Rupees (INR) at the stated exchange rate.																																				

Column 6 Funding sought from Innovate UK value in (£)/(INR)	Please enter the funding sought from Innovate UK for each UK participant organisation in the consortium for this RFP/competition. See Col 5 above.
Column 6 Funding sought from GITA (India) value in (£)/(INR)	Please enter the funding sought from DBT for each Indian participant organisation in the consortium for this RFP/competition. See Col 5 above.
Column 7 Other funding from public sector bodies (£)/(INR)	Please include any funding for the project from any other public sector bodies which has been applied for separately, and not as part of this RFP/competition. Funding from other public sector bodies might include other applications to research councils, other government departments, devolved administrations, other public sector organisations and some charities. The purpose of this column is to provide DBT, Innovate UK and RCUK with information on the total public funding for the project. See Col 5 above.
Column 8 Total (£)/(INR)	The total cost of the project – this is the sum of columns 5, 6 and 7 and will be entered automatically.
Bottom Row Total (£)/(INR)	The total of each column will be entered automatically.

3.2 Additional documentation required at Stage 2

3.2.1 Project appendices – applicable to both Indian and UK applicants

If invited to Stage 2, appendices can be submitted and are, in some cases, mandatory.

Appendices must be submitted with the application form. It is important to note that these are intended to contain supporting information and not substantive elements of answers to the application form questions. Do not, therefore, use the appendices as an overflow to the application form.

In order that evaluators/assessors can open and read the appendices, **for all applications** each appendix must:

- conform to the maximum length specifications listed below
- be submitted in Portable Document Format (.pdf)
- be legible at 100% zoom/magnification
- display prominently the 'Project title' as entered on page 1 of the application form
- be named as per the specifications given in the guidance 'Submitting your Application' click here: <https://interact.innovateuk.org/-/submitting-your-application>

If you submit appendices longer than specified below, they will be truncated and the excess discarded. Appendices may be printed or photocopied in black and white, so colour should not be used as the sole method of conveying important information.

Appendix	Guidance
Appendix A Up to 5 sides of A4	Use Appendix A to provide additional information to support Section 1 of the application form: The Business Proposition. You may wish to include graphics describing the nature of the problem, market dynamics and/or exploitation plans.
Appendix B Up to 5 sides of A4 (7 sides of A4 for academic and business applications)	A project plan is Mandatory for this application, and must be included in this section. Use Appendix B to provide further information to support Section 2 of the application form: The Project Details. You may include, for example, a Gantt chart, risk analysis table, project management structure and/or details of evidence for innovation. Academic and business applications may submit an additional 2 A4 sides for additional assessment information particularly for academics, such as the Pathways to Impact and Research Excellence. Please refer to separate guidance on your Project Costs for more information using the link below.
Appendix C Up to ½ side of A4 for each partner and subcontractor	Use Appendix C to provide details of the specific expertise and track record of each project partner and each subcontractor to address Question 8 of the application form. Academic collaborators may wish to refer to their research standing.
Appendix D (Mandatory for Indian applicants only)	Indian applicants also need to submit Appendix D (cost proforma). The template for this document can be found on the public area of the FTP site at full stage. This is mandatory.

3.2.2 Project plan

In addition to your response to Question 6 on the application form, you are required to submit a mandatory project plan as part of Appendix B.

For UK partners, a more detailed project plan will be required by Innovate UK for monitoring project progress.

For Indian partners, a more detailed project plan will be required by DBT (India) for review and monitoring of project progress.

The project plan should consist of:

- A chronological schedule of project activities presented in graphical form (e.g. Gantt chart on one page), clearly indicating the estimated time required for the completion of each main task in addition to milestones. Specific participant assignments for each task should be identified in the Project Plan even if this information was provided elsewhere, and task assignments for subcontractors and consultants should be separately identified and described with location of work;
- A Work Breakdown Structure (WBS) detailing the planned time commitment for each task, covering the same project duration (see example in Table 1);

Table 1: Example Work Breakdown Structure and Estimated Effort

Task #	Title	Task Description	Start Date	End Date	Effort Days
1000	Phase 1				
1100	Project Management				
1110	Project Management and support	Plan and monitor project activities and progress Implement and monitor subcontracts Monthly and quarterly reports			70 Participant A
1120	Meetings	Kick-off meeting Quarterly review meetings			10 each
1200	High-Level System Requirements and Design				
1210	System requirements and design	Overall system requirement specifications Overall system conceptual architecture and design System components definition			60 Participant A 20 Participant B
1300	Data Plan				
1310	Data planning, acquisition and preparation	Data planning Data acquisition Data preparation and processing			20 Participant A 20 Participant C
1320	Model data integration	Integrate data into models Test models and analyze outputs			40 Participant A 40 Participant C
1400	Model identification and definition				
1410	Application crop model implementation	Model identification, development and testing			60 Participant A 60 Participant C
1420	Integrated intelligent model implementation	Model identification, development and testing Establish and test system communication			80 Participant A 10 Participant B
1430	Product generation model implementation	Model identification, development and testing			40 Participant A 10 Participant B
1500	Hardware and Software Identification and Acquisition				
1510	Sensors	Identify and purchase sensors Install, test and maintain sensors			10 Participant A 40 Participant C
1520	Software acquisition	Software development and testing			10 Participant B
1600	Commercialization requirements				
Total Effort (Person Days)					XX Participant A YY Participant B ZZ Participant C AA Participant D

3.2.3 Project Finances

If invited to Stage 2, you will be asked to submit a finance form for each industry and academic participant in your project consortium applying for grant, which provides more detailed information on the total costs listed in your finance summary table.

Participants should use the standard Innovate UK finance forms provided as part of the application form and submit the details in GBP (£).

Funding of the project begins from the effective start date agreed in the signed grant confirmation letter / project funding agreement. Expenses incurred by the participants prior to the effective start date of the project cannot be restructured to fit into the eligible expenditure for reimbursement.

UK partners: information on project finances is available in the guidance ‘Your Project Costs’ on our website: <http://www.innovateuk.org/competitions/guidance-for-applicants/project-costs.ashx>

3.3 Exchange rate

For the purposes of this competition. The stated exchange rate UK £ to INR is:

UK £1 = 100 INR

Note: this exchange rate must be used in any calculations by applicants at all times during the competition process.

Contact information

INDIA	UNITED KINGDOM
http://www.dbtindia.nic.in/out-reach/latest-announcements	https://interact.innovateuk.org
Department of Biotechnology (DBT) Dr. Shailja V. Gupta Director Department of Biotechnology Email: shailja.dbt@nic.in	Innovate UK North Star House North Star Avenue Swindon SN2 1UE Wiltshire Competition helpline: 0300 321 4357 Email: support@innovateuk.gov.uk