







COMPETITION **GUIDANCE FOR APPLICANTS**

Newton Fund: UK-Malaysia Urban Innovation Challenge 2017

A bilateral framework providing facilitation and financial support for Malaysian and UK organisations through business-led collaborations

UK:

Innovate UK

Malaysia: **PlaTCOM Ventures**

May 2017

Executive summary

PlaTCOM Ventures (supported by the Malaysian Innovation Agency (AIM) and SME Corporation Malaysia (SME Corp)) and Innovate UK are running a call for proposals for collaborative research and development projects in the field of urban innovation.

Malaysia's urbanisation rate has been among the highest in the region (4th most urbanised economy in Asia according to the World Bank), which generates a sizeable amount of health, environmental, energy, and socio-economic challenges for local residents and public authorities. This call will support collaborations between UK and Malaysian businesses to generate new knowledge and develop innovative solutions to tackle these challenges and to improve the efficiency of urban systems in Malaysia.

Both the Malaysian and British governments aim to support projects developing the use of cutting-edge solutions to tackle critical issues in the field of urban innovation. The UK investment has been made possible through the Department for Business, Energy and Industrial Strategy-managed Newton Fund. The UK partners in this call are to invest up to £3million (GBP) in eligible projects. The Malaysian investment was made possible through the PlaTCOM Venture's investment of up to RM10 million (Ringgit Malaysia) in eligible projects, through the High Impact Programme 2 (HIP2) they manage. Each funding organisation will observe the funding limits of their counterparts involved in this call.

About the funding & implementation agencies, and the Newton Fund

PlaTCOM, Malaysia

PlaTCOM Ventures Sdn Bhd is the national technology commercialisation platform of Malaysia. It is a wholly-owned subsidiary company of Agensi Inovasi Malaysia (AIM) formed in collaboration with SME Corporation Malaysia under one of its six High Impact Programmes (HIPs) in SME Master Plan 2012-2020.

PlaTCOM Ventures is designed to discover and support innovations wherever they may be, assess ideas critically, explore them systematically, and turn the best ones into successful products and services. Rather than following traditional technology transfer models, PlaTCOM Ventures has designed a model that facilitates any segment of the entire commercialisation process (end-to-end facilitation) from idea to products and services. The whole approach will be market driven in supporting innovation and competitiveness. This model is fits innovation environment in the South East Asia region in providing commercialisation support for the fledgling businesses, innovators and entrepreneurs including those from academia and public research institutes.

For more information about PlaTCOM, please visit http://www.platcomventures.com/

AIM, Malaysia

Agensi Inovasi Malaysia (AIM) is a statutory body created to jump start wealth creation through knowledge, technology and innovation to stimulate and develop the innovation eco-system in Malaysia. We lay down the foundation of innovation that inspire and produce a new generation of innovative entrepreneurs.

For more information about AIM, please visit http://innovation.my/

SME Corp, Malaysia

SME Corporation Malaysia (SME Corp. Malaysia) is a Central Coordinating Agency under the Ministry of International Trade and Industry (MITI) Malaysia that formulates overall policies and strategies for Small and Medium Enterprises (SMEs) and coordinates the implementation of SME development programmes across all related Ministries and Agencies. It acts as the central point of reference for research and data dissemination on SMEs, as well as, provides advisory services for SMEs in Malaysia. SME Corp. Malaysia also assumes the role of the Secretariat to the National SME Development Council (NSDC), which is chaired by the Prime Minister of Malaysia.

For more information about SME Corp, please visit www.smecorp.gov.my.

High Impact Programme 2 (HIP2)

The implementation of High Impact Programme 2 (HIP2) - Technology Commercialisation Platform (TCP) under one of the size High Impact Programmers of SME Masterplan 2012 - 2020 is a strategic partnership between SME Corporation Malaysia (SME Corp) and Agensi Inovasi Malaysia (AIM). PlaTCOM Ventures Sdn Bhd is the public-private partnership under which this programme is implemented.

The model addresses the innovation gaps through a holistic and 'market-driven' approach in supporting innovation and industrial competitiveness. It is designed to remove market and financing barriers to innovation. The major benefits of this innovative commercialisation model will be derisking the risks involved for SMEs to develop products and services with lower costs and faster time-to-market, leveraging on trusted technologies from across Malaysia and overseas and receiving technology transfer and commercialisation support to further develop innovations.

The programme provides necessary support from 'concept to commercialisation'. This is done through the provision of access to technical assistance, market intelligence, incubation facilities, testing facilities and other relevant services - all in a single platform.

For more information about HIP2, please visit http://www.platcomventures.com/HIP2-@-High Impact Programme 2.aspx.

Innovate UK, UK

Innovate UK is an executive non-departmental public body established by the UK Government in 2007, and sponsored by the Department for Business, Energy and Industrial Strategy (BEIS). 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

The Newton Fund

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. £735 million will be spent by the UK through the Fund over a 7-year period (2014-2021), 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 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.

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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 competition.

Under the rules of this competition, consortia must have one Malaysian lead partner (MPL) and one UK lead partner (UKPL). The lead partner for Malaysia and the lead partner for the UK should liaise and coordinate to ensure that all requisite documents are submitted.

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

1.1 Competition overview

This competition aims to respond to the growing challenges of Malaysian urban areas with regards to mobility, waste and water. 75% of Malaysia's population lived in a city in 2015, a figure still expected to rapidly increase in the coming decade (World Bank data). This quick development has engendered major challenges for urban systems, particularly connected to their capacity to manage people, water and waste flows, and to respond to emergency situations. Innovative solutions could make cities more liveable and increase their resilience, allowing for fewer disruptions and lower health risks for urban citizens.

The competition calls for solutions under the following scope areas:

- Urban mobility, with a focus on real-time data and system integration, service delivery, first/last-mile connectivity and multi-modal connectivity.
- Urban waste reduction and management, especially looking at solutions for recovering, separating or extracting valuable components with minimal disruption to citizens for the following waste streams: household, industrial and commercial waste.
- Urban water management, specifically reducing non-revenue water and urban flooding.

Programmes of research and innovation for this call should:

- involve a collaborative consortium of UK and Malaysian partners
- develop and strengthen partnerships between UK and Malaysia to enable joint research and innovation with the final aim of commercialisation and implementation
- deliver societal benefits in terms of improved urban services in Malaysia

1.2 Finding partners

Meeting Mojo platform

- Innovate UK, in conjunction with the Knowledge Transfer Network (KTN) has launched an online Meeting Mojo platform to enable applicants to find partners.
- All interested applicants should create a profile on Meeting Mojo and search for partners in the database specific to this UK-Malaysia competition. 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 consortium.

- 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://malaysia-uk-newtonfund-2017.meeting-mojo.com
- The Meeting Mojo link is also available on the Innovate UK competition webpage under the "Finding Partners" section.

1.3 Competition scope

1.3.1 Urban mobility

The challenge

Traffic congestion in Malaysia is a problem in most of the country's major cities, with serious consequences for people's health and economic productivity. In Greater Kuala Lumpur alone, traffic congestion costs are estimated at over RM3,100 per resident, which equates to over 1.1% of national GDP in 2014. For further illustration, residents of Greater KL spend more than 250 million hours per year stuck in traffic, mainly because of the prevalence of single-use car ridership. Moreover, a lack of convenient shared mobility alternatives and the absence of infrastructure to connect the various public transport options results in low public transport ridership and highly congested urban arteries. This competition calls for solutions to urban congestion that address the challenge through improving public transport services, user experience and increase its use.

According to the World Bank (2015 figures), only 17% of residents in Kuala Lumpur use public transportation, compared to 62% in Singapore and 89% in Hong Kong. This situation disproportionally affects the urban poor, who are likely to be disconnected from urban amenities, as affordable housing tends to be situated in areas where public transport is hard to access. Currently, public transport services are not easy to navigate: there is very little real time information/ tracking available, although most private bus companies and rail-transit providers do collect real-time data. Furthermore, the collected mobility data is not integrated city-wide or across transport modes. First- and last-mile connectivity is a recurring issue, not only because of the lack of integration between modes and providers, but also due to poor walking or cycling infrastructure, a lack of information on alternative means of connecting between stations, and negative public perception regarding low-carbon transport options.

At a municipal service level, most areas in Malaysia suffer from a lack of coordination in traffic network management and public transport provision. There are few integrated traffic management solutions being used by the local authorities/ road authorities, and a lack of unified planning is a key obstacle to the delivery of efficient urban transport. Solutions that could address public service integration in order to ease urban congestion would also be in scope.

Solutions sought

The goal of this call is to help Malaysian cities:

- Reduce traffic congestion
- Increase use of public transport through information provision or integration of mobility datasets
- Increase quality of service (including security, reliability, cleanliness)
- Integrate multiple modes of transport
- · Provide high-quality, accurate and reliable information on traffic and public mobility status
- Increase the sustainability of urban mobility and reduce operational costs
- To be socially inclusive (particularly of the urban poor)

- Improve accessibility for persons with disabilities
- Encourage safe and accountable multiple car occupancy

The solutions we are calling for should fit one of the scope areas below:

- Data and Systems Integration This could result, for example, in better provision of
 information to the citizen; increased availability of data through new data collection methods;
 increased trend analysis and prediction through data analytics; improved response times to
 incidents.
- **Service Delivery** This could include, but not be limited to: cost saving solutions for transport providers; increased capacity and ridership as a result of innovative business models; more convenient ticketing solutions; improving the rider experience.
- **First-/Last- Mile Connectivity** This could include, but not be limited to: alternative modes of connecting people/communities to transit points; improving the commuter's journey experience (i.e. weather-proofing, improved safety)
- **Multi-modal transport connectivity** This could include, but not be limited to, solutions that bridge gaps between transit points; enabling commuters to identify optimal routes and transit.

If there are risks of legislative/policy barriers, the solution providers should demonstrate a clear strategy for engagement with the relevant authorities or stakeholders, and initial buy-in.

Out of scope

Due to the ODA component of this call, the building of physical infrastructure is out of scope for this competition. Moreover, projects that have negative environmental/ social impacts (i.e. GHG emissions) are also considered out of scope.

1.3.2 Urban waste

The challenge

In Southeast Asia, countries with high urbanization rates such as Singapore, Malaysia, Thailand, Indonesia, and Vietnam are witnessing fast growth of densely populated areas with large-scale industrialization. Hence, solid waste management services are witnessing a huge interest with diversion of waste from landfills to incineration and recycling. According to Frost and Sullivan report (2017), Malaysia is producing 13.87 M tons of municipal solid waste in 2014 and 1.25 kg/capita/day of municipal solid waste. This situation has a negative effect on the urban environment, where extensive landfills take up potentially productive land, and pollute the air, and ground-level and subterranean water streams. This usually engenders health risks for urban dwellers connected to contaminations and vector-borne disease. Furthermore, the resources lost to landfills could be recovered and converted into monetary value and boost the local economy through the creation of new industries.

Cities harbour multiple streams (household, industrial, commercial, construction etc) of waste where opportunities exist to divert waste from landfill and into recycling or product cycle re-entry. Solutions that can propose localised recycling options to urban communities could have an important social and environmental impact on Malaysian urban areas. There are also massive opportunities to connect citizens, businesses and large industry in a wider resource cycle management and valorisation system that could attach a monetary value to waste streams and encourage their recovery.

Solutions sought

The goal of this call is to help Malaysian cities:

- Reduce the amount of waste that goes to landfill
- Increase the amount of recycled/ reused resources

- Encourage the adoption of solutions which contribute to the "circular economy" model for urban waste streams
- Increase public awareness on waste reduction and value of resources
- Reduce urban poverty, improve environmental quality and reduce vector borne diseases

The solutions we are calling for should fit one of the scope areas below:

- **New affordable processes** to recover, separate or extract valuable components from urban household or commercial waste streams
- Development of new technologies for community-owned recycling schemes based on a viable circular economy model (eg waste from urban residential estates, business parks or industrial zones)

If there are risks of legislative/policy barriers, the solution providers should demonstrate a clear strategy for engagement with the relevant authorities or stakeholders, and initial buy-in.

Out of scope

Due to the ODA component of this call, the provision of infrastructure to support solutions is not in the scope. Solutions related to agricultural, animal and medical waste are also out of scope.

1.3.3 Urban water management

The challenge

Urban water management presents two major challenges in Malaysia: non-revenue water and urban flooding. Both relate to climatic extremes faced by Malaysian urban environments: sustained droughts affecting water reserves and provision, and cloud bursts that put enormous pressures on urban water management infrastructure. Both are seen as short-to-medium term priorities, posing environmental and health risks to Malaysian urban citizens.

Municipal water usage is currently expected to increase by 50% by 2030. In a context of ever-increasing climate pressures and extensive water shortages (particularly in the Western side of the Malaysian peninsula), this urban water wastage has substantial health effects (through water rationing during drought periods) and environmental consequences (through contamination). The Malaysian Government aims to reduce non-revenue water by 50% by 2020 and the sector has been identified as one of the top 3 emerging economic opportunities in Malaysia (with a potential to generate an additional RM410 million). The challenges around non-revenue water regard Malaysian cities' old infrastructure and poor maintenance technologies. Leaks are responsible for the loss of substantial amounts of water in most urban contexts. Pipe bursts are a regular occurrence, causing city-wide disruptions through frequent pipe-replacement works.

The other extreme water management challenge faced by Malaysian cities are floods. 90% of Malaysia's natural disasters are linked to flooding and their incidence rate is predicted to increase due to climate change. There is currently research being undertaken into periodic river/coastal flooding and mitigation strategies, but little has been done to provide concrete solutions for flash floods and disaster response. In flash flood situations, Malaysian urban areas currently have no management systems, information alerts or routing solutions that can mitigate impact on people's health, urban traffic and emergency response times. Municipal response teams also lack information on where flash flooding is occurring and an integrated urban data platform to assist them in making real-time decisions in these crisis situations.

Solutions sought

The goal of this call is to help Malaysian cities:

- Reduce incidents of pipe bursts [Non-revenue water]
- Accurately detect water leakage (non-intrusive) [Non-revenue water]
- Provide better water services to citizens while suffering from less disruption [Non-revenue water]
- Minimize the impact of flash floods on citizens by: informing in advance, real-time warning systems and route planning [Urban flooding]
- Make planning better for municipal response teams (traffic, emergency services) [Urban flooding]

The solutions we are calling for should fit one of the scope areas below:

- Water leak detection and management: including NDT for plastic pipes, pressure detection and management, water demand management solutions, in situ pipe repair and replacement.
- Municipal flash flood detection: including but not limited to predictive analytics based on realtime data, community-based flood detection platform (crowd-sourcing of information)
- Urban flash flood response systems: early warning systems and emergency route-planning, integration of real-time flood data with urban traffic management system etc

If there are risks of legislative/policy barriers, the solution providers should demonstrate a clear strategy for engagement with the relevant authorities or stakeholders, and initial buy-in.

Out of scope

Due to the ODA component of this call, the provision of infrastructure to support solutions is not in the scope. Smart water meters [non-revenue water] and military research and interventions [urban flooding] are also considered out of scope.

Overall scope requirements

All projects funded through this Newton Fund competition **must fit the Official Development Assistance (ODA) rules,** in that they should demonstrate a clear added value for the economic and social development of Malaysia, showing clearly potential for wider impact for the development of the country. Please refer to http://www.newtonfund.ac.uk/about/what-is-oda Specifically:

- The Newton partner country (Malaysia in this case) should be the primary focus of the projects and those which lack the sufficient focus on the Newton partner country will be considered out of scope and not be put forward for assessment.
- Projects must evidence how they impact the economic development and welfare of the people of the Newton partner country, above and beyond job creation in the partners involved.

Meeting the Newton Official Development Assistance (ODA) rules is the major eligibility criterion. Projects must meet this eligibility criterion to be put forward for assessment by the UK funding body. Failure to do so will result in the proposal being rejected and it will not be put forward for assessment. There is no negotiation on this status. This eligibility review takes place after the application is submitted, we will not review the information prior to application to confirm your project meets the rules.

1.4 Eligibility

1.4.1 Common eligibility criteria

A collaboration proposing an R&D project conducting industrial research 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 Malaysia and the UK.
- Project duration should be up to 24 months.
- Projects must build on existing research.
- 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 Malaysian applicants (both funders reserve the right to withdraw the grant if these dates are not kept to).

Each proposal must include as a minimum:

- A Malaysian SME
- A **UK** business partner

From the above, two are required to be Project Leads

- A Malaysian registered organisation Project Lead (MPL), leading the Malaysian part of the project and communicating with the UK Project Lead. The MPL must be an SME, the The definition used for an SME can be found at SME Corp's website: https://www.smecorp.gov.my/index.php/en/policies/2015-12-21-09-09-49/sme-definition.
- A UK Project Lead (UKPL), who is a UK registered organisation, leading the UK side of the project and communicating with the Malaysian Project Lead. The UKPL can be a business 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. It is envisaged the UKPL organisation will build a consortium approach between UK stakeholders and Malaysian stakeholders to deliver market-based solutions and are looking for longer-term collaborations with partner countries.

1.4.2 Applicants from Malaysia

Eligible Malaysian applicants:

- SMEs that are majority Malaysian-owned (Malaysian shareholding of 51% or more), with a minimum paid-up capital of RM10,000
- Other organisations, including research organisations, public sector departments or offices, etc, can only join projects as collaborators, consultants, subcontractors, etc.
- Commitment to contribute and secure up to 40% of the total required funding of the project on the Malaysian side, and to provide proof

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, public sector bodies and charities undertaking research activity in the UK are also eligible to participate as per Innovate UK's normal funding rules: https://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants
- Applications must be led by a business on the UK side.

Applications that include a research element must complete a JeS application on the Technology and Strategy Board R&D JeS form and include this as an annex to their application. The JeS system can be accessed here https://je-s.rcuk.ac.uk/JeS2WebLoginSite/Login.aspx and the JeS helptext is available here https://je-s.rcuk.ac.uk/Handbook/Index.htm

Please note, the project information on the JeS form must focus on the research organisation's contribution to the project, and not the consortium as a whole. As part of your Je-S submission please include in the **Impact Summary** section of the form a statement explaining how your university's contribution to the proposed project is compliant with Official Development Assistance (ODA) guidelines. For more information on ODA please refer to the http://www.newtonfund.ac.uk/about/what-is-oda/ and RCUK Newton Fund Guidance.

1.4.4. UK-Malaysia 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://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants#funding-rules. Work packages that include elements of
 Experimental Development will be considered within projects that predominantly target
 Industrial Research.
- UK project leads must collaborate with a Malaysian project lead to form a consortium to deliver the project.
- There is no restriction on the maximum number of partners in the UK and in Malaysia, for each consortium.
- Projects must articulate clear commercial goals and associated commercialisation strategies.
- Proposals must demonstrate the joint UK-Malaysia project consortium's expertise and capacity to manage the proposed project in their respective countries, as well as the respective roles of each project consortium member from both countries
- Building on the principles of a true bilateral partnership, all projects should demonstrate equivalence in effort from the Malaysian and UK partners.
- Successful project participants will be expected to demonstrate that all partners contributing to the project have agreed on IP Rights and the commercialisation plan as part of the final grant agreement process.
- Innovate UK and PlaTCOM 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. This
 should include, among other matters, IP rights, applicable law and dispute resolution mechanisms.

1.5 Enquiries on Intellectual Property (IP)

For any queries from UK applicants on the subject of Intellectual Property (IP), support is available from the UK's Intellectual Property Office (IPO). Please see details in the table below.

Intellectual Property and doing Business in UK/Malaysia

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

Christabel Koh

Email: Christabel.Koh2@fco.gov.uk

Tel: +65 6424 4229

Address: British High Commission Singapore, 100 Tanglin Road,

Singapore 247919

1.6 Funding

Innovate UK and PlaTCOM Ventures will implement an independent, merit-based project evaluation and selection process using existing assessment processes. They will then together identify the final list of successful applicants. A positive funding decision for projects that request funds will trigger:

- Innovate UK to offer funds to industry, research and other UK participants; and
- PlaTCOM to offer funds to the Malaysian Project Lead, which can then be disbursed accordingly, based on the approved project cost breakdown, to the other Malaysian partners within the consortium.

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 UK-Malaysia project may vary, each bilateral project must demonstrate equivalent total effort from each participating country.

1.6.1 Financial support – Malaysia

The Malaysian funding element is under the High Impact Programme 2 (HIP2)'s Concept-to-Commercialisation Gap Fund (CCGF) *via* PlaTCOM. For more information on the HIP2 and CCGF, see link below: http://www.platcomventures.com/HIP2-@-High Impact Programme 2.aspx

CCGF Grant Details:

The limit of funding per company is RM1.2 million and the final approved amount is subject to the discretion of the Steering Committee. The project duration allowed is up to 24 months. This grant can only provide up to 60% of the total required funding of the project on the Malaysian side and the Malaysian Project Lead (SME) will need to indicate and specify own source of funding (a minimum of 40%) and to provide proof.

CCGF can cover the following categories of activities listed below and the proposed funding sought on the Malaysian side of the consortium must fall within these categories. The Malaysian Project Lead (SME)'s contribution may or may not be within these categories. Other Malaysian partners incurring any costs within these categories may be covered by CCGF and other costs incurred beyond these categories will either have to borne by the Malaysian Project Lead as their contribution or by the respective Malaysian partners.

CCGF categories:

1. Proof-of-Concept and Prototype Development

Proof-of-concept refers to the body of evidence (mostly a working prototype) that needs to be produced in order to prove that the invention actually works. For many inventions, proof-of-concept can take place at two occasions along the commercialisation value chain. The first occurs at very early stages from idea to proof-of-concept where a 'research-grade' prototype is produced (mostly within the university or the research institute). The second occasion is when the 'research prototype' needs to be redesigned to an 'industry prototype' that can be scaled up and sold in the market. This scope can address both stages but under different categories. The 'research prototype' will be funded under the 'Proof-of-Concept and Prototype Development' category and the 'industry prototype' under the 'Productisation' category as described below.

2. Productisation

Productisation refers to the process of taking the 'research prototype' and designing in all the details to ease manufacturability and lower costs, and can also include any changes to make the product more sellable or appealing to the market. Thus the 'research prototype' is transformed into an 'industry prototype' that may or may not be further refined further down the commercialisation value chain through testing and validation, regulatory certification and customer feedback once the product hits the market.

3. <u>Licensing Support (in-licensing)</u>

In-licensing is the mechanism by which SMEs acquire Intellectual Property Rights (IPRs) from external research organisations, such as universities and public research institutes, as well as other entities (such as other SMEs, large companies and MNCs). The acquired rights for the IPRs are used for developing new products or improving existing products for commercialisation purposes.

4. <u>Testing and Validation</u>

Testing and validation is the process of ensuring that a design meets requirements. Testing (also called 'verification') confirms that products properly reflect the requirements specified to ensure that 'you built it right'. Validation confirms that the product, as provided, will fulfil its intended use ensuring that 'you built the right thing'. The risk of unexpected bottlenecks can be reduced if testing and validation services can be identified and accessed early on during the product development process.

5. Regulatory (Certification)

Compliance with state, local and federal regulations, and industry standards, is critical in obtaining certification for the marketing and distribution of new products and services. Most products fail in the Malaysian market due to a lack of awareness in regulatory certifications required and the process by which certification can be obtained for both local and international markets.

6. <u>Technical Assistance (Consultancy)</u>

SMEs in-licensing IPRs may need technical assistance from elsewhere to integrate the in-licensed IPRs into their new or existing products under development. This can be sourced from universities, external consultants (local or overseas) and other experts. The usual route by which technical assistance is obtained is *via* consultancy.

7. <u>Sector-Specific Market Intelligence</u>

Provision of access to specialised sector-specific market data and market information services including market intelligence reports, business models, specialised training in order to help the SME to strategise their business model and thereby maximise the chances of commercial success

through thorough planning. Such intelligence would enable the companies to make informed decisions as well as to identify any unexpected market challenges.

8. Incubation Services

Business incubation provides SMEs and start-ups with the ideal location to develop and grow their businesses, offering everything from virtual support, rent-a-desk through to state of the art laboratories and everything in between. This scope can cover the fee and expenses required under incubation services throughout the project duration.

1.6.2 Financial support – UK

The UK funding element will also be part of the Newton Fund and therefore UK applicants must be able to demonstrate that there is a clear economic and societal benefit to Malaysia 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, grant and eligible costs

We expect total UK project costs of between £300,000 to £500,000, giving rise to total UK grant of no more than £400,000. Proposals outside of this range can only be considered with prior Innovate UK approval.

Capital usage/ Equipment: Expenditure on equipment is eligible under this competition as long as all materials are directly related and essential to the goals of the project. Please note that all equipment fully funded by the grant and exclusively used on this project that presents a residual value greater than £1 at project end will have to be donated to the recipient country, in compliance with ODA rules.

Full details of what project costs are eligible for funding from Innovate UK can be found at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/552904/Project_c osts Innovate UK 2.pdf

Proportion of total eligible cost and grant per type of applicant

- The business proportion of total eligible project costs must be 70% or higher.
- Research organisations, public sector organisations and charities (undertaking non-economic activity) can together claim up to 30% 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://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants#funding-rules
- Work packages that include elements of Experimental Development will be considered within projects that predominantly target Industrial Research. Those work packages which are primarily Experimental Development will receive the appropriate grant percentage.
- 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 ¹	70%	45%
Medium	60%	35%
Large	50%	25%

- Research organisations, public sector organisations or charities (as defined as eligible according to Innovate UK's normal funding rules) can claim up to 100% of eligible costs.
- Universities can claim up to 80% of Full Economic Costs as determined via the JeS application system).

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:
 <u>https://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants#funding-rules</u>

Official Development Assistance (ODA) compliance:

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

1.7 Application overview

This is a single stage competition that opens for applications on 2nd May 2017.

- The application process consists of registration, followed by submission of the requisite application form and appendices.
- The UKPL and MAPL must ensure the full application form, including all appendices, are submitted before the application deadline.
- The application must reflect a combined effort from both countries, be written in English, and submitted to Innovate UK and PlaTCOM using their prescribed processes by the stated application submission date 12 noon GMT (7pm Malaysian time)
- **NOTE:** PlaTCOM and Innovate UK use their own application forms in keeping with their own processes.

Ineligible/rejected applications:

- Applications that do not meet the stated competition eligibility criteria as set out in this document, including ODA compliance.
- Project proposals that are not in the prescribed template. Hand-written applications will not be accepted.
- Applications via email will not be accepted, they must be submitted as per Innovate UK and PlaTCOM standard process only.

¹ The 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

- Applications are submitted after the deadline for submissions, as stated in this document.
- Applications submitted to the incorrect organisation or using the incorrect application form for the competition.
- Applications in which only one side (i.e. one country) has submitted an application.

1.8 The assessment and evaluation process for this competition

1.8.1 Assessment process

This competition will follow a single stage process.

PlaTCOM and Innovate UK will initially screen all the applications received by the application deadline for completeness of information as per the competition guidelines.

It is the responsibility of the Project Leads (UKPL and MPL) to ensure that all of the necessary information for the application has been gathered from UK and Malaysian partners and is submitted via the relevant process in the respective countries prior to the application deadline. If there is specific information missing in an eligible application, the funding bodies may at their discretion contact the lead applicants requesting them to provide the missing information within a specified timescale.

PlaTCOM and Innovate UK will then compile a list of the complete project proposals received and compare it with each other.

The final list of complete proposals under the competition will be shared between Malaysia and Innovate UK. These proposals will then undergo assessment in their respective countries.

1.8.2 Evaluation and selection of projects

To ensure the effective delivery of the competition and reinforce the principles of bilateral partnership, PlaTCOM and Innovate UK will conduct parallel but independent evaluations of all applications based on the project criteria, eligibility and requirements specified in the competition guidance, followed by a joint review. Together, they will make a joint recommendation on projects to be shortlisted for funding, based on the feedback and recommendations received from the Malaysian assessment and the UK assessment.

Assessors in both countries will review the application form and appendices along with associated supporting documentation (where appropriate).

Assessment process in Malaysia

Each application is assessed by a Commercialisation Specialist and in cases where industry-specific expertise is required, external experts will be engaged. Assessments will be done against the same set of criteria questions. Shortlisted cases will be scored by a committee. A ranked order of all applications will be produced.

Assessment process in the UK

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

All applications will be evaluated according to the standard assessment process, full details of which are available at: https://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants

Joint review

Following the independent evaluations in Malaysia and the UK, a joint review committee will be held, comprising representatives from the Malaysian and UK funding agencies. PlaTCOM and Innovate UK will then, together, identify the final list of successful applicants.

All funding organisations reserve the right to apply a portfolio approach across projects in different challenge areas, subject to applications reaching the required quality threshold. The final decisions on joint approvals in the call will be made at that time.

The decision to offer financial support and the conditions under which the support will be given is a prerogative of each country's financial institutions, which will independently analyse requests for funding in accordance with the operating policies of each institution. Innovate UK will communicate the final decision in writing (via e-mail/letter) to all the MPL and UKPL applicants respectively.

1.9 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. Please note that submission deadlines are 12 noon (GMT) in the UK and 7pm (Local Time) in Malaysia. Any applications after this time will not be accepted.

Competition open	2 nd May 2017
Closing of registration for UK applicants (applicants need to have	30 th August 2017
registered their intention to submit an application with Innovate UK)	
Competition close	6 th September 2017
	(Noon GMT; 7pm
	Malaysian time)
Communication 1: If you are not eligible under UK	15 th September 2017
ODA/scope/eligibility rules, you will be informed that your application	
is not going forward for assessment on this date	
Communication 2: If your Malaysian partners have been asked to give	20 th October 2017
more information on their business case, you will be informed by	
email on this date	
Communication 3: If your Malaysian partners have been asked to give	28 th November 2017
more information to the Steering Committee, you will be informed by	
email on this date	
Communication 4: Anticipated release date of competition results	12 th January 2018
Project start date	1 st February 2018 – 1 st
	<u>April 2018</u>

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.

Section 2 – information for UK applicants

2.1 How to apply for this competition – UK applicants



REGISTER

To enter this competition, the consortium should appoint a Project Lead for the UK side of the consortium (UKPL) and a Project Lead for the Malaysian side of the consortium (MPL).

Registrants to the Innovate UK system: 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 for UK applicants to register for this competition is 12 noon (GMT) 30th August 2017.

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: If repeat/duplicate applications for the same project are submitted, the repeat/duplicate applications will be ineligible and not assessed.



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. For this competition, these are:

- Example Collaboration Agreement
- Finance forms for each UK industry partner



COMPLETE documents

Each consortium is required to submit the following documents:

•	Application Form	supplied with your unique application number for
		this competition
•	Appendices A-E	(please see Section 3 of this document for more
		information)
•	UK Finance Form	(for every UK industry partner in your project)
•	Je-S Submission pdf Output Document	(for every UK academic partner in your project – if
		any)

The appendices allow you to provide supporting information for the assessors on your project. The UK Finance Forms provide details on your project costs for each UK business partner in your project consortium. For information on eligible project costs and the partner finance forms please click here https://www.gov.uk/government/publications/innovate-uk-completing-your-application-project-costs-guidance

<u>Do not leave it until the last few days to complete your submission documents.</u> If an application does not include all required appendices and forms, as detailed above, it will be deemed ineligible and will not be set for assessment.



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://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants

Please note: If repeat/duplicate applications for the same project are submitted, the repeat/duplicate applications will be ineligible and not assessed.



Once the competition submission deadline is reached, Malaysia and Innovate UK will initially screen all the applications received for completeness of information, eligibility of consortium members and ODA compliance, as per the competition guidelines. If any of these criteria is not fulfilled, the application will not be assessed and will be withdrawn from the competition. If your application is withdrawn at this stage, you will be notified via email by Innovate UK.

The UKPL and MPL of all assessed applications will be notified of the outcome of your application on the dates stated in the above Key Dates section. The UKPL will be notified by Innovate UK, the MPL will be notified by Malaysia.



Each UKPL will be able to access feedback on their application from the assessors by logging into the secure site where they submitted their application.

It is the responsibility of the UKPL to communicate the feedback to the rest of the consortium. No additional feedback can be provided and there will be no further discussion on the application.

For further information on what happens after you submit your application please click here: https://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants

2.2 The UK application form & required documents

The UK application form

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

Submission of one completed UK application form per project, in English, to Innovate UK is mandatory. Applications in any other format will not be accepted. Upon registration, each registrant will receive a unique application form and user ID for their application.

The UK and Malaysian Project Leads for each application should ensure that they liaise and coordinate to provide the application form and all associated appendices/documents required in both respective countries. If an application does not include all appendices and forms, it will be deemed ineligible and will not be set for assessment.

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: If repeat/duplicate applications for the same project are submitted, the repeat/duplicate applications will be ineligible and not assessed.

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 & development 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.

The structure of the application form is as follows:

- Application details
- Summary of proposed project
- Gateway question: scope
- Section 1 The Challenge (4 questions)
- Section 2 Project Details (4 questions)
- Section 3 Project Costs (2 questions)
- Public description of the project
- Finance summary tables for both UK and Malaysian partners

Sections 1 to 3, 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.

If an application does not include all appendices and forms, it will be deemed ineligible and will not be sent for assessment.

Key tip: number the answers to each question and 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 <u>including a</u> unique reference number for your project (for UK applicants).
- 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 <u>light grey shaded fields are completed automatically</u> from other information entered on the form, e.g. the total columns of a table. These cannot be overwritten.

Application details

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, if the UKPL is a UK business, the company number (as provided by Companies House). Please note: the lead organisation will be the main point of contact between Innovate UK and the UK project consortium.

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 project.
Malaysian Project Lead (MPL) organisation name	Enter the full registered name of the Malaysian project lead (MPL) organisation for the project. Please note: the lead organisation will be the main point of contact between Malaysia and the Malaysian project consortium.
Malaysian Project Lead (MPL) contact details	Enter the full name, postal code, e-mail address and telephone number of a named point of contact between Malaysia and the project.
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 Application number	This is completed automatically and is the reference that you should use on all correspondence (this is the 5 or 6 digit number after the dash).
Malaysian Application number	This is the project code from the MPL's Malaysian application form.

Summary of proposed project (not scored)

Question	Guidance
Please provide a short	This is an opportunity to provide a short summary of the key
summary of the content and	objectives and focus areas of the project. It is important that this
objectives of the project	summary is presented in reference to the main outline of the
including what is innovative	project, with sufficient information to provide a clear
about it.	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.

	ction 1: e business proposition	(10 points per question = 40 points in total)
	iestion	Guidance
1.		Describe how your proposal will exploit existing research in order to create new products, services or processes relevant to the four challenge areas (i.e. technical scope) of this call.
		Outline the business opportunity and what the project consortium 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	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
	up?	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 Malaysia.
		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 bewhat its size might be
		how the project will seek to explore the market potential.
3.	How will the results of the project be exploited	List or describe the potential exploitable outputs of the project such as:
	and disseminated?	products or services
		processesapplications
		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://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants#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 *and* 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 socioeconomic 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; 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:	(10 points per question = 40 points in total)
The project details	
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 3.3.
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 exploit existing research in creating new, innovative commercial solutions in answer to a clear market need? • does it push boundaries over and beyond current leadingedge 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?

Malaysia and Innovate UK 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. international collaboration, 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 consortium and its partners.
- 8. Does the project consortium have the right skills and experience and access to facilities to deliver the identified benefits?

Describe the track record of the project consortium members in UK and Malaysia 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 consortium (comprising both UK and Newton partner country sides) is collaborating together effectively and that each member has a clear role

•	project costs for each partner are logical, and well balanced
	over the consortium
•	the project consortium has the right available mix of skills and
	experience (in both countries) to deliver the project

• the project consortium's formation objectives are clear and if it would have been formed without this funding support

successfully

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	: and added value	(10 points per question = 20 points in total)
Question	illa added value	Guidance
9. What i	s the financial itment required for oject?	Indicate the anticipated project cost making clear the level of contribution from any project participants and the level of funding required from Malaysia and Innovate UK.
		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. Please see the guidance section of the Innovate UK website for further details on UK funding:
		https://www.gov.uk/guidance/innovate-uk-funding-general- guidance-for-applicants#funding-rules
		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://www.gov.uk/government/publications/innovate-ukcompleting-your-application-project-costs-guidance 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.

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 Malaysia and Innovate UK add value?

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 Malaysian participants.

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)

On the UK-Malaysia project level you will need to provide evidence that:

- successful delivery of your project will increase the total amount of money the project consortium spends on research & development in UK and Malaysia
- Innovate UK and Malaysian 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 Malaysia and the UK

On a UK-side you will need to provide evidence for:

 In more detail, on UK side, why Innovate UK funding is required for the project to be able to proceed

or

 how Innovate UK 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 Malaysia and the UK.

Public description of the project (not scored)		
Question	Guidance	
If your application is	To comply with Malaysian and UK Government practice on	
successful, Malaysia and	openness and transparency of public-funded activities, Malaysia	
Innovate UK will publish the	and Innovate UK will publish information relating to funded	
following brief description	projects. Please provide a short description of your proposal in a	
of your proposal. Provision	way that will be comprehensible to the general public. Do not	
of this description is	include any commercially confidential information, for example	
mandatory but will not be	intellectual property or patent details, in this summary.	
assessed.		
	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 (U	K and Malaysia)				
Column 1 Organisation name	Please provide the full names of the UKPL and MPL organisations and any participants in the project consortium (organisation names as noted in Companies House/CIN) on separate rows. Please indicate Parent Organisation, if applicable.				
Column 2 Organisation registration number	UK partners: 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. Malaysian partners: Companies should provide the Company Registration No.				
Column 3 Enterprise category	UK partners: 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://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants#funding-rules				
	Enterprise category	Headcount	Turnover	ı	Balance sheet total
	Medium sized	<250	<= €50 million		<= €43 million
	Small	<50	<= €10 million	or	<= 10 million
	Micro	<10	<= €2 million		<= 2 million
	 Malaysian Project Lead: Must be a small or medium enterprise (SME) as defined below: Sales turnover and number of full-time employees are the two criteria used in determining the definition with the "OR" basis as follows: For the manufacturing sector, SMEs are defined as firms with sales turnover not exceeding RM50 million OR number of full-time employees not exceeding 200. For the services and other sectors, SMEs are defined as firms with sales turnover not exceeding RM20 million OR number of full-time employees not exceeding 75. 				
	For more information, refer to http://www.smecorp.gov.my/index.php/en/policies/2015-12-21-09-09-49/sme-definition				

Column 4	Please provide the postcode of each organisation participating in
Postcode	the project.
Column 5 Contribution to the project by each organisation (£)/(Ringgit)	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 Malaysian partners, all figures in cols 5-9 must be in Malaysian Ringgit at the stated exchange rate.
Column 6 Funding sought from Innovate UK value in (£)	Please enter the funding sought from Innovate UK for each UK participant organisation in the consortium for this competition. See Col 5 above.
Column 6 Funding sought from Malaysia value in (Ringgit)	Please enter the funding sought from Malaysia for each Malaysian participant organisation in the consortium for this competition. See Col 5 above.
Column 7 Other funding from public sector bodies (£)/(Ringgit)	Please include any funding for the project from any other public sector bodies that has been applied for separately, and not as part of this 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 Malaysia and Innovate UK with information on the total public funding for the project. See Col 5 above.
Column 8	The total cost of the project – this is the sum of columns 5, 6 and 7
Total (£)/(Ringgit)	and will be entered automatically.
Bottom Row Total (£)/(Ringgit)	The total of each column will be entered automatically.

2.3 UK appendices to be submitted to Innovate UK

Appendices are required in addition to the application form submitted to Innovate UK. **Appendices** must be submitted in English alongside 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 collaborative application form.

In order that assessors can open and read the appendices, **for all UK applications** <u>each</u> 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://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants#the-application-process

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 - from the UK business partner perspective, 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 Up to 2 sides of A4	This appendix is mandatory. Use Appendix D to demonstrate how the project, as a whole, complies with the Official Development Assistance (ODA) criteria: http://www.newtonfund.ac.uk/about/what-is-oda Please note: If your project is viewed as not compliant with the ODA criteria, it cannot be funded by Innovate UK.
Appendix E Please see example Collaboration Agreement provided in the public area of the FTP site	This appendix is mandatory. Please provide an up-to-date working draft of your Collaboration Agreement, to include all consortium members in Malaysia and the UK. Should your application be successful in this competition, the complete and signed version of this document will need to be submitted at contracting stage.

2.4 UK Project plan (Appendix B)

In addition to your response to Question 6 on the application form, you are required to submit a <u>mandatory</u> 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 and should be submitted as part of Appendix B.

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				L
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 Requi	irements 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 requi	rements			20 Participant A 20 Participant D
Total E	ffort (Person Days)				XX Participant A YY Participant B ZZ Participant C AA Participant D

2.5 Details of financial contribution - UK

In addition to the collaborative application form and appendices, the UK partners must submit a finance form for every UK partner in your project consortium applying for grant. This will provide Innovate UK with more detailed information on the total costs listed in your finance summary table.

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

Capital Equipment: Expenditure on equipment is eligible under this competition as long as all materials are directly related and essential to the goals of the project. Please note that all equipment fully funded by the grant and exclusively used on this project that presents a residual value greater

than £1 at project end will have to be donated to the recipient country, in compliance with ODA rules.

Each UK academic participant is required to submit a Je-S form and to upload a PDF of the Output Document, showing a "with Council" status. Please note: as per standard process, academic partners using the JeS system will be required to complete the Justification of Resources and Pathways to Impact.

<u>Please note: the figures stated in your UK finance forms and your Je-S forms must match those given in your application form finance summary table.</u>

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. Information on project finances is available in the guidance 'Your Project Costs' on our website: https://www.gov.uk/government/publications/innovate-uk-completing-your-application-project-costs-guidance

Section 3 – information for Malaysian applicants

3.1 The Malaysian application form & supporting documents

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

The application form is downloadable at www.platcomdiscovery.com/urbaninnovation.

The UK and Malaysian Project Leads for each application should ensure that they liaise and coordinate to provide the application form and all associated appendices/documents required in both respective countries. If an application does not include all appendices and forms, it will be deemed ineligible and will not be set for assessment.

To submit your completed application form and supporting documents, you will need to register using a unique email address on www.platcomdiscovery.com/urbaninnovation. You will then be able to upload your documents according to the various categories of documents in **zip. format.**

Submission of one completed Malaysian application form per project, in English, to PlaTCOM Ventures is mandatory. Applications in any other format will not be accepted.

Multiple project applications

If you wish to apply for funding for more than one project, you will need to register at www.platcomdiscovery.com/urbaninnovation more than once and using a different email address. As with your first application, you need to complete the application form and submit it along with the supporting documents by uploading the documents according to the various categories of documents in zip. format.

Please note: If repeat/duplicate applications for the same project are submitted, the repeat/duplicate applications will be ineligible and not assessed.

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 & development 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.

The structure of the application form is as follows:

- Section A: Applicant Details
 - Part 1: Malaysian Project Lead
 - Part 2: Malaysian Partners (if applicable)
- Section B: Project Proposal
 - o Part 1: Project Details
 - o Part 2: Summary of CCGF Amount Sought

- Part 3: Project Consortium (UK and Malaysian parties)
- Part 4: IP Details (if applicable)
- Section C: Market and Financial Information
 - Part 1: Market Potential
 - o Part 2: 5-Year Financial Projection
 - Part 3: Capacity and Capability to Commercialise
- Section D: Public description of the project
- Section E: Declaration

Supporting documents that must be submitted along with the completed application form are:

- Project Cost Breakdown Spreadsheet
- Certified true copies of Form 9, Form 24, Form 44, Form 49, and Memorandum of Article of the Malaysian Project Lead (and Malaysian Partners (if applicable))
- Certified true copies of the Malaysian Project Lead's latest 3 years' audited accounts/management accounts
- CVs of all project consortium members (Malaysian and UK parties)
- 5-year financial projection
- Project timeline
- Completed UK application form
- Other attachments (e.g. Letters of Intent, Licensing Agreement, Collaboration Agreement, Service Contract, etc.)
- up-to-date working draft of your Collaboration Agreement, to include all consortium members in Malaysia and the UK. Should your application be successful in this competition, the complete and signed version of this document will need to be submitted at contracting stage.

It is important that you address and respond to each question clearly.

Please ensure that you upload the final and complete version of your application by the deadline at www.platcomdiscovery.com/urbaninnovation. It is your sole responsibility to ensure you upload the completed application form and supporting documents intended for submission and assessment.

If an application does not include all required documents, it will be deemed ineligible and will not be sent for assessment.

Key tip: number the answers to each question and 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.
- 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.

3.2 Exchange rate & contact information

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

1 GBP = 5.5 Ringgit

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

Contact information

MALAYSIA	UNITED KINGDOM
http://www.platcomventures.com/default.a	https://www.gov.uk/government/organisations/in
<u>spx</u>	novate-uk
PlaTCOM Ventures	Innovate UK
Nalni Subramainam	Customer Support Services
3501, Level 3, Quill Building 3, Jalan	North Star House
Teknorat 5,	North Star Avenue
63000 Cyberjaya, Selangor, Malaysia.	Swindon
T: +60 (0)3 8319 3116	Wiltshire
	SN2 1UE
Email: nalni@platcomventures.com	Email: support@innovateuk.gov.uk
	Customer Support Services: 0300 321 4357
	(Monday-Friday, 9am-5:30pm GMT)