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### **Innovation and Technology Commission**

# Application Guidelines For Designation As Designated Local Research Institution (Version 3.3)

#### INTRODUCTION

This document contains the guidelines in relation to the designation of local institutions as "designated local research institutions" ("DLRIs") under Section 19(1) of Schedule 45 to the Inland Revenue Ordinance (Cap. 112) ("IRO"). The guidelines seek to help you understand what a DLRI is, the requirements for designation as a DLRI and how to apply for the designation. They are provided for information only and have no binding force at law.

#### 1. BACKGROUND

- 1.1 In the 2017 Policy Address, the Chief Executive announced to substantially increase the tax deduction for expenditure on research and development ("R&D") with a view to encouraging more enterprises to conduct R&D activities in Hong Kong. For this reason, an enhanced tax deduction regime with two-tier rates ("the enhanced tax deduction") was introduced.
- 1.2 Under Section 16B of and Schedule 45 to the IRO, R&D expenditures are classified into "Type A expenditures" which qualify for 100% deduction or "Type B expenditures" which qualify for the enhanced tax deduction. "Type B expenditures" refer to payments made to DLRIs for "qualifying R&D activities" (i.e. out-sourced qualifying R&D), or to "qualifying expenditures" incurred by enterprises on "qualifying R&D activities" (i.e. in-house qualifying R&D). The enhanced tax deduction is 300% for the first \$2 million of the aggregate amount of "Type B expenditures" and 200% for the remaining amount without any cap.
- 1.3 In relation to out-sourced qualifying R&D, a payment made by a person carrying on a trade, profession or business in Hong Kong in respect of which the person is chargeable to profits tax to (a) a DLRI for a "qualifying R&D activity" (*Note 1*) related to that trade, profession or business, or (b) to a DLRI which has, as an object, the undertaking of a "qualifying R&D activity" related to the class of trade, profession or business to which that trade, profession or business belongs, where the payment is used for pursuing that object, will qualify for the enhanced tax deduction.

#### *Note 1:*

According to Section 2 of Schedule 45 to the IRO, an **R&D** activity is

- (a) an activity in the fields of natural or applied science to extend knowledge;
- (b) a systematic, investigative or experimental activity carried on for the purposes of any feasibility study or in relation to any market, business or management research;
- (c) an original and planned investigation carried on with the prospect of gaining new scientific or technical knowledge and understanding; or
- (d) the application of research findings or other knowledge to a plan or design for producing or introducing new or substantially improved materials, devices, products, processes, systems or services before they are commercially produced or used.

According to Section 4 of Schedule 45 to the IRO, a qualifying R&D activity is an R&D activity that –

- (a) falls within the description in sub-paragraph (a), (c) or (d) of the above definition for "R&D activity" (i.e. section 2(a), (c) or (d) of Schedule 45 to the IRO); and
- (b) is wholly undertaken and carried on in Hong Kong.

A qualifying R&D activity does not include -

- (a) any efficiency survey, feasibility study, management study, market research or sales promotion;
- (b) the application of any publicly available research findings or other knowledge to a plan or design, with an anticipated

outcome and without any scientific or technological uncertainty;

- (c) an activity that does not seek to directly contribute to achieving an advance in science or technology by resolving scientific or technological uncertainty; or
- (d) any work to develop the non-scientific or non-technological aspect of a new or substantially improved material, device, product, process, system or service.
- 1.4 Payments made to a DLRI for an R&D activity conducted outside Hong Kong or for an R&D activity other than a qualifying R&D activity (e.g. market, business or management research) may only be eligible for the 100% tax deduction as "Type A expenditures".

#### 2. DESIGNATION OF LOCAL INSTITUTION AS DLRI

- 2.1 Under Section 19(1) of Schedule 45 to the IRO, the Commissioner for Innovation and Technology ("Commissioner for I&T") may designate any of the following institutions as DLRI for tax deduction purposes ("the designation") -
  - (a) any university or college located in Hong Kong; or
  - (b) any other local institution (*Note 2*) that undertakes qualifying R&D activities in Hong Kong.

#### Note 2:

Local institution means an institute, association, organisation or corporation that is located in Hong Kong.

2.2 Local institutions applying for designation are required to demonstrate that they are competent to perform the R&D activities and they conform to the criteria for designation set out in Section 4 of this document.

#### 3. ELIGIBILITY OF LOCAL INSTITUTION FOR APPLICATION

- 3.1 The eligible applicant shall be an institute, association, organisation or corporation that is incorporated or formed according to relevant laws of Hong Kong, including
  - (a) a body corporate incorporated in Hong Kong under the Companies Ordinance (Cap. 622) ("Companies Ordinance") or a former Companies Ordinance as defined by section 2(1) of the Companies Ordinance.
  - (b) a body corporate incorporated outside Hong Kong and registered as a non-Hong Kong company with a place of business in Hong Kong under the Companies Ordinance.
  - (c) a statutory corporation established under any other relevant Ordinances in Hong Kong.

#### 4. CRITERIA FOR DESIGNATION

4.1 Applicants are required to provide proof and documentary evidence in their applications to demonstrate that they meet the criteria for designation as set out in this section to provide the R&D services in Hong Kong. Details of the classification of the science and technology fields and the corresponding areas of each field are set out in **Appendix A**.

#### (a) <u>Manpower Requirement</u>

The applicant shall have sufficient R&D personnel with appropriate academic and professional qualifications, knowledge and experience to undertake the R&D activities in the area(s) of the science and technology field(s) for which designation is sought. The manpower, structure and capability of its Research Team shall be commensurate with the R&D services it provides. It shall provide in its

application detailed information on its Research Team, including the organisational structure and the number of staff together with their post titles, duties and academic / professional qualifications. As a minimum, its research team shall have at least one full time Research Team Leader and four full time Researchers stationed in Hong Kong. The Team Leader(s) and Researchers shall meet the following requirements -

- (i) The Research Team Leader shall hold a master's degree or above in science / technology from a Hong Kong university, or equivalent, and have served as a principal investigator in at least one completed research project in the relevant area(s) of the science and technology field(s) (*Note 3*);
- (ii) The Researchers shall hold a bachelor's degree or above in science / technology from a Hong Kong university, or equivalent, or at least 5 years of research experience in science and technology; and
- (iii) Detailed track records shall be provided in the application as supporting evidence, including publication of research results in peer-reviewed international journals.

#### *Note 3*:

The applicant shall provide the information on the completed research project(s) in which the proposed Research Team Leader(s) was the principal investigator(s). The information shall include the scale, scope, nature and duration of the project as well as the completed report for assessment. If the applicant applies for designation in more than one science and technology field, it shall assign a Research Team Leader for each field. Same Research Team Leader for different fields is acceptable provided that there is evidence (e.g. track records, professional

knowledge, etc.) to demonstrate his/her competency in all the fields.

#### (b) Experience of the Applicant in Providing R&D Services

- (i) The applicant shall have at least recent 3 years of experience in undertaking the R&D activities in the area(s) of the science and technology field(s) for which the designation is sought. Details of research activity records and achievements shall be provided in the application as supporting evidence, including new processes / products / technologies developed, publications of research findings, accreditation by industry organisations or renowned scientific and technological associations and registration of patents in or outside Hong Kong, if any.
- (ii) While the applicant shall conduct the R&D activity by itself, it may sub-contract out a portion of not more than 50% of the R&D activity (in terms of the contract value) to other local or overseas R&D institutions provided that (a) it retains control over the sub-contracted R&D activities, (b) sub-contracting is necessary because the work cannot be done by the applicant itself due to technical reasons and (c) it is not merely acting as a commissionaire.
- (iii) If the research activity records provided in the application contain sub-contracted R&D activities to other R&D institutions, the applicant shall provide information on the sub-contracting, such as the contract / sub-contract value of the projects, portion of sub-contracting, reasons for sub-contracting and the relevant selection, control and monitoring procedures.

#### (c) R&D Facilities and Equipment

The applicant shall possess and / or have access to (e.g. rental or shared use) R&D facilities / equipment that are required for carrying out the R&D activities in the relevant area(s) of the science and technology field(s) and they shall be located in Hong Kong. The applicant shall provide the information on those R&D facilities / equipment which significantly affect the results of R&D services together with relevant details (e.g. manufacturer, model details, functions / specifications, location and ownership) in the application as supporting evidence.

#### (d) Governance and Management Structure

The applicant shall have governance and management structure for effectively supervising and monitoring its operation and provision of the R&D services. The applicant is also required to provide information about the history of legal disputes arising from its provision of R&D services, if any, and the arrangements (e.g. insurance coverage) to cover liabilities that may arise from its R&D services.

#### 5. APPLICATION PROCEDURES

#### Submission of Application

#### 5.1 An application shall be submitted in one of the following ways:

#### (a) **By Online Form**

The applicant may complete and submit the online application form and upload all the required supporting documents through "GovHK". The checklist of supporting documents for online application are set out in **Appendix B**.

#### (b) **By Email**

The applicant may submit the electronic copies of the duly completed and signed application form (including Annex A to G of the application form) and all the required supporting documents as listed in the checklist of the application form by email (<u>DLRI-enquiry@itc.gov.hk</u>) to DLRI Secretariat. The email shall be titled "Application for DLRI (Electronic Submission)".

#### (c) By Post or In Person

The applicant may submit the duly completed and signed application form (including Annex A to G of the application form) and all the required supporting documents as listed in the checklist of the application form (either in hard copies or electronic copies stored in electronic device) by post or in person to DLRI Secretariat at the following address –

DLRI Secretariat
Innovation and Technology Commission
10/F, North Tower, Tseung Kwan O Government Offices
30 Tong Yin Street, Tseung Kwan O
Sai Kung, New Territories

#### Receipt and Initial Processing of Applications

- 5.2 Upon receipt of an application, ITC will acknowledge receipt by email.
- 5.3 ITC may request additional or missing information, supporting documents or clarifications which are considered to be necessary for processing the application.
- 5.4 In the event that the applicant fails to submit the requisite information, supporting documents or clarifications within the time specified by

ITC, the application may be suspended, returned or rejected.

#### Assessment of Applications

- 5.5 Applications will be assessed by ITC according to the relevant criteria. Applicants shall note that the criteria serve to be the basic requirements for the assessment of applications and each application will be considered case by case on its own merits. ITC may, if necessary, perform on-site inspections and conduct interviews with the applicant's representatives and employees.
- 5.6 ITC may seek advice from the Expert Panel on matters related to the assessment of applications and other related issues.

#### Notification of Application Results

- 5.7 The assessment time for each application depends on the complexity and the number of the science and technology fields and areas for which the designation is sought and whether on-site inspection is needed. For a less complex single field application where on-site inspection is not required, ITC will inform the applicant of the result in writing generally within six weeks of the receipt of the application and all the required information, supporting documents and clarifications. For more complicated cases, the processing time will be longer.
- 5.8 For successful applications, ITC will issue an Instrument of Designation specifying the designation validity period, the scope of designation and the terms and conditions for the designation.

#### Renewal of the designation

5.9 In general, the designation as DLRI carries a validity period of two to four years. The validity period depends on the assessment outcome and will be determined on a case-by-case basis. If a DLRI wishes to retain its designation status, it must apply for renewal <u>four months</u> <u>before the expiry of the validity period</u>.

#### 6. OBLIGATIONS OF APPLICANT / DLRI

- 6.1 The applicant / DLRI shall fully cooperate with and provide ITC with all information necessary for the assessment of its competency in undertaking R&D activities and its conformity with the designation criteria and conditions.
- 6.2 The applicant / DLRI shall note that inaccurate and incomplete information will affect the processing of application and designation. Any omission or misrepresentation of information may lead to rejection of applications or revocation of designation.
- 6.3 It is the responsibility of the applicant / DLRI to provide truthfully all information and supporting documents for the application and the designation. Without prejudice to other legal rights of ITC, ITC may decline or withhold the processing of an applicant's application if the applicant is found to have provided false information or falsified documents or have made misrepresentation in connection with the application. Furthermore, ITC may, if it sees fit, report the case to relevant regulatory authorities for investigation.
- 6.4 The applicant / DLRI shall obtain prior consent from their customers as necessary for the disclosure of any relevant information to ITC in the application.
- 6.5 The applicant / DLRI shall not initiate any contact with members of the Expert Panel, the Review Panel on Designation of DLRI ("the Review Panel") and / or any technical experts deployed by ITC for examining the application or reviewing the designation without the prior written agreement from ITC.
- 6.6 It is the responsibility of the applicant / DLRI to carry out its work in accordance with all legislation (including the Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region), regulations and by-laws of the Hong Kong Special Administrative Region as well as the ethical and

safety practices in the relevant area(s) of the science and technology field(s). The applicant shall declare in its application that its operation is in full compliance with all these requirements and practices.

- 6.7 The DLRI shall at all times conform with the terms and conditions and other requirements for the designation as specified by ITC. ITC may amend the terms and conditions it considers necessary at any time within the designation validity period and DLRI shall conform with the amended terms and conditions within the period of time specified by ITC. (See also section 10.2)
- 6.8 DLRI may use its designation status to promote or provide its R&D services during the designation validity period subject to the following conditions:
  - (a) It takes all necessary actions to ensure that its designation status is correctly presented, without any misrepresentation or overstatement;
  - (b) Its advertising / promotional materials or statement about its designation status shall not give any false or misleading information or impression;
  - (c) It shall clearly distinguish the R&D services covered under the designation ("area(s) of the science and technology field(s) under designation") from all other services and businesses in its publications and websites, particularly advertising / promotional materials or statements;
  - (d) It shall not allow other persons, entities or institutions to use, misuse or misrepresent its designation status and shall take prompt action to rectify it if it so happens;
  - (e) It shall not use its designation status to imply that any subject of its activities or services (e.g. a product, process, system or Research Team) has been, in any way, accredited, certified,

- approved, endorsed, supported, guaranteed or recommended by the Government; and
- (f) It shall not use its designation status in such manner that may bring the Government into disrepute.
- 6.9 ITC reserves the right to impose further terms and conditions on the use of the designation status by DLRI when the designation is granted.
- 6.10 Applicant / DLRI shall inform ITC immediately, or at the latest within one month, of any changes in its circumstances and / or designation particulars that may affect its application, conformity with the designation criteria / terms and conditions and designation status ("changes affecting application / designation"). Examples of such changes are:
  - (a) changes in ownership, legal, commercial or organisational status (e.g., mergers, company dissolutions, bankruptcies, compulsory or voluntary liquidation or any other matters involving the Official Receiver);
  - (b) changes in the area(s) of the science and technology field(s) under designation;
  - (c) changes in its name, organisational structure, Research Team Leader or senior managerial staff or reduction in research team staff number;
  - (d) changes in the authorised representative (*Note 4*);
  - (e) changes in its correspondence address or any premises where R&D services are to be carried out; and
  - (f) major changes in operational procedures, manpower or financial resources or any other matters which will undermine its capability to provide R&D services or its conformity with

the designation criteria / terms and conditions.

#### *Note 4:*

The authorised representative shall be a key member of the management team authorised by the institution to represent it in communicating with ITC for all matters concerning its application and designation, as indicated in the application form.

6.11 For the occurrence of any changes affecting application / designation, ITC may conduct assessment on the applicant / DLRI to verify whether it continues to meet the criteria and the terms and conditions for the designation. ITC may alter the designation validity period, the scope of designation and the terms and conditions for the designation at its discretion.

#### 7. MONITORING MEASURES

- 7.1 DLRI is required to maintain proper books and records (e.g. signed contracts / agreements, R&D reports, etc.) for the R&D services it provided in the designation validity period. All the records may be subject to ITC's inspection on request.
- 7.2 ITC may request additional information, perform site inspections and interview relevant individuals to verify the information and records provided by the DLRI.

#### 8. REVOCATION AND TERMINATION OF THE DESIGNATION

- 8.1 By virtue of sections 19(3) and 19(4) of Schedule 45 to the IRO, the Commissioner for I&T may revoke the designation of a DLRI ("the revocation") at any time and issue an Instrument of Revocation to the DLRI concerned, specifying the effective date of the revocation.
- 8.2 Factors to be considered in deciding the revocation include the following –

- (a) The DLRI has failed to comply with or is incapable of complying with any of the designation criteria or terms and conditions.
- (b) The DLRI has failed to keep proper records as required by ITC or declined to co-operate with ITC for its on-going monitoring efforts.
- (c) The DLRI is found to be engaged in unethical or illegal practices.
- 8.3 A local institution, with its designation revoked, shall immediately discontinue using its designation status to promote or provide its R&D services and shall not make any representation to any parties suggesting or implying that the designation is still valid and effective.
- 8.4 A DLRI may voluntarily terminate its designation by serving upon ITC a written notice in advance. The notice shall be signed by its authorised representative and specify the reason(s) for the termination. The voluntary termination will become effective either on the date of receipt of the aforementioned written notice by ITC or on a date to be determined by ITC at its discretion.
- 8.5 ITC shall not be liable for any loss or damage suffered by the DLRI arising from whatever cause in connection with the revocation of the designation or the refusal to extend the designation.

#### 9. APPLICATION FOR REVIEW

- 9.1 If an applicant or a DLRI ("appellant") intends to request a review on the decision on rejecting the application or revoking the designation, it shall, within one month from the date of notification of such decision, submit an application for review to the Commissioner for I&T, setting out the substance of matters to be reviewed and the grounds for requesting the review.
- 9.2 Upon receipt of an application for review, a Review Panel comprising

- independent experts will look into the matter and provide a recommendation to the Commissioner for I&T.
- 9.3 Having considered the findings and recommendations of the Review Panel, the Commissioner for I&T will inform the appellant of the decision normally within three months from the receipt of the application for review. Such decision will be final and conclusive.

#### 10. AUTHORITY AND ADMINISTRATION

10.1 ITC will keep confidential all information provided by applicant / DLRI in relation to the designation, renewal of the designation, changes of designation particulars, review of designation decision and other relevant process ("the relevant information") and access to the relevant information will only be allowed on a "need-to-use" basis. It may be necessary for ITC to pass the relevant information to ITC's monitoring bodies. Where any law requires disclosure of any information to a third party, ITC will, where possible and permitted by the law, inform the Applicant / DLRI concerned. Furthermore, ITC will comply with the provisions under the Personal Data (Privacy) Ordinance (Cap. 486) and the rules under the Code on Access to Information of the Government.

Subject to the above, ITC may:

- (a) make copies of any relevant information for the purpose of handling the work relating to the designation; and
- (b) use conventional mail, telephone, fax and unencrypted and unprotected email through the Internet and other means to handle the relevant information and pass the relevant information to relevant parties inside or outside ITC which are involved in the work relating to the designation.
- 10.2 ITC may amend the application procedures, the designation criteria and conditions, and any other related requirements for the designation from time to time as it sees fit. Applicants and DLRIs shall conform

with the related amendments within the period of time specified by ITC.

- 10.3 ITC may conduct on-site inspections to offices, research facilities and other premises of an applicant or a DLRI in connection with its application or designation.
- 10.4 ITC may investigate any complaint made to ITC by a third party against any DLRI concerning its provision of R&D services. The DLRI shall provide information to ITC upon request and shall cooperate with ITC for the purpose of investigating the complaint.
- 10.5 ITC may maintain and publish, in any publications, webpages or in any other forms as it sees fit, information relating to the designation and revocation of the designation. The details may include the names, addresses, and other particulars of the relevant DLRIs.

#### 11. ENQUIRY

11.1 For enquiries, please contact DLRI Secretariat of ITC:

Telephone: 3543 5904 Fax: 3543 5939

E-mail address: <u>DLRI-enquiry@itc.gov.hk</u>

#### Appendix A

#### Fields of Science and Technology

Branch of Science and	Field Code / Field Name
Technology	
1. Natural Sciences	1.1 Mathematics
1. Natural Sciences	
	1.2 Computer and information sciences
	1.3 Physical sciences
	1.4 Chemical sciences
	1.5 Earth and related environmental sciences
	1.6 Biological sciences
	1.7 Other natural sciences
2. Engineering and Technology	2.1 Civil engineering
	2.2 Electrical engineering, electronic engineering,
	information engineering
	2.3 Mechanical engineering
	2.4 Chemical engineering
	2.5 Materials engineering
	2.6 Medical engineering
	2.7 Environmental engineering
	2.8 Environmental biotechnology
	2.9 Industrial Biotechnology
	2.10 Nano-technology
	2.11 Other engineering and technologies
3. Medical and Health Sciences	3.1 Basic medicine
	3.2 Clinical medicine
	3.3 Health sciences
	3.4 Health biotechnology
	3.5 Other medical sciences
4. Agricultural Sciences	4.1 Agriculture, forestry and fisheries
	4.2 Animal and dairy science
	4.3 Veterinary science
	4.4 Agricultural biotechnology
	4.5 Other agricultural sciences
5. Miscellaneous	Field name and details to be specified by Applicant

#### **Explanatory notes**

(Areas of the respective Science and Technology Fields)

#### 1. Natural sciences

#### 1.1 Mathematics

• Pure mathematics, Applied mathematics; Statistics and probability<sup>1</sup>;

#### 1.2 Computer and information sciences

• Computer sciences, information science and bioinformatics (hardware development to be 2.2);

#### 1.3 Physical sciences

 Atomic, molecular and chemical physics (physics of atoms and molecules including collision, interaction with radiation; magnetic resonances; Moessbauer effect); Condensed matter physics (including formerly solid state physics, superconductivity); Particles and fields physics; Nuclear physics; Fluids and plasma physics (including surface physics); Optics (including laser optics and quantum optics), Acoustics; Astronomy (including astrophysics, space science);

#### 1.4 Chemical sciences

• Organic chemistry; Inorganic and nuclear chemistry; Physical chemistry, Polymer science, Electrochemistry (dry cells, batteries, fuel cells, corrosion metals, electrolysis); Colloid chemistry; Analytical chemistry;

#### 1.5 Earth and related Environmental sciences

- Geosciences, multidisciplinary; Mineralogy; Palaeontology; Geochemistry and geophysics; Physical geography; Geology; Volcanology; Environmental sciences;
- Meteorology and atmospheric sciences; climatic research;
- Oceanography, Hydrology, Water resources;

#### 1.6 Biological sciences (Medical to be 3, and Agricultural to be 4)

• Cell biology, Microbiology; Virology; Biochemistry and molecular

<sup>&</sup>lt;sup>1</sup> This includes research on statistical methodologies, but excludes research on applied statistics which shall be classified under the relevant field of application (e.g. Economics, Sociology, etc.)

- biology; Biochemical research methods; Mycology; Biophysics;
- Genetics and heredity (medical genetics to be 3); reproductive biology (medical aspects to be 3); developmental biology;
- Plant sciences, botany;
- Zoology, Ornithology, Entomology, Behavioural sciences biology;
- Marine biology, freshwater biology, limnology; Ecology; Biodiversity conservation;
- Biology (theoretical, mathematical, thermal, cryobiology, biological rhythm), Evolutionary biology; other biological topics;

#### 1.7 Other natural sciences

#### 2. Engineering and technology

#### 2.1 Civil engineering

• Civil engineering; Architecture engineering; Construction engineering, Municipal and structural engineering; Transport engineering;

## 2.2 Electrical engineering, Electronic engineering, Information engineering

• Electrical and electronic engineering; Robotics and automatic control; Automation and control systems; Communication engineering and systems; telecommunications; Computer hardware and architecture;

#### 2.3 Mechanical engineering

- Mechanical engineering; Applied mechanics; Thermodynamics;
- Aerospace engineering;
- Nuclear related engineering; (nuclear physics to be 1.3);
- Audio engineering, reliability analysis;

#### 2.4 Chemical engineering

• Chemical engineering (plants, products); Chemical process engineering;

#### 2.5 Materials engineering

• Materials engineering; Ceramics; Coating and films; Composites

(including laminates, reinforced plastics, cermets, combined natural and synthetic fibre fabrics; filled composites); Paper and wood; textiles; including synthetic dyes, colours, fibres; (nanoscale materials to be 2.10; biomaterials to be 2.9);

#### 2.6 Medical engineering

• Medical engineering; Medical laboratory technology (including laboratory samples analysis; diagnostic technologies); (Biomaterials to be 2.9 [physical characteristics of living material as related to medical implants, devices, sensors]);

#### 2.7 Environmental engineering

• Environmental and geological engineering, geotechnics; Petroleum engineering, (fuel, oils), Energy and fuels; Remote sensing; Mining and mineral processing; Marine engineering, sea vessels; Ocean engineering;

#### 2.8 Environmental biotechnology

• Environmental biotechnology; Bioremediation, diagnostic biotechnologies (DNA chips and biosensing devices) in environmental management; environmental biotechnology related ethics:

#### 2.9 Industrial biotechnology

 Industrial biotechnology; Bioprocessing technologies (industrial processes relying on biological agents to drive the process) biocatalysis, fermentation; bioproducts (products that are manufactured using biological material as feedstock) biomaterials, bioplastics, biofuels, bio-derived bulk and fine chemicals, bioderived novel materials;

#### 2.10 Nano-technology

- Nano-materials [production and properties];
- Nano-processes [applications on nano-scale]; (biomaterials to be 2.9);

#### 2.11 Other engineering and technologies

Food and beverages;

• Other engineering and technologies;

#### 3. Medical and Health sciences

#### 3.1 Basic medicine

Anatomy and morphology (plant science to be 1.6); Human genetics;
 Immunology; Neurosciences (including psychophysiology);
 Pharmacology and pharmacy; Medicinal chemistry; Toxicology;
 Physiology (including cytology); Pathology;

#### 3.2 Clinical medicine

• Andrology; Obstetrics and gynaecology; Paediatrics; Cardiac and Cardiovascular systems; Peripheral vascular disease; Hematology; Respiratory systems; Critical care medicine and Emergency medicine; Anaesthesiology; Orthopaedics; Surgery; Radiology, nuclear medicine and medical imaging; Transplantation; Dentistry, oral surgery and medicine; Dermatology and venereal diseases; Allergy; Rheumatology; Endocrinology and metabolism (including diabetes, hormones); Gastroenterology and hepatology; Urology and nephrology; Oncology; Ophthalmology; Otorhinolaryngology; Psychiatry; Clinical neurology; Geriatrics and gerontology; General and internal medicine; other clinical medicine subjects; Integrative and complementary medicine (alternative practice systems); Chinese Medicine;

#### 3.3 Health sciences

- Health care sciences and services (including hospital administration, health care financing); Health policy and services;
- Nursing; Nutrition, Dietetics;
- Public and environmental health; Tropical medicine; Parasitology;
   Infectious diseases; epidemiology;
- Occupational health; Sport and fitness sciences;
- Social biomedical sciences (includes family planning, sexual health, psycho-oncology, political and social effects of biomedical research); Medical ethics; Substance abuse;

#### 3.4 Health biotechnology

• Health-related biotechnology; Technologies involving the manipulation of cells, tissues, organs or the whole organism

(assisted reproduction); Technologies involving identifying the functioning of DNA, proteins and enzymes and how they influence the onset of disease and maintenance of well-being (gene-based diagnostics and therapeutic interventions (pharmacogenomics, gene-based therapeutics); Biomaterials (as related to medical implants, devices, sensors); Medical biotechnology related ethics;

#### 3.5 Other medical sciences

- Forensic science:
- Other medical sciences;

#### 4. Agricultural sciences

#### 4.1 Agriculture, Forestry and Fisheries

• Agriculture; Forestry; Fishery; Soil science; Horticulture, viticulture; Agronomy, plant breeding and plant protection; (Agricultural biotechnology to be 4.4)

#### 4.2 Animal and Dairy science

- Animal and dairy science; (Animal biotechnology to be 4.4)
- Husbandry; Pets;

#### 4.3 Veterinary science

#### 4.4 Agricultural biotechnology

 Agricultural biotechnology and food biotechnology; GM technology (crops and livestock), livestock cloning, marker assisted selection, diagnostics (DNA chips and biosensing devices for the early/accurate detection of diseases) biomass feedstock production technologies, biopharming; agricultural biotechnology related ethics;

#### 4.5 Other agricultural sciences

#### 5. Miscellaneous

• Field name and details to be specified by Applicant.

#### **Checklist of Supporting Documents for Online Application**

- a. Documentary proof of the authorisation of the authorised representative
- b. Business Registration Certificate and Certificate of Incorporation or similar documents
- c. CVs of Team Leader(s)/Researchers of the Research Team
- d. Organisation chart of the Research Team
- e. List of major R&D activities and details of activities
- f. Supporting documents for the major R&D activities
- g. Research activity records and achievements and details of subcontracting
- h. Supporting documents related to the R&D facilities and equipment
- i. Floor plan(s) showing the R&D facilities and equipment
- j. Organisation chart(s) showing the company structure
- k. Flowchart(s) related to the workflows of undertaking and monitoring R&D projects
- 1. Supporting documents for arrangements to cover liabilities that may arise from R&D activities
- m. Self-evaluation report
- n. Declarations form
- o. Other documents (Applicant may upload other documents relevant to the application)