Innovation and Technology Commission

Innovation and Technology Fund
Innovation and Technology Support Programme
Guangdong-Hong Kong Technology Cooperation Funding Scheme

Guide to Filling in the Application Forms

This Guide explains how to complete the application form of the Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS) under the Innovation and Technology Support Programme (ITSP) of the Innovation and Technology Fund (ITF).

2. Details of the ITF and TCFS are available at http://www.itf.gov.hk. Details on the categories of projects under TCFS and the themes/topics for the 2013 TCFS are at the Appendix. The application form and this Guide are based on the application form and the Guide for ITSP projects, with the specific requirements for TCFS in ***bold italic*** for ease of reference. In addition to the information in this Guide and the application form, the Innovation and Technology Commission (ITC) may issue supplementary information and guidelines from time to time. Please check the ITF website to see if there is any updating before submission.

3. The application period of TCFS projects funded by ITF will be from **11 September 2013 to 10 October 2013**.

4. If you have any question on this Guide and the application form, please contact -

ITF Secretariat (ITSP Section)
Innovation and Technology Commission
21/F, West Wing, Central Government Offices,
2 Tim Mei Avenue, Tamar
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ITF Secretariat (ITSP Section)
Innovation and Technology Commission
September 2013

General

1. Before filling in the application forms, applicants are requested to read the paper "Creation of a Favourable Ecological Environment to Facilitate the Realisation of Research and Development Results" endorsed by the Commerce and Industry Panel of the Legislative Council in November 2010 (ref. LC paper no. CB(1) 389/10-11(05)) available from : http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci1116cb1-389-5-e.pdf.

2. ***The TCFS aims to enhance the level of collaboration on research and development (R&D) between organisations in Hong Kong and Guangdong Province and Shenzhen. Details on the categories of projects under TCFS and the themes/topics for the 2013 TCFS are at the Appendix.***

3. Broadly the TCFS provides funding support for two major types of applied research and development (R&D) projects -

   (a) Platform Projects

   All platform projects require industry sponsorship from at least two private companies to cover at least 10% of the total project cost within the project period. The companies should not be related to the lead applicant in terms of ownership or management. The sponsorship can either be in cash or in-kind or a combination of both. As a general rule, intellectual property (IP) rights generated from the project should be vested with the lead applicant which can be an R&D Centre[1] or a designated local public research institute, viz. local universities, the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology. However, in the case of an R&D Centre project in which the majority of the R&D work is carried out by a local university, we will provide the flexibility to the R&D Centre to negotiate with the university and decide on the appropriate IP ownership and commercialisation arrangements.

   (b) Collaborative Projects

   For collaborative projects, the industry co-applicant should contribute at least 50% of the total project cost (or at least 30% in the case of R&D Centre

[1] The R&D Centres include –
(a) Automotive Parts and Accessory Systems R&D Centre (www.apas.hk);
(b) Hong Kong Research Institute of Textiles and Apparel (www.hkrita.com);
(c) Hong Kong Applied Science and Technology Research Institute (www.astri.org);
(d) Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (www.lscm.hk); and
(e) Nano and Advanced Materials Institute (www.nami.org.hk).

projects) within the project period. The IP rights generated may be owned by the industry co-applicant if it has contributed more than 50% of the total project cost within the project period. The IP rights should be vested with the lead applicant otherwise. As regards IP benefit sharing and related arrangements, it will be subject to negotiation among the parties concerned and must be agreed before the commencement of the project and set out in the project agreement.

4. Where the ITF funding for a project exceeds $30 million, approval from the Finance Committee of the Legislative Council is required.

5. Please use ITF Form 4.1 for applications of platform and collaborative projects under TCFS.

6. For Category C projects, the application should be completed in Chinese. The applicant should also enclose the application from its Mainland partner which should be submitted concurrently to the Guangdong/Shenzhen authorities.

7. Applications must be submitted to the ITF Secretariat (ITSP Section) either -

(a) in hard copy in triplicate (one original plus two duplicate copies) in person or by post. Please also kindly provide a soft copy (preferably in MS Word 2003 or above); or

(b) through the Innovation and Technology Commission Funding Administrative System (https://www3.itf.gov.hk/?itf_lng=en).

8. ITC reserves the right to seek additional information where necessary. Unless on request of the ITF Secretariat, supplementary information provided after submission of application will NOT be accepted and will NOT form part of the application.

9. The lead applicant will be notified of the result of its application in writing. Withdrawal of an application should be made by the lead applicant in writing to ITF Secretariat at any time before the project agreement is signed.

Part A The Applicant

I. Information on Lead Applicant

1. The lead applicant must be an organisation and be either:

   (a) an R&D Centre set up under the ITF; or

   (b) a designated local public research institute (viz. local universities, the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology).

2. The lead applicant should obtain prior consent of parties concerned if they are referred to in the application form.

3. Where an application is successful, the lead applicant will enter into a project agreement with the Government and is required to comply with the terms and conditions therein, including monitoring project progress and expenditure, submission of reports and audited accounts, etc.

II. Information on Industry Co-Applicant

1. For platform projects, there is no need for an industry co-applicant.

2. An industry co-applicant is only applicable to collaborative projects, which can either be a private company incorporated in Hong Kong under the Companies Ordinance (Cap. 32), an industry support organisation, a trade and industry association or professional body which has the legal capacity to enter into contracts.

III. Information on Sponsor(s)/Supporting Party(ies)

1. There is no limit on the number of sponsors and supporting parties. It is desirable that letters of support/sponsorship can be enclosed in the application with the company/organisation chop(s).

Part B The Project

I. Key Project Details

(A) Total Project Cost

1. The total project cost is the sum of all estimated expenditure to be incurred (including items to be covered by in-kind contribution) and the administrative overheads as appropriate. Applicants are required to provide details of the project cost items under the section 'Financial Considerations' in Part C of the application form.

(B) Industry Sponsorship and Other Sources of Financial Contribution

1. Industry sponsorship refers to sponsorship from private companies which are not related to the lead applicant in terms of ownership or management and should in general be the user of the project deliverables. To avoid conflict of interest, such companies should not be the equipment/service suppliers of the project.

2. Other sources of financial contribution refers to contribution to the project obtained from various parties, including funding provided by the lead applicant, contribution in cash or in-kind from supporting parties, e.g. charitable organisations, venture capitalists, individuals, etc. It can also include personal contribution by project team members. They shall exclude industry sponsorship as mentioned above and project income.

3. Total financial contribution refers to the summation of industry sponsorship and other sources of financial contribution.

4. Industry sponsorship and other sources of financial contribution can either be in cash or in-kind or a combination of both. In-kind sponsorship in the form of equipment or consumables would only be accepted if:

   (a) the in-kind sponsorship is essential to the project and is contributed specifically for the project; and

   (b) documentary proof of the value of sponsorship has been provided to facilitate a fair assessment of the value of contribution, e.g. details of the valuation for new and used equipment and consumables.

Manpower contribution from industry sponsor and industry co-applicant will be counted as other sources of financial contribution but not industry sponsorship.

(C) Payment Schedule

Platform projects

1. Applicants must obtain industry sponsorship of at least 10% of the project cost from at least two private companies to demonstrate reasonable market interest.

2. As a general rule, at least 50% of the pledged industry sponsorship should be paid before the project commences and the remaining sponsorship should be received before the 'mid-point' of the project period. Payment of more than 50% of industry sponsorship upfront will be welcomed.

3. For other sources of financial contribution, consideration will be given to allowing greater flexibility on the payment schedule but all contribution must be received by the 'mid-point' of the project period.

4. ITF funding will normally be disbursed on a half-yearly basis, subject to satisfactory project progress against the stated milestones and due payment of the industry sponsorship and other sources of financial contribution.

Collaborative projects

5. The industry co-applicant should provide at least 50% of the total project cost (or 30% in the case of R&D Centre projects) within the project period. The ITF funding is released on a matching basis, i.e. the contribution from the industry co-applicant should be made first and the disbursement from ITF will follow.

(D) Schedule of the Project Period

1. The duration of the project period should not exceed 24 months in general. There is however no minimum time requirement.

(E) Related Information

1. The provision of information on previous research work done (including ITF-funded projects) and earlier applications for funding support from sources other than ITF is to enable us to have a comprehensive understanding of the project proposal, especially where the relevant work was funded by University Grants Committee (UGC)/Research Grants Council (RGC)'s Areas of Excellence Scheme, Theme-based Research Scheme and Collaborative Research Fund.

II. Brief Description of Project Proposal

(A) Location of R&D Work

1. The R&D work funded under ITSP projects should primarily be conducted within the territory of Hong Kong. However, given the close ties between Hong Kong and the Mainland, up to 50% of the R&D work of an ITF project can be conducted (and relevant expenditure incurred) in the Mainland.

2. Where certain R&D tasks need to be conducted outside Hong Kong (other than the Mainland), prior approval from ITC must be sought with justifications (e.g. countries/provinces/cities/overseas research institutes which have entered into technology collaboration agreements/ Memorandum of Understanding with the Government or local universities/R&D Centres).

(B) Project Milestones

1. The project will be monitored against the agreed project milestones. The lead applicant is required to submit half-yearly progress reports/final report until project completion. We note that for the first report, there may not be significant progress in terms of R&D deliverables but we anticipate that all preparatory work (e.g. recruitment of staff, procurement of equipment, etc.) has been completed by then.

2. For Category C projects, the applicant should also set out the relevant milestones of the projects to be carried out by the Mainland partner, where appropriate.

Part C Justifications

1. The assessment framework comprises 7 components. Their weightings are as follows:

   (a) Innovation and Technology Component (20%);

   (b) Technical Capability (20%);

   (c) Financial Considerations (16%);

   (d) Existence of a Holistic Plan to Realisation/Commercialisation (16%);

   (e) Relevance with Government Policies or in Overall Interest of Hong Kong (12%);

   (f) IP Rights and Benefit Sharing (8%); and

   (g) Management Capability (8%).

2. In general, the framework aims to achieve the following -

   (a) encouraging and selecting projects with greater prospect of realisation/commercialisation;

   (b) facilitating the trial of R&D products (especially in the public sector), so that researchers and industry can gain actual experience to fine-tune the outcomes, build up 'reference' for subsequent marketing, and bring about wider economic and social benefits to the community;

   (c) motivating the private sector to invest more in R&D activities in Hong Kong; and

   (d) enhancing co-operation among Government, industry, academia and research institutes (官產學研).

I. Innovation and Technology Component

1. The ITF is set up to finance primarily applied R&D projects that contribute to innovation or technology upgrading in industry. The innovation and technology component is hence most important. The project should primarily pertain to applied research with its deliverables having a reasonable chance for application in due course.

2. Upstream research will not be accorded priority since it is primarily within the ambit of RGC funding. However, if funding by the RGC has taken a project from the stage of foundation research to the stage of applied research, for instance in the Areas of Excellence Scheme, consideration may be given for funding under the ITF. This will provide continued support to the R&D activity as well as establishing better interface between the two key funding sources. The lead applicant should provide letters of support from the UGC/RGC Secretariat as appropriate.

(A) Nature of the project

1. On whether the project will give rise to new technologies or projects, consideration will be given in the overall sense if the R&D can bring benefits to Hong Kong. While ITF funding is primarily for the benefit of Hong Kong, and hence a Hong Kong angle would be of greatest importance, due regard will also be taken in terms of benefits to a wider community (e.g. crop research to address the problem of food shortage).

2. On whether the project will enhance quality of existing products (e.g. capacity, reliability, speed, etc.), the applicant should set out the type and extent of such improvements.

3. On whether the project will render cost more competitive, the lead applicant should provide an estimate on the degree of improvements.

4. Applicant should highlight the element of Guangdong/Hong Kong cooperation in the project proposal (e.g. collaboration between research institutes and enterprises in Guangdong/Shenzhen and Hong Kong).

II. Technical Capability

(A) Viability of technical proposal and quality of technical submission

1. The viability of the technical submission refers to whether, at the current point in time, the technical proposal is reasonably viable.

2. While the majority of research work should be done locally, there will be a degree of flexibility and it is acceptable that the R&D team obtains a reasonable proportion of component(s) of technology/product available overseas and builds its own research on top of this, or contracts out certain component(s) of the research work. It is imperative on the applicant and the project coordinator to ensure that all necessary IP licensing and authorisation arrangements are in order before the relevant external IPs are used in their R&D work. Whilst there is no need to 're-invent the wheel', one must consider the nature and extent of any proposed technical improvement and whether such improvement merits IP protection.

3. In assessing the quality of the funding application, factors such as technical approach to the problem, accuracy of technical data, reasonableness of assumptions, etc. will be considered.

(B) Competence of technical team

1. This refers to the technical ability of the project coordinator and his team to deliver the proposed project fully (e.g. background and experience of the research team and feasibility of the R&D work plan).

2. In assessing the research team, apart from studying the qualifications and experience of individual members, we will consider whether the overall size of the team, the mix of staff at various levels, etc. are appropriate. Proven track record in applied R&D work will be favourably considered.

3. The lead applicant is welcome to provide all relevant information to support the application e.g. industry and academic awards won in the past, endorsement of outstanding experts in the field, etc.

III. Financial Considerations

The lead applicant should ensure that all financial information has been provided in this section and the basis of calculation is reasonable.

(A) Project Expenditure

1. The lead applicant should provide a breakdown of the estimated project expenditure to be incurred during the project period.

(a) Manpower

(i) Project funding can generally be used to cover the salary of project staff, including employer's mandatory contribution to the Mandatory Provident Fund (MPF), contract gratuities, annual salary adjustment (excluding increments and promotion) and general fringe benefits (e.g. medical) in accordance with the established mechanism of the relevant R&D Centres and designated local public research institutes.

(ii) ITF will not fund the emolument to a person who is already on the payroll of local university (i.e. existing teaching staff) or the industry co-applicant. However, administrative overheads will be provided to a university undertaking the project (see part (d) below).

(iii) The lead applicant is required to seek prior consent from ITC for any change in the key project staff, for example, the project coordinator or deputy project coordinator.

(b) Equipment

(i) The lead applicant should critically examine how the equipment required for the project can be obtained in the most economical manner:

– the applicant should first make use of existing equipment;

– the applicant should proceed to rent if it is more economical than to purchase; or

– new equipment can be procured if it is genuinely necessary, but the applicant should supply information on the expected usage rate of the equipment e.g. usage time vs. down time and the plan or alternative use after project completion or disposal.

We will take into account expected usage rate, mode of acquisition (purchase vs. rental), future use/divestment (e.g. for teaching/research purposes at one or more university) to ensure the greatest possible cost effectiveness. Where necessary, ITC will require the applicant to transfer any equipment whose acquisition cost is $500,000 or above to the Government or another party (e.g. Hong Kong Science and Technology Parks Corporation) within a period of two years after project completion.

(ii) The lead applicant and the project coordinator are encouraged to share the use of existing equipment within their organisations or with other organisations where possible (e.g. local universities and Hong Kong Science and Technology Parks Corporation).

(iii) Individual equipment or parts that will eventually form part of the project deliverables (e.g. the prototype) are regarded as consumables and the relevant cost should be grouped under 'other direct costs'.

(iv) The lead applicant is required to seek prior consent from ITC for change in any equipment with an estimated cost of $500,000 or above per item.

(v) Project funding cannot be used to cover –

1. charges/time cost for use of existing equipment already owned by the applicants or industry co-applicant;

2. depreciation/amortisation or provisions not representing actual expenses incurred; and

3. general office and IT equipment.

(vi) The lead applicant should ensure that all procurement for goods and services is carried out in an unbiased and fair manner and must comply with the following procedures, or with the established mechanism of individual public research institutes:

Aggregated value of each procurement	Requirement
Below $50,000	Quotations from at least two suppliers
$50,000 - $1,430,000	Quotations from at least five suppliers
Above $1,430,000	Open tender

(c) *Other Direct Costs*

(i) Project funding can be used to cover –

1. external consultancy;

2. purchase of consumables and technology licences;

3. promotion and marketing activities for disseminating project deliverables and technology transfer;

4. patent registration fee up to $150,000 per project; and

5. external audit fees as required by the ITF project agreement. (The maximum provision allowed for a project costing less than $1 million, between $1 million and $5 million and more than $5 million should not exceed $8,000, $14,000 and $20,000 respectively.)

(ii) Project funding cannot be used to cover other costs like –

1. building facilities (including office, laboratory, accommodation) – rates, rental, renovation, and operation, repair and maintenance expenses;

2. costs of setting up office or forming association/consortium;

3. utilities – charges for electricity, gas, water, telephone and fax;

4. transport – shuttle bus services and home to workplace

travelling expenses;

5. general administration and office expenses;

6. staff-related costs – provident fund handling charges, staff training and development costs and staff facilities;

7. entertainment expenses, and any prizes, either in the form of cash or other types of souvenirs;

8. advertisement (except for disseminating project deliverables, or staff recruitment);

9. organisation of trade missions and participation fees at study/trade missions for individuals/companies;

10. charges for non-R&D services (e.g. accounting, personnel, procurement, library, security, cleansing, legal, and central and departmental administrative support) provided by the lead applicant/industry co-applicant or their contractors/agents; and

11. capital financing expenses, e.g. mortgage and interest on loans/overdrafts.

(d) Administrative Overheads

(i) For platform projects undertaken by R&D Centres (except ASTRI which is under a separate funding arrangement), local universities and the Vocational Training Council, the application can include administrative overheads up to 15% of the ITF funding requested (i.e. net of administrative overheads). For collaborative projects, the administrative overheads will be calculated at 15% of the approved project cost. The industry co-applicant is required to pay its share of administrative overheads proportional to its contribution to the project. For example, if the industry co-applicant contributes 50% the project cost, it will be required to contribute 50% of the administrative overheads while ITF contributes the remaining.

(ii) The administrative overheads should be included as part of the project expenditure in the financial information to be provided by the lead applicant.

(B) Industry Sponsorship/Other Sources of Financial Contribution

1. The minimum industry sponsorship remains to be 10% of the total project cost for platform projects and 50% of the total project cost for collaborative projects (30% of the total project cost in case of R&D Centre projects). But in general, the higher degree of contribution, the stronger industry interest in the project and hence the greater chance of success to commercialisation.

2. Apart from sponsorship from the industry, there may be other sources of financial contribution provided by the lead applicant, contributions from supporting parties, e.g. charitable organisations, venture capitalists, individuals, etc. It can also include contribution by project team members. However, other sources of financial contribution may not include industry sponsorship and project income.

3. The lead applicant is required to provide details on industry sponsorship and other sources of financial contribution.

4. Under the Research & Development (R&D) Cash Rebate Scheme, industry sponsorship (including sponsorship contributed by industry co-applicant under collaborative projects) by a private company towards an ITF project is eligible for cash rebate. Further information on the R&D Cash Rebate Scheme are available at http://www.crs.itc.gov.hk.

(C) Project Income and Residual Funds

1. All ITF funding, industry sponsorship, other sources of financial contribution, project income received during the project period should be credited to the project account and be used for offsetting project expenditure. After completion of the project or its earlier termination, the lead applicant shall return to the Government all unspent funding contributed by the Government, including all residual project income and interest income in the project account, and any other income under the IP rights benefit sharing as set out in the project agreement.

IV. Existence of a Holistic Plan to Realisation/Commercialisation

1. In the context of ITSP, 'Realisation' refers to the R&D product(s) being used in the public sector as there may not be a 'commercial' market (e.g. specialist equipment for law enforcement agencies); whereas 'Commercialisation' refers to the R&D product(s) being launched/sold commercially. It may not always be necessary to 'prove' that the product will reach the 'consumer' market. Facilitating the process of commercialisation may also be acceptable.

2. To enhance the chance of realisation/commercialisation, the applicant should provide information such as -

   (a) the stage at which the R&D project is positioned (e.g. concept, optimisation for scaling, commercialisation, etc.);

   (b) future positioning of the technology/product in the market vis-a-vis existing products;

   (c) the exact deliverables/milestones (both qualitative and quantitative) and the expected time frame;

   (d) whether ITF funding will be required for a further phase of research work;

   (e) whether there are associated/complementary technology development projects which will add to chance of realisation, for example through the clustered-projects[2] approach; and

   (f) to provide an analysis of the strengths/weaknesses/opportunities/threats of competing products (i.e. SWOT analysis).

3. The applicant should where appropriate supply letter(s) of support -

   (a) from company(ies) interested to take out a license of the project deliverables for further development;

   (b) from manufacturer(s) interested in manufacturing the product in a commercial scale; or

   (c) from Government departments or public bodies supporting the project.

[2] In general, ITF projects are approved on an 'individual' basis. Clustered-projects refer to applications that address different technological challenges but share a common theme or purpose. To engender synergy, collaboration and greater impact of individual projects, ITC takes a more holistic consideration under the 'clustered-projects approach'.

V. Relevance with Government Policies or in Overall Interest of Hong Kong

1. Apart from serving the industry, ITC encourages R&D in technologies that will dovetail with relevant Government policies, or bring benefit to the community at large, for example -

   (a) support important Government initiatives e.g. environmental protection and healthcare;

   (b) bring significant social benefit e.g. creating devices to help track unattended Alzheimer patients to minimise accidents;

   (c) contribute to the upgrading of the industry e.g. a cleaner method of production;

   (d) provide opportunities for training of local engineering and scientific personnel;

   (e) foster close collaboration among key stakeholders (官產學研); and

   (f) enhance the image of Hong Kong internationally.

2. For projects that will involve activities/expenditure outside Hong Kong, the lead applicant should provide details to demonstrate the 'Hong Kong angle', namely benefits that will be enjoyed by the Hong Kong community.

3. The Government is keen to train up local engineering and scientific personnel. While the R&D team should mainly comprise local staff, overseas expertise could be engaged provided that it is within a reasonable limit.

VI. IP Rights and Benefit Sharing

While seeking a reasonable financial return from commercialisation, ITC allows for the necessary flexibility to motivate various stakeholders. In fact, it should be stressed that the ITF is set up to fulfil the public mission of promoting innovation and technology and monetary return from the R&D projects it supported is not the only consideration. For details on the general policy and arrangements pertaining to IP rights and related matters for R&D projects funded under the ITSP, please refer to the 'Guide on IP Arrangements for R&D Projects Funded Under the ITSP of the ITF' as promulgated by ITC in August 2013 (http://www.itf.gov.hk). The key points are summarised below -

1. The applicant will be required to provide information on:

   (a) whether, and if so the plan to have the R&D result patented or protected by other means;

   (b) whether there are plans for spin-offs in due course and if so, the details;

   (c) the proposed formula of benefit sharing among all parties concerned (e.g. licence fees and royalties); and

   (d) whether unrestricted use of the technology would be allowed for relevant Government departments/public bodies.

2. ***For Category C projects, the applicant should set out the ownership of the IP to be generated from the project and IP benefits sharing among all parties concerned, including Mainland partners.***

   Platform Projects

3. As a general rule, the IP generated from a project should be vested with the lead applicant, which in general will be an R&D Centre or a designated local public research institute. This will allow the institutions to assume a proactive role in disseminating the R&D results and promoting commercialisation. However, in the case of R&D Centre projects in which the majority of the R&D work is carried out by a local university, ITC will provide the flexibility to the R&D Centre to negotiate with the concerned university and decide on the appropriate IP ownership and commercialisation arrangements.

4. The Government shall enjoy a royalty-free right to use the IPs as appropriate.

5. The lead applicant and/or the relevant designated local public research institute are required to disseminate the project deliverables and promote technology transfer to the industry through workshops, seminars, licensing or consultancy, etc.

6. The lead applicant is expected to generate income where appropriate by charging fees for project deliverables so as to recoup at least part of the project cost.

7. Platform projects are intended for the benefit of the industry as a whole and hence the usual licensing arrangement should be non-exclusive. The guiding principle is to enable the use of technology and R&D results by interested parties in an open, transparent and non-exclusive manner.

8. Where there are exceptional circumstances which require some elements of exclusivity in order to encourage industry interest, the lead applicant should seek prior approval from ITC with full justifications. ITC will consider such proposed arrangement on a case-by-case basis having regard to factors such as whether the arrangement would increase the chance of commercialisation of the R&D results, and the overall benefits to the community.

Collaborative Projects

9. As a general rule, provided that an industry co-applicant contributes more than 50% of the project cost, it will be entitled to the ownership of the IP under a collaborative project unless otherwise agreed between the lead applicant and the industry co-applicant. The industry co-applicant may indicate whether consent will be given for unrestricted use of the R&D results under the project for development for use in the public sector (including Government and public bodies) in Hong Kong or for promulgating the R&D result for non-commercial purposes (e.g. academic journals) in future.

10. The arrangements for benefit sharing (including financial income from the project) should, as far as possible, be agreed among parties concerned (e.g. R&D Centres/research institutes/industry partners) in writing before the commencement of the project. For collaborative projects, such arrangements must be agreed among parties concerned before the commencement of the project. In general, supporting parties making other sources of financial contribution are not entitled to benefit sharing.

Indemnity

11. If the project involves using background IPs of a third party, the applicant should indicate in the application form whether the consent/licence for use of such IPs has been obtained. The applicant shall indemnify and keep indemnified the Government against any claims, actions, investigations, demands and all liabilities arising from the use of such IPs on the term set out in the project agreement.

VII. Management Capability

1. Management capability is more than technical capability. It pertains to whether the applicant and his R&D team and other supporting members have and can demonstrate the ability to bring the project to fruition. For example, apart from the research team, whether there are other facilities such as a university technology transfer office which will devote the effort to bring the project to realisation, or whether the R&D team has the support of companies already well-established in the market.

2. The capacity of the project team will be considered having regard to its commitments in other areas including on-going ITF projects.

3. Where appropriate, the track record of the applicant and the project team in previous ITF projects will also be reviewed.

Appendix

2013 Guangdong-Hong Kong Technology Cooperation Funding Scheme

Introduction

To strengthen technology development between Hong Kong and Guangdong, the governments of the Hong Kong Special Administrative Region (HKSAR) and Guangdong Province jointly set up the Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS) in 2004 as a key cooperation initiative to encourage collaboration among universities, research institutes and technology enterprises in the two places. The Shenzhen Municipal Government joined the TCFS in 2005.

2. Under the 2013 TCFS, the governments of HKSAR and Guangdong Province invite R&D project proposals under the specific themes/topics in technology areas of common interest at ***Annex A*** and provide funding support to approved projects.

Categories of Projects

3. There are three categories of projects for application under the TCFS, namely -

(a) **Category A** – projects to be solicited, vetted and funded solely by Hong Kong -

(i) **Category A(1)** – projects to be solicited, vetted and monitored by the R&D Centres[1]; and

[1] Projects will be solicited, vetted and monitored by the following Centres –

(a) Hong Kong Applied Science and Technology Research Institute (ASTRI);

(b) Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM);

(c) Hong Kong Research Institute of Textiles and Apparel (HKRITA); and

(d) Nano and Advanced Materials Institute (NAMI).

For projects falling under the Automated Parts and Accessory System R&D Centre (APAS), they will be solicited by APAS, vetted/processed by the Innovation and Technology Commission and monitored by APAS.

(ii) **Category A(2)** – projects to be solicited, vetted and monitored by the Innovation and Technology Commission (ITC).

(b) **Category B** – projects to be solicited, vetted and funded solely by Guangdong or Shenzhen.

(c) **Category C** – projects to be jointly solicited, vetted and funded by Guangdong and Hong Kong –

(i) **Category C(1)** – projects jointly funded by Guangdong and Hong Kong; and

(ii) **Category C(2)** – projects jointly funded by Shenzhen and Hong Kong.

Category C – Joint Funding

4. An application of the same project under Category C should be submitted simultaneously by the participating organisations to the respective authority in Hong Kong and Guangdong (or Shenzhen). The processing and preliminary vetting will be conducted separately by the two sides. The results of the preliminary vetting of the two sides will then be submitted to a joint vetting committee comprising officials from both sides for a final decision on the projects for joint funding support. The approved projects will be monitored by authorities of the two sides respectively, and may also be subject to joint monitoring by the authorities of the two sides.

5. Please note that deadline of submission of project proposals set by Guangdong authorities on Category C(1) and Shenzhen authorities on Category C(2) is 10 October 2013.

Enquiries

6. For enquiries about applications under Category A(1), please contact the R&D Centres direct –

R&D Centres	Contact Persons
Automotive Parts and Accessory Systems R&D Centre	Mr C H Leung Tel : 2788 5311 Fax : 2788 5406 E-mail : chleung@apas.hk Website : www.apas.hk
Hong Kong Applied Science and Technology Research Institute	Dr KC Shum, Senior Manager, Programme Management Tel : 3406 2456 Fax : 3406 2801 E-mail : kcshum@astri.org Website : www.astri.org
Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies	(1) Dr David Leung Tel : 2299 0587 Fax : 2299 0552 E-mail : dleung@lscm.hk (2) Ms Elaine Yu Tel : 2299 0538 Fax : 2299 0552 E-mail : eyu@lscm.hk Website : www.lscm.hk
Hong Kong Research Institute of Textiles and Apparel	Dr Kai-chiu Ho Tel : 2627 8188 Fax : 2364 2727 E-mail : kcho@hkrita.com Website : www.hkrita.com
Nano and Advanced Materials Institute	Dr Harry Chan Tel : 3511 3487 Fax : 3543 1005 E-mail : harrychan@nami.org.hk Website : www.nami.org.hk

7. For enquiries about applications under Category A(2) and Category C, please contact Innovation and Technology Commission:

Contact persons:

- Mr Thomas Tse (Tel : 3655 5481, Fax : 2377 0730, E-mail : mailto:thomas.tse@itc.gov.hk); or

- Mr Summer Lau (Tel : 3655 5605, Fax : 2957 8726,
  E-mail : skclau@itc.gov.hk)

8. The contact details of the Guangdong and Shenzhen authorities are as follows -

(1) Guangdong

Mr. GUO Xiuqiang
Guangdong Provincial Department of Science and Technology
Website : www.gdstc.gov.cn
Tel : 86 20-8316 3874

(2) Shenzhen

Ms. CHEN Ying
Science and Technology Innovation Commission of Shenzhen Municipality
Website : www.szsti.gov.cn
Tel : 86 755-8210 7383

Annex A

2013 Guangdong-Hong Kong Technology Cooperation Funding Scheme

Specific Themes/Topics

Category A(1) – Applications should be sent to the respective R&D Centres shown in brackets under the themes/topics.

Themes/Topics	Code Number
(a1) Hybrid energy storage for new energy vehicle application: (i) Capacitor and battery energy storage development, (ii) Other hybrid energy system development, (iii) Wireless Charging.	1
(a2) CAN bused vehicle electronic control module: (i) Vehicle body control module which host the vehicle base function like lights, doors & windows, (ii) Integrated battery control function with charging function.	2
(a3) Light-weighted vehicle technology development in vehicle application: (i) Carbon fiber technology & development and its application as vehicle body parts, (ii) Aluminum technology & application in vehicle, (iii) New vehicle structure design with weight reduction. (Hong Kong Automotive Parts and Accessory Systems R&D Centre)	3

Themes/Topics	Code Number
(b1) Innovative textile materials: (i) Harmless & environment-friendly natural & man-made fibres with multi-functionalities, (ii) Interactive intelligent textile material, and (iii) Textile composite material.	4
(b2) Energy-saving and environmental-friendly production system and material: (i) Innovative textiles and clothing production system to save energy/fuel consumption, (ii) Environmentally-friendly textile dyestuff and chemical, and (iii) Quick testing technology for toxic and harmful textiles and clothing products. (Hong Kong Research Institute of Textiles and Apparel)	5
(c1) Internet of Things (IoT) technologies and applications for Guangdong-Hong Kong logistics and supply chain industries.	6
(c2) "Green" and environmentally-friendly technologies for Guangdong-Hong Kong logistics and supply chain management industries.	7
(c3) Key logistics and supply chain management technologies and applications for "Smart City" in GD-HK area (e.g. sensing, navigation, positioning, tracking, etc.).	8

Themes/Topics	Code Number
(c4) Enabling logistics and supply chain management technologies for upgrading servicing industries in GD-HK area (e.g. retail, financial services, tourism, hotel & convention etc.).	9
(c5) Key technologies and applications to enhance supply chain security in GD-HK area (e.g. cargo shipment security and verification, food safety, product authentication, etc.).	10
(c6) Cloud technologies and analytic applications for GD-HK logistics and supply chain management industries. (Hong Kong Logistics and Supply Chain Management Enabling Technologies R&D Centre)	11
(d1) Internet-of-Things (IoT) management system (Hong Kong Applied Science and Technology Research Institute)	12
(e1) Nano/advanced materials and technologies for sustainable energy: (i) energy storage technologies such as next generation battery materials and nano structural designs, and (ii) renewable energy such as solar cell and light trapping technologies.	13

Themes/Topics	Code Number
(e2) Nano/advanced materials and technologies for display and solid-state lighting including printable electronics.	14
(e3) Construction/building nano and advanced materials for applications: (i) Insulation, (ii) Fire resistance, (iii) Corrosion resistance, and (iv) Strength/ductility enhancement.	15
(e4) Nano/advanced materials and technologies for environmental applications: (i) Anti-bacterial coatings and materials, (ii) Environmentally-friendly functional protective coatings and surface treatment processes, (iii) Wastewater treatments, and (iv) Air remediation.	16

Themes/Topics	Code Number
(e5) Nano/advanced materials and technologies for bio and healthcare applications: (i) Anti bacterial, (ii) Bio fuel, (iii) Bio labelling, (iv) Sensing and detection, (v) Diagnostics, (vi) Drug delivery, and (vii) Tissue engineering. (Nano and Advanced Materials Institute)	17

Category A(2) – Applications should be sent to the Innovation and Technology Commission.

Themes/Topics		Code Number
(a)	Advanced internet applied technologies.	18
(b)	Advanced information and communications applied technologies.	19
(c)	Advanced intelligent multimedia applied technologies.	20
(d)	Advanced manufacturing equipment and key technologies.	21
(e)	Biotechnology.	22
(f)	Chinese medicines.	23
(g)	Environmental technology.	24
(h)	Electronics: innovative electronics technologies and products for medical and health-care, manufacturing automation and green energy, including but not restricted to biosensors, telemedicine systems, helpful devices and facilities for the aged and the disabled, man-machine interface, energy management, solid-state lighting, etc.	25
(i)	New materials applied technologies.	26
(j)	Testing and certification.	27

Categories C(1) and C(2) – Applications should be sent to the Innovation and Technology Commission. For Category C(1), please refer to ***Annex B*** for the requirements of the themes set out by Guangdong Provincial Department of Science and Technology under this category.

Themes/Topics	**Code Number**
Category C(1)	
(a) Intelligent manufacturing equipment and the informatisation of the manufacturing industry: (i) The development of intelligent manufacturing equipment such as intelligent monitoring and control devices and components, and high precision ceramic printheads, (ii) Technologies for informatisation of the manufacturing industry such as the digitisation and manufacturing of complex products.	28
(b) New materials technologies: The development and application of functional membrane materials, high-performance fibres and composite materials and chiral drug separation materials.	29
(c) Medical device technologies: (i) The development and application of medical imaging technology and products, (ii) The development and application of high precision devices for minimally invasive surgery and surgical operations, (iii) The development and application of high-end medical supplies.	30

Themes/Topics	Code Number
Category C(1)	
(d) New technologies for textile garments: (i) The development and application of new textile and garment products, including functional products and intelligent textiles, (ii) The development and application of advanced textile technologies, including those for multi-functional textile finishing and green dyeing and finishing, (iii) The development and application of manufacturing technologies, including functional products manufacturing technologies and computer-aided technology for customised garment manufacturing.	31
(e) Technologies for automotive parts and accessories: (i) The development and application of key components for automotive transmission systems, (ii) The development and application of electronic products for vehicles, (iii) The development and application of electrical products for vehicles.	32

Themes/Topics	Code Number
Category C(2)	
(a) Internet and new generation information technology: (i) Cloud computing, (ii) Internet of things, (iii) Sensor network, (iv) Social network, (v) RFID tags and logistics management enabling technologies, (vi) Next generation communications protocol design, (vii) Network coding technique, (viii) Big data analytics, (ix) Research on millimeter wave and terahertz technologies.	33
(b) New materials: (i) Nanomaterials, (ii) Newly developed bio-inspired materials, (iii) Research on terahertz optics and metamaterials, (iv) Surface technology of metallic materials, (v) High performance fibres and composite materials, (vi) Advanced rare earth materials, (vii) Piezoelectric and pyroelectric intelligent composite materials, (viii) Magnetoelectric composite materials, (ix) Biofunctional materials, (x) Synthetic chemistry.	34

Themes/Topics	Code Number
Category C(2)	
(c) New Energy: (i) Solar energy, wind energy, wave energy and bioenergy, (ii) High performance thin-film photovoltaic cell, (iii) Smart grid, (iv) Renewable energy, (v) Advanced batteries for energy storage.	35
(d) Biotechnology, including: (i) Chinese medicine, (ii) Anti-body drug (Antibody drug), (iii) New vaccine, (iv) Research and application of advanced biomedical information processing technology, (v) Stem cell and musculoskeletal regeneration, (vi) Design and application of biomedical information platform, (vii) Research and development of small-molecule drug lead compound, (viii) Chiro-Sciences, (ix) Emerging infectious diseases, (x) Brain and cognitive sciences, (xi) Oncology in South China, (xii) Agrobiotechnology, (xiii) Phytochemistry and plant resources in West China, (xiv) Molecular neuroscience.	36

Themes/Topics	Code Number
Category C(2)	
(e) Energy saving and environmental protection: (i) Semi-conductor lighting, (ii) Sewage treatment technology, (iii) Mobile and open platform for environment surveillance and analysis, (iv) Organic waste treatment, (v) Air purification technology, (vi) Green logistics, (vii) Green construction, (viii) Marine pollution.	37
(f) Advanced equipment manufacturing: (i) Large-sized high-end medical imaging equipment, (ii) Magnetic resonance imaging equipment, (iii) Ultrasonic diagnosis and treatment equipment, (iv) Robotics, (v) High speed train-related equipment, (vi) Ultraprecision machining technology.	38

Themes/Topics	Code Number
Category C(2)	
(g) Technology for people's livelihood: (i) Technologies for the elderly: electronic technology for improvement to the medical care for the elderly; advanced information technology for supervision of the elderly; new materials technology relating to apartments for the elderly, etc., (ii) Public hygiene and community health, (iii) Environment noise control, (iv) Public safety, (v) Food safety, (vi) Disaster relief and humanitarian aid.	39

Annex B

2013 年粵港科技合作計劃
廣東省科學技術廳
C（1）類主題要求

專題一：智能製造裝備及製造業信息化

專題說明：目前，廣東是我國製造業大省，但由於自主創新能力薄弱、智能裝備依賴進口，嚴重制約了製造業的健康和可持續發展。因此，發展智能製造裝備是促進我省製造業轉型升級的重要途徑，也是我省參與國際競爭的先導力量。同時，通過不斷推進信息技術與產品製造全生命週期各環節的深度融合，引領新模式、新技術的應用，大力促進企業自主創新能力提升和製造服務化發展，全面支撐我省由“廣東製造”向“廣東創造”轉變。

專題內容：支持開發智能測控裝置和部件、精密陶瓷打印噴頭等智能製造裝備；支持複雜產品數字化定制設計與製造等製造業信息化技術。

專題目標：研製一批具備核心知識產權的智能測控裝置及關鍵部件；打造一批節能型企業、數字化製造企業與行業服務系統，促進製造業核心競爭力的顯著提升，支持廣東省製造業的快速發展。

研發的技術或產品應具有明顯的創新性和先進性，對提升行業技術水準和促進產業發展具有積極作用，核心技術擁有自主知識產權，新申請 2 件以上國家發明專利（其中至少 1 件發明專利進入實質性審查）。

專題二：新材料技術

專題說明：近年來，隨著高端裝備製造行業對材料性能要求的不斷提高，電子信息、節能環保、生物醫藥等相關產業對配套材料要求的不斷細化，新材料技術的發展面臨著機遇與挑戰。廣東作為材料生產的大省，應緊緊圍繞戰略性新興產業的發展需求，不斷匯聚優勢創新資源，重點開發結構功能一體化、智能化、高性能新型材料，加快培育和發展新興產業的關鍵配套材料，帶動傳統材料工業轉型升級，形成我省新型材料產業的創新優勢。

專題內容：支持功能膜材料、高性能纖維及複合材料、手性藥物分離材料的開發應用。

專題目標：項目產品可突破水處理膜、特種分離膜、離子膜材料規模化製備技術瓶頸，推動膜材料在節能環保、新能源等相關行業的應用，形成產業化規模。

項目產品可突破高性能纖維國產化技術壁壘，大幅度提高纖維的力學性能，開發高性能纖維複合材料的設計和加工新技術，穩定質量、降低成本，滿足汽車、高鐵、飛機、風力發電、遊艇等的應用需求。

項目產品可突破手性藥物分離膜技術、離子交換和吸附材料製備及應用關鍵技術，實現手性藥物分離材料的國產化和批量生產。

研發的技術或產品應具有明顯的創新性和先進性，核心技術擁有自主知識產權，新申請 3 件以上發明專利（其中至少 2 件發明專利進入實質性審查）；項目完成時，應建成工業化生產線，實現規模化生產，年產值達到 1 億元以上。

專題三：醫療器械技術

專題說明：醫療器械產業是技術密集型產業，是廣東重點發展的戰略性新興產業，廣東省醫療器械產業在全國一直佔有優勢地位，尤其在珠三角地區，一些醫療器械產品已經可以替代進口。隨著人民對健康保健、醫療服務需求的不斷增加，醫療器械產業的發展空間仍十分巨大。通過進一步支持醫療器械新產品的研究和開發，有利於繼續保持我省醫療器械產業的優勢地位，推動醫療器械產業升級。

專題內容：支持醫學影像技術與產品的開發應用；支持微創及外科手術精密器具的開發應用；支持高端醫用耗材的開發應用。

專題目標：項目產品的主要技術指標應達到國際先進水準，對整個行業具有帶動作用，可實現批量化生產。

研究開發的技術或產品應具有明顯的創新性和創新性，核心技術擁有自主知識產權，新申請 2 件以上發明專利（其中至少 1 件發明專利進入實質性審查）；研製產品至少應通過國家食品藥品監督管理局授權檢測機構的註冊產品檢測。

專題四：紡織服裝新技術

專題說明：紡織服裝是我省傳統產業。隨著人們生活水準和社會對節能環保要求的不斷提高，整個紡織服裝行業對材料和生產技術也提出了更高的要求。未來，廣東省在紡織服裝行業應不斷圍繞功能性紡織品關鍵技術、綠色加工技術、新型紡織機械技術等開展技術創新，通過充分發揮產業基礎及區位優勢，提高紡織行業競爭力。

專題內容：支持新型紡織品及成衣製品的開發應用，包括功能製品、智能紡織品等；支持先進的紡織技術的開發應用，包括多功能紡織整理、綠色染整技術等；支持生產技術的開發應用，包括功能製品生產技術、紡織計算機輔助定制技術等。

專題目標：研製的產品或技術應具有明顯的創新性和先進性，對提升行業技術水準和促進產業發展具有積極作用，項目產品可實現產業化。核心技術擁有自主知識產權，新申請 3 件以上發明專利（其中至少 1 件發明專利進入實質性審查）。

專題五：汽車零部件技術

專題說明：零部件是汽車工業的重要組成部分。目前，廣東省汽車零部件產業與整車產業相比水準較低、規模較小、研發能力弱且分散，零部件企業的配套率低，零部件發展滯後，在一定程度上阻礙了省內汽車整體水準的提高。因此，廣東省必須利用先進製造技術，開發具有自主知識產權的汽車關鍵零部件，構建自主創新體系及區域零部件生產規模化，以提高汽車關鍵零部件製造水準和整車配套能力，提升我省汽車產業的競爭力。

專題內容：支持汽車傳動系統關鍵部件的開發應用；支持汽車電子產品的開發應用；支持汽車電氣產品的開發應用。

專題目標：利用先進製造技術，初步形成與汽車整車生產相適應的零部件開發匹配能力，提升製造效益，滿足本省汽車生產企業的需要，並逐步覆蓋周邊省份汽車企業需求。項目產品實現產業化，項目完成時，項目產品產值不低於 1000 萬元。

項目研發的技術或產品應具有明顯的創新性和先進性，核心技術擁有自主知識產權，新申請 3 件以上發明專利（其中至少 1 件發明專利進入實質審查）。