

Innovation and Technology Commission

Funding Guidelines for

Frontier Technology Research Support Scheme

(前沿科技研究支援計劃)

Effective from September 2025

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Objectives

As announced in the 2024-25 Budget, the Innovation and Technology Commission ("ITC") launched the Frontier Technology Research Support Scheme ("FTRSS"/"Scheme") under the Innovation and Technology Fund The objectives of the FTRSS are to attract international top-notch talents, promote basic research and cross-sectoral co-operation in frontier technologies, so as to enhance Hong Kong's research capacities including research teams, hardware facilities, equipment and fixtures. By consolidating the strengths of the upstream sector in innovation and technology ("I&T") ecosystem, the Scheme aims to foster the comprehensive development of the I&T chain, build capacities for collaboration with the Guangdong-Hong Kong-Macao Greater Bay Area on commercialisation opportunities and dovetail with the Mainland's strategic planning of technologies. This set of funding guidelines ("Guidelines") outlines the principles and details of implementation of the Scheme as well as points to note for applicant institutions under FTRSS ("Applicant Institutions").

Key Elements

- 2. The Scheme comprises the following key elements
 - Research and development ("R&D") co-operation led by (a) The research international top-notch talents: ("Projects") and the research facilities ("Research Facilities") funded by the Scheme shall facilitate R&D co-operation spearheaded by international top-notch talents and be carried out in Hong Kong. These leading talents shall be world-class researchers, scholars or scientists in the respective fields with distinguished academic standing and proven experience, possessing not only exemplary research capability and visionary thinking, but also outstanding performance in frontier technology fields. At the same time, they shall demonstrate outstanding achievements and leadership in research, teaching and collaborative programmes, so as to spearhead the development of science. The leading talents are also expected to bring their overseas research teams comprising junior researchers/scholars to Hong Kong to be part of the Project

Teams (as defined in Paragraph 13(a)(i) below). Priority may be given to applications with leading talents bringing their overseas research teams to take part in the Project in Hong Kong and constitute a major part, i.e. at least 50% of the research team of the Project. Details of the eligibility of the leading talents and their research team members are set out in Paragraphs 5-8 below; and

(b) Applicant Institutions required to secure contributions to match Government funding: Funding from the Government of the Hong Kong Special Administrative Region ("Government") is to be provided on a matching basis under the Scheme, subject to specified ratio to the contributions secured by the Applicant Institutions and other requirements specified in the Guidelines and Funding Agreement (as defined in Paragraph 12 below). Details of the funding scope as well as the in-kind and non-in-kind contributions are respectively set out in Paragraphs 13-15 and 20-26 below.

Eligibility

Applicant Institutions

3. An Applicant Institution must be a local university funded by the University Grants Committee ("UGC")¹. To facilitate inter-institutional and cross-sectoral co-operation, UGC-funded universities together with other parties that provide technological or financial (including in-kind and non-in-kind) support to the Project ("Co-applicants")² may submit joint applications.

4. If a joint application is made by a UGC-funded university with one or more Co-applicants, the lead applicant responsible for matters relating to the application must be a UGC-funded university ("Lead Applicant Institution").

i.e. The City University of Hong Kong, Hong Kong Baptist University, Lingnan University, The Chinese University of Hong Kong, The Education University of Hong Kong, The Hong Kong Polytechnic University, The Hong Kong University of Science and Technology, and The University of Hong Kong.

Co-applicants include but are not limited to research institutes, industry partners, corporate sponsors, philanthropic organisations, venture capital firms, academic institutions, public bodies and individuals, whose roles in the Project may be research collaborators, technical advisors, investors, financiers or sponsors.

The Lead Applicant Institution and Co-applicants of the joint application should specify clearly their respective duties in the application form. Each reference to the Applicant Institution in the Guidelines, in case of a joint application, should be construed to cover the Lead Applicant Institution and Co-applicants in that joint application.

Leading Talents and Research Team Members

- 5. The leading talent of the Research Facility and Project shall be research personnel who have worked at a university, public/private research institute or the research arm of a private enterprise overseas for not less than three years in the past 10 years immediately preceding the FTRSS application deadline, and the immediate previous appointment of the leading talent shall generally not be any full-time engagement at any such institutions in Hong Kong or the Mainland³. For the research team members brought by the leading talent from overseas to the Research Facility and Project, they shall fulfil the same eligibility criteria specified above.
- 6. The Applicant Institution shall ensure that the leading talent and his/her research team members are legally permitted to work or reside in Hong Kong throughout the duration of the Project ("Project Period").
- 7. The leading talent must be based in Hong Kong upon relocation, and priority will be accorded to applications with leading talents appointed on a full-time basis. The Applicant Institution shall ensure that the work of the leading talent and his/her research team members is primarily undertaken in Hong Kong. The amount of funding to be approved under the Scheme will take into account the allocation of time of the leading talent and his/her research team members for work to be performed in and outside Hong Kong. Besides the work commitment already indicated in the application, the leading talent and his/her research team members shall have obtained prior written approval of the Applicant Institution for work performed outside Hong Kong in accordance with

a visiting scholar, may be considered under the Scheme.

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Exceptions may be accepted by the Government with special consideration. For example, a talent who has only served a brief stint in a university in the Mainland, or a talent whose immediate previous appointment involves part-time work in Hong Kong or the Mainland, say as

its established procedures⁴. The Applicant Institution shall also inform ITC in writing immediately upon giving such approval.

8. Considering the keen competition for attracting international talents, leading talents appointed by Applicant Institutions within six months prior to the deadline for applications may be considered under the Scheme.

Scope of Coverage

- 9. The Project shall be visionary and with originality, including but not limited to basic research activities in one or more of the following seven frontier technology fields⁵
 - (a) artificial intelligence;
 - (b) quantum information;
 - (c) integrated circuits;
 - (d) brain science and brain-inspired research;
 - (e) gene and biotechnology;
 - (f) clinical medicine and health; and
 - (g) exploration in deep space, deep earth, deep sea and the polar regions.
- 10. A general description of the above seven fields is at <u>Annex A</u>. In view of the rapid advancement in I&T, the Mainland's latest planning and development needs of Hong Kong, applications for Projects falling outside the seven fields

The Applicant Institution shall monitor the leading talent and the research team members' commitment to the Project with regard to the work performed outside Hong Kong. The Applicant Institution must declare and confirm adherence to this requirement through regular progress reports, and the actual compliance with this requirement shall also be duly reflected in the audited accounts signed by the independent auditor as set out in Paragraphs 49-51 of the Guidelines

These seven frontier technology fields were identified in the National 14th Five-Year Plan.

specified in Paragraph 9 above but closely associated with Hong Kong's high-quality development and new quality productive forces may also be accepted.

Funding Arrangements and Scope

- 11. Funding support of an amount between HK\$100 million and HK\$300 million is to be provided on a matching basis to each successful application under the Scheme subject to the requirements specified in the Guidelines and Funding Agreement (as defined in Paragraph 12 below). The amount of funding support to be recommended for each approved application will depend on the merits of the Project proposal and the budget plan submitted by the Applicant Institution as well as in-kind and non-in-kind contributions made to support the Project from companies, organisations or individuals as mentioned in Paragraph 22 below ("Contributors") and the Applicant Institution for matching purpose.
- 12. To ensure prudent use of public funds, the Applicant Institution of an application approved and accepted by the Government shall enter into a funding agreement (in such form and substance as determined by the Government) with the Government ("Funding Agreement"). The Funding Agreement shall contain the complete terms and conditions in respect of the Project and cover matters including, without limitation, the rights and responsibilities of the parties, the governance structure of the Research Facility, modus operandi, scope of research, financial arrangements, agreed performance indicators and intellectual property (IP) arrangements. If a joint application is approved, the Lead Applicant Institution and Co-applicants must jointly and severally be responsible for all obligations of the Applicant Institution under, arising out of or in connection with the Funding Agreement. The approved Project proposal and the approved budget plan will be included as an appendix to the Funding Agreement.
- 13. All funding provided by the Government under the Scheme ("FTRSS Funding") must be used in a reasonable, proportionate and proper manner in the following areas and incurred within the Project Period. Any expenditure item or part thereof which is already funded or will be funded by the Government, a body/institution subvented by the Government, the Applicant Institution or any Contributors will not be funded under FTRSS, i.e. no double payment is allowed for the same part of an expenditure item. FTRSS Funding shall not be used to cover expenses incurred before the commencement date of the Project as

specified in the Funding Agreement. FTRSS Funding may be used for covering –

(a) <u>Manpower</u>

- (i) FTRSS Funding may be used to cover the remuneration expenses for the leading talent, research team members and other project team members ("Project Team"), which are incurred exclusively for conducting the Project and operating the Research Facility within the Project Period, including the salary of the staff, employer's mandatory contribution to the Mandatory Provident Fund, contract gratuity, annual salary adjustment and medical benefits in accordance with the established mechanism of the universities.
- (ii) The Applicant Institution may make use of the FTRSS Funding to maintain the remuneration of the staff engaged in the Project to such a level that resources originally used for the remuneration expenses of the staff could be redeployed to employ additional staff to strengthen support for general teaching activities, so that the staff participating in the Project could devote more time to and focus on the R&D work for the Project.
- (iii) In general, Contributors making the in-kind or non-in-kind contributions to the Project shall not take any form of remuneration from the FTRSS Funding. If any of them are appointed as the Project Team members, the Applicant Institution shall provide declarations made by the concerned personnel in writing on all relevant remunerated positions, justifications for the appointments and course of action to be taken to mitigate or avoid any conflict of interest for the Government's approval before offering the concerned personnel any form of remuneration from the FTRSS Funding. The Government shall have the

absolute discretion as to whether to grant approval for such arrangements.

(b) Equipment

- (i) Costs arising from the purchase of new equipment, rental of equipment and maintenance of existing equipment for the implementation of the Project may be covered by the FTRSS Funding. In general, hire-purchase of equipment is not allowed. If the equipment concerned is to be shared among the Project and other projects, the relevant costs shall be charged on a pro-rata basis under each such project and the Applicant Institution is required to maintain a record on the usage of the equipment by the concerned projects for cost allocation purpose.
- (ii) In general, all equipment procured shall be housed in the Research Facility in Hong Kong⁶.
- (iii) The title to all equipment procured shall be vested in and remained with the Lead Applicant Institution. Upon completion or termination of the Project, the Lead Applicant Institution is obliged to retain all equipment purchased for the Project with a value of not less than HK\$500,000 for at least two years, and to have such equipment available for inspection by the Government or its representatives upon request. Notwithstanding the above, the Government reserves the right to require the Lead Applicant Institution to transfer the title to relevant equipment to the Government or any nominee(s) of the Government

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If the equipment for the Project purchased using the Project Funds (as defined in Footnote 9) needs to be installed or housed outside Hong Kong in exceptional circumstances, the Applicant Institution shall seek prior approval from the ITC with full justifications. In any case, the total cost of all equipment to be installed outside Hong Kong shall be less than 25% of the total equipment budget of FTRSS Funding, as a substantial part of the Project activities is required to be conducted in Hong Kong.

within a period of two years after completion or termination of the Project.

(c) Other Direct Costs

FTRSS Funding may be used to cover R&D-related costs, general operating expenses of the Research Facility, and other expenses that are necessary and relevant to the Project, including but not limited to –

- (i) set-up costs of the Research Facility, including one-off fitting-out/renovation/ upgrading works;
- (ii) external consultancy fees;
- (iii) cost of procurement of R&D consumables;
- (iv) patent application and licensing fees;
- (v) legal and accounting fees;
- (vi) expenses incurred for participating in conferences, exhibitions and study missions which are essential in production and delivery of the Project deliverables⁷; and
- (vii) expenses incurred for marketing and promotional purposes which are essential in production and delivery of the Project deliverables.
- 14. The FTRSS Funding to be provided to the Applicant Institutions for expenses under "Manpower" is based on a matching ratio of up to

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All related expenditure (including passage and accommodation for overseas visits, transportation, publicity, meals, etc.) shall be maintained at reasonable cost levels and comply with the prevailing financial policies, regulations, spending limits and other relevant mechanisms and procedures of the Applicant Institution concerned unless with prior written approval from the ITC. The Applicant Institution must declare and confirm adherence to this requirement through regular progress reports, and the actual compliance with this requirement shall also be duly reflected in the audited accounts signed by the independent auditor as set out in Paragraphs 49-51 of the Guidelines.

1 (Government): 1 (Applicant Institution and other funding sources), with only non-in-kind contributions being eligible for matching purposes. For expenses under "Equipment" and "Other Direct Costs", FTRSS Funding is to be provided at a matching ratio of up to 4 (Government): 1 (Applicant Institution and other funding sources), which may include in-kind and non-in-kind support.

- 15. The Government has the absolute discretion to decide what expenditure items which shall not be funded by FTRSS. Some examples of expenditure items not to be funded under FTRSS are as follows
 - (a) manpower expenditure on bonus, fringe benefits and allowance other than medical benefits, such as severance payment, expenses on housing (including nominal rental for quarters), education, training, non-duty related passage and travelling, meal, insurance, overtime and untaken leave, etc.⁸;
 - (b) capital/construction costs and rental expenses for the venue of the Research Facility;
 - (c) administration overheads or fees charged to the Project arising from the general or administrative services provided by the Applicant Institutions (e.g. personnel, accounting, security, cleansing, library services, etc.);
 - (d) expenses on mass production activities;
 - (e) expenses incurred as matching funds for other schemes of the Government;
 - (f) investment of any kind except for deposit of funds in the dedicated bank account for the Project (i.e. "Project Bank Account" referred to in Paragraph 16 below);
 - (g) capital financing expenses, e.g. mortgage and interest on loans/overdrafts;

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Applicant Institutions may provide, at their own costs and with their own resources as they see fit, a better remuneration package to cover allowances and fringe benefits not funded by FTRSS.

- (h) repayment of any loan taken out by the Project and/or the Project Team members;
- (i) local travelling expenses for staff from home to workplace (except for expenses under Paragraph 13(c)(vi));
- (j) any expenses for trips that are in the Government's opinion unnecessary or irrelevant to the operations or R&D work of the Project;
- (k) any entertainment expenses, and any prizes, either in the form of cash or other types of souvenirs;
- (1) any expenditure items that are in the Government's opinion unnecessary or irrelevant to the operations of the Research Facility/Project;
- (m) costs related to prior/subsequent year(s)/period(s) adjustment(s); and
- (n) any events or activities that are inconsistent with the law or legislation in or applicable to Hong Kong or other applicable jurisdictions.

The list of unallowable cost items set out above is <u>not</u> exhaustive. The Applicant Institutions shall consult the ITC if they have any doubt on whether an item could be covered by the FTRSS Funding.

Project Bank Account

16. The Applicant Institution is required to open a separate risk-free interest-bearing bank account with a licensed bank registered under the Banking Ordinance (Cap. 155) under its name ("Project Bank Account") and assign a unique code specifically for handling the funding for the Project. The FTRSS Funding will be deposited into the Project Bank Account only, which shall be

solely and exclusively used for the purpose of handling the Project Funds⁹ of the Project throughout the Project Period. The Applicant Institution shall bear the responsibility to monitor the use of Project Funds, for ensuring compliance with the requirements under the Scheme.

All FTRSS Funding, all interest income generated in the Project Bank Account, contribution from the Applicant Institution and other funding sources for matching purpose, including capital investment and/or sponsorship and income received or receivable during the Project Period shall be credited to the Project Bank Account. After completion or termination, as the case may be, of the Project, the Applicant Institution shall return to the Government all unspent Project Funds in accordance with the relevant Government's portion of the contributions (including in-kind and non-in-kind) for the Project together with interest thereon. Notwithstanding the above, if the circumstances set out in Paragraphs 55-57 of the Guidelines arise, e.g. if the progress of the Project is unsatisfactory, or the Funding Agreement is breached, the Government reserves the right to cease the funding or terminate the Project, and require the Applicant Institution to return all or any disbursed fund together with interest thereon.

Venue of Research Facility

- 18. An Applicant Institution shall arrange to secure a suitable venue and set up the Research Facility in Hong Kong on its own accord. When submitting the application, the Applicant Institution shall also provide concrete proofs that the space or premises intended for the Research Facility has already been secured.
- 19. Activities of the Projects shall primarily be conducted within the territory of Hong Kong. Any expenditure to be incurred outside Hong Kong shall be specified in the application as an offshore expenditure item and fully justified on the grounds of operational efficiency, reliability and quality of the goods/services procured. In general, no more than HK\$20 million or 20% of the FTRSS Funding, whichever is lower, could be incurred and utilised outside Hong Kong. The Applicant Institution's actual compliance with this "local

Project Funds in the Guidelines comprise the FTRSS Funding, the contribution from the Applicant Institution and other funding sources for matching purpose, and other income derived

Applicant Institution and other funding sources for matching purpose, and other income derived from the Project during the Project Period. All such funding shall be deposited into one single Project Bank Account.

content" requirement shall be duly reflected in the audited accounts signed by the independent auditor as set out in Paragraphs 49-51 of the Guidelines.

Contributions from Applicant Institution and Contributors

- 20. In-kind and/or non-in-kind contributions may be provided by the Applicant Institution and Contributors, as appropriate, for matching purposes under the Scheme. However, in-kind contributions shall not exceed 50% of the total contributions in relation to the non-remuneration expenditure. All contributions for matching purposes shall be non-repayable or non-redeemable. In general, cross-sectoral collaborations and mobilisation of resources from the Applicant Institution and other non-government sectors are encouraged to enhance support to the Projects.
- 21. Under the Scheme, the Applicant Institution may use the UGC-fundings as the contribution towards the remuneration expenses for Project Team members. As the contribution is part of the remuneration expenses, the ceiling of the subsidy matching ratio for these expenses is set at 1 (Government): 1 (Applicant Institution and other funding sources). For non-remuneration expenditure, the source of other in-kind and non-in-kind support to be put in by the Applicant Institutions must not overlap with public resources.
- 22. The contribution for the Project, including capital investment and/or sponsorship, may be from any or all of the following funding sources other than the Applicant Institution
 - (a) an individual including any Project Team members and/or their family members or relatives¹⁰;
 - (b) a company incorporated in Hong Kong under the Companies Ordinance (Cap. 622) or its predecessor Ordinance (i.e. Companies Ordinance (Cap. 32)), including a company which is owned by the Project Team or any Project Team members and/or their family members or relatives;

and siblings' spouses of the Project Team members' spouses.

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In general, family members and relatives of Project Team members include their (a) grandparents; (b) parents; (c) siblings; (d) spouse; (e) children; (f) parents' siblings and their children; (g) siblings' spouses; and (h) grandparents, parents, siblings, parents' siblings and their children

- (c) a company incorporated outside Hong Kong, including a company which is owned by the Project Team or any Project Team members and/or their family members or relatives; and
- (d) an industry support organisation, a trade and industry association or a professional body.

To avoid conflict of interests, Contributors to the Project shall <u>not</u> be the suppliers of goods or service providers for the Project, unless prior written approval has been given by the ITC.

- 23. The capital investment and/or sponsorship from the Applicant Institution and/or Contributors shall be deposited into the Project Bank Account in order to be accepted for matching purposes under the Scheme.
- 24. Details on the eligibility of the non-in-kind and in-kind contributions as matching funds are as follows
 - (a) Non-in-kind contribution shall be in the form of capital investments and/or sponsorships and would only be accepted if
 - (i) it is a non-repayable cash contribution or nonredeemable investment¹¹;
 - (ii) except for contribution specified under Paragraph 21, the funding source of the non-in-kind contribution is from the self-financing reserves of the Applicant Institution or Contributors such as venture capitalists, angel funds, private companies or individuals, instead of from the Government (including UGC and ITF);
 - (iii) the non-in-kind contribution is paid into the Project Bank Account within the Project Period or other timeframe specified by the Government; and

Convertible notes and equity investment with redemption clauses are not considered as qualified non-in-kind contributions under the Scheme.

- (iv) documentary proof, such as a legally binding investment agreement, a letter of undertaking, bank-in records, etc., has been provided to ascertain the eligibility of such contribution.
- (b) <u>In-kind contribution</u> shall be in the form of essential equipment, tools, machinery, consumables or other non-cash support that are relevant to the operation of the Research Facility/Project and would only be accepted if
 - (i) it is for matching with non-remuneration expenses;
 - (ii) the in-kind contribution is essential to the Project and is contributed specifically for the Project;
 - (iii) the funding source of the in-kind contribution is not derived from the Government (including UGC and ITF); and
 - (iv) documentary proof has been provided to facilitate an independent and fair assessment of the value of the contribution, e.g. details of the valuation for new and used equipment and consumables. In general, two independent valuations for each item of the in-kind shall contribution be provided for the Under special circumstances such as the assessment. Contributor being the sole supplier of the item or the item is unique in terms of IP ownership or technology, in which case there are genuine difficulties in obtaining a second independent valuation, other form documentary evidence from the Contributor may be accepted at the Government's discretion.
- 25. The cost of any equipment purchased with the Government funding (including UGC and ITF) shall not be deemed as an in-kind contribution. However, where the rental expenses of such equipment have been included as Project expenditure as provided for under Paragraph 13(b)(i), any rental expenses being waived can be recognised as in-kind contribution.

26. Background IP and overhead charge of services (e.g. overhead charge of R&D service, etc.) cannot be counted as in-kind contribution.

Application Arrangements

Application

- 27. Matters on appointments, promotion and retirement of the Project Team are within the governance of the Applicant Institution as per established practices. The Applicant Institution shall arrange recruitment through its own channels and submit the application via an office designated by the Applicant Institution to the ITC. Before putting forward applications, the Applicant Institution must make sure that the leading talent and the research team members brought by the leading talent from overseas to the Research Facility and Project have agreed in principle to work in Hong Kong. The Applicant Institution is required to prioritise its applications if two or more applications are submitted.
- 28. The deadline for the first round of applications is <u>25 November 2025</u>. Subject to responses and funding situation, the ITC may invite more than one round of applications if needed.
- 29. The application shall comprise information of the following areas –

(a) <u>Project Team</u>

- (i) the profile of the leading talent and other Project Team members recruited/to be recruited;
- (ii) an organisational chart of the proposed Research Facility that outlines the composition of the Project Team, with the essential roles and job descriptions of each team member in the Project, as well as the key positions and decision-makers (e.g. Laboratory Director, R&D Project Leader and other critical personnel) indicated;
- (iii) documentary proofs such as an employment contract, a letter of appointment, a letter of commitment or a

signed undertaking from the leading talent and other Project Team members confirming agreement to work in the Applicant Institution; and

(iv) the institutional support and the remuneration package (e.g. salary, fringe benefits, accommodations, etc.) to be offered to the leading talent and other Project Team members.

(b) <u>Project</u>

- (i) the Project to be conducted, including the frontier technology field(s) to covered and the themes of the Project;
- (ii) the research institutes collaborating in the Project, if applicable;
- (iii) expected R&D deliverables;
- (iv) Project milestones and performance indicators;
- (v) details of the cross-sectoral and/or inter-disciplinary co-operation;
- (vi) venue arrangements;
- (vii) manpower and resources commitment;
- (viii) IP arrangements;
- (ix) budget plan;
- (x) detailed breakdown of the contributions from the Applicant Institution and/or Contributors; and
- (xi) support to be provided by the Applicant Institution and other relevant institutions.

- 30. The ITC will request the Applicant Institution to set out the performance indicators to be achieved during the Project Period and the timetable for Project implementation in the application. In vetting the application, considerations will be given as to whether the performance indicators and timetable are reasonable and appropriate. The performance indicators for the Project shall cover aspects, such as
 - (a) overall benefits to the I&T sector and the society as a whole, including building Hong Kong as an international talent hub (e.g. the number of top-notch scholars and/or scientists recruited internationally, as well as the number of local post-doctoral researchers / Doctor of Philosophy (PhD) students and other participants engaged in the Project), and fostering growth of the I&T ecosystem (e.g. the number of start-ups spun off from the research work of the Research Facility);
 - (b) the research outcomes with internationally-recognised technical breakthroughs, including the number of renowned scientific awards, the number of research papers to be published and/or cited by international scientific journals, and the number of patents to be generated/filed; and
 - (c) <u>inter-disciplinary co-operation</u>, including the number of cross-sectoral/institutional researches, as well as the amount of industry contributions and its proportion to the overall Project.

Assessment Process

31. To ensure the quality of applications, the Applicant Institutions shall conduct their own internal assessment and selection before submitting applications to the ITC. The applications submitted will first be subject to preliminary checking by the Secretariat for the Scheme to be set up under the ITC ("FTRSS Secretariat"), and will eventually be assessed by an assessment panel, comprising experts in the relevant technology fields as well as representatives from the Government and/or the community at large ("Assessment Panel"/"Panel"). After assessment, the Assessment Panel will recommend

applications for approval by the Commissioner for Innovation and Technology (CIT).

- 32. As the research ideas and profiles of the leading talents in the applications may contain sensitive information, the ITC will request all the members of the Assessment Panel to declare interests and adhere to the principle of confidentiality.
- 33. During the assessment process, the Assessment Panel may have comments and suggestions on any applications. The Assessment Panel may invite representatives from the Applicant Institution to attend the panel meeting to brief members and answer enquiries, and if necessary, may also invite the leading talent to attend an interview either face-to-face or via virtual means. Where necessary, the FTRSS Secretariat will seek advice from independent experts on individual applications. The Applicant Institution may be required by the FTRSS Secretariat to provide clarifications or supplementary information and revise the application in response to the comments and suggestions of the Assessment Panel. Applications which have been suitably revised to the satisfaction of the Assessment Panel will eventually be submitted to the CIT for approval.
- 34. The Lead Applicant Institution will be notified of the result of the application in writing. Given that the Scheme is essentially talent-oriented, unsuccessful cases will not be considered in the upcoming rounds of application exercises unless there are substantial changes in the qualifications of the talents leading the Project. Where applicable, any applications with such substantial changes will be treated as new applications, if submitted, in future rounds of application and required to go through the normal assessment procedures.
- 35. The decisions of the Assessment Panel and the ITC under the Scheme including, inter alia, the application results and the amount of funding approved, are final. Successful applications may be granted all or part of the funding requested. Any decision to approve or reject the application shall not be subject to appeal to, or review in, any court. The Government reserves the right not to disclose the reasons for its decisions and may impose conditions on the grant for the FTRSS Funding.

Assessment Criteria

- 36. The Assessment Panel will conduct assessments of the proposals on a merit basis, having regard to the following key criteria (details of which are summarised at **Annex B**) and circumstances of individual cases
 - (a) <u>talent component of the Project</u>, including the academic achievement, standing and reputation of the leading talent, the number of researchers recruited internationally, the extent of their engagement (such as time commitment) in the Project, and the plans for local talent development;
 - (b) <u>I&T components and research themes of the Project</u>, including the technical excellence, originality and potential for international technical breakthroughs in respect of the frontier technology involved, as well as the expected deliverables of the Project such as patents and start-ups to be generated;
 - (c) technical levels and management capabilities of the parties involved in the Project, including the proven track records of the Applicant Institution, the research teams and research institutes collaborating in conducting relevant R&D activities and setting up/managing research facilities of similar scale;
 - (d) reasonableness of the budget plan of the Project, such as the potential of the budget plan to achieve self-sustainability in the long run, financial viability of the estimated expenditure of the Project, and the level of commitment from the Applicant Institution and Contributors; and
 - (e) overall benefits to the I&T sector and the society as a whole, including the relevance of the Project to the Government's policies on promoting frontier technology development, building Hong Kong as an international talent hub and fostering growth of the I&T ecosystem.

Project Commencement

- 37. Unless otherwise specified by the Government, within two months of the announcement of application results, the Applicant Institution must complete the appointment formalities of the leading talent for the Project. During that two-month period, the Applicant Institution and/or Contributors are required to deposit no less than 20% of their committed non-in-kind contributions for matching purposes into the designated Project Bank Account.
- 38. The appointment of the leading talent is required to take effect within 12 months of the announcement of application results and no later than the commencement date of the Project as specified in the Funding Agreement. No FTRSS Funding shall be used to cover expenses incurred before the commencement date of the Project. The Applicant Institution shall also ensure that the Research Facility commences operations within 18 months following the signing of the Funding Agreement. The Research Facility shall maintain continued operations for no less than five years from the commencement date of the Project to produce or deliver the project deliverables.

Disbursement Arrangements

39. The disbursement of FTRSS Funding for an approved application will be arranged in tranches. In order to enable the Project to be kick-started, part of the approved funding is to be disbursed as advance payment. The amount of advance payment will be determined with reference to the projected cash flow requirement of the Project specified in the approved application form and be made upon due payment of the corresponding share of contribution from the Applicant Institution and/or Contributors. Thereafter the FTRSS Funding will normally be disbursed on a half-yearly basis, subject to the actual expenditure and projected cashflow for the coming year, satisfactory Project progress made in the previous reporting period against agreed milestones and due payment of the contribution from the Applicant Institution and Contributors, including their capital investment and/or sponsorship as appropriate. As the FTRSS Funding is provided on a matching basis, if the actual amount of the contributions from Applicant Institution and/or Contributors is less than that committed at the time of application, without prejudice to any rights or claims that the Government may have, the amount of funding will be reduced correspondingly and any disbursed

amount in excess shall be returned to the Government within 30 days after receipt of written notice from the Government requiring it to do so together with interest.

40. If the progress of a Project is unsatisfactory or the Guidelines or the Funding Agreement is breached, the Government reserves the right to cease to fund or even terminate the Project and the Funding Agreement, and require the Applicant Institution to return all or any disbursed fund within 30 days after receipt of written notice from the Government requiring it to do so together with interest and be responsible for any other losses or damage which may be suffered by the Government.

Monitoring and Reporting Arrangements

- 41. By entering into the Funding Agreement with the Government, the Applicant Institution undertakes to comply with the requirements as set out in the Funding Agreement for conducting the Project and operating its Research Facility. The Applicant Institution shall also assume all legal liabilities arising from, and be directly accountable and liable for, all legal obligations relating to the Project, and shall not take any action that is prejudicial to the Government's interest. The Government is entitled to terminate the Project and the Funding Agreement if the performance of the Project, Applicant Institution or the Project Team fails to meet the terms therein, or if the leading talent leaves office during the Project Period. The Government also has the right to require immediate refund of all or any of the disbursed FTRSS Funding together with interest if any funding amount is not used exclusively for the purposes designated under the Scheme.
- 42. The Applicant Institution shall closely monitor the progress of the Project against the agreed performance indicators, Project milestones, etc. The Applicant Institution is required to submit regular progress reports, annual audited accounts and other necessary supporting documents (e.g. proofs showing receipt of funding, etc.) for the ITC's approval and monitoring.

Progress Reports and Audited Accounts

43. The progress reports shall include, but not limited to, the progress of the Project as compared against the agreed performance indicators and Project milestones, as well as the Project's contribution to the local I&T ecosystem (e.g.

in terms of commercialisation (including licensing and product), income, the number of IP generated/ patent filed, the level of R&D investment, the number of employment opportunities created, the cultivation of local I&T talents, etc.). The reporting cycle of the annual progress report and audited accounts shall cover the period ending 31 March of each year and shall be submitted on or before 30 June of that particular year. For Projects commencing on or before 1 September, the first reporting period will conclude in March of the following year. For Projects initiated after 1 September, the first reporting period will conclude in March of the second subsequent year. In other words, the first annual progress report and audited accounts of the Project may cover a period ranging from 7 to 18 months, depending on the timing of commencement of the Project. Two examples are provided below for illustrative purposes –

Project Commencement Date	First Reporting Period	Submission Due Date
1 September 2026	1 September 2026 – 31 March 2027 (i.e. 7 months)	30 June 2027
1 October 2026	1 October 2026 – 31 March 2028 (i.e. 18 months)	30 June 2028

44. The Applicant Institution shall bear the responsibilities for monitoring the performance of the Project Team and continue to appraise their performance in accordance with prevailing personnel management guidelines and practices of its own. The Applicant Institution shall provide the ITC with observations and assessment of the performance of the Project Team in the annual progress reports. If requested by the ITC, the Applicant Institution shall provide within one month supplementary information on the performance and work of the Project Team.

Mid-term and Final Scientific Reviews

45. Each successful Applicant Institution shall establish an internal scientific committee comprising at least five international and local experts in relevant technology fields and one representative from the senior management of the Applicant Institution ("Scientific Committee"). The Scientific Committee

shall be responsible for developing assessment parameters¹² for mid-term and final scientific reviews of the Projects approved by the ITC along with the submission of the first progress report. The Scientific Committee shall closely monitor the implementation progress of the Project, conduct mid-term scientific reviews on the technical aspects of the research, and submit a mid-term scientific review report to the ITC together with the third annual progress report. In addition, a final scientific review against the established assessment parameters must be conducted by the Scientific Committee within nine months of Project completion, and the final scientific review report must be submitted to the ITC within 12 months of Project completion or such shorter period as may be specified by the Government. For Projects with durations exceeding five years, the reporting schedule of the scientific reviews will be separately specified in the Funding Agreement.

Final Reports and Final Audited Accounts

- 46. Upon completion or termination of the Project, the Applicant Institution is required to submit a final audited accounts and a final report **strictly** against the stated performance indicators and milestones for approval according to the reporting schedule as set out in the Funding Agreement or any subsequent revised submission schedule(s) as agreed by the Government.
- All progress reports, scientific review reports and final reports shall be prepared in the standard format as specified by ITC and submitted electronically through the Innovation and Technology Commission Funding Administrative System (ITCFAS). Without prejudice to any other rights or claims that the Government may have, any non-compliance of reporting requirements (e.g. delay in submission of report(s), report quality not to the satisfaction of the Government) may affect the Applicant Institution's future applications for funding support from the Government. Any extension of the report submission is subject to prior written agreement from the ITC. If requested by ITC, the Applicant Institution is required to provide timely clarification and/or supplementary information to substantiate the content of the report. Where

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The Applicant Institution is required to submit to the ITC for endorsement the composition of its Scientific Committee and the assessment parameters established by the Scientific Committee, along with the submission of the first progress report. Any subsequent adjustments to the assessment parameters shall be specified in the progress reports for the ITC's endorsement.

necessary, the ITC may organise visits or progress review meetings to examine the progress of the Project.

48. Upon receipt of the final report, the ITC will assess the effectiveness of the Project, having regard to the Project results measured against the agreed performance indicators as set out in the Funding Agreement. If requested by the ITC, the Applicant Institution is required to provide timely clarification and/or additional information to substantiate the content of the final report, or be invited to present the Project results.

Auditing Requirements

- 49. The Applicant Institution is required to submit annual and/or final audited accounts to assure the Government that the Project Funds are applied to the Project in accordance with the approved budget and in compliance with the Funding Agreement. The annual and/or final audited accounts shall be signed by independent auditors who must be Certified Public Accountants holding a practising certificate registered under the Professional Accountants Ordinance (Cap. 50) ("Auditors") and conducted in accordance with the latest version of the Notes for Auditors of Recipient Organisations issued by the ITC ("Notes").
- 50. The Applicant Institution shall specify in the engagement letter for the employment of the Auditors that they shall strictly follow the requirements and the specimen stipulated in the latest version of the Notes in conducting reasonable assurance engagements and preparing Auditors' reports for annual and/or final accounts of the Project. The engagement letter shall also specify that CIT, the Director of Audit and other Government's authorised representatives shall have the right to communicate with the Auditors on matters concerning the annual and/or final audited accounts and the supporting statements.
- 51. The Applicant Institution is required to make available to the Auditors all information, documents and explanations relating to the Project.

Change Requests

52. The Project shall be carried out strictly in accordance with the approved Project proposal appended to the Funding Agreement. For any material modification, amendment or addition to the Project or the Funding Agreement,

including but not limited to changes of the Project commencement or completion date, personnel arrangements, research scope/methodology, agreed performance indicators, approved budget or cash flow projection, the Applicant Institution shall seek prior approval from the Government in writing. In general, requests for substantial changes would not be entertained.

- 53. Where the cumulative deviation of expenditure for a board category of "Manpower", "Equipment" or "Other Direct Costs" does not exceed 30% of the original approved budget and does not result in any increase in the total approved Project cost and the total amount of FTRSS Funding requested, prior approval from the ITC is not required. However, as the subsidy matching ratios for expenses under the board category of "Manpower" and expenses under the board categories of "Equipment" and "Other Direct Costs" are different in accordance with Paragraph 14, any transfer of budgeted expenditure between categories with different matching ratios is <u>not</u> allowed. In other words, only virement between the board categories of Equipment" and "Other Direct Costs" is permissible.
- 54. Any virement as a result and the underlying reasons shall be reported by the Applicant Institution in the relevant progress report(s) and/or final report. If the deviation exceeds 30% of the original approved budget, prior approval from the ITC is required and such request shall be made electronically by the Applicant Institution through the ITCFAS.

Suspension or Termination

55. The Government may terminate the Project or withhold the disbursement of FTRSS Funding at any time on grounds including, inter alia, overdue contributions, unsatisfactory performance or resignation of the leading talent, unsatisfactory performance of the Project such as failure in meeting the agreed performance indicators and/or milestones, slim chance of completion of the Project in accordance with the approved Project proposal, that the operation of the Research Facility is no longer relevant to the objectives of the Scheme, or the Government sees fit to terminate the Project and the Funding Agreement in the public interest.

- 56. In case that the appointment of a leading talent is terminated due to unsatisfactory performance or resignation of the leading talent¹³, the Applicant Institution shall report such to the ITC before or immediately upon the termination of engagement or resignation. In such event, the Government shall have the right to terminate the Project and the Funding Agreement immediately on the effective date of resignation or termination of engagement as the Project is approved for the designated leading talent. Without prejudice to any rights or claims of the Government, the Project Funds for remuneration for the leading talent and/or research team members shall cease on the date of termination of the Project and the Funding Agreement, and the Applicant Institution shall return to the Government all unspent FTRSS Funding together with interest thereon in accordance with the proportion of contributions from different parties as specified in the Funding Agreement within 30 days after receipt of written notice from the Government.
- 57. In the event that the termination of the Project is initiated by the Applicant Institution within the Project Period due to reasons such as serious injury, illness or death of the leading talent, the Applicant Institution shall notify ITC in writing at least three months in advance, providing the reasons for such termination. The Applicant Institution shall also return to the Government all unspent FTRSS Funding within 30 days after receipt of written notice from the Government together with interest thereon in accordance with the proportion of contributions from different parties as specified in the Funding Agreement.

Books and Records

- 58. The Applicant Institution shall keep a full, proper and separate set of books and records for the Project (including but not limited to receipts, counterfoils, vouchers, copies of cheques issued, payroll sheets, signed certified receipts, quotations and tendering documents and other supporting documents) during the term of the Funding Agreement and for at least seven years after completion, expiry or termination of the Project.
- 59. Accounting on an accrual basis shall be adopted. Unless otherwise approved by the ITC, expenditures could only be covered by the FTRSS Funding

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In case a research team member resigns/leaves, the Applicant Institution may appoint another research team member as replacement, provided that the new appointment complies with the requirements specified in Paragraphs 5-6 of the Guidelines.

after the related services and goods have been delivered or the related activities have been conducted, regardless of whether payments have already been made. Contributions from the Applicant Institution and Contributors, including capital investments and/or sponsorships as well as other income derived from the Project during the Project Period, whether budgeted or not, shall constitute part of the project income and shall be used solely for the Project. All transactions relating to the Project shall be properly and timely recorded in the books and accounts. The books and records shall be maintained in such a manner so as to enable the production of Statement of Income and Expenditure and Statement of Financial Position in respect of the Project.

60. The Government and its authorised representatives, including the CIT and/or the Director of Audit, shall be allowed access to all or any of the books and records of the Project for conducting audit, inspection, verification and copying from time to time upon reasonable notice at any time during the period when such books and records are kept as required under Paragraph 58. The Director of Audit may carry out value-for-money studies on the Applicant Institution or the Project in receipt of the FTRSS Funding. The Government reserves the right to require the Applicant Institution to return to the Government all or any misused funds together with interest income accrued and be liable for any losses or damage that may be suffered by the Government.

Procurement Procedures

61. The Applicant Institution shall exercise the utmost financial prudence in the procurement of the equipment, other goods or services for or incidental to the Project, and shall ensure that all procurements for goods and services are carried out in an open and fair manner. The Applicant Institution shall adhere to its established/current procurement procedures or the procurement procedures as specified in the Funding Agreement, which include but not limited to the following –

Aggregated value of each procurement	Requirement
HK\$50,000 and below	Verbal quotations from at least two suppliers
Above HK\$50,000 to HK\$1,360,000	Written quotations from at least five suppliers
Above HK\$1,360,000	Open tender

- 62. In case the Applicant Institution intends to directly procure goods or services from a company/an organisation/an individual not in accordance with the procurement procedures as specified in Paragraph 61, the Funding Agreement or the Applicant Institution's established procurement procedures, it shall submit to the ITC details of the proposed contract and its relationship with the company/organisation/individual together with full justification for the ITC's approval prior to entry into the proposed contract.
- 63. In conducting procurement using the FTRSS Funding, the Applicant Institution shall take into account its continuing duty to safeguard national security and shall not engage in any acts or activities that may endanger national security. The successful Applicant Institution (and its board members, Project Team, employees, contractors, consultants, agents and any other personnel who are in any way involved in the Project) shall exercise professional judgment, sensitivity and prudence in assessing any potential national security risks or issues that may be involved in every stage of the procurement. The duty for the successful Applicant Institution to safeguard national security is a continuing one that subsists throughout every stage of the entire procurement process, including before and after signing of the Funding Agreement.

IP Arrangements

64. While the ITC has not set any formulae for benefit-sharing, the Project Teams/inventors shall be entitled to no less than 70% of the IP benefits ¹⁴ (in respect of the IPs generated by the Project Teams/inventors during the Project

¹⁴ IP benefits refer to the payment and sharing of licensing fees, royalties and form of commercialisation income arising from an R&D.

Period), and the remaining portion shall be set on an equitable and proportional basis taking into account the following factors –

- (a) financial contributions of the Applicant Institution and Contributors leading to the R&D outcomes (if applicable, products/services launched);
- (b) efforts made by concerned parties; and
- (c) market forecasts and business practices (including pricing of products/services in individual industry sectors, etc.).
- 65. The ownership of the IPs generated from the Project shall be subject to the negotiation and agreement among the Applicant Institution, the Project Team members, Contributors and other relevant parties, if any.
- 66. The Applicant Institution, the Project Team members, Contributors and any other relevant parties shall, as far as possible, reach a consent on the IP benefit-sharing arrangements in writing before the commencement of the Project.

Publicity and Acknowledgement

- 67. Acknowledgement of ITF funding shall appear on all equipment, facilities, publications, publicity and media events relating to the Project.
- 68. The following disclaimer shall also be included in any publications and media events relating to the Project
 - "Any opinions, findings, conclusions or recommendations expressed in this material/publication (or by members of this project team) do not reflect the views of the Government of the Hong Kong Special Administrative Region or the Innovation and Technology Commission."

Handling of Information

69. Information provided by the Applicant Institution and/or the individuals in their applications and reports (e.g. progress reports, scientific review reports

and final reports) will be kept by the Government in confidence and all personal data will be handled in accordance with the relevant provisions of the Personal Data (Privacy) Ordinance (Cap. 486). In this regard, the Government shall have the right to disclose, without further reference to the Applicant Institution and/or the relevant individuals, whenever it considers appropriate, Discloseable Information ¹⁵ to other Government bureaux/departments, statutory bodies or relevant third parties for the purposes as prescribed in the application form/reporting templates and all other purposes arising from or incidental to it. Relevant information will also be posted on the ITF's website for public access. By submitting the application/report, the Applicant Institution is regarded to have agreed to, and to have obtained from each individual whose personal data is provided in the application/report, his/her consent for the disclosure, use and further disclosure by the Government of the personal data for the purposes referred to above in this paragraph.

Prevention of Bribery

70. The Applicant Institution shall observe the Prevention of Bribery Ordinance (Cap. 201) ("PBO"), and shall caution its board members, Project Team, employees, contractors, consultants, agents and any other personnel who are in any way involved in the Project against soliciting or accepting any hospitality, entertainment or inducements which would impair their impartiality in relation to the Project The Applicant Institution shall take all necessary measures (including by way of a code of conduct, internal guidelines or contractual provisions where appropriate) to ensure that its board members, Project Team, employees, contractors, consultants, agents and any other personnel who are in any way involved in the Project are aware of the aforesaid prohibition and will not solicit or accept any advantages or hospitality which would impair their impartiality, etc. in the conduct of or in relation to the Project. If the Applicant Institution, its board members, Project Team, employees, contractors, consultants, agents or any other personnel who are in any way involved in the Project commit an offence under the PBO in relation to the Project

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⁵ "Discloseable Information" means any information provided by the Applicant Institution and the Project Team to the Government in their applications and reports including without limitation, information in connection with, their applications and reports under FTRSS, the names and addresses of and other information on the Applicant Institution and the Project Team to the Government, including past applications, other ITF projects they are undertaking / propose to or will undertake, details of the applications and the projects, the project costs and the FTRSS Funding, and any other information provided by the Applicant Institution and the Project Team to the Government, and information on the Applicant Institution's service provider(s) and supplier(s).

funded by FTRSS, the Government shall be entitled to terminate the Project and the Funding Agreement, cancel the funding approved, stop the disbursement of funds, require the Applicant Institution to return all or any of the disbursed FTRSS funds together with interest thereon and to be liable for any losses or damage that the Government may have suffered.

Important Note

- 71. The Applicant Institution (and its board members, Project Team, employees, contractors, consultants, agents and any other personnel who are in any way involved in the Project) shall conform in all respects with all applicable laws and regulations (including without limitation all law and legislation in or applicable to Hong Kong (including the National Security Laws)).
- 72. The Government may at any time and with immediate effect, revoke or terminate the Funding Agreement, refuse to provide the FTRSS Funding, revoke or reject the related reimbursement requests, withhold any payment and require refund of any funding disbursed under the FTRSS to the Government in any of the cases
 - (a) the Applicant Institution and/or any of its board members, the Project Team, employees, contractors, consultants, agents and any other personnel who are in any way involved in the Project has/have been involved or is being involved, in any act or activity which
 - (i) constitutes or causes the occurrence of an offence endangering national security;
 - (ii) in the reasonable opinion of the Government, is likely to constitute or cause the occurrence of an offence endangering national security;
 - (iii) in the reasonable opinion of the Government, is otherwise contrary to the interests of national security or the public interest of Hong Kong;
 - (b) in the reasonable opinion of the Government, the continued engagement of the successful Applicant Institution or the continued performance of

the Project and/or the Funding Agreement is contrary to the interests of national security or the public interest of Hong Kong; or

- (c) the Government reasonably believes that any of the events mentioned in (a) or (b) above has occurred or is about to occur.
- 73. For the purpose of the Guidelines –

"National Security Laws" means all laws and legislation which are from time to time in force or applicable to Hong Kong relating to the safeguarding of national security, including but not limited to the Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region as applied in Hong Kong under the Promulgation of National Law 2020 (L.N. 136 of 2020) and the Safeguarding National Security Ordinance (6 of 2024); and

"offence endangering national security" has the meaning given to it under the Safeguarding National Security Ordinance.

Enquiries

74. If the Applicant Institution has any enquiries about the Guidelines, please contact our subject officer –

Telephone numbers: 3543 5904

Email address: ftrss@itc.gov.hk

Address: Innovation and Technology Commission

11/F, North Tower

Tseung Kwan O Government Offices 30 Tong Yin Street, Tseung Kwan O

Sai Kung

New Territories

Innovation and Technology Commission September 2025

The Seven Frontier Technology Fields for Frontier Technology Research Support Scheme

Technology Field	General Description
(a) Artificial Intelligence	Make breakthroughs in foundational and cutting-edge theories
	Conduct R&D of dedicated chips
	Develop deep learning frameworks and other platforms for open source algorithms
	• Make innovations in fields such as learning, reasoning and decision-making, images and patterns, voice and video, and natural language recognition and processing
(b) Quantum Information	Conduct R&D of metropolitan-area, intercity, and free-space quantum communication technologies
	• Carry out R&D of universal quantum computer prototype and practical quantum simulators
	Make breakthroughs in technology for quantum precision measurement
(c) Integrated	Conduct R&D of design tools
Circuits	Conduct R&D of key equipment and critical materials such as high purity targets
	Make breakthroughs in advanced processes and special processes such as the insulated gate bipolar transistor (IGBT) and microelectromechanical systems (MEMS)
	Upgrade advanced storage technologies
	Develop silicon carbide, gallium nitride, and other wide-bandgap semiconductors

Techn	ology Field	General Description	
(d) Brain science		Conduct analysis of brain cognition principles	
and brain- inspired research	• Carry out the drawing of the whole brain mesoscopic neural connection atlas		
		• Conduct research on the pathogeneses of major brain diseases and possible interventions	
		• Carry out research on the intelligence development of children and teenagers	
		Conduct R&D of brain-inspired computing and brain- computer interfaces	
(e) Ge		Carry out research on genomics and its applications	
Віс	Biotechnology	 Make innovations in technologies such as genetic cells and genetic breeding, synthetic biology, and biomedicine 	
		• Conduct R&D of new-type vaccines, in vitro diagnostics, and antibody drugs	
		• Develop major and new varieties in such fields as farm crops, livestock, poultry and aquaculture farming, and agricultural micro-organisms	
		• Conduct research on key biosafety and biosecurity technologies	
	inical edicine and ealth	• Carry out basic research on the pathogeneses of cancer, cerebrovascular and cardiovascular diseases, respiratory diseases, and metabolic diseases	
		• Conduct R&D of proactive health intervention technologies and cutting-edge technologies such as regenerative medical techniques, microbiome, and new treatments	
		• Carry out research on key technologies for the prevention and treatment of major communicable diseases and major chronic non-communicable diseases	

Technology Field	General Description
(g) Exploration in Deep Space, Deep Earth, Deep Sea and the Polar Regions	 Carry out basic scientific research on the origin and evolution of the universe and seismic tomography Undertake space explorations such as the orbiting of Mars and asteroid roving Conduct R&D of new-generation heavy-lift carrier rockets and reusable space transport systems, equipment for deep earth exploration, crafts for deep sea operations, maintenance, support, and equipment experiments, and stereo observation and monitoring platforms and heavy icebreakers for polar regions Develop the fourth phase of China's lunar exploration programme, the second phase of its marine exploration programme, and the second phase of its polar exploration programme

Framework of the Assessment Criteria for Frontier Technology Research Support Scheme

Criterion	Content	
(a) Talent Component	• The academic achievement, standing and reputation (viz. experience, expertise, award winning achievements and network) of the leading talent and other research team members involved. The following quantitative and qualitative indicators may be applied as appropriate:	
	(i) <u>citation impact</u> , such as total citations, h-index, i10-index, and citations per paper;	
	(ii) no. of high-impact journals and conferences papers, such as no. of publications in top-tier journals (e.g. Nature, Science, Cell, Institute of Electrical and Electronics Engineers (IEEE) Transactions, The Lancet), and no. of conference papers in elite venues (e.g. Conference on Neural Information Processing Systems, Conference on Computer Vision and Pattern Recognition, International Conference on Machine Learning for AI);	
	(iii) research funding and grants, such as total research funding secured, Principal Investigator on major grants (e.g. NIH R01, NSF CAREER, ERC Grants, Wellcome Trust), and industry-sponsored research collaborations;	
	(iv) <u>awards and honours</u> , such as prestigious awards (e.g. Nobel Prize, Fields Medal, Turing Award, Breakthrough Prize), fellowships (e.g. IEEE Fellow, American Association for the Advancement of Science Fellow, Royal Society Fellow), and early-career awards (e.g. Sloan Research Fellowship, Packard Fellowship for Science and Engineering);	

Criterion	Content	
	(v) patents and commercialisation, such as patents filed/granted, no. of start-ups founded, and licensing revenue;	
	(vi) <u>academic influence</u> , such as editorial roles in top journals and Altmetric Attention Score;	
	(vii) collaboration and network strength, such as international co-authorships and centrality in co-authorship networks (measured via tools like Scopus or VOSviewer); and	
	(viii) <u>institutional and societal impact</u> , such as policy influence (e.g. white papers, government advisory roles), media mentions and textbook authorship.	
	• Proportion of research team members recruited internationally	
	• The extent of the engagement (e.g. time commitment) of the leading talent and the research teams in the Project	
	• The sophistication and comprehensiveness of local talent development plans (e.g. how local research personnel, PhD students and post-doctoral researchers can be trained and engaged in the Project and the expected number of the local talents involved)	
(b) Innovation and	• Objectives	
Technology Components and Research Themes	(i) to set out the pain point(s)/strategic technological problems faced by Hong Kong in the concerned frontier technology field(s) being selected for the research and development (R&D) work under FTRSS;	
	(ii) to briefly describe the research gap(s) and how the Project can fill the gap(s) and address the identified pain point(s) to achieve breakthroughs;	

Criterion	Content	
	(iii)	to provide details of the new/novel elements – what is new/novel in the original basic R&D Project, in terms of ideas, concepts, themes, knowledge. technologies, methodologies and/or applications; and
	(iv)	to illustrate the relevant scientific/engineering principle(s) of how the innovation and technology (I&T) work will be carried out.
	• Scop	e of R&D Work
	(i)	shall articulate how the R&D work would be systematically conducted and the specific research areas for generating new knowledge to develop the I&T
	(ii)	shall describe the specific core R&D activities, technology development processes and/or methodologies that are visionary and originality-based;
	(iii)	shall provide details on inter-institutional and cross-sectoral co-operation, if any, including the type(s) and extent of the co-operation, information of the collaborating research institutes, and how synergies in R&D work could be fostered;
	(iv)	shall provide information on the arrangement of intellectual property (IP) rights, including whether the IP benefit-sharing arrangements would provide greater incentive for the Project Team to translate their R&D outcomes;
	(v)	shall provide information if R&D activities involve data collection from parties other than the Project Team such as principal approaches/methodologies used in data collection, and how data privacy and integrity will be ensured; and

Criterion	Content	
	(vi) shall clarify whether there are any regulatory requirements for conducting a user/clinical trial/other experiment if it is proposed as part of the R&D plan.	
	• Project Deliverables	
	(i) shall demonstrate excellence in original breakthrough basic R&D outcomes with the potential to be translated into innovative and marketable solutions/products/services/systems; and	
	(ii) shall describe the expected targets and outcomes of the Project, and how the progress towards achieving them can be tracked and evaluated in concrete and measurable terms.	
	• Technical Challenges/Risks	
	(i) shall articulate the challenges and potential risks in accomplishing the Project objectives and milestones, and detail the measures on how to avert/address them.	
(c) Technical and Management Capabilities of the Parties Involved in the	Applicant Institution, the Project Team and collaborating research institutes (if any) to fully	
Project	• The appropriateness of the overall size of the team, the composition of the team at all levels, and the roles of key Project Team members in the implementation of the Project.	
	• The track records of the Applicant Institution and Project Team in conducting R&D activities and setting up/managing research facilities of similar scale.	

Criterion	Content	
(d) Reasonablenes of the Budge Plan of the Project	 Shall provide a breakdown of the estimated Project expenditure to be incurred throughout the Project Period with sufficient justifications that demonstrate the reasonableness and financial viability of the estimated Project expenditures. Shall list out the level of sponsorship/investment secured from the Applicant Institutions and/or 	
	 Contributors with documentary proofs. Shall articulate how the Research Facility can be operated on a self-financing and sustainable basis in the long run. 	
(e) Overall	• Objectives	
Benefits to the I&T Sector and the Society as Whole	d (1) to set out how the Project would respond to the	
	(ii) to illustrate the extent to which the Project is in the overall interests of the community.	
	• Project Deliverables	
	(i) shall demonstrate the overall benefits of the Project to the I&T sector of Hong Kong, e.g. building Hong Kong as an international talent hub and fostering growth of the I&T ecosystem; and	
	(ii) shall articulate the social contribution of the Project to the local community and/or our country, e.g. R&D results that contribute to the improvement of standard of living of the community, creation of long term and high value added technology based employments, provision of training opportunities to the local graduates/ research personnel, etc.	