Annex D: Guidelines on Funding Private Sector Entities

S/N 1 – (a) Funding to private sector entities conditional on collaboration with public sector performer

1a. **Funding for private sector entities for research projects (of total project budget >$500,000), and test-bedding/demonstration/scale-up projects (of total project budget >$2M), will be conditional on collaboration with a public research performer**

- NEA, as the Implementing Agency (IA), will determine which of the following two categories applies for the Research Innovation and Enterprise (RIE) funding proposed for a private sector entity**.**

Activity	Broad definitions
Research	Refers to work undertaken that is (1) aimed at new findings; (2) based on original, not obvious, concepts and hypotheses; and (3) uncertain about the final outcome *[References the OECD's Frascati Manual (2015) definition for R&D]*
Test-bedding/ demonstration/scale-up	Includes work undertaken to (1) test existing knowledge/capabilities in a laboratory/simulated environment before it can be integrated into an operational system, (2) validate and/or verify such knowledge/capabilities as part of a proof-of-concept, or (3) build on such knowledge/capabilities for application on a larger scale.

i. As RIE funding should be directed at supporting public RIE ecosystem growth, the applicant should provide strong justification for funding research activities undertaken primarily by private sector entities.

ii. For research projects, the condition will apply for projects with a total budget of > $500,000 to ensure that public research performers are involved in such research projects for capability transfer, especially in research activities.

iii. For *test*-bedding*/demonstration/scale-up* activities, the condition will apply for projects with a total budget of >$2M. In general, RIE funding for test-bedding/demonstration/scale-up activities should be focused on the deployment and/or commercialisation of public sector-developed capabilities. RIE funding should not be used for test-bedding or deployment of off-the-shelf solutions, unless there is clear justification of its benefit at the national or RIE ecosystem level, e.g. would spur widespread/ national S&T adoption in line with RIE objectives, such as first use of a novel technology that could result in strong economic outcomes (e.g. significant cost savings) or drive widespread industry adoption that would raise the sector's competitive advantage.

iv. For projects up to the $500,000 or $2M thresholds for research and test-bedding/demonstration/scale-up activities respectively, while no conditions will be imposed on such projects, the applicant should tap on, and involve public research performers in such projects as far as possible to build skilled researcher pool.

S/N 1 – (b) Ensuring true collaborations with public research performers

1b. For both research and test-bedding/demonstration/scale-up projects, collaborations with public research performers should be true partnerships

- These collaborations should translate into new knowledge acquired by the RIE ecosystem and/or growth in local ability to build on, scale up, or otherwise modify the resultant capability/system, i.e. it is not sufficient to train individuals/government agency teams to be smart users.

- NEA may support private sector applicants in identifying and linking up with suitable public research partners, e.g. IHLs (and the respective Innovation and Enterprise Offices (IEO) and Centres of Innovation), A*STAR, and the CREATE entities.

S/N 1 – (c) Waiver from condition of collaboration with public research performers

1c. If there are compelling reasons that preclude collaborations with public research performers, Applicants will need to provide NEA with the following information for assessment:

i. The basis for the deviation (e.g. national security/confidentiality issues)

ii. How RIE funding of the project will still accrue benefits to the public RIE ecosystem even without collaboration with public research performers

- This may include new knowledge acquired by the RIE ecosystem, and/or growth in local ability to build on, scale up, or otherwise modify the resultant capability/system (i.e. goes beyond training individuals/in-house government agency teams to become smart users).

- Could be demonstrated through meaningful KPIs with appropriately ambitious targets, e.g. no. of Research Scientists and Engineers (RSEs) hired, no. of locals trained, no. of collaboration projects with local companies, that would result in a local manpower pool that can build on, scale up or modify the capability (see preceding point)

iii. The plan for mitigating the challenges that prevent collaboration with public research performers

- For example, if the lack of existing capability/expertise in the relevant R&D area of work is the key challenge to involving public research performers in the current project, the applicant should articulate the plan to grow local capability in the public research ecosystem and/or the local RIE ecosystem.

- This will help seed capabilities that NEA can draw on in the future for capability development.

S/N 2 – (a) Prescribed funding support levels

2a. Funding of private entities should be aligned with the support tiers indicated below.

S/N	Type[1]	Max Direct Costs (DC)[2] support
1	All non-Singapore private sector entities (incl. not-for-profits)	30%
2	Large Local Enterprises (LLEs)	30%
3	Singapore SMEs	50%
4	Singapore Start-ups	
5	Singapore Not-for-profits	

S/N 2 – (b) Facilitating assessment of grant applications from private sector entities

2b. Applicants should note the following regarding grant applications:

- Private sector applicants are to provide financial statements/other justifications as per the Additional Declaration Form for Private Sector Entities to determine which enterprise segment the applicants fall into.
- Budget line items should be suitably broken down for detailed analysis/ scrutiny, to ensure that the requested budget is fair and a good use of public monies

S/N 3 – (a) Funding for non-SG entities conditional on STLO appointment

3a. A Singapore Technology Licensing Office (STLO) must be appointed in projects that fund non-SG private sector entities, regardless of whether a public research performer is involved in the project.

- The STLO will help to manage the sponsored foreground IP in Singapore for maximum utility, and also help to provide fair access to SG entities in the public and private sector.
- The STLO will carry out IP management services, including responsibilities and obligations necessary to file, prosecute and/or protect the IP applications, manage and

[1] Definitions of each segment are included in Appendix D.1.

[2] Definitions of Direct Costs (DC) reference those used in the guidelines on overhead support rates are in Appendix D.2. **Indirect costs will not be supported for all private sector entities (i.e. 0% of indirect costs will be provided).**

license the sponsored IP minimally in Singapore (if required, services to manage IP outside of Singapore can be set out in the project agreement).

- Unless explicitly agreed with the owner(s) of the background IP, the STLO will have no rights to manage background IP.
- Appointment of the STLO may be done on a fixed term (e.g. x months).
    - i.e. set out that the STLO has the right to commercialise the sponsored IP on an exclusive basis and the sole right to issue exclusive and non-exclusive licenses of that sponsored IP for the specified term.
    - Thereafter, the IP owner(s) may decide who will take over IP management responsibilities .
- NEA may support private sector entities in identifying and linking up with an appropriate STLO.
    - IHL Innovation and Enterprise Offices (IEOs) and A*STAR may be appointed to take on the role of STLO (a list of potential STLOs is in subsequent paragraphs).
    - If a public research performer is involved, the natural STLO will be the IEO of that public research performer; otherwise, an STLO may be selected based on their area of expertise.
    - NEAs may also identify other public/private sector entities to perform the role of the STLO if deemed more appropriate; this will typically preclude the IP licensing arm of the private sector entity itself, since there could be potential conflict of interest (i.e. the company would have vested interest in not providing fair access to the sponsored IP to other public/private sector entities).
- As a general principle, funding of the STLO should not reduce grant funding to the awarded entity.
    - NEA will work with the relevant STLO to assess the IP management costs, which can be funded directly by NEA, or through the awarded entity (i.e. the entity would receive the STLO funding as part of the grant, and pay the STLO accordingly).

List of potential STLOs

- NEA may consider appointing the Innovation and Enterprise Offices (IEO) within the following IHLs and RIs as STLO, in cases where RIE funding is provided to non-Singapore private sector entities.
    - As there is no definitive list of each of the IEO's strengths, NEA may consider IEOs that had been engaged in the technology area(s) of interest. NEA may also reach out directly to the IEOs to assess if they would be appropriate as the STLO for the project.

- NEA will need to reach out to the relevant IEO to enquire their interest in taking up the role as STLO.
- If necessary, NEA may also identify other public/private sector entities to serve as STLO.

Table: List of IEOs that could potentially serve as STLOs

S/N	**Entity**
1	A*STAR (A*ccelerate)
2	NUS (NUS Industry Liaison Office)
3	NTU (NTUitive)
4	SMU (Office of Research and Tech Transfer)
5	SUTD (T3 office or Technology Transfer & Translation under Office of Partnership, Innovation & Enterprise)
6	SIT (ARIE or Applied Research, Innovation & Enterprise division)
7	Singapore Polytechnic (Department of Technology, Innovation and Enterprise)
8	Ngee Ann Polytechnic (Technology Development and Innovation Office)
9	Nanyang Polytechnic (Centre for Industry & Lifelong Learning, CIL3)
10	Temasek Polytechnic (Research and Technology Development Department)
11	Republic Polytechnic (Office of Technology Development)
12	Institute of Technical Education (Industry-based Training Division, ITE HQ)
13	National Health Innovation Centre

Appendix D.1

Definitions of the different enterprise segments, caa 19 Jul 2021

S/N	Type	Criteria
1	Non-Singapore entities	• <30% local shareholding, determined by the ultimate individual ownership
2	LLEs	• ⩾30% local shareholding; and • More than $100M in annual turnover
3	SMEs	• Have Group Annual Sales Turnover of not more than $100M, or maximum employment of 200 employees • To qualify as an Singapore entity, they must also have at least 30% local shareholding, i.e. local equity held directly or indirectly by Singaporean(s) and/or Singapore Permanent Resident (PR)(s)
4	Start-ups	• Registered for less than 5 years at time of grant application • Has individual ownership of more than 50% at reference year; and • Employs at least 1 worker • To qualify as an Singapore entity, they must also have at least 30% local shareholding
5	Not-for-profits	• Registered as a public Company Limited by guarantee, society or charity trust • Main purpose is to support or engage in activities of public or private interest without any commercial or monetary profit, and are prohibited from distributing monetary residual to their own members • To qualify as an Singapore not-for-profit, the entity must meet all 3 of the following criteria: (1) Registered and physically present in Singapore; (2) Core funding (i.e. excluding competitive grant funding) is derived entirely/mostly from Singapore entities; (3) Managed by a Board, which is at least half appointed by Singapore entities

Appendix D.2

Definition of direct costs

- Direct Costs: Expenses directly attributed to the research/innovation & enterprise (I&E) project (i.e. required to deliver project objectives). Usually covers Expenditure on Manpower (EOM), Equipment (EQP), Other Operating Expenses (OOE) and other relevant direct costs.
    - List of non-fundable Direct Costs are shown below.
- Indirect Costs: Generalised expenses necessary to support the research/I&E project, but usually incurred for common or joint objectives across more than one project [e.g. Host Institutions' (HIs) corporate support for Principal Investigators (PI), Rental, Utilities and Facility Management (RUFM), etc.], and cannot be directly attributed to a particular research/I&E project. In general, the grantor does not manage Indirect Costs funding, i.e. PIs are expected to adhere to their HI's policy of managing such funding.

Table: List of non-fundable costs

Type of Expenses	**Description**
Salaries of Lead PIs / Investigators	Not allowable, to ensure no double-funding of salaries and related costs, as the salaries are already supported from other sources (e.g. faculty salaries are supported separately by the IHL as it is in support of the IHLs' core mission).
Salaries of teaching staff / Teaching substitutes	Not allowable, as this is already being supported from capitation grants.
Undergraduate tuition support	Not allowable, as this should be supported under the respective scholarship grants and bursary schemes, and stipend top-up for existing post-graduate scholarship holders that fall under the Research Scholarship category" (as had been incorporated in the customised Manpower Guidelines for Mgmt of Grants), because such stipends must align with the prevailing rates set by the Ministry of Education.
Salaries of general administrative support staff	Not allowable, as this is an indirect cost.[3]
Costs related to general administration and management	Not allowable, as this is an indirect cost.[3] This includes common office equipment, such as furniture and fittings, office software, photocopiers, scanners and office supplies.

[3] Indirect Costs should be funded from the provided Indirect Costs or from other funding sources.

Type of Expenses	Description
Costs of office or laboratory space	Not allowable, as this is an indirect cost.[3] This includes renovation/outfitting costs, rent, depreciation of buildings and equipment, and related expenditures such as water, electricity, general waste disposal and building/facilities maintenance charges.
Personal productivity tools & communication expenses	Not allowable, unless the use of mobile phones and other form of smart devices were indicated in the methodology for the Research/I&E Project. All other costs under this expense type should be supported from Indirect Costs.
Entertainment	Not allowable, as this is an indirect cost. [3]
Refreshment	Not allowable, unless this is related to a hosted conference or workshop for the Research/I&E Project. All other costs under this expense type should be supported from Indirect Costs.
Audit fees (Internal and external audit) and Legal fees	Not allowable, as this is an indirect cost. [3]
Fines and Penalties	
Professional Membership Fees	
Staff retreat and team-building activities	
Patent Application	Not allowable, as this should be supported from overheads given to I&E Office (IEO). This includes patent application filing, maintenance and other related costs.