

We shape a **safe**, **high quality**, **sustainable** and **friendly** built environment.

Our Ref: BCA 94.22.1 Date: 07 June 2018

> R&I Planning and Management Department Built Environment Research & Innovation Institute

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# **Circular to Professional Institutes / Associations**

Dear Sir / Madam,

### GRANT CALLS FOR CITIES OF TOMORROW (CoT) R&D PROGRAMME

### Background

1. The Building and Construction Authority (BCA) and Housing & Development Board (HDB) have jointly launched the first series of grant calls under the Cities of Tomorrow R&D Programme, a multi-agency effort, led by the Ministry of National Development (MND) on 07 June 2018. The programme is funded under the National Research Foundation (NRF), as part of the Urban Solutions and Sustainability (USS) domain under Research, Innovation and Enterprise 2020 (RIE2020).

### **Eligibility**

- 2. The grant calls are open to all Singapore-based Institute of Higher Learnings (IHLs), public sector agencies and not-for-profit research laboratories, as well as companies and company-affiliated research laboratories/institutions to submit proposals on solutions that meet the objectives of these grant calls.
- 3. The Lead Principal Investigator (PI) who leads the Research must be based in Singapore. Collaboration with foreign organisations and experts in the capacity of Co-Principal Investigator (Co-PI), or as Collaborator is allowed.
- 4. Grant applicants are strongly encouraged to collaborate with industry and development agencies to develop innovative solutions that can address the call objectives and demonstrate strong potential for real-world application within Singapore.

### **Scope of Grant Calls**

- 5. The following are the grant calls topics under the three key research thrusts:
  - a) Vertical 1: Advanced Construction:
    - Technology and Methodology for Advanced 3D Concrete Printing with Reinforcements
    - Innovative Advanced Prefabricated Design Concepts for High-rise Residential Buildings

# b) Vertical 2: Resilient Infrastructure:

- Technologies to Geo-reference and Detect Underground Services and Assets for New Estates
- Automated Solutions and Artificial Intelligence System for Inspection, Diagnosis and Maintenance of External Building Façades
- Lift Monitoring and Diagnostic System
- c) Vertical 4: Greater Sustainability:
  - Phase Change Materials for Effective Indoor Cooling in the Tropics
  - Solutions to Maintain Good Ventilation in Enclosed Spaces with Zero or Very Minimal Energy
  - Co-existence of Roadside Planting and Bio-retention Systems

# **Funding Support**

- 6. Singapore-based IHLs, public sector agencies and not-for-profit hospitals and research laboratories will qualify for up to 100% funding support of approved qualifying direct costs of a project. Private sector companies and company-affiliated research laboratories or institutions will qualify for up to 70% of funding support of the approved direct qualifying costs of a project. Support for indirect costs, in the form of overheads, will only be provided for Singapore-based IHLs and not-for-profit entities. Funding support of 20% of the total qualifying approved direct costs will be allowed. Indirect costs must be specifically provided for in the grant, and approved by the Grantor based on the nature of the research.
- 7. R&D proposals already funded by other government agencies will not be considered. Pls and supporting agencies will need to declare other funding sources as well as participation in other funding initiatives during application. Proposals with similar scope, which are currently under evaluation by other funding initiatives, will not be considered until the results from the other funding initiatives are finalised.

8. Funding awarded cannot be used to support overseas R&D activities. All funding awarded must be used to carry out the research activities in Singapore unless expressly approved by the grantor.

# **Application**

9. The full details of the grant calls and all related documents can be downloaded from the following website:

Vertical 1: www.mnd.gov.sg/citiesoftomorrow/ongoing-grant-calls/v1-advanced-construction

Vertical 2: www.mnd.gov.sg/citiesoftomorrow/ongoing-grant-calls/v2-resilient-infrastructure

Vertical 4: www.mnd.gov.sg/citiesoftomorrow/ongoing-grant-calls/v4-greater-sustainability

10. All proposals must be submitted to **both** <u>cot</u> <u>submission@mailbox.hdb.gov.sg</u> and <u>BCA COT@bca.gov.sg</u> by **19 July 2018**, **2359 hrs**. Late submissions or submissions from individual applicants without endorsement from the Host Institution will not be entertained. It is advised to restrict submissions to 10 MB.

11. For more information, please contact the Secretariat at: cot submission@mailbox.hdb.gov.sg or BCA\_COT@bca.gov.sg.

Thank you.

TAN TIAN CHONG

**DEPUTY MANAGING DIRECTOR** 

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