

Annex A – Waiver of space rental fees for sandboxes

Built Environment Innovation Hub (BEIH)

1. Since its launch in 2023, the Built Environment Innovation Hub (BEIH) at BCA Braddell Campus has been a collaborative space where innovators and progressive companies share, test and refine the latest building technologies and ideas.
2. The facility has been used to testbed and trial more than 170 solutions, of which about 60 are Robotics & Automation (R&A) solutions.
3. To make it easier and less costly for companies to innovate, BCA will be waiving space rental fees for BEIH technology sandboxes for two years from this July.
4. To start, the space rental fee waiver will be offered to teams trialling solutions that improve productivity, such as R&A, as they are the most common type of technology test-bedded at the BEIH. This can be extended to other areas if there is demand for other types of technologies.

How it will work

5. The sandbox is open to local and overseas technological solution providers and BE firms, including those without a physical presence in Singapore. To be eligible, applicants must meet the following criteria:
 - The proposed solution or process must be relevant to the Built Environment sector, with a focus on improving construction productivity.
 - The solution should be at a stage where sandbox testing or demonstration would meaningfully advance its readiness for commercial deployment in Singapore — for instance, solutions that are new-to-market, not yet validated for local conditions, or require adaptation to meet local building codes and requirements.
6. The sandbox space will be open to multiple projects and solutions concurrently. Interested parties may look out for the open call on BCA's website go.gov.sg/beih-sandbox.

Annex B – Innovative Procurement Partnerships (IPPs)

1. Innovation Procurement Partnership (IPP) was announced on 28 February 2025 in MOF's Committee of Supply debate speech.
2. IPP is intended to help businesses especially the smaller or newer firms without a proven track record, participate in Government Procurement (GP) opportunities. Under IPP, the contract is structured into two parts: a pilot phase followed by an option for deployment. If the pilot is successful, the Government is able to award the option for deployment of the successful solution. This benefits both the supplier and the Government by providing more certainty for scaling up innovative solutions, while streamlining the procurement process into a single procurement effort.
3. To make the Innovative Procurement Partnership more accessible to SMEs and start-ups, the Government will also share risks with businesses by waiving the security deposits and liquidated damages by default during the pilot testing phase.
4. Innovative Procurement Partnership is conducted via open sourcing, allowing any business to participate.
5. In this way, not only does the IPP facilitate experimentation, it also provides a clearer deployment pathway for innovative SMEs and startups to scale up their operations and move towards commercial success.
6. JTC has launched its first two IPPs, covering two challenge statements. Together, they drew close to 20 submissions:

Challenge statement	What it addresses	Awarded solution providers
Tapping existing CCTV to assess productivity at infrastructure sites	Applies computer vision to on-site camera footage, so that productivity can be measured automatically,	Vebits AI, Invigilo AI

	without having staff manually review the footage and log the data.	
Automated inspection of covered drains	Uses robotics to inspect covered drains, a task that is time-consuming and can expose workers to confined, hazardous spaces.	MyrLabs

7. In the coming months, JTC will launch more IPP tenders in areas, such as construction inspection robots and remote-controlled tower cranes.

Annex C – Review of Regulations to support Innovation

1. BCA and MOM established a workgroup to review existing regulatory frameworks and safety protocols, identify constraints to R&A adoption, and work pre-emptively to resolve or mitigate regulatory hurdles to enable greater proliferation of Robotics & Automation (R&A) solutions across the BE sector.

Removing Requirement for Operators to be Stationed Within Smart Hoists

2. BCA and MOM have reviewed the first batch of projects deploying smart hoists on construction sites and exempted them from the prevailing Workplace Safety and Health (WSH) requirement to station operators within smart hoists. This will allow companies deploying smart hoists to reap greater cost and manpower savings. To ensure safety, these projects will put in place safeguards, such as interlocks to keep hoist doors secure.
3. MOM and BCA will learn from this first batch of projects to streamline the process further. For instance, agencies may consider whitelisting smart hoist solutions that have proven safety records in future, for pre-approved exemption from the rules.
4. Agencies will continue working together with the industry to streamline rules to facilitate innovation and help companies save time, money and manpower
5. For firms that wish to find out more or request assistance on regulatory reviews, they can visit: <https://www1.bca.gov.sg/growth-and-transformation/productivity/robotics-and-automation>.

Annex D – Integrated Digital Delivery Technology Alliance (IDDTA)

1. The IDDTA is a JTC programme that certifies digital solutions that are tested and proven to work on JTC's projects. To be certified, a vendor's solution must meet JTC's requirements and be able to connect to OPTIMUS, JTC's Connected Data Environment — a shared digital workspace that enables seamless information sharing across different teams throughout the project lifecycle, from the design- to construction-stage.
2. Construction companies looking to digitalise can save time and costs by adopting these proven solutions instead of going through their own trial and error processes. For technology start-ups, they can test and scale their innovations, while benefiting from IDDTA certification as a mark of quality for other prospective customers.
3. This addresses a practical issue observed in earlier projects. When JTC specified the use of new construction technologies, project partners sometimes had difficulty finding technology vendors who could meet JTC's requirements. In some cases, vendors were appointed but could not deliver what was needed after award.
4. IDDTA provides contractors and consultants a list of certified technology partners for JTC projects, reducing trial and error and helping them adopt suitable solutions with greater confidence. For technology providers, JTC's certification provides a reference track record that can strengthen their credibility and visibility beyond JTC and Singapore.
5. The first batch covers three use cases:

Use case	What it does	Solution providers
1. Digital precast and logistics tracking	Tracks precast components and site logistics from fabrication, through delivery, to installation — much like parcel tracking on an e-commerce platform, to more seamlessly coordinate the production of precast components.	a) Capps Solutions Pte Ltd b) LeapThought Asia Pte Ltd c) Novade Solutions Pte Ltd d) Ynomia Ltd
2. 360° “at-grade” reality capture	Builds a periodic, navigable visual record of site conditions at ground level, similar to a street-view service, to support progress, quality, and safety monitoring.	a) Airsquire Pte Ltd b) Cupix Asia Pacific Pte Ltd c) OpenSpace Inc

3. Drone-based reality capture (Site-wide progress and survey monitoring)	Conducts reality capture from the air, covering areas that are difficult to document from the ground focused on site-wide progress, land survey and earthwork measurements	a) PIX4D S.A. b) OpenSpace Inc c) Cupix Asia Pacific Pte Ltd
3. Drone-based reality capture (Quality and defect Inspection)	Conducts reality capture from the air, covering areas that are difficult to document from the ground, focusing on quality and defect inspection	d) Operva AI Pte Ltd e) H3 Zoom Pte Ltd

4. More use cases will be added in due course, including construction robotics solutions.