

MEDIA RELEASE

CONSTRUCTION ITM TO PAVE THE WAY FOR DIGITAL INTEGRATION AND BETTER JOBS

- *Integrated Digital Delivery (IDD) uses cloud and digital technology to integrate stakeholders in the building life cycle management*
- *80,000 trained personnel in DfMA, IDD and green buildings by 2025*
- *Sustained collaboration among industry, union, IHLs and the government to realise ITM vision*

Singapore, 24 October 2017 – Construction involves many parties at different stages of a project, and good coordination is critical in preventing unnecessary reworks along the way. Integrated Digital Delivery (IDD) aims to strengthen such coordination and foster collaboration by connecting all parties through digital information and technology. This was announced by Minister for Social and Family Development and Second Minister for National Development, Mr Desmond Lee at the launch of the Construction ITM on Tuesday at the Expo, Max Atria.

2. Held in conjunction with the opening of the Singapore Construction Productivity Week, Minister Desmond Lee officiated the launch, alongside representatives from various stakeholder groups involved, including

- Mr Lim Ming Yan, President and Group CEO of CapitaLand and the co-chairman of the Future Economy Council (FEC) Built Environment Sub-Committee;
- Mr Zainal Sapari, Executive Secretary of industry union, Building Construction and Timber Industries (BATU) and co-chair of the Construction Productivity and SkillsFuture Tripartite Committee;
- Mr Pek Lian Guan, Executive Director and CEO of Tiong Seng Holding Limited and co-chair of Construction Productivity and SkillsFuture Tripartite Committee; and
- Mr Hugh Lim, Building and Construction Authority (BCA)'s CEO.

Construction ITM

3. The Construction sector is among the 23 sectors which contribute most significantly to Singapore's economy¹ and identified to develop industry transformation maps. The Construction ITM is one of the five sectors under the built environment cluster, which includes the real estate, security, environmental services and landscape sectors. Refer to [Annex A](#) for the list of sectors and clusters identified for transformation.

4. The Construction ITM envisions an advanced and integrated sector with widespread adoption of leading technologies, led by progressive and collaborative firms well-poised to capture business opportunities, and supported by a skilled and competent workforce offering good jobs for Singaporeans. Recognising key global trends which impact the sector such as the digital revolution, rapid urbanisation and climate change, the ITM identifies IDD, Design for Manufacturing and Assembly (DfMA), as well as green building as key transformation areas to address the challenges faced by the sector.

Digital integration through 'The Cloud'

5. IDD, for example, proposes to ride the wave of the digital revolution such that buildings increasingly incorporate smart technologies and construction work processes are digitally integrated. Enabled by Building Information Modelling (BIM), IDD is a new concept that will help to fully integrate processes and stakeholders along the value chain through advanced info-communications technology (ICT) and smart technologies.

6. In short, IDD leverages cloud and digital technology to integrate stakeholders in the building life cycle management. It connects the entire project delivery process from design, fabrication, to assembly on-site, as well as operations and maintenance of buildings when construction has completed. Firms such as WOHA, Greyform, NTU, Kimly, Eastern Pretech, Lendlease, CCDC and Lum Chang, have started using tools like RFID tagging and data analytics to track and automate their project processes. Plans are underway to encourage adoption of shared platforms and standards to fully integrate the parties involved in building projects. Refer to [Annex C](#) for more information about IDD and [Annex A](#) for plans to drive adoption of IDD in the sector.

¹ The built environment sector alone contributes to about 6% of the Gross Domestic Product (GDP)

Better jobs through transformation of sector

7. The transformation of the sector will result in redesigned jobs involving higher skills, more competitive salaries and better work environment to meet the aspirations of Singaporeans. For example, new roles such as production engineers and supervisors overseeing manufacturing of prefabricated concrete walls, and BIM managers have been introduced to the sector, and they work in a more conducive indoor work environment as compared to conventional construction work. The traditional worksite will also be transformed to become more streamlined, with lesser but more highly skilled workers needed to operate smarter machines and tools.

8. By 2025, the ITM targets to have 80,000 personnel trained in DfMA, IDD and green building capabilities. To support workforce needs and aspirations, a Built Environment SkillsFuture Tripartite (BEST) Taskforce has been set up to look at providing more structured internships, and lead in training more new graduates in response to industry feedback to help graduates become more job ready.

Sustained collaboration among industry, unions, IHLs, and the government

9. The development of the Construction ITM involved extensive consultation and engagement with the stakeholders over a year. The continued collaborative and concerted effort by all parties, including industry firms, unions, institutes of higher learning and the government, is crucial for the successful implementation of the ITM to realise the collective vision of the sector.

10. “The Construction ITM is developed by the sector, for the sector. We will continue our close partnership and collaboration with all stakeholder groups in implementing the strategies to drive the sector forward. Through the transformation process, we look forward to seeing greater investment in capability building and more collaboration among firms to capture new business opportunities, and more importantly, for more Singaporeans to join the sector as a more technologically advanced workforce is needed,” said Mr Hugh Lim, BCA CEO.

11. Mr Lim Ming Yan, President and Group CEO of CapitaLand and the co-chairman of the Future Economy Council (FEC) Built Environment Sub-Committee, said, “To shape the future of real estate for Singapore, the ability to leverage cutting edge technologies is critical. It is heartening to see the active and genuine participation of stakeholders at all levels which culminated in the industry and Government co-creating the ITM. This is especially critical as the transformation of our sector can only materialise through tripartite effort and collaboration.

Beyond taking the time out to attend dedicated consultation sessions, some of the trade associations had also taken the initiative to organise talks and seminars with their members to collate and share valuable feedback.”

12. Feedback from the industry will continue to be progressively incorporated into the Construction ITM, as it is a live document that will continue to evolve to keep abreast of how key trends and shifts shape up globally and in Singapore.

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About Building and Construction Authority

The Building and Construction Authority (BCA) of Singapore champions the development of an excellent built environment for Singapore. BCA’s mission is to shape a safe, high quality, sustainable and friendly built environment, as these are four key elements where BCA has a significant influence. In doing so, it aims to differentiate Singapore’s built environment from those of other cities and contribute to a better quality of life for everyone in Singapore. Hence, its vision is to have "a future-ready built environment for Singapore". Together with its education arm, the BCA Academy, BCA works closely with its industry partners to develop skills and expertise that help shape a future-ready built environment for Singapore. For more information, visit www.bca.gov.sg.