

Construction Industry Council

Committee on Productivity

Meeting No. 001/21 of the Committee on Productivity (Com-PRO) was held on 9 March 2021 (Tuesday) at 2:30 pm in the Board Room, 38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon.

Summary Notes of the Com-PRO Meeting No. 001/21:

Agenda Item	Paper	Major Resolutions / Progress Highlights
1.1	CIC/PRO/M/004/20	Confirmation of Minutes of the Previous Meeting Members confirmed the minutes of the Com-PRO Meeting No. 004/20 without any amendment.
1.2	-	Matters Arising from the Previous Meeting Item 4.2 – (Sub-item 2.2): Four revised reports of the research study on “MiC for High-rise Buildings in Hong Kong: Supply Chain Identification, Analyses and Established” were circulated for Members’ approval on 26 February 2021. After deliberation, Members approved all four research reports and agreed to proceed with the final payment. Concerning the data integrity for the “Cost Estimates of MiC Summary Report”, Members agreed to publish three reports only, namely “Practical Guide on MiC Adoption”, “Roadmap for MiC Implementation” and “Market Analysis” on the CIC website. Item 4.6: The Secretariat reported that the DfMA MiMEP Tradeshow 2021 (the Tradeshow) was being held from 2 to 12 March 2021 at the CIC-Zero Carbon Park and through an online platform. Around 3,000 participants attended the Conference and the Webinar Forum of the Tradeshow in person and online. Nearly 90% of the participants had rated the Conference and the Webinar Forum as good and excellent. The overall expenditure for the Tradeshow was within the approved budget (HK\$1.55M). The exhibits will be handed over to the HKIC for educational purpose, while highlights of the Tradeshow will be uploaded to the CIC website for wider promotion on MiMEP.

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		<p>Item 4.3: The Secretariat reported that the Interim Report of the consultancy services for “Driving DfMA Adoption to Enhance Productivity for E&M Works in HK Building Projects” was endorsed by Members. The Secretariat will circulate the draft Guidebook on DfMA for MiMEP for Members’ review once ready.</p>
1.3	-	<p>Proposed Com-PRO’s Key Initiatives The Secretariat presented a progress update on the approved work plan for 2021 and four major initiatives on driving construction productivity enhancement by Com-PRO:</p> <p>(a) Construction Process Re-engineering (CPR) A reference material on recommendations to achieve productivity enhancement for formwork erecting, bar bending and fixing, and concreting is expected to be ready for publication in the mid-2021. In addition, related trade associations under the Registered Specialist Trade Contractors Scheme would be engaged to brainstorm potential strategies for productivity enhancement.</p> <p>(b) Design for Manufacture and Assembly (DfMA) Members of DfMA Alliance will be invited to provide their project information including using the score under the DfMA Scoring Scheme (DSS) and project performance data. It was targeted to retrieve data from around 30 residential building projects. A Guidebook on the MiMEP adoption would be completed in 2021 Q3. While the feasibility study on the platform approach for DfMA was put on hold due to its immaturity, an e-directory covering relevant suppliers within the Greater Bay Area is being developed by the Committee on Construction Business Development (Com-CBD).</p> <p>(c) A.I. & Robotics (AIR) and Facilitating Innovation Adoption The consultancy study on Construction Robot Certification Scheme is targeted to be completed in 2021 Q3. The proposed training framework for construction robots was put on hold until robots are more commonly adopted in the industry. An annual symposium on construction robotics would be held in 2021 Q4 with a business matching, a construction robotics hub for facilitating the adoption of</p>

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		<p>construction robotics is targeted to be ready for launching by end of 2021.</p> <p>(d) Productivity Benchmarking, KPI Setting and Monitoring The trend of construction productivity at both industry level and trade level will be monitored. An interactive dashboard would be established by 2022 Q1 to show the labour productivity.</p> <p>(e) Comments from the Members</p> <p>(i) CPR: The Development Bureau (DEVB) suggested that the CIC could assist in promoting the product certification scheme for steel reinforcing bars when established, and the practical guidelines developed under the CIC-funded research project on the application of concrete maturity method in Hong Kong construction industry (targeted to be ready by 2021 Q4). Members were encouraged to share successful cases on process re-engineering.</p> <p>Members agreed that application of advanced construction materials could be investigated for re-engineering some construction processes (e.g. fibreglass for prefabricated bathrooms had been adopted in Japan). “Fit for purpose” reviews (i.e. review of current specifications and requirements) and facilitation of application of advanced construction technologies should also be carried out for improving the productivity of MEP works.</p> <p>(ii) DfMA: DEVB suggested that a more in-depth study would be required on the enhanced DSS before applying it to the industry. Members suggested expanding the DSS to commercial buildings which may have good potential for adopting DfMA and achieving productivity enhancement. The CIC Executive Director suggested to explore practical DfMA products to be adopted in the private sector.</p> <p>(iii) A.I.R. and Facilitating Innovation Adoption: Members opined that it may be difficult for contractors to apply construction robots due to cost and technical considerations. Their practical</p>

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		<p>applications and commercialisation should be facilitated. DEVB suggested to explore collaboration with Com-BIM on construction digitalisation for productivity enhancement.</p> <p>The Secretariat would take Members' comments into account in preparing the Com-PRO business plan 2022 to be deliberated in the next meeting.</p>
1.4	CIC/PRO/P/001/21 (for approval)	<p>Progress Update on the Consultancy Study for “Establishing a Certificate Scheme for Construction Robots”</p> <p>The Consultant, SGS Hong Kong Limited, updated Members on the progress of the consultancy study. The proposed administrative and technical requirements for certifying construction robots performing welding tasks were presented.</p> <p>Members suggested the Consultant to consider site conditions, safety requirements during setup, and associated algorithms of robots in the assessment standards.</p> <p>The Consultant requested for a 3-month EOT (i.e. to the end of June 2021) with no financial implication for completing the consultancy study due to complexity in compilation of the technical requirements and the need for wider consultation with various industry stakeholders. Members had no adverse comments and approved the EOT request.</p>
1.5	CIC/PRO/P/002/21 (for approval)	<p>Proposed Construction Innovation Expo 2022 and CIC Innovation Award 2022</p> <p>The Secretariat presented a proposal on organising the Construction Innovation Expo (CIExpo) 2022 and the CIC Construction Innovation Award (Innovation Award) 2022, which included an event programme and a project timeline of CIExpo 2022, a proposed organising committee on the CIExpo 2022, and details on the Innovation Award 2022. The total expense for organising the CIExpo 2022 is estimated to be within HK\$23.2 million (including prize money for the Innovation Award). Engagement with potential sponsors and exhibitors would be conducted at an earlier stage compared with CIExpo 2019.</p>

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		After deliberation, Members approved the proposal. This CIExpo 2022 proposal will be submitted to the Executive Committee in March 2021 for endorsement and the Council in April 2021 for final approval.
1.6	-	Any Other Business There was no other business.
1.7		Next Meeting 002/21 The next meeting would be scheduled to be held in June 2021. The Secretariat would inform Members once the meeting details were confirmed.

Remarks: The mentioned papers discussed at the Committee on Productivity Meeting No. 001/21 and/or the full meeting minutes can be made available to Council Members from the CIC Secretariat upon request.