

Construction Industry Council
Committee on Productivity

Meeting No. 004/20 of the Committee on Productivity (Com-PRO) was held on 16 December 2020 (Wednesday) 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. 004/20:

Agenda Item	Paper	Major Resolutions / Progress Highlights
4.1	CIC/PRO/M/003/20	Confirmation of Minutes of the Previous Meeting Members confirmed the minutes of the Com-PRO Meeting No. 003/20 without any amendment.
4.2	-	Matters Arising from the Previous Meeting Item 2.2: The Secretariat reported that a meeting had been held with Prof. Wei PAN and his research team to improve the draft reports on the study on “MiC for High-rise Buildings in Hong Kong: Supply Chain Identification, Analyses and Establishment”. A focus group meeting would be arranged by the research team in December 2020 to obtain advice / input from a few industry experts on improvement of the draft reports, in particular, the “Practical Guide on MiC Adoption”. The Secretariat will seek views and endorsement from Members when the revised draft reports are ready. Item 2.4: The Secretariat reported that the objectives and the expected quality of the research study “Development of an Appraisal Framework for Assessing the DfMA Content for Buildings in Hong Kong” (the Research Study on DfMA Appraisal Framework) had been achieved. 11 Members had endorsed the final report. As such, Members agreed to proceed with the final payment in accordance with the research agreement. Comments from the Development Bureau (DEVB) and the Housing Department would be taken into account in further developing the DfMA Scoring Scheme. Item 3.4: The DfMA x MEP Tradeshow 2021 would be presented under agenda item 4.6.

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		<p>Item 3.5: Members took note of the membership of the Expert Group established for the research project on “Application of Maturity Method for Determination of Early-age Concrete Strength”.</p> <p>Item 3.6: The Secretariat reported that the International Symposium on 5G Technology was held on 9 December 2020 with a total of 1,182 participants from the industry and its business matching event would be held on 16 - 17 December 2020. The overall expenditure of the Symposium was within the approved budget. Over 80% of the participants had rated the Symposium as good or excellent.</p> <p>Update on Webinars: The Secretariat reported that a CIC Research Webinar was held on 19 October 2020 with a total of 629 participants; and a DfMA Webinar with two UK expert speakers and facilitated by Mr Tim HALL was held on 14 December 2020 with a total of 987 participants.</p> <p>Request for Extension of Time (EOT) and Updates on the Consultancy and Research Projects: The Hong Kong Productivity Council requested for an EOT of 4 months for the consultancy study on the development of concrete skip with remote control. The additional time required was for carrying out improvement to the remote control set up and the subsequent testing on site. The Secretariat also recommended to grant an EOT for the advisory service of Mr Tim HALL up to March 2021, for him to arrange one additional webinar and carry out tasks requested by the CIC. Members approved these two EOT requests.</p>
4.3	-	<p>Progress Update on the Consultancy Services for “Driving DfMA Adoption to Enhance Productivity for E&M Works in HK Building Projects”</p> <p>The Consultant, AECOM, presented a summary of their Interim Report, including (a) review on DfMA development in the UK, Singapore and Hong Kong; (b) results of interviews with industry stakeholders and questionnaire survey; and (c) proposed strategies for driving DfMA adoption, viz. (i) raise awareness by education & information; (ii) create demand; (iii) enhance supply chain collaboration and ecosystem; and (iv) build up local capabilities and skills. The proposed structure of the DfMA</p>

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		<p>Guidebook for E&M Works was also presented. Members agreed with the proposed strategies for driving DfMA adoption for E&M works.</p> <p>The Consultant took note of Members' views and gave the following initial comments: (a) DfMA for MEP works should emphasise on standardised design to be achieved in the early design stage; (b) setting suitable KPIs for the project would help to drive DfMA adoption; and (c) a permanent local factory would be driven by demand in the long term. The Secretariat would circulate the Interim Report to Members for review and endorsement.</p> <p><i>[Post-meeting note: 10 Members endorsed the Interim Report as at 11 January 2021.]</i></p>
4.4	CIC/PRO/P/011/20 (for approval)	<p>Application for the CIC R&D Fund – Adaptive Modular Construction Using Semi-Rigid Joints and Economical Corrugated Beam Sections</p> <p>Prof. Siu-lai CHAN presented his research proposal on the captioned subject with a research duration of 24 months at a cost request of HK\$1,500,000 from the CIC R&D Funding.</p> <p>The main objective of the research was to develop a structural analysis approach which takes into account the strength and stiffness of the connections and the corrugated sheets in MiC modules, to achieve an economical design. Members were concerned that the research could not achieve significant cost savings when compared to the overall building cost and the analysis constraints could reduce the flexibility in the building design. The research proposal was not approved.</p>
4.5	CIC/PRO/P/012/20 (for approval)	<p>Proposed Initiatives for Driving DfMA Adoption in the Hong Kong Construction Industry</p> <p>The Secretariat proposed 4 key initiatives for driving DfMA adoption in the Hong Kong construction industry in the next few years, viz. (a) implement a DfMA Scoring Scheme (DSS); (b) enhance DfMA adoption for E&M works; (c) explore the use of a platform-based approach to facilitate DfMA adoption; and (d) provide training on DfMA.</p>

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		<p>The Secretariat presented the framework of an enhanced DSS with trial run results of its adoption in a few projects. DEVB indicated that there is government policy to drive modular integrated construction (MiC), with mandatory adoption for new building works under the Capital Works Programme, and had concern on the need for incentivising DfMA and its impact on MiC adoption. Some Members considered that there are industry and project benefits to drive adoption of DfMA, especially in the private building and E&M sectors. Hence, they agreed to launch the DSS (which embraces the MiC technology) in 2021 Q1 for trial use, collect data for calculating the DSS scores on a number of building projects to benchmark DfMA adoption levels, and obtain related project performance on productivity, safety and waste. Then analyses would be carried out to try to correlate the DSS scores with the associated project performance.</p> <p>DEVB maintained its adverse comment on and non-endorsement of the final report of the Research Study on DfMA Appraisal Framework and the proposed DSS conveyed to the Secretariat via its email dated 18 October 2020. DEVB reiterated the reaching of consensus among Com-PRO members in the half-day “DfMA Forum” held on 7 September 2020 that limited resources should be focused on promoting wider adoption of MiC and the use of modular integrated MEP. DEVB suggested not to focus on promoting the use of other lower level prefabrication technologies in the hierarchy of DfMA.</p> <p>The Secretariat took note of Members’ comments and would collect data for internal reference and analysis as the first step. The analysis results would be presented to Members for review and further discussion when available. After deliberation, Members had no further comments on the other proposed initiatives for driving DfMA adoption.</p>

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4.6	-	<p>Progress Update on the DfMA x MEP Tradeshow 2021</p> <p>The Secretariat presented the progress update on the DfMA x MEP Tradeshow 2021 (the Tradeshow) scheduled on 2 - 12 March 2021 to be held at the CIC-Zero Carbon Park. Members had no comment on the proposed event programme, guests and speakers for the opening ceremony and conference, proposed supporting organisations, and layout plan and exhibits for the Tradeshow.</p> <p>The Secretariat took note of Members’ comments on the key visual. The name “DfMA MiMEP Tradeshow 2021” was agreed by Members. The Secretariat will carry on organising the Tradeshow with the HKFEMC and implement the contingency plan on virtual tradeshow if required.</p>
4.7	-	<p>Any Other Business</p> <p>(i) CIC Construction Innovation Award</p> <p>The Secretariat presented the background of the CIC Construction Innovation Award (Innovation Award), reviewed the awards given in 2015, 2017 and 2019, and sought ideas from Members for the next Innovation Award event to be held in 2022. Members disagreed with the suggestion of renaming the award with an identified title sponsor.</p> <p>(ii) Vote of thanks to Com-PRO Chairperson</p> <p>Since Ir Ringo YU would complete his six-year tenure as a Council Member on 31 January 2021, the CIC Chairman, Mr. CHAN Ka-kui, and the CIC Executive Director, Ir Albert CHENG, expressed their gratitude for Ir YU’s active participation and contributions to the CIC as a Council Member and the Com-PRO Chairperson.</p>
4.8	-	<p>Next Meeting 001/21</p> <p>The next meeting would be held in March 2021. The Secretariat would inform Members once the meeting details were confirmed.</p>

Remarks: The mentioned papers discussed at the Committee on Productivity Meeting No. 004/20 and the full minutes can be made available to Council Members by the CIC Secretariat upon request.