

Construction Industry Council

Committee on Building Information Modelling

Meeting No. 003/22 of the Committee on Building Information Modelling (Com-BIM) was held on Tuesday, 27 September 2022 at 2:30pm at Board Room, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong.

Summary Notes of the Com-BIM Meeting No. 003/22:

Agenda Item	Paper	Major Resolutions/ Progress Highlights
3.1	CIC/BIM/M/002/22	Confirmation of Minutes of the Previous Meeting Members confirmed the Minutes of the meeting held on 15 June 2022.
3.2	CIC/BIM/M/002/22	Matters Arising from the Previous Meeting Members received the progress report on matters arising from the previous meeting, circulated on 20 September 2022 with no further comments. Regarding item 2.5 on the progress of the Construction Digitalisation Roadmap, Mr. FUNG Chi-yiu updated Members that the Hong Kong Construction Association (HKCA) encouraged large companies to conduct in-house trainings on BIM personnel. The HKCA Secretariat was also liaising with the Construction Industry Council (CIC) to set up group classes for the HKCA in training BIM personnel and to explore ways to simplify the relevant accreditation process.
3.3	CIC/BIM/P/022/22 (for approval)	Applications for the CIC R&D Fund Prof. Jack CHENG and Ms. Rosana WONG declared interest on this item as they were among the applicants of the CIC R&D Fund. Ir Antonio CHAN also declared interest as his

		<p>company was associated with one of the applicants of the research proposal.</p> <p>A presentation session on the research proposals applications was organised to Members on 22 September 2022.</p> <p>Upon deliberations, Members approved the following three research proposal applications if the respective condition(s) was (were) met:</p> <p>(a) <u>Automated BIM-based Clash-free Rebar Design for Reinforced Concrete Components with Extended Types and Irregular Shapes</u> This research proposal application was approved based on the conditions that the research could deliver clash-free rebar designs and the disclosure of the optimisation methodology.</p> <p>(b) <u>Automatic Generation of Bill of Quantities from BIM Drainage Network in accordance with Standard Method Measurement for Civil Engineering Works</u> This research proposal application was approved based on the condition that openBIM environment could be adopted.</p> <p>(c) <u>Assessing KPI for BIM: The Development of New Auditing Platform for CDE</u> This research proposal application was approved based on the conditions that 100% project cost could be funded by the CIC, and the intellectual property right would solely be on the CIC, and an auditing platform for both submission and auditing could be developed.</p> <p>Members disapproved the following research proposal applications:</p> <p>(a) <u>Developing an Aerial Thermography-based BIM Platform for Automatic Building Energy Performance Calibration and Thermal Defect Management</u> Members were concerned about the accuracy of the product and opined that similar products were available in the market and thus, the research value was low. Majority of</p>
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		<p>Members did not recommend this research proposal application.</p> <p>(b) <u>AI-based automated segmentation of 3D point-clouds for classification of underground piping facilities</u> Members agreed not recommending this research proposal application.</p> <p>(c) <u>Digital Twin-enabled Smart BIM for Fit-out Construction in Hong Kong</u> Members agreed not recommending this research proposal application.</p>
3.4	CIC/BIM/P/023/22 (for approval)	<p>Assignment Brief and Project Plan for Provision of Supply and Installation of LED Immersive Cave Automatic Virtual Environment (CAVE) for the Construction Industry Council</p> <p>Ir Dr. George WONG, Senior Manager-Industry Development, briefed Members the project details of the LED Immersive CAVE (LED CAVE) at the CIC BIM Space, and informed Members that the relevant budget of HK\$3 million was approved by the CIC Council. The LED CAVE would be used for conducting training in different areas including safety, procedures and installation, for reviewing designs with BIM model in 1:1 scale, and for demonstrating as a control center in monitoring construction sites.</p> <p>Members suggested to optimise the utilisation rate by adopting a similar operation model with the CIC-Zero Carbon Park which allows commercial companies to use the facilities with rental fees, the CIC would explore the feasibility.</p> <p>Ir Thomas HO, CIC Chairman emphasised that the content of the LED CAVE was crucial and hoped Members, such as Ms. Rosana WONG and Mr. FUNG Chi-yiu, could contribute the BIM models. The CIC would collect BIM models from public clients and contractors. Members suggested the CIC to consider maximising the height of the LED CAVE so as to</p>

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		<p>avoid distortion of different BIM models and enhance the scope of software on how to interface with different BIM models respectively.</p> <p>Upon deliberations, Members approved in principle the assignment brief and project plan for provision of supply and installation of the LED CAVE.</p>
3.5	CIC/BIM/P/024/22 (for approval)	<p>CIC Beginner’s Guide on Construction Digitalisation Summary of various publications in the series of the CIC Beginner’s Guide on Construction Digitalisation is as follows:</p> <p>(a) <u>“CIC Beginner’s Guide on Construction Digitalisation – Adoption of BIM in Small and Medium Enterprises (SMEs)”</u> It was designed to facilitate SMEs to start adopting BIM, including the hardware and software required and the training courses to attend etc.</p> <p>(b) <u>“CIC Beginner’s Guide on Construction Digitalisation – Adoption of Common Data Environment (CDE)”</u> It was targeting on project clients, lead consultants and contractors, on the selection of CDE.</p> <p>(c) <u>“CIC BIM Beginner’s Guide on Construction Digitalisation – Digital Platform for Construction Work Management”</u> It was focusing on the smart site monitoring technologies and products on site operation available in the market, including safety, progress and situation, for proper selection of the digital platform.</p> <p>Ar. Prof. Ada FUNG and Ir Thomas HO opined that it would be more effective and powerful to publish the abovementioned three CIC Beginner’s Guides in one go, and organise a</p>

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		<p>launching webinar. Ir Thomas HO supplemented that the CIC could develop a promotional plan for encouraging SMEs to use the “CIC Beginner’s Guide on Construction Digitalisation – Adoption of BIM in SMEs” and making good use of the Construction Innovation and Technology Fund.</p> <p>Upon deliberations, Members approved in principle the issuance of the “CIC Beginner’s Guide on Construction Digitalisation – Adoption of CDE”.</p> <p>[Post-meeting note: “CIC BIM Beginner’s Guide on Construction Digitalisation – Digital Platform for Construction Work Management” was renamed to “CIC BIM Beginner’s Guide on Construction Digitalisation –Smart Site Digital Platform”]</p>
3.6	CIC/BIM/P/025/22 (for information)	<p>Summary Notes of a Separate Meeting to Boost the Supply of BIM Personnel</p> <p>Ir Dr. George WONG briefed Members on the key points raised during the separate meeting to boost the supply of BIM personnel held on 7 September 2022. A new Task Force would be formed to develop and target to publish a white paper/ action plan on BIM personnel by the end of 2022.</p>
3.7	CIC/BIM/P/026/22 (for information)	<p>Update on Progress Reports</p> <p>Members took note of the progress updates on the BIM Certification and Accreditation Schemes and the key events by the Construction Digitalisation Department in the coming months.</p>
3.8	CIC/BIM/P/027/22 (for information)	<p>Progress of the Construction Digitalisation Roadmap</p> <p>Members took note of the progress updates on the progress of the Construction Digitalisation Roadmap.</p>

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		<p>Ar. Prof. Ada FUNG asked for the updates on the area of smart asset/ facility management. Ir Dr. George WONG responded that webinars would be organised to share the good practises in the industry, followed by a publication of Beginner’s Guide in the next year.</p>
3.9	*CIC/BIM/P/028/22* (for information)	<p>★Progress of the Task Force on BIM Standards Members took note of the progress of the Task Force on BIM Standards (TF-BS).</p> <p>Mr. Alfred WONG pointed out the term “Harmonisation” was intended to be used only for the “DEVB BIM Harmonisation Guidelines for Works Departments”, and opined that it might be inappropriate for the term “Harmonisation 2.0” to be used by the CIC as a generic term, especially when it comes to the issues related to the private sector. Ar. Prof. Ada FUNG suggested to use the term “Digital Hong Kong Harmonisation” as a substitute. The CIC Secretariat would discuss with the TF-BS on the naming.</p>
3.10	*CIC/BIM/P/029/22* (for information)	<p>★Progress of the Task Force on BIM Training Members took note of the progress of the Task Force on BIM Training.</p> <p>Ir Dr. George WONG supplemented that the next meeting of the Task Group on BIM-enabled Modern Construction Training for Higher Education would be held in mid-October 2022.</p>
3.11	*CIC/BIM/P/030/22* (for information)	<p>★Progress of the Task Force on BIM Submissions to the Buildings Department Members took note of the progress of the Task Force on BIM Submissions to the Buildings Department.</p> <p>The formation of the Task Force on Development of BIM-related Digital Solutions (TF-DBDS) was approved by the Com-BIM through circulation on 5 August 2022 (see Annex).</p>

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		Mr. Alex HO supplemented that the first meeting of the TF-BDBS was held on 31 August 2022, and the TF-BDBS was identifying and prioritising a list of BIM-related digital solutions for development and adoption by the industry.
3.12		Any Other Business No other business was raised in the meeting.

Remarks: The mentioned papers discussed at the Committee on Building Information Modelling and the full meeting minutes can be made available to Council Members from the CIC Secretariat upon request.

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Task Force on Development of BIM-related Digital Solutions

Terms of Reference

1. To identify and prioritise a list of BIM-related digital solutions, including but not limited to plugins for BIM authoring tools, for development and adoption by the industry.
2. To monitor the development of identified digital solutions, and ensure their quality and value fit for the industry needs.
3. To identify pilot projects for the trial of the digital solutions, and enhance the digital solutions as necessary before launching to the industry.
4. To support the use and promotion of the digital solutions to the industry.
5. The Task Force shall have a term of 18 months starting from the first meeting.

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Task Force on Development of BIM-related Digital Solutions

Membership List

	Name	Organisation	Category
1.	Alex HO (Chairperson)	Assistant Director-Industry Development, Construction Industry Council	CIC
2.	Boris YIU	Works Branch, Development Bureau	Government
3.	Wendy CHEN [#]	Planning and Lands Branch, Development Bureau	Government
4.	Eric POON	Urban Renewal Authority	Employer
5.	YIP Yin-yung	Representative from The Real Estate Developer Association of Hong Kong	Employer
6.	Aaron CHAN	P&T Group	Architectural Consultant
7.	Clement CHUNG	Ove Arup & Partners Hong Kong Ltd.	Engineering Consultant
8.	Katherine SHUM	Rider Levett Bucknall Limited	QS Consultant
9.	(To be confirmed)*	(To be confirmed)*	Contractor
10.	Rosana WONG	Yau Lee Construction Company Limited	Contractor

Remarks:

- [#]Representative is changed from Jenny CHOI to Wendy CHEN.
- *Mr FUNG Chi-yiu of Hip Hing Construction Company declined to join the Task Force. One representative from the contractor is to be confirmed.
- Relevant government departments and regulators will be invited to join the Task Force as and when required.