Construction Industry Council

Committee on Building Information Modelling and Construction Digitalisation

Meeting No. 002/24 of the Committee on Building Information Modelling and Construction Digitalisation (Com-BIM & CD) was held on Tuesday, 2 July 2024 at 2:30pm at Board Room, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong and through web meeting.

Present :	Jack CHENG Chin-pang Aaron CHAN Wing-kai* HUNG, Sing-yeung Ringo LEUNG Kam-wing Samson PUNG Chun-nok* Stanley TO Kwong-cheuk Michael WONG Kin Neil WONG Man-kai Ole WONG Ming-yan* Kevin WONG Sai-choi Rosana WONG Wai-man YIP Yin-yung* Andy YU Man-kit Frankie FUNG Yiu-man*	(JCCp) (WKCn) (HSY) (Rkw) (SnP) (STO) (MkW) (NeW) (OWMY) (KWg) (RnWg) (YYY) (AYu) (FFg)	Principal Assistant Secretary (Project Capability and Strategy), Development Bureau
	Alan TANG Kai-yan	(ATKY)	Principal Assistant Secretary (Works) 3, Development Bureau
	Karen CHEUNG Yuk- ching*	(KCyc)	Assistant Director/ New Buildings 1, Buildings Department
In Attendance:	Andy CHAN Lai-chun*	(AClc)	Assistant Secretary (Project Capability and Strategy) 6, Development Bureau
	Thomas HO On-sing	(TH)	CIC Chairman
	Albert CHENG Ting-ning Alex HO	(CTN) (AHKK)	Executive Director Director – Industry Development

CIC/BIM/M/002/24

	Chris LAU*	(CLu)	General Manager –
			Finance &
			Procurement
	George WONG	(GWCk)	Senior Manager –
		,	Industry Development
	Ron NG	(RNCw)	Principal – School of
		`	Professional
			Development in
			Construction (Acting)
	Eros LAM*	(ELLT)	Manager –
		`	Management Support
	Greg CHAN	(GgC)	Manager – Industry
	-	/	Development
	Ion CHAN*	(InSC)	Manager – Building
			Information Modelling
	Sunny CHOI*	(SLC)	Manager – Industry
			Development
	Lok FUNG*	(LF)	Manager – Industry
			Development
	Lawrence LEUNG	(LLTY)	Manager – Industry
			Development
	Ella POON*	(EPn)	Manager – Industry
			Development
	Kacy CHONG	(KC)	Assistant Manager –
			Industry Development
	Rebecca LEE	(RbL)	Officer II – Industry
			Development
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Apologies	: Wilson LU	(WnL)	
	Kelvin WONG Ka-wo	(KWKw)	

Remarks: *represents the attendee who attended the meeting through video conference (Microsoft Teams).

MINUTES

Action

JCCp welcomed TH, Chairman of the CIC and all Members to attend the meeting.

JCCp extended a warm welcome to the new Members, namely Mr. HUNG, Sing-yeung, Ir Ringo LEUNG Kam-wing, Prof. Wilson LU, Mr. Stanley TO Kwong-cheuk, Sr Michael WONG Kin, Ir Neil WONG Man-kai, Mr. Andy YU Man-kit and Mr. Frankie FUNG Yiu-man, who

joined the Com-BIM & CD since May 2024.

JCCp reminded Members to declare conflict of interest, if any. No conflict of interest was registered.

2.1 Confirmation of Minutes of the Previous Meeting

Members took note of Paper CIC/BIM/M/001/24 and confirmed the Minutes of Meeting No. 001/24 of the Com-BIM & CD held on Tuesday, 26 March 2024.

2.2 Matters Arising from the Previous Meeting

Members received the progress report on matters arising from the previous meeting circulated on 25 June 2024 with no further comments.

Item 1.3 Enhancement of the Assessment Mechanism and Procedures of the CIC Research and Technology Development (R&D) Fund

Members would be invited to join the second batch of the "Pool of Experts" for formation of Assessment Panel for the CIC R&D Fund.

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(CTN joined the meeting at 2:43pm)

2.3 Proposed New Membership, Terms of Reference and Terms of Office for the Task Force on BIM Personnel Development

Members took note of Paper CIC/BIM/P/013/24.

GWCk briefed Members on the proposed new membership, terms of reference and terms of office for the Task Force on BIM Personnel Development (TF-BPD).

JCCp opined that it would be necessary for extending the terms of office for the TF-BPD to review the statistics on supply and demand of BIM personnel in Hong Kong and update the CIC White Paper on BIM Personnel Development in Hong Kong (the "White Paper") in 2025.

Members approved the Proposed New Membership, Terms of Reference and Terms of Office for the Task Force on BIM Personnel Development.

(CLu joined the meeting at 2:51pm)

2.4 2025 Business Plan

Members took note of Paper CIC/BIM/P/014/24 for endorsement.

JCCp welcomed CLu from the Department of Finance & Procurement of the CIC to attend the meeting on agenda 2.4.

GWCk briefed Members on the progress of the 2024 Business Plan, the summary of the 2025 Business Plan and the proposed 2025 Major KPIs of the Com-BIM & CD.

JCCp opined that the use of Building Information Modelling (BIM) should be fully integrated into the entire construction industry. He emphasised that BIM training for practitioners is essential. General short courses could be organised for practitioners to enhance their familiarity with BIM applications. He proposed organising physical or hybrid events to enhance interactions among practitioners from different organisations.

Apart from routine work and business, CTN emphasised that the CIC and the stakeholders should pay attention to the target of "Roadmap on Adoption of BIM for Building Plan Preparation and Submission" by the Development Bureau (DEVB), to mandate submission of BIM model and BIM-generated building plans for approval by 2029.

TF-BSBD Secretariat

He opined that the application of digital technologies transformed rapidly in recent years, which reshaped the construction industry by increasing efficiency, safety and productivity.

Rkw expressed clients' concern on the timeline on mandating the submission of BIM model and BIM-generated building plans. He also mentioned that there was a lack of manpower in engineering discipline to create and manage BIM models in the industry.

HSY opined that the cost of using BIM was the main concern of subcontractors. He suggested the CIC to offer fundings for attracting subcontractors to use BIM.

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KCyc mentioned that the Buildings Department (BD) had been encouraging the industry to gear up themselves to using BIM models and BIM-generated building plans for submissions. The BD had engaged consultants to collect industry readiness in using BIM for submissions.

CTN commented that the timeline of the BD to mandate submission of BIM model and BIM-generated building plans for approval by 2029 would motivate the industry to use BIM.

ATKY supplemented that the "Roadmap on Adoption of BIM for Building Plan Preparation and Submission" had been carried out in phases. The first milestone was achieved with the use of BIM for the building plans preparation and submission to the BD by the Mass Transit Railway Corporation (MTR), The Hong Kong Housing Society (HKHS) and The Urban Renewal Authority (URA) in 2024. It was targeted that large residential projects would be required to adopt BIM for their submissions in 2026.

He also opined that the CIC should conduct a survey to review the current situation of BIM adoption in the industry, including small and medium enterprises (SMEs) / subcontractors, and focus more on the quality of BIM models. CIC might promote the use of openBIM which would benefit the use of Common Data Environment (CDE) for collaboration among project team members in the industry. He commented that the survey with a view to update the White Paper should be conducted as soon as possible. The survey might also cover the questions to be raised later in the technology adoption survey. CIC was requested to send the questions in the survey to DEVB for review in advance before carrying out the survey.

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He informed Members that the Lands Department developed an Underground Utility Information System (UUIS) in the form of Geographic Information System (GIS). Seventy percent of Underground Utility data had been uploaded to the system to be launched by the end of 2024.

KWg opined that the 2025 Major KPIs of the Com-BIM & CD might focus more on digitalisation. There was a need to promote and populate digitalisation and automation in the industry. Frontline practitioners could be trained to view and use BIM models.

AHKK emphasised the importance of elevating practitioners' data and digital literacy when utilising Artificial Intelligence (AI) by offering training through self-study online resources or handy reference materials. Additionally, he pointed out a recent trend of creating Revit-compatible solutions by large mainland companies. It would be valuable to pilot these solutions on selected projects and provide feedback on the solutions to the mainland companies for further improvement.

TH highlighted the industry concerns regarding the insufficient number

of skilled and competent BIM practitioners. The CIC should prioritise developing a roadmap and creating practical courses tailored to practitioners to enhance their knowledge of buildability. Moreover, he recommended the CIC to conduct industry survey immediately. He also mentioned that the Master class on AI and Large Language Model (LLM) would be launched soon to train up practitioners for meeting the demand of the market.

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AHKK supplemented that the CIC developed the "Reference Material of BIM Harmonisation for Digital Hong Kong", which aims to identify appropriate additional information requirements of BIM models for reference by the industry (both public and private sectors), and in support of Government's initiative of developing Common Spatial Data Infrastructure (CSDI) and Smart City and to satisfy the use cases identified in the Report on 3D Spatial and BIM Data Use Case Requirements of the Hong Kong Construction Industry published by the CIC in 2021. A seminar will be arranged in July to introduce the reference materials to the industry.

FFg mentioned that the DEVB had established a steering committee for coordinating the development of high productivity construction methods such as Modular Integrated Construction (MiC). The steering committee had arranged meetings with stakeholders to informally discuss the definition of MultiTrade Integrated Mechanical, Electrical and Plumbing (MiMEP) and the ways to promote the use of MiMEP by BIM adoption. The adoption of MiMEP would be one of the agenda items in the upcoming meetings of the steering committee.

Apart from the discussed items, JCCp supplemented that the CIC should also focus on the following initiatives:

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- To enhance the quality of BIM personnel such as CCBMs/ CCBCs.
- To arrange webinars with focuses on specific themes such as openBIM, CDE, etc.
- To arrange the itinerary of overseas study tours with focuses on specific topics such as openBIM, openCDE, etc.

Upon deliberations, Members endorsed the 2025 Business Plan and the proposed 2025 Major KPIs.

(TH left the meeting at 4:03pm) (CLu left the meeting at 4:13pm)

2.5 Updates on Construction Safety

Members took note of Paper CIC/BIM/P/015/24.

GWCk briefed Members on the activities or involvement for the Year of Safety initiatives by the CIC to enhance construction safety. He also highlighted the "Life First Safety Campaign 2024" to Members.

2.6 Report on the progress of KPIs of the Committee on Building Information Modelling and Construction Digitalisation

Members took note of Paper CIC/BIM/P/016/24.

GWCk briefed Members on the key points of the progress report of 2024 Major KPIs of the Com-BIM & CD and 2024 actual expenditure versus approved budget.

2.7 Progress Updates of the Construction Digitalisation Department (including key events/ projects in coming months)

Members took note of Paper CIC/BIM/P/017/24.

GWCk briefed Members on the progress updates of the Construction Digitalisation Department including key events/ projects in coming months.

GWCk highlighted the "CIC Global Construction Digitalisation Forum and Exhibition (GCDFE) 2024" to be held from 29 to 30 October 2024 at the Hong Kong Convention and Exhibition Centre (HKCEC) and encouraged Members to participate in the event.

GWCk also introduced the new "Centre for Future Construction (CFC)" located at HKIC Kowloon Campus to Members. The construction project of CFC started on 21 June 2024. The CFC is CIC's strategic project to support the construction industry to boost manpower development in using innovation and technology for improving construction processes.

RnWg expressed concern that naming the "Centre for Future Construction" (CFC) might convey the wrong impression to the public, suggesting that the CIC would exclusively showcase futuristic construction and digitalisation technologies. GWCk appreciated the feedback and agreed to forwarding it to the CFC Steering Committee for further consideration.

CFC Steering Committee Secretariat (CTN left the meeting at 4:26pm) (OWMY left the meeting at 4:31pm)

2.8 Progress of the Task Force on BIM Training

Members took note of Paper CIC/BIM/P/018/24.

LLTY briefed Members on the progress of the Task Force on BIM Training (TF-BT).

2.9 Progress Report on the BIM Certification and Accreditation Schemes

Members took note of Paper CIC/BIM/P/019/24.

GWCk briefed Members on the progress report on the BIM Certification and Accreditation Schemes.

(ATKY left the meeting at 4:31pm)

2.10 Progress of the Task Force on BIM Standards

Members took note of Paper CIC/BIM/P/020/24.

WKCn briefed Members on the progress of the Task Force on BIM Standards (TF-BS).

JCCp recommended the TF-BS to consider the feasibility on arranging a launching ceremony for the newly launched standards/ guidelines such as the "Reference Material of BIM Harmonisation for Digital Hong Kong".

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JCCp expressed his concern on the timeliness and the implementation status of the related publications of CIC BIM Standards. He suggested the Members of the TF-BS to review the necessity on updating the publications, as well as the BIM Dictionary. It was recommended to add some new terms, such as Smart Site Safety System (4S), Large Language Model (LLM), Generative Artificial Intelligence, etc., in the BIM Dictionary.

TF-BS Secretariat

2.11 Any Other Business

(a) Review on the Construction Digitalisation Roadmap

GWCk updated Members on the review of the Construction Digitalisation Roadmap.

(b) Proposal on energising the Digital Twin Hub

GWCk briefed Members on the tentative event schedule to be held at the CIC Digital Twin Hub (DT Hub) in 2024 and encouraged Members to share the post-event promotion of the DT Hub via LinkedIn.

MkW introduced the proposed BIM Award to be organised by the Hong Kong Institute of Civil and Building Information Management (HKICBIM) in early 2025 to Members. GWCk welcomed MkW to consider organising the event at the new CFC in 2025.

(c) <u>Proposal on Digitalisation Study Tour to Singapore</u>

GWCk briefed Members on the proposal on Digitalisation Study Tour to Singapore (the "Study Tour") tentatively to be scheduled from 3 to 6 September 2024.

JCCp encouraged Members to join the Study Tour and share their comments and ideas towards the proposed agenda. He also suggested that the Study Tour could focus on both BIM and digitalisation.

Members agreed with the proposal and suggested to arrange site visits during the Study Tour.

KCyc recommended to meet with the Engineer of Corenet X and its related architecture firms to obtain a full picture for the experience gained from the submission of building plans.

Upon deliberation, Members agreed with the proposal on the Study Tour. The CIC would extend the invitation to the members of the Task Force on BIM Submissions to the Buildings Department to join the delegation.

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[Post-meeting notes: The Com-BIM & CD Paper No. CIC/BIM/P/021/24 on "Proposal on Digitalisation Study Tour to Singapore in September 2024" was circulated to Members on 11 July 2024. Members were also invited to express their interests to

join the Study Tour.]

(ATKY left the meeting at 4:50pm)

(d) Construction Safety AI chatbot

GWCk introduced to Members the key features of the Construction Safety AI chatbot by LLM. It aimed at taking around three months to develop the chatbot. It was targeted to be launched soon to the public for utilisation by the industry practitioners.

2.12 Date of Next Meeting

The next meeting was scheduled for 16 September 2024 (Monday) at 2:30pm at Board Room, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong.

There being no further business, the meeting was adjourned at 5:20pm.

CIC Secretariat July 2024