

Construction Industry Council

Committee on Building Information Modelling

Meeting No. 002/21 of the Committee on Building Information Modelling (Com-BIM) was held on Tuesday, 29 June 2021 at 2:30pm at the Multi-purpose area, BIM Space, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong and through web meeting.

Present	: Ada FUNG Yin-suen	(AF)	Chairperson
	Antonio CHAN Chi-ming	(ACHAN)	
	Neo CHAN Kang-yuen	(NCKy)	
	Thomas CHAN Tak-yeung	(CTY)	
	Jack CHENG Chin-pang	(JCCp)	
	Donald CHOI Wun-hing*	(DC)	
	Clement CHUNG	(CtCg)	
	CHUNG Kwok-fai*	(CKFi)	
	Ivan FU Chin-shing*	(FI)	
	Francis LEUNG Chi-suen	(FLCs)	
	Billy WONG Chi-pan	(BWCb)	
	Kelvin WONG Ka-wo*	(KWKw)	
	Rosana WONG Wai-man	(RnWg)	
In Attendance	: Marcin KLOCEK	(mK)	Chairperson of Task Group 1 on BIM Specifications
	SO Ching	(CSO)	Co-chairperson of Task Group 2 on BIM Special Conditions of Contract & Services Agreement
	Elvis HUI	(EsH)	Representative of Eric POON
	Mark LAI	(MLAi)	Representative of Tommy TAM
	Richard PANG	(RPg)	Director – Industry Development
	Daniel CHIU	(D1C)	Principal - School of Professional Development in Construction, Hong Kong Institute of Construction (Acting)
	Alex HO	(AHKK)	Senior Manager – Building Information Modelling
	Ron NG	(RNCw)	Manager – Building Information Modelling
	George WONG	(GWck)	Manager – Building Information Modelling

	Shirley LAM	(SHLm)	Assistant Manager – Building Information Modelling
	Kacy CHONG	(KC)	Senior Officer – Building Information Modelling
Apologies	: Eric POON Shun-wing	(EPSW)	
	Tommy TAM Wing-cheung	(WCT)	
	Michael WONG Wai-lun	(MWWL)	
	Rocky POON Lock-kee	(LKP)	Co-chairperson of Task Force on BIM Specifications and Agreement

*Remarks: *attended the meeting through Microsoft Teams*

MINUTES

Action

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

2.1 Confirmation of the Minutes of Meeting No. 001/21 of the Com-BIM

Members took note of the Paper CIC/BIM/M/001/21 and confirmed the Minutes of Meeting No. 001/21 of the Com-BIM held on Tuesday, 30 March 2021.

2.2 Matters Arising from the Previous Meeting

Members received the progress report on matters arising from the Meeting No. 001/21 of the Com-BIM. AHKK gave highlights on major issues. No comment was received.

[Note: The progress report is appended at the Annex.]

2.3 2022 Business Plan

AHKK briefed Members on the Paper CIC/BIM/P/007/21 and gave a presentation on the 2022 business plan. Highlights were as follows:

- (a) In 2021, the Com-BIM had developed a 3-Year Strategic Plan for 1 July 2021 to 30 June 2024 after the brainstorming session held on 17 April 2021. The Strategic Plan targeted to achieve the following

objectives in three years:

- (i) to increase the adoption of BIM by the construction industry;
 - (ii) to train up sufficient practitioners at various levels to support wider BIM adoption in projects;
 - (iii) to increase the skill level of BIM use for both new and advanced users; and
 - (iv) to widen the applications of BIM to cover BIM submissions to BD and Lands Department (LandsD), and throughout the project lifecycle.
- (b) The 2022 business plan and key performance indicators/ deliverables were proposed under five key areas, including (1) Training and Certification, (2) Standards/Guidelines, (3) Promotion and Publicity, (4) Research and Development, and (5) Special Projects.
- (c) The 2022 proposed budget was \$6.69 million.

The key discussions by Members were summarised as follows:

- (a) Facilitating BIM submissions to Buildings Department (BD) and LandsD

AF suggested the Development Bureau (DEVB) to streamline the submission process and encouraged BD to give incentives to encourage the industry to submit BIM models along with the drawings and information generated from them, e.g. shortening the submission approval time, developing automated tools for use by practitioners and regulators to improve efficiency in compliance and checking, etc.

CTY mentioned that LandsD would take the lead in developing a 3D digital underground utilities database. The baseline data and updating mechanism would be established in one to two years. The database would only be opened to specific users with LandsD's permission but not to the general public.

JCCp suggested that the CIC BIM Standards for MEP and the CIC BIM Standards for Underground Utilities should be updated to align with the development work of LandsD when necessary.

AF suggested that the work done made the "Consultancy Services on the 3D and BIM Data Use Requirements of the Construction Industry for the Development of Digital Hong Kong to the HKSAR Government for Construction Industry Council" (Digital HK) would help to promote openBIM/ open data to the industry.

- (b) Development of training course materials

RnWg suggested the CIC to encourage the industry organisations to

develop training materials to suit their own needs.

AF agreed that advanced level training was essential for professionals to learn BIM. The CIC could provide some basic training and collaborate with professional bodies and trade associations (e.g. HKIA, HKIE, HKCA, HKFEMC, etc.) to offer advanced and specific training for their members.

TF-BT

(c) Conduct workshops for clients

AF suggested that training workshops should also be organised for non-governmental organisations (NGOs) who were sizeable asset owners and developers (e.g. Tung Wah Group of Hospitals, Pok Oi Group, Po Leung Kuk, etc.).

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(d) Collaborate with DEVB to identify pilot projects using BIM for e-tendering and share the lessons learnt

CTY mentioned that DEVB intended to have BIM models (with drawings in the BIM models) to replace separate drawings for tendering in delivering the project. The tender documents were planned to be completed in 2021 or early 2022 and pilot projects would be started.

AF commented that the extraction of data or information from the BIM model would be a key step in the whole process of e-tendering, including preparation of Bills of Quantities, tender analysis, etc.

(e) Alignment of Common Data Environment (CDE)

RnWg raised the difficulties for contractors/ developers/ service providers to define CDE.

CTY updated that a steering committee had been formed under DEVB to study the establishment of CDE and alignment of functionalities within different works departments. The CIC would be kept informed of the development.

AF suggested that the CIC should formulate the requirements of CDE and further discuss the matter in a Task Group/ Task Force to be set up under a suitable Committee, also having regard to the fact that CIC BIM Standards – General (Version 2) had already prescribed a host of requirements for CDE beyond the basics of ISO 19650.

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(f) BIM Adoption Survey

AF pointed out that polling questions in webinars and BIM talks could be used to collect feedback from BIM professionals and experts in the absence of a BIM adoption survey in 2021 & 2022, but the information collected may be biased as these would be experienced BIM users. She also suggested to collect the feedback from walk-in

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visitors of BIM Space to cover those novice BIM users. The feedback from the lay public would also be important.

After deliberation, Members endorsed the proposed 2022 business plan and budget of the Com-BIM for onward processing.

(EsH and MLAi attended the meeting at 3:35pm.)

2.4 Progress of the Task Force on BIM Standards

This paper presented the progress of the Task Force on BIM Standards (TF-BS) for Members' information.

JCCp updated Members on the progress of the TF-BS.

AF suggested that the CIC BIM Dictionary should be updated annually. Any comments or feedback on all CIC publications should also be reflected to the CIC for updates and enhancement.

TF-BS

JCCp supplemented that the CIC BIM Dictionary would be reviewed and updated in Q4 of 2021.

Members noted the Paper CIC/BIM/P/008/21 without further comments.

2.5 Progress of the Task Force on BIM Training

This paper presented the progress of the Task Force on BIM Training (TF-BT) for Members' information.

CtCg updated Members on the progress of TF-BT. In regard to the importance of BIM training for students and youngsters, BIM Education Symposium and Student Projects Award were newly proposed to encourage students to learn more about BIM.

AF mentioned that the CIC could develop a framework for training courses for the industry to develop training programmes which suit their own needs in higher education. It would be better if teaching faculties and university students applied BIM throughout their course contents and projects. She recommended more advanced users to take the buildingSMART Professional Certificate – Foundation programme for OpenBIM in Hong Kong offered by the Hong Kong Alliance of Built Asset and Environment Information Management Association (HKABAEIMA).

JCCp suggested that some free openBIM events and webinars could be

promoted to CIC-Certified BIM Managers (CCBMs)/ CIC-Certified BIM Coordinators (CCBCs).

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After deliberation, AF summarised that the CIC had a platform for learning and sharing of known information to promote BIM adoption. The CIC should harvest free products and promote them to the industry.

ACHAN expressed the concerns of people who looked for plug-in software from the market.

AHKK supplemented that plug-ins software were included in the Construction Innovation and Technology Fund (CITF) pre-approved list. Clients could buy these plug-ins with CITF subsidies. Some vendors had provided webinars and workshops for product introduction. Previous webinars are available for replay at the CIC BIM Portal.

AHKK gave a PowerPoint presentation to recap the current landscape of BIM personnel and training. He presented the figures of BIM personnel supply and demand.

After deliberation, AF said that youngsters should learn more about the techniques of integration and collaboration.

Members noted the Paper CIC/BIM/P/009/21 without further comments.

2.6 ★Progress of the Task Force on BIM Specifications and Agreement

This starred paper presented the progress of Task Force on BIM Specifications and Agreement (TF-BSA), including the progress of the Task Group 1 on BIM Specifications (TG1) and Task Group 2 on BIM Special Conditions of Contract & Services Agreement (TG2) for Members' information.

AF updated Members on the progress of TF-BSA.

Members noted the Paper *CIC/BIM/P/010/21* without further comments.

2.7 Progress of the Task Force on BIM Submissions to the Buildings Department

This paper presented the progress of the Task Force on BIM Submissions to the Buildings Department (TF-BSBD) for Members' information.

AF updated Members on the progress of TF-BSBD, also noting that BD

had been arranging separate meetings with professional bodies specialising in BIM in parallel, such as HKIBIM and HKABAEIMA.

Members noted the Paper CIC/BIM/P/011/21 without further comments.

2.8 Progress Reports

This paper presented the progress report on the BIM Certification and Accreditation Schemes, progress updates of the BIM Department's Business Plan 2021 (including key events/ projects in coming months), and ongoing consultancies and research projects under the Com-BIM for Members' information.

AHKK gave a PowerPoint presentation and updated Members on the progress of work done by the BIM Department.

Members noted the Paper CIC/BIM/P/012/21 without further comments.

2.9 Any Other Business

CIC-BIM Network Sharing Session

AF informed Members that CIC-BIM Network sharing session would be held on 10 August 2021 at the CIC-Zero Carbon Park (CIC-ZCP) to share the 3-year Strategic Plan with them and request them to contribute and participate in the actions stated in the 3-year Strategic Plan. She invited Members to join the sharing.

2.10 Date of Next Meeting

The next meeting would be scheduled for Tuesday, 28 September 2021 at 2:30 pm at the Board Room, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong.

All to note

[Post-meeting note: The Com-BIM Meeting is rescheduled to 30 September 2021.]

There being no further business, the meeting was adjourned at 6:15pm.

**CIC Secretariat
July 2021**

Matters Arising from the Meeting No. 001/21 of the Com-BIM

Matters Arising	Action by	Proposed Action/ Progress
<p>1.3 ★Progress of the Task Force on BIM Standards</p> <p>Ada FUNG reminded that the CIC should update the CIC Standards published previously to align them with ISO 19650 requirements.</p> <p>As regards the issue concerning consultation with Fire Services Department for development & formulation of BIM Guide Using BIM in Generation of MEP Digital Drawings for Statutory Submissions, alternative approaches should be explored such as consulting MEP consultants and contractors involved in the process.</p>	<p>Task Force on BIM Standards</p> <p>Task Force on BIM Standards</p>	<p>CIC Secretariat will update (1) “CIC BIM Standards for Mechanical, Electrical and Plumbing”, (2) “CIC BIM Standards for Underground Utilities” and (3) “CIC Production of BIM Object Guide - General Requirements” by Q4 2021.</p> <p>CIC Secretariat and A.C.I.D., the consultant had consulted the Fire Services Department, the Association of Consulting Engineers of Hong Kong (ACEHK) (MEP consultants) and the Hong Kong Federation of Electrical & Mechanical Contractors Limited (HKFEMC) (MEP contractors) on 14 May 2021, 20 April 2021 and 16 March 2021 respectively, during the second round stakeholder engagement period of the Consultancy.</p>
<p>1.4 Progress of the Task Force on BIM Training</p> <p>Alex HO informed Members that the CIC would request the CIC-Certified BIM Managers (CCBMs) and CIC-Certified BIM Coordinators (CCBCs) to take the online video training (with quiz) on the new CIC BIM Standards General (in line with ISO</p>	<p>CIC Secretariat</p>	<p>BIMCAB approved the proposal that all CCBMs and CCBCs must complete this training to meet the associated mandatory CPD hours for their renewal of certification. The accredited course providers had attended a one-day training course at the CIC and were informed that they were required</p>

Matters Arising	Action by	Proposed Action/ Progress
<p>19650), and require the accredited course providers to incorporate the new CIC BIM Standards into their training courses. Ada FUNG suggested that this special online training programme should be formalised with issuance of certificates by CIC.</p> <p>Ada FUNG highlighted that CIC would encourage software vendors to prepare a series of video clips for online training, so that it would relieve their burden of training for trainees' and trainers' benefit. Referring to Annexes A and B of Paper CIC/BIM/P/002/21 showing Course Outlines, she suggested that it would be useful for some online training materials to be developed by CIC and made available for the industry's consumption with a huge population at the contractor and subcontractor levels.</p>	<p>Task Force on BIM Training</p>	<p>to incorporate the new BIM Standards into their training material. A certificate would be issued upon completion of the online training programme.</p> <p>Some free online training materials of commonly used BIM software such as ArchiCAD Training Series by GRAPHISOFT and The Complete Beginners' to Autodesk Revit Architecture by BIMscape had been collected. The CIC Secretariat will continue to collect useful online training materials and discuss with the Task Force on BIM Training on how to effectively disseminate them. Target to disseminate a batch of information in Q3 2021. Commercial online teaching packages would also be listed for ease of reference.</p>
<p>1.5 ★Progress of the Task Force on BIM Specifications and Agreement</p> <p>Ada FUNG suggested LESK Solutions Co. Ltd, the consultant, to list out the controversial issues related to the draft Special Conditions of Contract (SCC) for BIM and BIM Services Agreement for discussion, and give a presentation to the Task Force</p>	<p>Task Force on BIM Specifications and Agreement</p>	<p>The BIM Department notified the CBD Department to coordinate with LESK, the consultant, to review the controversial issues and make a presentation to the Task Force. CBD had scheduled the presentation to the Task Force be held on 8 July 2021 tentatively.</p>

Matters Arising	Action by	Proposed Action/ Progress
and highlight any issues that would require advice from the Task Force.		[Post-meeting note: The Task Force meeting was held on 8 July 2021 and the draft version of SCC for BIM and BIM Services Agreement were endorsed by the Task Force for public consultation. A seminar / webinar will tentatively be held on 27 July 2021 to launch the public consultation.]
<p>1.6 Progress of the Task Force on BIM Submissions to the Buildings Department</p> <p>Kelvin WONG suggested the CIC Secretariat to discuss with the Buildings Department (BD) on possible incentives to attract the industry to make BIM submissions to the BD.</p>	CIC Secretariat	The CIC Secretariat will discuss this issue with BD and other Task Force members at a suitable time in the coming Task Force meeting. The Task Force meeting held on 29 April 2021 mainly focused on reviewing Members' challenges on BIM submissions or statutory plan production by BIM and their proposed workaround solution.
<p>1.8 Any Other Business</p> <p>(a) <u>Green Finance</u> Ivan FU suggested the CIC to explore the application of BIM in relation to the implementation of the Carbon Assessment Tool (CAT). He suggested to start a small pilot project using BIM and CAT to assess the carbon emission level.</p>	CIC Secretariat	An internal meeting between the BIM Department and the Environment and Sustainability (E&S) Department was held on 8 April 2021. The meeting agreed that the pre-tender BIM model could be used to calculate the estimated quantity of materials as input to the CAT for a preliminary assessment of the carbon emission under the project, for option assessment at the design stage. However, in the

Matters Arising	Action by	Proposed Action/ Progress
<p>(b) <u>Survey on Common Data Environment (CDE)</u> Ada FUNG suggested to provide more information and guidance on CDE, for example, the location of the cloud platform, and desirable functionalities offered by CDE.</p>	CIC Secretariat	<p>construction stage the project Architect or Engineer and the Contractor should capture the embodied carbon data for the approved materials delivered and used on site, and upload it to the CAT for assessment of the carbon emission in construction.</p> <p>[Post-meeting note: A follow up meeting was held on 21 June 2021 among BEAM Society Limited (BSL) and BIM Department and E&S Department of the CIC on exploring future collaboration between BIM, CAT and BSL's Assessment Automation System namely 'iBEAM'.]</p> <p>The CIC Secretariat had invited a few vendors to demonstrate how their platform can meet the CDE requirements stipulated in the new CIC BIM Standards - General. It was considered appropriate to see demonstration of more CDEs before developing a practical guideline for selecting CDE.</p>
<p>(c) <u>Change in Membership of the Task Force on BIM Specifications and Agreement</u> Ada FUNG suggested to update the Committee on Construction Business Development (Com-CBD) on the new membership as the Task Force is a joint Task Force under the Com-BIM</p>	CIC Secretariat	CIC Secretariat updated the CBD Department by email on 17 May and 22 June 2021.

Matters Arising	Action by	Proposed Action/ Progress
<p>and the Com-CBD.</p> <p>(d) <u>“BIM-based Rebar Design Optimisation and Prefabrication Automation” Plug-in Software</u></p> <p>Jack Cheng updated Members that further details of identifying pilot MTR projects for the use of the plug-in software developed in the research project supported by the CIC R&D Fund would be discussed in the meeting scheduled on 31 March 2021.</p>	CIC Secretariat	<p>The Secretariat had prepared a R&D Material Transfer Agreement which included statements on the purpose of use, use of material, ownership and intellectual property rights, confidential, warranties/ liabilities etc. The HKUST research team was reviewing the document.</p> <p>Please note that the MTR had expressed to keep this confidential and the CIC agreed not to mention the MTR had a project to try out the R&D product.</p>
<p>(e) <u>CCBM</u></p> <p>Marcin KLOCEK and Jack CHENG quoted an example where a BIM practitioner with many years of working experience could not meet the CCBM entry requirements and suggested the CIC to re-consider the qualification requirements of CCBM. The above suggestion received would be directed to the BIMCAB for discussion.</p>	CIC Secretariat	<p>The issue was tabled for discussion in the meeting of BIMCAB on 26 May 2021. The meeting noted that the entry requirements of the Special Route for CCBM applications was created after the Normal Route and Grandfathering Route. The Special Route was set up for those BIM practitioners who might not be able to fulfill the academic entry requirements but were well recognised by the industry. After vigorous discussion, public presentations on BIM subjects in at least 4 conferences/ symposia as an invited speaker were agreed by BIMCAB as a good indicator of</p>

Matters Arising	Action by	Proposed Action/ Progress
		the industry's recognition of the applicant. The BIMCAB considered no need to revise the entry requirements for certification of BIM Managers under the Special Route.