

Construction Industry Council

Committee on Building Information Modelling

Meeting No. 004/19 of the Committee on Building Information Modelling (Com-BIM) was held on Tuesday, 10 December 2019 at 2:30pm at the Board Room, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong

Present	:	Ada FUNG	(AF)	Chairperson
		Stephen LAI Yuk-fai	(SLI)	Acting Chairperson
		CHUNG Kwok-fai	(CKFi)	
		Kenneth MO Kon-fei	(KM)	
		Thomas CHAN Tak-yeung	(CTY)	
		YU Sai-yen	(SYYu)	
		Kelvin WONG	(KWKw)	Airport Authority Hong Kong (AAHK)
		Bruce LAW	(BLw)	The Association of Architectural Practices (AAP)
		Clement CHUNG	(CtCg)	The Association of Consulting Engineers of Hong Kong (ACEHK)
		Karen CHENG	(KCKl)	Architectural Services Department (ArchSD)
		Clarice YU	(YPM)	Buildings Department (BD)
		Terence LAM Tat-ming	(TmL)	Civil Engineering and Development Department (CEDD)
		Bernard WONG Lap-pong	(LPWg)	Drainage Services Department (DSD)
		Steve CHAN	(CHY)	Electrical and Mechanical Services Department (EMSD)
		Ray CHAN	(RyCn)	Hospital Authority (HA)
		Daniel CHONG Kwok-ming	(DCg)	The Hong Kong Federation of Electrical and Mechanical Contractors Limited (HKFEMC)
		Andrew CHAN Ching-leung	(ACCl)	Hong Kong General Building Contractors Association (HKGBCA)
		Edmund CHAN	(ECSc)	Hong Kong Housing Authority (HKHA)
		SO Ching	(CSO)	The Hong Kong Institute of Architects (HKIA)

David FUNG	(DFg)	Hong Kong Institute of Building Information Modelling (HKIBIM)
Sunny CHOI Shing-lam	(SLC)	The Hong Kong Institute of Surveyors (HKIS)
NG Chun-keung	(NCK)	Hong Kong Institute of Utilities Specialist (HKIUS)
Steve ROWLINSON	(SR)	The University of Hong Kong (HKU)
Jack CHENG	(JCCp)	The Hong Kong University of Science and Technology (HKUST)
HO Ka-chun	(KcH)	Highways Department (HyD)
Kelvin KUO	(KKuo)	Chartered Institution of Civil Engineering Surveyors (Hong Kong Region) (ICES(HK))
Ben CHAN	(BCSb)	Lands Department (LandsD)
Rico TSANG	(RTg)	Planning Department (PlanD)
Eric POON Shun-wing	(EPSW)	Urban Renewal Authority (URA)
Eric LIU	(ELSI)	Vocational Training Council (VTC)
Antonio CHAN	(AoCn)	Water Supplies Department (WSD)
In Attendance : Keith YIM	(KYm)	Association of Consultant Quantity Surveyors (ACQS)
Terence KONG	(TKHw)	Independent Checking Unit, Housing Department (ICU)
Marcin KLOCEK	(mK)	MTR Corporation Limited (MTRC)
Richard PANG	(RPg)	Director - Industry Development
Alex HO	(AHKK)	Senior Manager – Building Information Modelling
Serina LAU	(SLau)	Manager - Building Information Modelling
Ron NG	(RNCw)	Manager - Building Information Modelling
George WONG	(GWCK)	Manager - Building Information Modelling
Warren NG	(WnNg)	Assistant Officer – Centre Administration, Hong Kong Institute of Construction (HKIC)

Apologies	:	Ivan FU Chin-shing	(FI)	
		Sammy NG	(SNTy)	bSHK
		FUNG Siu-man	(SmF)	The Chinese University of Hong Kong (CUHK)
		Billy WONG	(BWCb)	The Hong Kong Construction Association (HKCA)
		Benny CHOW Ka-ming	(BCw)	Hong Kong Green Building Council (HKGBC)
		Franki YEUNG	(FY)	Hong Kong Housing Society (HKHS)
		Calvin FU Po-wa	(CFPw)	The Hong Kong Institution of Engineers (HKIE)
		LI Heng	(HL)	The Hong Kong Polytechnic University (PolyU)
		Andrew SIMPSON	(ASn)	West Kowloon Cultural District Authority (WKCDA)
		Simon J GALLAGHER	(SJG)	Chartered Institute of Architectural Technologists (Hong Kong Centre) (CIAT)

MINUTES

Action

AF chaired the meeting using video conference as she was in Madrid attending COP25.

Before the meeting, RPg was invited to randomly select five winners from the BIM adoption survey respondents who would receive a free “BIM Manager Training Course” (worth around \$8,000) or another BIM training course organised by the Hong Kong Institute of Construction (HKIC). Winners were Mr. Chan Ka-fai, Mr. Daniel Chan, Ir Alfred Leung, Miss Man Lai-yiu and Miss Lau Ka-pik, Kathy. CIC Secretariat and HKIC would follow up with the winners.

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4.1 Confirmation of the Minutes of Meeting No. 003/19 of the Com-BIM

Members took note of the Paper CIC/BIM/M/003/19 with some minor comments from SLC and confirmed the Minutes of meeting No. 003/19 of the Com-BIM held on Tuesday, 10 September 2019.

4.2 Matters Arising from the Previous Meeting

AHKK reported on the matters arising from the previous meeting as follows:

(a) Item 3.2 - Presentation of BIM Adoption Roadmap

- (i) On behalf of Ms. Eliza Wong, representative from The Real Estate Developers Association of Hong Kong (REDA), AAHK reported that members of REDA are adopting BIM subject to the scale, nature and stage of the projects. As REDA is an association with numerous members, they would adopt BIM at the own pace to suit their own needs.
- (ii) For the “Roadmap on BIM Adoption Form”, CIC Secretariat had sent follow-up emails to bSHK, Hong Kong Green Building Council and Hong Kong Institution of Engineers (HKIE) on 19 November 2019 and was waiting for their reply.

(b) Item 3.3 - 2020 Business Plan

The research project “BIM-based Rebar Design Optimisation and Prefabrication Automation” would be reported under agenda item 4.5.

- (c) Item 3.6 - Progress of the Task Force on BIM Training
- (i) Regarding HKIE and Hong Kong Institute of Surveyors (HKIS) to consider organising accredited top-up BIM training courses for their members in the future, their responses were as follows:
- On behalf of HKIE, AHKK reported that the relevant HKIE Divisions had been organising engineering discipline-specific BIM technical seminars/talks/forums for their members over the past years and would continue to do so.
 - For any engineering discipline-specific BIM training courses, HKIE understood that BIM training for engineers (in each discipline) was urgently needed. The challenge for engineers to serve as trainers was that most of these engineers were employed by consultants/contractors, etc. They may not have time or could not provide training service without the consent from their employers. It may be more realistic for training to be provided by consultants/contractors, and conducted by their employees through HKIC.
 - SLC reported that in collaboration with Hong Kong Institute of Vocational Education, HKIS was organising BIM training courses for Quantity Surveyors. There were already 250 members registered for the courses.
- (ii) On behalf of HKIC, AHKK reported that HKIC noted the demand for training seats related to Building Services (BS)/Mechanical, Electrical and Plumbing (MEP), and would consider offering more BIM for BS/MEP courses in 2020.
- (iii) Regarding the Development Bureau (DEVB) to share the BIM training requirements for their graduates with the professional bodies, CTY reported that all Graduate Trainees under the DEVB (Works Branch) would learn BIM, including those graduated in 2019. They would spend about ten days to learn the basic BIM knowledge, modelling and BIM management skills so that at the end of their graduate training, they would be reasonably competent to take up BIM projects. While taking up the BIM projects, they would also acquire and accumulate practical BIM experience.
- (d) Item 3.7 - Progress Report on BIM by CIC
- Regarding the educational institutions requested for an information hub to be set up for BIM-related research projects including Final Year Projects (FYPs) carried out at higher education institutions in

Hong Kong, the CIC Secretariat had sent an email to Memorandum of Understanding (MoU) institutions for collecting their BIM-related research projects including FYPs for sharing in the BIM Portal. As at 18 November 2019, only Chu Hai College of Higher Education replied that they had no BIM-related FYPs/Theses. For other MoU institutions, CIC Secretariat would follow up with them.

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(e) Item 3.8 - Progress of the BIM Adoption Survey

The consultant had now differentiated between regulators and public clients under the category “Government Department” when providing recommendations. Details would be reported under agenda item 4.4.

4.3 Issuance of the Reference Material for Using Building Information Modelling in Statutory Plans Submissions

Before going through the details of the agenda items 4.3 and 4.4, AF advised that CIC had engaged/consulted Members and the industry throughout the drafting process, and if Members had any minor comments after the presentation on the “Reference Material for Using Building Information Modelling in Statutory Plans Submissions” (Reference Material) and “BIM Adoption Survey Results and Recommendations”, CIC would take them into account and update the documents accordingly. If there was no adverse comment, CIC Secretariat would seek members’ approval on these two items as they had substantially been completed.

AF supplemented that if Members had any comment on the Reference Material, under the consultancy agreement, the consultant would have 14 months’ time to update the document after its issuance.

(AF left the meeting at 3:09pm and SLI served as an Acting Chairperson to hold the rest of the meeting)

AHKK briefed Members on the paper CIC/BIM/P/012/19 regarding the issuance of the Reference Material.

AHKK expressed gratitude to Members of the Task Force on BIM Standards (Phase 2) (TF-BS) for their contribution on the Reference Material. The Reference Material aimed to provide the construction industry with good practice to produce the statutory plans using BIM technology. The Reference Material was supplemented by software templates, sample projects and software user guides. During the development of the Reference Material, CIC had conducted many stakeholder consultation sessions. The deliverables would be issued and published on the CIC website first for the industry to make reference,

while Buildings Department (BD) would further go through their consultation process and fine tune the deliverables if necessary before they could turn it into a BD Guideline.

Ir Francis LEUNG, representative from Aurecon, gave a presentation on the Reference Material including Phase A: superstructure plan, foundation plan, demolition Plan; Phase B: excavation and lateral support plan, site formation plan, ground investigation plan; and Phase C: drainage plan, curtain wall (superstructure plan).

After deliberations, mK made some minor comments on the inconsistency in the content while YPM expressed concern on the confusion in the name of the Reference Material published by the CIC and the Guideline to be published by the BD after further consultation at a later stage. YPM suggested CIC to consider treating this Reference Material as a consultation document and JCCp agreed with YPM.

For the title of the publication, since the definition of “Guideline” from BD was different from the CIC, JCCp would further discuss with Members of the TF-BS (Phase 2).

SLI requested Members to give written comments to the CIC Secretariat within two weeks. The document would be published if no adverse comment was received.

[Post-meeting Notes: After discussing with Members of the TF-BS (Phase 2), the title of the publication was changed to “CIC BIM Standards for Preparation of Statutory Plan Submissions” to better reflect its meaning. The CIC Secretariat did not receive any adverse comment from Members as of 23 December 2019. Hence, the publication was approved in principle and published on the CIC BIM Portal for reference on 31 December 2019.]

(CSO left the meeting at 3:44pm)

4.4 BIM Adoption Survey Results and Recommendations

AHKK briefed Members on the paper CIC/BIM/P/013/19 regarding the BIM adoption survey results and recommendations.

AHKK recapped that it was the first BIM adoption survey in Hong Kong. It aimed to identify key opportunities and challenges in BIM adoption to allow future BIM strategies to be developed.

Dr. Calvin Kam, representative from bimSCORE Limited, gave a presentation on the key BIM adoption survey results and recommendations. The recommendations included understanding local BIM market, identifying hurdles and motivations, recommending strategies and actions, and developing a vision on BIM adoption in Hong Kong.

After deliberations, CTY supplemented that DEVB had also engaged bimSCORE Limited to carry out another survey which focused on public works projects. A set of KPIs would be developed to measure the effectiveness of BIM. The results would be shared with the CIC after completion. In addition, the direction in mandatory more usages of BIM for capital works projects in Hong Kong is clear. DEVB encouraged practitioners to make use of the Construction Innovation and Technology Fund for procurement of BIM hardware, software and training.

SLI reminded Members not to release the survey results and recommendations at this moment until a report was published.

As there was no adverse comment from Members, the BIM adoption survey results and recommendations were approved in principle.

(SR and ACCL left the meeting at 4:35pm)

(KWKw, ELSI, BCSb left the meeting at 5:04pm)

4.5 Progress of the Research Project - BIM-based Rebar Design Optimisation and Prefabrication Automation

JCCp gave a presentation on the progress of the research project “BIM-based Rebar Design Optimisation and Prefabrication Automation”.

Members took note of the progress of the research project.

(YPM and mK left the meeting at 5:23pm)

4.6 Any Other Business

RPg encouraged Members to attend the Construction Innovation Expo (CIExpo) 2019. He was pleased to report that many people had registered to attend the exhibition, and that the International Conference on BIM was oversubscribed.

4.7 Next Meeting

The next meeting would be held on 7 January 2020 (Tuesday) at 2:30 p.m. at the Board Room, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong. As it would be a last meeting in this term of appointment of Members, a light lunch would be served at 1:00 p.m. and group photo would be arranged.

All to note

There being no further business, the meeting was adjourned at 5:26pm.

CIC Secretariat
December 2019