Construction Industry Council

Committee on Building Information Modelling

Meeting No. 001/22 of the Committee on Building Information Modelling (Com-BIM) was held on Tuesday, 29 March 2022 at 2:30pm through video conference (Microsoft Teams).

Present :	Ada FUNG Yin-suen Antonio CHAN Chi-ming Neo CHAN Kang-yuen Jack CHENG Chin-pang Clement CHUNG CHUNG Kwok-fai Francis LEUNG Chi-suen Eric POON Shun-wing Billy WONG Chi-pan Kelvin WONG Ka-wo Rosana WONG Wai-man Thomas CHAN Tak-yeung Tommy TAM Wing-cheung	(AF) (ACHAN) (NCKy) (JCCp) (CtCg) (CKFi) (FLCs) (EPSW) (BWCb) (KWKw) (RnWg) (CTY) (WCT)	Principal Assistant Secretary (Works) 3, Development Bureau Assistant Director/Corporate Services, Buildings Department
In Attendance:	Thomas HO On-sing	(TH)	CIC Chairman
	Roger WONG Yan-lok	(RW)	Deputy Secretary for Development (Works) 2, Development Bureau
	Daniel SUEN	(DSn)	Director - Industry Development
	Alex HO	(AHKK)	Assistant Director - Industry Development
	George WONG	(GWCk)	Senior Manager - Industry Development
	Daniel CHIU	(D1C)	Principal - School of Professional Development in Construction (Acting)
	Sunny CHOI	(SLC)	Manager - Industry Development
	Shirley LAM	(SHLm)	Manager - Industry Development
	Serina LAU	(SLau)	Manager - Industry Development
	Ron NG	(RNCw)	Manager - Industry Development

CIC/BIM/M/001/22

SEE-TO Chi-heng (CHST) Lecturer - Building Information

Modelling, School of

Professional Development in

Construction

Apologies : Donald CHOI Wun-hing (DC)

Michael WONG Wai-lun (MWWL)

Presenter : Nelson YAM Hon-fun (NYHf) Senior Land Surveyor/BIM

(Survey and Mapping Office/Technical Division),

Lands Department

(attended agenda item 1.10 only)

MINUTES

Action

AF welcomed TH, CIC Chairman and RW, Deputy Secretary for Development (Works) 2, Development Bureau to attend the meeting and reminded Members to declare conflict of interest, if any.

1.1 Introduction of Committee on BIM and Its Task Forces

Members took note of Paper CIC/BIM/P/003/22.

AF reported that the reappointment period of Chairperson and 14 Members of the Committee on BIM (Com-BIM) would be from 1 February 2022 to 31 January 2023. As there are three remaining vacancies in the Com-BIM under the following categories, Com-BIM would wait for the Council Members to show interest before inviting potential nominees from the industry:

- (a) Professionals and Consultants;
- (b) Trade Unions; and
- (c) Young Member.

Corresponding to the recent renaming of the BIM Department of the CIC to the Construction Digitalisation Department, AF invited Members to review the necessity for renaming Com-BIM, with options including the "Committee on BIM and Construction Digitalisation", having regard to the fact that the Terms of Reference of Com-BIM is "To formulate strategies for market transformation, promote the use and facilitate the application of BIM, digital construction, and its

CIC Secretariat related technologies in construction industry". GWCk supplemented on the current establishment of the Task Force on Construction Digitalisation, which is under the CITAC Management Board. The CIC Secretariat would discuss internally and report the findings accordingly.

1.2 Confirmation of Minutes of the Previous Meeting

Members took note of the Paper CIC/BIM/M/004/21 and confirmed the Minutes of Meeting No. 004/21 of the Com-BIM held on Tuesday, 14 December 2021.

1.3 Matters Arising from the Previous Meeting

Members received the progress report on matters arising from the previous meeting, circulated on 22 March 2022 and highlighted as follows, with no further comments:

Item 4.3 on revisiting the submission guidelines of the CIC Research and Technology Development (R&D) Fund, providing potential applicants with the CIC roadmap(s)/ directions for their preparation of proposals and identifying any applications received being worth further consideration - the R&D submission guidelines and the suggested R&D topic areas had been reviewed together with the Construction Productivity Department, the contact point of R&D applications, immediately after the last Com-BIM meeting. The CIC Secretariat disseminated the revised suggestions on R&D topics/ areas to potential applicants, and further explored with them on possibility of resubmission.

Item 4.5 on issuance of Technical Circular on the BIM Harmonisation Guidelines incorporated with the CIC BIM Standards by December 2021 – Development Bureau (DEVB) issued its Technical Circular (Works) No. 2/2021 in December 2021 to update the policy and requirements on the adoption of BIM technology. Under paragraph 19 of the Circular, Works Departments should ensure in all technical and fee proposals of consultancy agreements or construction works tenders with BIM adoption to be invited on or after 1 January 2022 that the design and as-built BIM models are prepared in accordance with the DEVB BIM Harmonisation Guidelines, in alignment with the CIC BIM Standards.

Item 4.8 on establishing register of BIM personnel for monitoring the demand and supply in CIC-Certified BIM Managers (CCBMs) and

CIC-Certified BIM Coordinators (CCBCs), BIM modellers and BIM viewers, and keeping track of the availability of training seats from the training service providers - the BIM Certification and Accreditation Board (BIMCAB) Secretariat had requested each accredited course provider to provide statistics of the participants quarterly. Furthermore, the course providers would provide their estimated annual volume of training seats to the BIMCAB Secretariat for monitoring and assurance of adequate training seats.

Item 4.9 on keeping track of projects using the publications as a pilot and reporting in the Com-BIM meeting - a questionnaire incorporated comments from the Task Force on BIM Standards (TF-BS) was sent to industry stakeholders on 17 March 2022 to collect their views and status of adopting CIC BIM Standards by 31 March 2022. The CIC Secretariat would report the progress after consolidating the information.

Item 4.11 on arranging separate meetings to discuss the details of Construction Digitalisation Roadmap (CDR) – four brainstorming sessions were arranged from 4 to 18 March 2022. Details would be reported in agenda item 1.6.

1.4 Issuance of the Reference Materials - Standard Rebar Shape Codes for Offsite Prefabrication

Members took note of Paper CIC/BIM/P/004/22.

GWCk reported that a study was carried out by the CIC in April 2021 to identify and consolidate all rebar shape codes being used for offsite prefabrication. Upon review, the first list of standard rebar shape codes for offsite prefabrication was established, using all the standard shapes of the BS8666:2005 and 11 other non-standard shapes commonly used by the approved prefabrication yards in Hong Kong. The "Reference Materials - Standard Rebar Shape Codes for Offsite Prefabrication" (Reference Materials) was concurrently developed by in-house staff of the CIC, with valuable inputs from the DEVB, Association of Consulting Engineers of Hong Kong (ACEHK), Hong Kong Construction Materials Association Limited (HKCMA) and representatives from the rebar prefabrication yards as approved by the Civil Engineering and Development Department (CEDD) (the "Yards").

Upon deliberations, Members agreed to remove the diagrams depicting those standard shapes from BS8666 in Appendix A of the Reference Materials in view of the copyright and updates of BS8666 issues. The

CIC Secretariat CIC Secretariat would further check and confirm the version of BS8666 with the Yards.

AF opined that the Reference Materials should be integrated into the overall framework of the CIC BIM Standards and Guidelines with clear indication for adoption by CCBM and CCBC, and indicate the time frame for incorporating the new set of rebar shape codes into common BIM authoring software such as Tekla and Revit.

TF-BS

Subject to further refinements of the Reference Materials and subsequent endorsement by the TF-BS, the Reference Materials would be re-circulated to the Com-BIM Members for approval.

CIC Secretariat

1.5 Update on Progress Reports

Members took note of Paper CIC/BIM/P/005/22.

(a) BIM Certification and Accreditation Schemes

SLC presented the progress report on the BIM Certification and Accreditation Schemes (BIMCAS). GWCk supplemented that the number of CCBMs practising in BIM consultants as indicated in the table on C51 should be 52, instead of 50.

In response to BWCb's enquiry, the BIMCAB Secretariat would provide numbers of full-time and part-time students attending CIC-Accredited BIM Manager Courses after the meeting.

BIMCAB Secretariat

TH stated that the industry had serious concern on the lack of BIM personnel. He opined that the BIMCAB Secretariat should critically review the market demand for CCBM and CCBC, and the shortage of each discipline for timely and regular assessment. Com-BIM should also identify the ways to accelerate training/ provision of more BIM personnel to fulfill the market needs.

BIMCAB Secretariat

In response to CTY's enquiry, BWCb suggested to increase the supply of CCBM, preferably towards quadrupling the demand numbers from the industry.

AF opined that the CIC should discuss with relevant associations, including but not limited to the Hong Kong Construction Association (HKCA) and Hong Kong Federation of Electrical and Mechanical Contractors Limited (HKFEMC), and encourage them to develop training programmes for their own. TH further suggested the CIC to organise collaborative training schemes with HKCA, Hong Kong Institution of Engineers (HKIE) and other consultants, as they best

BIMCAB Secretariat understand their own training requirements. The CIC could play an auditing role to ensure their training programme meeting the CIC's requirements.

CTY opined that HKIE and other professional bodies could explore inclusion of BIM training in their professional training schemes. Companies could explore providing on-the-job training schemes to graduates from related Higher Diploma programmes under the Vocational Training Council (VTC), arousing their interest in entering the industry through participation in BIM projects.

BWCb, on behalf of HKCA, supported the above suggestions and would discuss with the School of Professional Development in Construction (SPDC) on provision of BIM training classes for HKCA Members.

BWCb

CKFi, Chairperson of the BIMCAB, would discuss with FLCs on BIM training for HKIE Members.

BIMCAB Secretariat

(b) Celebration of BIM Achievement (CBA) 2022

SHLm presented the progress updates of key events by the Construction Digitalisation Department in the coming months.

TH opined that the CBA 2022 should focus on tangible benefits, covering design as well as commissioning / operational achievements through application of BIM in management tools. He further suggested granting top three awards or "Best of the Best" awards among all categories, in view of the substantial number of award recipients, for consideration by the Organising Committee (OC) for consideration. The CIC Secretariat would further invite contractors associations for interior and curtain wall works as supporting organisations as recommended by TH.

[Post-meeting note: A follow-up OC meeting was held on 7 April 2022, arriving at the recommendation of adding a grand award under the Organisation and Project category, if there is an unanimous decision by the Judging Panel on availability of outstanding organisation or project with exceptionally high score.]

(EPSW left the meeting at 4:29pm)

1.6 Progress of the Construction Digitalisation Roadmap

Members took note of Paper CIC/BIM/P/006/22.

GWCk updated Members on the progress of the CDR.

Upon deliberations, Com-BIM agreed to drive four Digital Application Areas (DA), namely DA1, DA2, DA3 and DA6 of the CDR.

TH opined that the planned and follow-up action items should include tangible KPIs, including targets/ deliverables by the end of 2024. For the smart data sharing (DA1) under the Common Data Environment (CDE) roadmap, he suggested further elaboration/ inclusion of annual targets on number of new projects adopting CDE.

CIC Secretariat

TH stated that the outcome of the "BIM-Automation of GFA Calculation, Fire Safety and Prescribed Checking for GBP Preparation" research project was successful. He expected Com-BIM to identify more BIM-related automation tools to accelerate BIM submission process. AF stated that some pioneers in the industry had already developed some automation tools, such as BWCb and his colleagues, and the CIC would be inviting them for an experience sharing webinar/ BIM Talk. Whilst these tools would work well for their company having regard to their workflow and software, the CIC would need to develop vendor neutral tools for use by the industry, most likely through consultancy projects and with Building Department's strong involvement.

CIC Secretariat

AF encouraged Airport Authority Hong Kong (AAHK) to promote and adopt BIM for Asset Management (AM)/Facility Management (FM). KWKw offered to share more cases of BIM applications on AM/FM in AAHK with industry stakeholders for their reference, and would consider participating in CBA to promote BIM for AM/FM.

CIC Secretariat

AF opined that the CIC should establish milestones for action items and conduct a BIM adoption survey and a digitalisation survey to track the progress of CDR. She suggested forming special Task Force/ Task Group to follow up on some of the actions contained in DA1 and DA6 where necessary and appropriate.

CIC Secretariat

(CKFi left the meeting at 4:48pm)

1.7 Progress of the Task Force on BIM Standards

Members took note of Paper CIC/BIM/P/007/22.

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

TF-BS would update the rebar template in the "CIC BIM Standards for Preparation of Statutory Plan Submissions". Refinement of the CDE Guide incorporated comments from TF-BS would be circulated to TF-BS again for endorsement and then to Com-BIM for approval.

TF-BS

JCCp supplemented that "BIM Horizontal Harmonisation for BIM/ Geographic Information System (GIS) Integration under First Phase Development of Kwu Tung North and Fanling North New Development Area: Open BIM and GIS for Information Exchange for Works Departments" received the merit award under "Project Category" at the Hong Kong openBIM/ openGIS Award 2022 organised by the Hong Kong Alliance of Built Asset & Environment Information Management Associations (HKABAEIMA) buildingSMART Hong Kong on 23 March 2022. The CIC was one of the organisations having contribution to the project. With respect to the need for Hong Kong to drive openBIM and openGIS in line with global and national development, AF supplemented that it would be beneficial for the CIC to join HKABAEIMA as member and/ or sign a Memorandum of Understanding, and suggested TH to consider it with the CIC Secretariat.

(KWKw left the meeting at 4:57pm)

1.8 Progress of the Task Force on BIM Training

Members took note of Paper CIC/BIM/P/008/22.

CtCg, Chairperson of the TF-BT, updated Members on the progress of the TF-BT.

In response to the enquiry on availability of BIM training plan for Works Departments, CTY updated Members that DEVB monitored BIM training progress in Works Departments continuously. He suggested discussing BIM training plans of Works Departments at the next DEVB's BIM Steering Committee meeting.

CTY

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

Members took note of Paper CIC/BIM/P/009/22.

RNCw updated Members on the progress of the Task Force on BIM Submissions to the BD (TF-BSBD) and invited Com-BIM Members to identify more pilot projects for BIM Submissions to the BD.

WCT reported that BD organised two briefing sessions on the introduction to Electronic Submission Hub (ESH) and user operation in ESH on 11 March and 15 March 2022 respectively. Due to the COVID-19 pandemic, the launch of Stage 1 of ESH was postponed to May 2022. The Stage 1 covers structural plan submissions for building works above ground without the need for cross-department referral.

1.10 Sharing of Introduction to Building Plan Checking Tools for BIM Submission by Lands Department (LandsD)

AF announced that the description of this agenda item should read as "Sharing of Introduction to Building Plan Checking Tools for BIM Submission by Lands Department (LandsD)" instead of "BIM Harmonisation".

NYHf delivered a presentation on "Introduction to Building Plan Checking Tools for BIM Submission", and AF requested the CIC Secretariat to share ArchiCAD sample models for LandsD's reference.

CIC Secretariat

1.11 Any Other Business

No other business was raised in the meeting.

Date of Next Meeting

The next meeting was scheduled for 28 June 2022 (Tuesday) at 2:30 pm at 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 15 June 2022.]

There being no further business, the meeting was adjourned at 5:50pm.

CIC Secretariat March 2022