

Construction Industry Council

Committee on Building Information Modelling

Meeting No. 002/22 of the Committee on Building Information Modelling (Com-BIM) was held on Wednesday, 15 June 2022 at 3:00pm at Board Room, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong.

Present	: Ada FUNG Yin-suen	(AF)	Chairperson
	Antonio CHAN Chi-ming	(ACHAN)	
	Neo CHAN Kang-yuen	(NCKy)	
	Aaron CHAN Wing-kai*	(WKCn)	
	Jack CHENG Chin-pang	(JCCp)	
	Clement CHUNG	(CtCg)	
	FUNG Chi-yiu	(FCY)	
	Francis LEUNG Chi-suen	(FLCs)	
	Eric POON Shun-wing	(EPSW)	
	TANG Man-hei	(MHT)	
	Michael WONG Wai-lun	(MWWL)	
	Rosana WONG Wai-man	(RnWg)	
	Thomas CHAN Tak-yeung	(CTY)	Principal Assistant Secretary (Works) 3, Development Bureau
	Tommy TAM Wing-cheung	(WCT)	Assistant Director/Corporate Services, Buildings Department
In Attendance	: Thomas HO On-sing*	(TH)	CIC Chairman
	Albert CHENG*	(CTN)	Executive Director
	Daniel SUEN	(DSn)	Director - Industry Development
	Alex HO	(AHKK)	Assistant Director - Industry Development
	George WONG	(GWck)	Senior Manager - Industry Development
	Chris LAU*	(CLu)	Senior Manager - Finance (attended agenda item 2.3 only)
	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
	Javin CHENG	(JCCh)	Officer - Industry Development

Apologies : Donald CHOI Wun-hing (DC)
CHUNG Kwok-fai (CKFi)
Kelvin WONG Ka-wo (KWKw)
YIP Yin-yung (YYY)

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

MINUTES

Action

AF welcomed TH, Chairman of the Construction Industry Council (CIC), CTN, Executive Director, and three new Members namely WKCn, FCY and MHT, to attend the meeting. She also informed Members that the fourth new Member, YYY, had sent apologies for not being able to attend the meeting.

(TH, ACHAN, and RnWg attended the meeting at 3:04pm)

AF informed Members that Mr. Billy WONG Chi-pan had resigned from the Com-BIM. The Com-BIM respected his decision and thanked him for his support in the past.

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

2.1 Confirmation of Minutes of the Previous Meeting

CTY pointed out that there was a typo under paragraph 1.7 of the minutes on page C11, as “Kwun Tong North” should read as “Kwu Tung North”.

Subject to the above amendment by the CIC Secretariat, Members took note of Paper CIC/BIM/M/001/22 and confirmed the Minutes of Meeting No. 001/22 of the Com-BIM held on Tuesday, 29 March 2022.

2.2 Matters Arising from the Previous Meeting

Members received the progress report on matters arising from the

previous meeting, circulated on 8 June 2022 and highlighted as follows, with no further comments:

(JCCp attended the meeting at 3:07pm)

Item 1.1 on reviewing the necessity of renaming the Com-BIM to options including the “Committee on Building Information Modelling and Construction Digitalisation” - the CIC Secretariat had discussed the matter with the Chairperson of the Construction and Innovation Technology Application Centre Management Board. The Chairperson was open to the renaming of the Com-BIM, but opted that the Task Force on Construction Digitalisation should continue to operate and monitor the Construction Digitalisation Roadmap (CDR) with key performance indicators (KPIs) set by 2026. The CIC Secretariat would follow up to consider it internally.

(MHT attended the meeting at 3:10pm)

Item 1.4 on issuance of the Reference Material on Standard Rebar Shape Codes for Offsite Prefabrication - the revised Reference Material incorporated with Members’ comments was approved in principle through circulation on 2 June 2022.

Item 1.5 on Building Information Modelling (BIM) personnel - SLC reported the data as received from the course providers. Number of graduates in daytime classes were drastically higher than that of the evening classes. Upon deliberations of potential quality issues, NCKy suggested the CIC to increase public awareness on the variety of CIC-accredited course providers besides the CIC itself.

**BIMCAB
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SLC further reported on meetings/ discussions with the Hong Kong Construction Association (HKCA), The Hong Kong Federation of Electrical and Mechanical Contractors Limited (HKFEMC), The Hong Kong Institution of Engineers (HKIE), The Hong Kong Institute of Surveyors, The Hong Kong Institute of Architects (HKIA) and a number of individual contractors. The organisations/ contractors were encouraged to arrange private classes with the CIC-accredited course providers, or to set up their own BIM Manager or BIM Coordinator programmes for accreditation by the CIC. GWCK mentioned that the arrangement of BIM training classes in August 2022 for the HKCA by the School of Professional Development in Construction of the Hong Kong Institute of Construction was also in progress. FLCs updated Members that the direction of the senior management of the HKIE was to enhance its services to the HKIE members by offering accredited training, with BIM training among its first priority.

CTY supplemented that according to a survey with the Works Departments (WDs) conducted in early April 2022 on the number of CIC-Certified BIM Manager (CCBM) and CIC-Certified BIM Coordinator (CCBC) in WDs and their consultants and contractors who work under the capital works projects, around 80% of the eligible staff (i.e. staff who have adequate experience to apply for CCBM/CCBC) have not yet attended CCBM/CCBC training. Therefore, there would be great potential to increase the number of CCBM/CCBC by offering training to these staff members and helping them apply for certification. The Development Bureau (DEVB) has been working with the CIC on a training plan for these staff members and the CIC was coordinating with the course providers with a view to arranging such training in 2022 Q3 tentatively and onwards. The training plans of WDs would be reviewed in the next DEVB's BIM Steering Committee meeting scheduled for November 2022.

DEVB

TH opined that the DEVB should set a timeline for the eligible staff in WDs to become CCBM and CCBC, and the CIC should facilitate any collaboration scheme proposed by the HKIA and the HKIE respectively. The CIC should also explore various means to encourage contractors and consultants to become CCBM and CCBC.

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CTN opined that the manpower shortage of BIM personnel could also be resolved from the demand side, including removing any exaggerated or overlapped requirement of BIM under the contract. He suggested the DEVB to set a timeline for the implementation of contractual BIM.

CTY responded that the DEVB was exploring to include BIM models as part of the essential tender information. Upon obtaining the legal clearance on the revised conditions of contract, pilot projects would then be identified from different WDs for trial in around end 2022 / early 2023 tentatively.

AF suggested to organise a separate session for a thorough discussion of the supply issue of BIM personnel.

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Item 1.6 on the progress of inviting the industry pioneers to share their experience on automation tools - representatives of the Hip Hing Construction Company Limited (Hip Hing) shared their experience in the "CIC Webinar on BIM Show & Tell - Process improvement through BIM automation, demonstrating compliance with building codes and regulations" on 30 May 2022. The CIC Secretariat was also collecting materials on asset management and facilities management from The Airport Authority Hong Kong (AAHK).

Item 1.7 on the update of rebar templates as listed in the “CIC BIM Standards for Preparation of Statutory Plan Submissions” - two software providers, namely Autodesk and Trimble, agreed to incorporate the rebar shape codes library into the software templates of the “CIC BIM Standards for Preparation of Statutory Plan Submissions”. The completed software templates were under review by the Buildings Department (BD).

Item 1.10 on sharing of ArchiCAD sample models to the Lands Department (LandsD) - the CIC Secretariat had shared the sample models in ArchiCAD format developed for Drainage Plans to the LandsD on 13 May 2022.

2.3 2023 Business Plan

(CLu attended the meeting at 4:04pm)

Members took note of Paper CIC/BIM/P/012/22.

GWCK gave a presentation on the progress of the 2022 business plan and the 2023 business plan. Highlights were as follows:

- (a) Progress of the 2022 business plan:
 - (i) inaugural BIM Education Symposium was successfully organised on 25 January 2022;
 - (ii) two Memorandums of Understanding (MoUs) were signed between the CIC and the School of Professional and Continuing Education under The University of Hong Kong and the Hong Kong Metropolitan University in January 2022;
 - (iii) organisation of the Celebration of BIM Achievement 2022 and the CIC BIM Competition 2022 were making good progress;
 - (iv) the Reference Material on Standard Rebar Shape Codes for Offsite Prefabrication would be published in June 2022; and
 - (v) the CIC Beginner’s Guide on Construction Digitalisation – Adoption of BIM in Small and Medium Enterprises and the “CIC Beginner’s Guide on Construction Digitalisation – Adoption of Common Data Environment were also under the development stage.

- (b) By the end of 2022, works would be focused on the following key areas:
 - (i) developing signature training course on CDE;
 - (ii) re-energising the CIC BIM Space to generate more practical values for the industry;
 - (iii) collaborating with the DEVB and the LandsD to provide guidelines on what and how data are required by and shared with the industry through the Common Spatial Data Infrastructure. These guidelines could be considered as an extension to the DEVB BIM Harmonisation Guidelines for Works Departments published in October 2021; and
 - (iv) exploring the development of relevant reference materials on City Information Modelling (CIM) with applications.
- (c) In 2023, the Com-BIM would continue to drive the following digital application (DA) areas, namely DA1, DA2, DA3 and DA6, of the CDR. The Com-BIM would also align its works with two of the 14 high priority strategies recommended in the report of the consultancy services for improving time, cost and quality performance of the Hong Kong construction industry (Phase II) for CIC (the “TCQ Report”). These two high priority strategies were “Streamlining Approval Processes” and “Enhancing Project Management and Procurement”, with particular focus on “Developing an Integrated Digital Submission and Approval Process” and “Development of Integrated Project Digital Platform”.
- (d) The 2023 business plan and KPIs/ deliverables were proposed under the following six key areas:
 - (i) training and certification;
 - (ii) standards/ guidelines;
 - (iii) promotion and publicity;
 - (iv) research and development;
 - (v) development of Integrated Project Digital Platform (as recommended by the “TCQ Report”); and
 - (vi) special projects.
- (e) The 2023 proposed budget was HK\$4.918 million.

CTN requested Members and the CIC Secretariat to provide more impactful and clearer KPIs of the Com-BIM in the 2023 business plan in the following areas:

- (a) Supply of CCBM and CCBC in both training and certification;
- (b) Number of BIM plugins to be developed;
- (c) Identification of solutions to facilitate BIM submissions to the BD; and
- (d) Number of pilot schemes for adoption of contractual BIM under contracts from the public clients, such as the MTR Corporation, the AAHK, the Urban Renewal Authority, the Hospital Authority and the Hong Kong Housing Society.

CTY opined that development of CIM would need the Government to take the lead as it should be under the purview of smart city development and would involve collaboration among various government departments. AF considered geographic information system and openBIM as important elements since these could contribute to the development of CIM. She requested the CIC Secretariat to include openBIM development into the 2023 business plan as one of the KPIs. Furthermore, the 11 use cases of “Digital Hong Kong” developed by the CIC would contribute positively towards CIM from construction industry’s perspective.

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FLCs enquired on the possibility for the CIC to provide financial subsidies to the professional institutes in organising in-house BIM training courses. AHKK responded that the financial subsidies to the professional institutes might be provided through the Construction and Innovation Technology Fund.

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In response to WKCn’s suggestion on developing BIM for e-tendering submission related guidelines in 2023, GWCK replied that the suggestion would be passed to the related Task Force for consideration.

Upon deliberations, Members endorsed the proposed 2023 business plan subject to the above refinements, and endorsed the proposed budget of the Com-BIM.

(TH and CLu left the meeting at 4:52pm)

[Post-meeting note: revised 2023 business plan, including the 2023 major KPIs in the Com-BIM and the proposed budget, was endorsed

by the Com-BIM through circulation on 21 July 2022.]

2.4 Update on Progress Reports

Members took note of Paper CIC/BIM/P/013/22.

- (a) BIM Certification and Accreditation Schemes (BIMCAS)
SLC presented the progress report on the BIMCAS.

CTY raised queries on the apparently high disapproval rate of CCBM and CCBC, and requested the BIM Certification and Accreditation Board (BIMCAB) Secretariat to address the issue. CTY suggested to offer preparation classes to the applicants and to help the applicants to prepare for the interview.

(EPSW left the meeting at 4:57pm)

RnWg inquired about the possibility of just giving written test and without interview for some CCBC applicants, as some practitioners were more focusing on the technical aspect in their job descriptions.

FLCs suggested the BIMCAB Secretariat to offer a preliminary assessment, such as an online multiple-choice quiz, to the interviewees before allowing them to attend the interview in order to improve the passing rate.

SLC noted the views of Members, and responded that the failure of applicants was not entirely on BIM knowledge but also on inadequate practical BIM experience. The interview questions were not difficult but most applicants had not done sufficient preparation before the interviews. The BIMCAB Secretariat would prepare some guidelines to draw applicants' attention to the core areas to be prepared for the certification interviews.

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- (b) Progress updates of Construction Digitalisation (CD) Department
GWck presented the progress updates of key events by the CD Department in the coming months, and highlighted that the Hong Kong Construction CDE Award Launching Ceremony would be held on 7 July 2022.

2.5 Progress of the Construction Digitalisation Roadmap

Members took note of Paper CIC/BIM/P/014/22.

GWCK updated Members on the progress of the CDR.

AF reflected from previous stakeholder engagement exercises that the Housing Department (HD) was not able to share the use of its CDE with external parties, notably service providers, due to its firewall restriction. GWCK responded that the CIC Secretariat had made initial contact with the Office of the Government Chief Information Officer (OGCIO). A meeting was expected to be held with the HD and the OGCIO in July 2022.

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AF suggested the CIC Secretariat to include action items of the CDR to be followed up by the Com-BIM and its Task Forces/ Task Groups into the 2023 business plan for completeness.

AHKK invited Members to develop and share the digitalisation roadmap of their organisations with the industry, including the following elements:

- (a) Adoption of BIM, CDE and Digital Works Supervision System in project contract sums over HK\$300 million; and
- (b) “全民皆 BIM”, in translation “BIM for everyone” (i.e. those who are responsible for works projects should at least be able to view BIM models).

AHKK also informed Members that the CIC was planning to invite companies to sign a charter with an aim to promoting digitalisation in the Construction Innovation Expo to be held in December 2022.

AF requested FCY and ACHAN to drive members of the HKCA and the HKFEMC respectively in achieving the above target (a), and MHT and MWL to drive supervisors, foremen and frontline workers in achieving the above target (b). AF expected FCY, ACHAN, MHT and MWL to provide their feedback in the next meeting.

**FCY,
ACHAN,
MHT and
MWL**

2.6 ★Progress of the Task Force on BIM Standards

Members took note of *Paper CIC/BIM/P/015/22*.

The progress of the Task Force on BIM Standards (TF-BS) was presented under the starred paper. JCCp, Chairperson of the TF-BS, updated Members on the progress of the TF-BS.

JCCp reported that the issuance of the Reference Materials - Standard

Rebar Shape Codes for Offsite Prefabrication (paper no. CIC/BIM/P/010/22) and the issuance of updated CIC BIM software-specific user guides for preparation of statutory plan submissions (paper no. CIC/BIM/P/011/22) were approved in principle by the Com-BIM through circulation on 2 June 2022.

2.7 ★Progress of the Task Force on BIM Training

Members took note of *Paper CIC/BIM/P/016/22*.

The progress of the Task Force on BIM Training (TF-BT) was presented under the starred paper. CtCg, Chairperson of the TF-BT, updated Members on the progress of the TF-BT.

(ACHAN left the meeting at 5:45pm)

[Post-meeting note: the renewal of MoUs with higher education institutions (paper no. CIC/BIM/P/019/22) was approved by the Com-BIM through circulation on 5 July 2022.]

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

Members took note of Paper CIC/BIM/P/017/22.

AF, Chairperson of the Task Force on BIM Submissions to the BD (TF-BSBD), updated Members on the progress of the TF-BSBD.

In response to AF's enquiry on how to develop automation tools for improving productivity and sharing of the intellectual property with the industry, FCY would explore with his Hip Hing staff and share with Members as appropriate.

(MHT left the meeting at 5:47pm)

[Post-meeting note: the reappointment of Chairperson and Members from 22 July 2022 to 31 January 2023 to the TF-BSBD (paper no. CIC/BIM/P/018/22) was approved by the Com-BIM through circulation on 30 June 2022.]

2.9 Any Other Business

CTN agreed that it would be the work of the Government to develop CIM, but he expected the DEVB to provide direction to the construction industry on how the industry could contribute in this area. Apart from the development of BIM and CDE, he expected the DEVB to discuss with the CIC on the work plan to define the information/model requirements of BIM submission in supporting the development of CIM. He suggested the CIC to include the work plan and time schedule in the 2022 business plan and enhance the tasks in the 2023 business plan. He also wished the DEVB to expedite the issuance of standard and guidelines by the LandsD. To complement the work plan outlined above, AF suggested the CIC should first help the LandsD to promote the DEVB BIM Harmonisation Guidelines for Works Departments, and proposed to include this work in the 2022 and 2023 business plans.

DEVB

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In response to CTN, CTY explained that the development of CIM and the development of smart city in the long term would involve many government departments. It might also involve policy formulation and legislative amendments. The DEVB would however open to the discussion and keep in view of the situation.

AF suggested to arrange a separate session to further discuss this issue.

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2.10 Date of Next Meeting

The next meeting was scheduled for 27 September 2022 (Tuesday) at 2:30pm at Board Room, 29/F, Tower 2, Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong.

All to note

There being no further business, the meeting was adjourned at 6:05pm.

**CIC Secretariat
June 2022**