

Construction Industry Council

Committee on Building Information Modelling

Meeting No. 001/19 of the Committee on Building Information Modelling (Com-BIM) was held on Tuesday, 12 March 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
		CHUNG Kwok-fai	(CKFi)	
		Stephen LAI Yuk-fai	(SLI)	
		Kenneth MO Kon-fei	(KM)	
		Vitus NG	(VN)	
		Benny CHAN Chak-bun	(BCCb)	Hospital Authority (HA)
		David CHAN	(DCCk)	The Association of Architectural Practices (AAP)
		Ben CHAN Siu-bun	(BCSb)	Lands Department (LandsD)
		Edmund CHAN Sai-chun	(ECSc)	Hong Kong Housing Authority (HKHA)
		Thomson LAI	(TLai)	Hong Kong Institute of Building Information Modelling (HKIBIM)
		Jack CHENG	(JCCp)	The Hong Kong University of Science and Technology (HKUST)
		Karen CHENG	(KCKI)	Architectural Services Department (ArchSD)
		Sunny CHOI Shing-lam	(SLC)	The Hong Kong Institute of Surveyors (HKIS)
		Benny CHOW Ka-ming	(BCw)	Hong Kong Green Building Council (HKGBC)
		FUNG Siu-man	(SmF)	The Chinese University of Hong Kong (CUHK)
		KC HO	(KcH)	Highways Department (HyD)
		Terence LAM Tat-ming	(TmL)	Civil Engineering and Development Department (CEDD)
		Eric LIU	(ELSl)	Vocational Training Council (VTC)
		Silas LIU Kam-ming	(SLKm)	Planning Department (PlanD)
		Ben LO Yu-bun	(YbL)	Water Supplies Department (WSD)

	LOW Hon-wah	(LHW)	Chartered Institution of Civil Engineering Surveyors (Hong Kong Region) (ICES)
	Sammy NG	(SNTy)	bSHK
	Eric POON	(EPSW)	Urban Renewal Authority (URA)
	Steve ROWLINSON	(SR)	The University of Hong Kong (HKU)
	Andrew SIMPSON	(ASn)	West Kowloon Cultural District Authority (WKCDA)
	SO Ching	(CSO)	The Hong Kong Institute of Architects (HKIA)
	Billy WONG	(BWCb)	The Hong Kong Construction Association (HKCA)
	Steve CHAN	(SCHy)	Electrical and Mechanical Services Department (EMSD)
	Bernard WONG	(LPWg)	Drainage Services Department (DSD)
	Franki YEUNG	(FY)	Hong Kong Housing Society (HKHS)
	Clarice YU Po-mei	(YPM)	Buildings Department (BD)
In Attendance	Ir Prof LO Hong-kam	(LHK)	
:	Nelson YAM Hon Fun	(NYHf)	Lands Department (LandsD)
	Richard PANG	(RPg)	Director - Industry Development
	Alex HO	(AHKK)	Senior Manager – Building Information Modelling
	Ron NG	(RNCw)	Manager - Building Information Modelling
	George WONG	(GWCK)	Manager - Building Information Modelling
	Serina LAU	(SLau)	Manager - Building Information Modelling
	Terence WONG	(TWTw)	Lecturer - Building Information Modelling
	Terry LAM	(TyLm)	Manager - Construction Productivity
	Andy LI	(AyLi)	Senior Officer - Construction Productivity
Apologies	Ivan FU Chin-shing	(FI)	
:	YU Sai-yen	(SYYu)	

Andrew CHAN Ching-leung	(ACCI)	Hong Kong General Building Contractors Association (HKGBCA)
Daniel CHONG Kwok-ming	(DCg)	The Hong Kong Federation of Electrical and Mechanical Contractors Limited (HKFEMC)
Clement CHUNG	(CtCg)	The Association of Consulting Engineers of Hong Kong (ACEHK)
Calvin FU Po-wa	(CFPw)	The Hong Kong Institution of Engineers (HKIE)
LI Heng	(HL)	The Hong Kong Polytechnic University (PolyU)
NG Chun-keung	(NCK)	Hong Kong Institute of Utilities Specialist (HKIUS)
Kelvin WONG	(KWKw)	Airport Authority Hong Kong (AAHK)

MINUTES

Action

1.1 Applications for the CIC Research and Technology Development Fund - BIM-based Rebar Design Optimisation and Prefabrication Automation

AF reported that CKFi, LHK, SmF and SR would join the meeting after this agenda item to avoid conflict of interest.

TyLm briefed Members on the paper CIC/BIM/P/001/19 regarding the applications for the CIC Research and Technology Development (R&D) Fund.

According to the selection criteria (Value of project, Cost-effectiveness and Research Implementation) in the CIC Research Policy, one research proposal, namely “BIM-based Rebar Design Optimisation and Prefabrication Automation” was shortlisted for Members’ endorsement.

JCCp gave a presentation on the research proposal. The research aims to develop a highly specialised BIM-based platform for automated clash-free design optimisation and prefabrication of steel rebar in typical RC building structures. It would focus on building and public housing. The key objectives include: -

- accuracy on rebar details design and rebar bending schedule;
- automation; and
- wastage reduction on site

After deliberations, CSO and KM suggested the research team to consult a Registered Structural Engineer (RSE) and BCw suggested setting a wastage reduction target for the research. JCCP would take into account the above suggestions.

Members endorsed the research proposal and AF suggested CIC Secretariat coordinated the formation of a small working group to monitor the research.

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[Post Meeting Notes: A small working group would be formed by representatives from DEVB, BD, HKCA, HKHA and HKIE to monitor the research.]

(TyLm and AyLi left the meeting at 3pm)
(CKFi and LHK arrived the meeting at 3pm)

(See item 1.6 which was reported before 1.2)

1.2 Confirmation of the Minutes of Meeting No. 003/18 of the Com-BIM

Members took note of the Paper CIC/BIM/M/003/18 and confirmed the Minutes of meeting No. 003/18 of the Com-BIM on Tuesday, 4 December 2018.

1.3 Matters Arising from the Last Meeting

(a) Agenda item 3.2 - BIM Education among Professional Bodies

- CSO reported that the HKIA BIM & IT Committee would follow up with the Hong Kong Institute of Construction (HKIC) to discuss the collaboration opportunity and arrangement for provision of BIM CPD training courses to HKIA members; HKIA BIM Accreditation for List of BIM Pro and BIM Co was launched where DEVB and CIC were informed; HKIA would co-organised BIM in Architectural Design course with the Hong Kong Design Institute.
- On behalf of HKIE, AHKK reported that HKIE had been conducting engineering discipline-specific BIM seminar/training course/forum (CPD events) for their members. CIC would arrange a meeting with HKIE to discuss the collaboration opportunity and detailed arrangement for organising discipline-specific BIM courses which aim to be covered by Construction Innovation and Technology Fund (CITF).
- SLC reported that Quantity Surveying Division of the HKIS was working with IVE (Morrison Hill) to develop a BIM Cost Management course for their members.

(b) Agenda item 3.6 - progress of the Task Force on BIM Standards (Phase 2)

- It would be reported under Agenda item 1.6.

(c) Agenda item 3.12 - 3D Spatial Data for a Digital Hong Kong

- It would be reported under Agenda item 1.5.

1.4 Revised HKIC BIM Training Plan 2019/20

TWTw briefed Members on the paper CIC/BIM/P/002/19 regarding the revised HKIC BIM training plan 2019/20.

From 1 January 2019 onwards, BIM training courses were to be operated by the Continuing Professional Development (CPD) Department of HKIC. The number of training places would be increased from 1,360 in

2018 to 2,120 in 2019/20. The content of the BIM Management Course was being enhanced to meet the BIM Manager Course accreditation requirements under the BIM Certification and Accreditation Schemes (BIMCAS). The BIM Data Management Course would be modified to focus on scripting (programming).

After deliberations, TWTw agreed to review the number of class for Navisworks. Moreover, HKIC would increase the number of classes and number of seats of the training courses if there is market demand.

Members endorsed the revised HKIC BIM training plan 2019/20.

1.5 Progress Report on BIM by CIC

AHKK gave a presentation on the progress report on BIM by CIC as follows:

- a) Promotion of adoption of BIM
 - BIM Adoption Charter Signing Ceremony was held on 28 January 2019.
 - Sought Members' support on the comprehensive BIM adoption survey in Hong Kong for December 2018 and forecast for December 2019. All to note
 - Sought support from organisations / departments on collecting their BIM specifications for internal study. All to note
- b) Development of BIM Standards (Phase 2)
 - Sought Members' comments on the draft standards. All to note
- c) Promotion of adoption of BIMCAS
 - Ten briefing sessions were organised since launching in January 2019 and attracted more than 520 participants.
 - Sought Members' support to encourage existing BIM Team Leaders under DEVB's works projects or BIM Managers in their projects to submit applications for the Certification of BIM Manager. All to note
 - CIC could organise separate briefing sessions for institutions if required. All to note
- d) Promotion of BIM Year events
 - BIM Year 2019 & BIMCAS Launch Ceremony was held on 28 January 2019.
 - "BIM Talks x Research Forum" was held on 20 February 2019.
 - "BIM Talks x Safety" would be held at the Hong Kong Jockey Club Amphitheatre on 22 May 2019. This would be one of the key events of the Construction Safety Week 2019. Members were welcomed to All to note

propose speakers to share experience on using BIM for safety and encourage their colleagues to join.

- Users new to BIM were welcomed to join the BIM Awareness Seminars and Workshops in 2019. All to note
 - Total 45 groups and 11 groups have registered to enter the BIM Competition in the Tertiary Students Category and the Open (Practitioners) Category respectively.
 - The project on BIM-Asset Management at ZCB was close to completion.
 - The target launch of BIM Portal (Phase 2) would be in Q2 2019.
 - Interviews with Key BIM Practitioners were being arranged.
- e) Opening of the CIC BIM Space
- A preview of BIM Space for CIC Council Members was conducted on 22 February 2019. The opening ceremony was planned to be held on 23 April 2019.
 - Sought Members' support on the contribution of BIM showcases and sharing of their knowledge with the industry. All to note
- f) Development of new / enhanced existing BIM courses
- Channelled the needs and demands of BIM training from the industry to HKIC.
 - Collaborated with professional bodies to organise training courses for their members.
 - The MoU with Technological and Higher Education Institute of Hong Kong (THEi) would be arranged at the CIC BIM Space opening ceremony.
- g) BIM-related research projects
- Encouraged local universities to utilise the CIC R&D fund to carry out BIM-related research projects. All to note
- h) Engagement of industry support
- Encouraged practitioners to use the CITF to support their BIM implementation. All to note
 - Co-organised BIM conferences and seminars with professional bodies and academia and give a talks at these events to promote BIM adoptions and promoted CIC's roles in driving the adoption of BIM in the AEC industry.
- i) Development of a 3D digital built environment for Hong Kong
- Collaborated with Lands Department (LandsD), Planning Department (PlanD) and Buildings Department (BD) to plan and define the scope of the consultancy service.

- j) buildingSMART International Standards Summit
- Encouraged Members to join the Summit in Germany from 25 to 28 March 2019. All to note

Members took note of the progress report on BIM by CIC.

(SR arrived the meeting at 3:30pm)

1.6 Progress of the Task Force on BIM Standards (Phase 2)

JCCp briefed Members on the paper CIC/BIM/P/003/19 and gave a presentation on the progress of the Task Force on BIM Standards (Phase 2) as follows:

- Two meetings were held since the last Com-BIM Meeting.
- For draft of the BIM Standards for statutory plan submission, four stakeholder engagement seminars were held from January to March 2019 and more than 200 stakeholders had participated.
- For the draft versions of the two BIM Standards (Phase Two), viz. for Mechanical Electrical Plumbing: Level of Development & Underground Utilities, two stakeholder engagement consultation forums were held in January 2019 with over 140 participants. A draft was issued for comment on 5 March 2019. Another two stakeholder engagement forums would be held on 21 and 22 March 2019.

Members took note of the progress of the Task Force on BIM Standards (Phase 2).

[Post Meeting Notes: Two more briefings of the first draft of BIM Standards of Statutory Plan Submission were held on 9 and 11 April 2019 respectively.]

(SmF arrived the meeting at 3:14pm)

1.7 Progress of the Task Force on BIM Training

SLC briefed Members on the paper CIC/BIM/P/004/19 regarding the progress of the Task Force on BIM training as follows:

- One meeting was held since the last Com-BIM Meeting.
- Drainage Services Department (DSD) and Water Supplies Department (WSD) had respectively given one and two project BIM models to CIC for teaching purpose.
- The Task Force encouraged the professional bodies such as HKIA, HKIE and HKIS to organise discipline-specific BIM training for their members.

AF suggested CIC to sign MoU on collaboration of BIM education with post-secondary institutes who were providing sub-degree courses.

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Members took note of the progress of the Task Force on BIM Training.

1.8 Progress of the BIM-related Projects

Members would be requested to share with Com-BIM their progress of BIM and related projects.

(a) PlanD

SLKm updated Members on the progress of the Feasibility Study “Development of a Common Spatial Data Infrastructure – Built Environment Application Platform (BEAP)”. He reported that Stage 1 “Study and Formulation of a Development Framework” had been completed. Stage 2 “Development of a Test Case for BEAP was in progress.

SLKm updated that 30 Proof of Concepts (PoC) under four thematic areas (1) Planning and Land use, (2) Infrastructure and Engineering, (3) Landscape, Environment and Conservation, and (4) Others, have been identified for taking forward. There were ten selected prototype applications in total and two of them were BIM-related. They were “Visualisation and Analysis of Underground Space and Utilities” and “Compliance Checking of Building Plans”.

(b) LandsD

BCSb updated Members on the progress of the project “Development of Common Spatial Data Infrastructure (CSDI), 3D Digital Map, and e-Building Plan Data Processing System”. BCSb reported that LandsD was chairing the CSDI Data and Technical Standards Working Group and was developing data standards for framework spatial data, technical standards of the CSDI platform and a GeoData Store. Deliverables in the period from 2019/20 to 2023/24 would include (1) Common standards for fundamental data (framework spatial data), (2) Content-specific standards for common sharable data, and (3) a CSDI Portal to be developed with backend geoprocessing and spatial data services and a frontend portal for discovery and download.

BCSb further updated that the development of Design and As-Built BIM Data Repository was in good progress. Prototype system had been developed for Works Departments’ trial use and it would be extended for B/Ds with more technical details on simplified BIM. Full implementation of the repository was targeted for 2020.

(c) BD

YPM updated Members on the progress of the project “Draft Guidelines for using BIM in General Building Plan (GBP) Submission”. The objectives of drafting the guidelines were to facilitate AP, RSE and RGE in the preparation of GBP by BIM authoring software and to recommend good practices for the enhancement of submission standard. The guidelines, which would include “BIM file submission requirement”, “Specification for native (BIM) files” and “File structure and file naming convention”, would be released later in 2019.

Other than PlanD, LandsD and BD shared regular updates in the Com-BIM meeting, AF suggested Works Departments to update the progress of the BIM-related projects in the next Com-BIM Meeting while institutions and organisations were also welcomed to share their updates.

CEDD,
ArchSD,
WSD, HyD,
EMSD,
DSD

Members took note of the progress of the BIM-related projects being undertaken by PlanD, LandsD and BD.

(JCCp left the meeting at 3:55pm)

1.9 Any Other Business

RPg give a PowerPoint Presentation on the Construction Innovation Expo (CIExpo) 2019 as follows:

- The CIC and the DEVB would organise the CIExpo 2019 to showcase and use of promote innovative and advanced design methods, devices, processes, materials, systems and applications.
- The CIExpo 2019 would be held at the Hong Kong Convention and Exhibition Centre from 17 to 20 December 2019, which would be concurrent with the CIC Construction Innovation Award 2019 Prize Presentation Ceremony, and International Conferences on BIM, Construction Productivity and Modular Integrated Construction (MiC).
- The CIExpo 2019 would be one of the signature events to celebrate the 70th anniversary of the founding of the People's Republic of China. The Chief Executive of the HKSAR would be invited to officiate the ceremony.

AF encouraged Members to join the CIExpo 2019 and consider to be or help to identify exhibitors.

All to note

1.10 Next Meeting

11 June 2019 (Tuesday) at 2:30 p.m. at the Board Room, 29/F, Tower 2, All to note
Enterprise Square Five (MegaBox), 38 Wang Chiu Road, Kowloon Bay,
Kowloon, Hong Kong.

There being no further business, the meeting was adjourned at 4:53pm.

CIC Secretariat
March 2019