Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers Committee (APSEC)

Working Group on General Building Plan (GBP) Submission using Building Information Modelling (BIM)

Minutes of the Inaugural Meeting on 31 July 2018 at 9:30 a.m. in Conference Room 1816 of Buildings Department 18/F, Pioneer Centre 750 Nathan Road, Kowloon

Present:	Chairman Ms YU Po-mei, Clarice	AD/CS	BD
	Official Members Mr LEE Kai-yiu, Eric	SBS/IT	BD
	(Secretary) Ms TSANG Po-king, Aileen Mr LAM Chi Ming, Kempis	SBS/NTW1 SES/BP1 Building Plan Unit	BD LandsD
	Mr CHUNG Yiu Wah, William	SA/ICU2 Independent Checking Unit	Transport and Housing Bureau
	Non-official Members Mr CHAN Cho-sing, Joel Mr CHUI Pak-chung, Patrick Ir Dr YUEN Pak Leung Sr CHEUNG Man-to, Arthur Mr YIP Yin-yung Mr David CHAN Mr Paul NG Ir Gabriel YU Sr Nathan LEE		HKIA HKIA HKIE HKIS REDA AAP AAP AREC PBSCA
	Observers Mr. TONG Kwan-yuen, Lawrence	Senior Land Surveyor/LIC5, SMO	LandsD
	Mr. Rex TANG	Surveyor/Lies, Sivio	HKIA
	Ms. Rachael CHOW		HKIA
	Mr. Franklin YU		HKIA
	In attendance: Mr S F LAI	SE/IT3 (Note-taker)	BD
	Ms Zoey CHAN	(INDIC-lakel)	HKIA

Apologies:

BD SBS/D3 Mr CHENG Robert BD BS/HKE4 Mr LEE Sai Kit, Jacky BDBS/NTE10 Mr IP Pui Leung, Herman HD Senior Manager / BT(C) Mr CHAN Sai Chun, Edmund

(observer)

I. INTRODUCTION

- The Chairman welcomed all members and observers and briefed them on the relevant 1. background, proposed objectives and draft terms of reference. The terms of reference was endorsed.
- The Secretary briefed the proposed Electronic Submission Hub (ESH) to accept on-line 2. submission and processing of GBP in electronic format (not limited to BIM drawings), and the background / present situation of acceptance of BIM in building plan submission.

ITEMS DISCUSSED II.

- **Application of BIM in Hong Kong Building Industry** 3.
- The Chairman enquired members' experience in using BIM and the BIM software 3.1 adopted.
- Members and observers shared their experience / projects adopting BIM. REVIT and 3.2 ARCHICAD were the common BIM softwares adopted for the preparation of GBP. LandsD advised the wider use of BIM with GIS interface would assist development of Hong Kong as a smart city. ICU/HD commented that they were in the process of developing plug-ins for GBP submissions using BIM.

Standards / Templates for BIM Submission 4.

- The Chairman informed that BD planned to firstly accept BIM submission for 4.1 mathematical calculations to facilitate verification and checking of area calculations in GBP submitted under the Buildings Ordinance in early / mid-2019. BD wished to establish a template for GBP submission for each commonly adopted BIM software. In view that most stakeholders adopted REVIT and ARCHICAD, the WG could focus on these 2 softwares.
- The template would form the base for preparing GBP submissions if AP preferred to 4.2 submit BIM drawings, instead of CAD, for verification of area calculations. the easy processing of BIM drawings, BD would require all AP to adopt such a template and the files would need to be native files. The templates and requirements could be promulgated via a revised PNAP ADM-19.
- The Chairman advised that BD would employ consultant(s) to develop computer-aided 4.3 checking tools for BIM submission in the future. Development of such auto-checking tools would be BD's long term objectives after securing the necessary funding. templates to be developed by the WG need not contain such auto-checking functions.

- 4.4 As BIM had been generally adopted by members for preparation of GBP, the Chairman welcomed members to share their BIM templates / guidelines / in-house plug-in voluntarily (for REVIT and ARCHICAD) for further development of the standard template. The WG could unify a standard template for each BIM software.
- 4.5 Some members agreed to share their BIM templates for further study and development of the standard template to benefit the industry.
- 4.6 Members agreed that the templates and revised ADM-19 should be promulgated as soon as possible. To meet the target of early / mid 2019, it would be more feasible to develop a simple template with standard presentation style, file name, view name, colour codes, title panel etc, instead of a template with unified plug-in.
- 4.7 Members raised the compatibility problem in different versions of same BIM software. They opined that BD should not specify version requirement in BIM submission.
- 4.8 LandsD expected the templates could also facilitate their plan checking. It would be desirable to have functions similar to their currently adopted programme for CAD submissions.
- 4.9 Members commented on the large file size and suggested setting a reasonable level of details in the submission drawings.
- 4.10 Some members raised their concerns on intellectual property rights and potential legal implications if the full BIM models were accessible by the general public in the future.
- 4.11 Members commented that the logistics such as how amendments could be made on the submitted drawings etc. would need to be considered.
- 4.12 <u>The Chairman</u> appealed to WG members to share their BIM templates / guidelines / plug-in by 20 August 2018. Sub-committee in small groups would be formed by end of August 2018 to study the shared templates in detail and prepare the consolidated templates.

Action: HKIA, HKIE, HKIS, REDA, AAP, AREC, PBSCA and ICU/HD

III. ANY OTHER BUSINESS

- 5. Members enquired if more observers could attend the meeting. <u>The Chairman</u> welcomed observers to attend the WG meeting, subject to not too excessive numbers in view of the limited space in the meeting room. To enable a more focused discussion, observers might not have the opportunity to raise questions. Advance notice to the Secretary would be needed.
- 6. PBSCA enquired whether BD would provide BIM training to the industry. <u>The Chairman</u> expressed they could approach the Construction Industry Council (CIC) for BIM training.
- 7. Members enquired and the Chairman advised that the presentation materials and the meeting notes could be shared with their fellow members for collecting their feedback to facilitate the work of the WG.

8. There was no other business and the meeting was adjourned at 12:15 p.m.

IV. DATE OF NEXT MEETING

9. The date of next meeting would be announced in due course.