

**Construction Industry Council**

**Committee on Environment and Technology**

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Meeting No. 004/13 of the Committee on Environment and Technology for 2013 was held on 2 October 2013 (Wednesday) at 2:30 pm at CIC Headquarters, 15/F, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong.

Present:	Kevin POOLE	(KP)	Chairman
	Siu-hung CHAN	(SHC)	
	Hau-wai CHEUNG	(HWC)	
	Robert LAM	(RL)	
	Sze-chun WONG	(SCW)	
	Choi-kai AU	(CKA)	Director of Buildings
	Connie YEUNG	(CY)	Hong Kong Housing Authority
	Chung-leung WONG	(CLWo)	Development Bureau
	Thomas NG	(TN)	The University of Hong Kong
	Ringo YU	(RY)	Hong Kong Construction Association
	Ping-wai CHOW	(PWC)	Hong Kong Construction Industry Employees General Union
	Pun-hing HO	(PHH)	The Hong Kong Federation of Electrical and Mechanical Contractors
	Wai-wah HO	(WWH)	Chair of TF-RSS
	Simon WONG	(SW)	Chair of TF-RFID
In Attendance:	Joe FONG	(JF)	Environmental Protection Department
	Ka-chun MAK	(KMK)	Architectural Services Department
	Ivan WONG	(IW)	Senior Manager - Council Services 2
	Julian LEE	(JL)	Manager - Research
	Ivan KO	(IK)	Manager - Council Services 2
	Belle HO	(CYH)	Manager - Council Services 5
Apologies:	Anthony CHAN	(AnC)	
	Reuben CHU	(RC)	
	Christopher LEUNG	(CL)	
	James KWAN	(JK)	
	Sam-choi CHAN	(SCC)	Construction Site Workers General Union
	James PONG	(JP)	Hong Kong Institute of Surveyors
	Kenneth POON	(KPN)	Hong Kong Institute of Surveyors
Ada FUNG	(AF)	Hong Kong Housing Authority (represented by Connie YEUNG)	

Chuen-fai WONG (CFW) Environmental Protection  
Department  
(represented by Mr. Joe FONG)

## **PROGRESS REPORT**

### **Action**

#### **4.1 Confirmation of the Progress Report of the Previous Meeting**

Members took note of Paper CIC/ENT/R/003/13 and confirmed the progress report of the last meeting held on Thursday, 3 July 2013 at CIC Headquarters, 15/F, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong.

#### **4.2 Confirmation of the Progress Report of the Previous Meeting**

##### **4.2.1 Study Report on Roadmap for the BIM Implementation in Hong Kong**

Item 3.3 of the Previous Progress Report - The Council approved the publication of the Final Draft report of the Roadmap for BIM Strategic Implementation for public access. The Report was available in the CICs website for download.

##### **4.2.2 Guidelines for Enhancement of Productivity of Skilled Workers in Construction Projects**

Item 3.6 of the Previous Progress Report - An icon in the CIC homepage was created for accessing the guidelines.

##### **4.2.3 Consultancy Service for Preparation of BIM Standards**

Item 3.8 of the Previous Progress Report - The Council approved the commissioning of a consultancy service to carry out the preparation of BIM standards (Phase One).

#### **4.3 Consultancy Study and Survey on Prefabrication**

Members took note of Paper CIC/ENT/P/026/13.

Following the opinions set out in the Phase One Study Report and the subsequent endorsement of the Committee at the last Committee Meeting on the Phase Two Study in relation to the

Action

Establishment of a Local Prefabrication Yard and the Survey on Utilisation of Local Prefabrication Yard, Members discussed the scope of the Survey and the way to handle both the Study and the Survey.

The scope of the survey would cover:

- (a) If a local prefabrication yard can help improve manpower situation;
- (b) If the local prefabrication yard can attract new bloods to join the construction industry given the working environment in a prefabrication would be much better than in construction site;
- (c) If construction workers would accept a lower salary for better working environment and facilities in the prefabrication yard, and more reliance on machine than personal skills; and
- (d) If contractors and consultants are ready to switch their current construction and design methods to facilitate the use of prefabrication, etc.

A Member said that the survey results should be taken into consideration in the Feasibility Study and might affect the recommendations of the Feasibility Study. Hence, the design of the survey questions should be reviewed by the consultant of the Feasibility Study. Therefore, Members generally agreed to integrate the Survey with the Feasibility Study into a single consultancy service. To ascertain the quality of the survey company under the single consultancy arrangement, a list of qualified survey firms might be included in the tender document or other means to be considered by the Secretariat to control the quality of the survey company.

The Chairman concluded that the Members endorsed on procuring a single consultancy service to carry out the Survey and the Feasibility Study at a total budget of HK\$2,450,000.

#### 4.4 **Suggestions from the Construction Industry Group**

Members took note of Papers CIC/ENT/P/027/13.

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On 30 May 2013, the Chairman of the Committee was invited to give a briefing to the Construction Industry Group (CIG) of the British Chamber of Commerce in Hong Kong on the works and plans of the Committee. After the briefing, the CIG wrote a letter to the Chairman on 4 July 2013 and suggested six topics for the consideration and deliberation of the Committee.

Members agreed to the responses proposed in the paper. Besides, the following information would be included in the reply to CIG in relation to the wider adoption of prefabrication:

- (a) Buildings Department published the “Code of Practice for Precast Concrete Construction” in 2003. A technical committee was set up by the Buildings Department to collect views on the Code of Practice with a view to further facilitating the use of prefabrication.

The Secretariat would reply the Construction Industry Group accordingly.

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**4.5 Task Force on River Sand Substitutes Research**

Members took note of Paper CIC/ENT/P/028/13.

WWH said that the first task force meeting was held to steer the study of River Sand Substitutes for Concrete Production and Cement Sand Mortar Production (Phase Two) which commenced in August 2013.

The study objectives were:

- i. To draft a local construction standard on aggregates for mortar based on existing standards in Europe, UK and China;
- ii. To study the effects of fines content on concrete to determine the optimum and allowable fines contents so as to draft general guidelines for fine aggregate for concrete;
- iii. To study the effects of fines content on various types of mortar to determine the optimum and allowable fines contents so as to draft a set of specifications for aggregate for different types of mortar and a set of requirements for classification of manufactured sand;

Action

- iv. To study the feasibility of crushing and processing waste glass for recycling as aggregate for mortar; and
- v. To study the feasibility of crushing and processing old concrete for recycling as aggregate for concrete and mortar.

Task Force Members accepted the Inception Report and Progress Report No. 1 of the Phase Two Study. A test plan on the river sand substitutes would be prepared.

4.6 **Task Force on Schematic Design for Application for RFID, GPS and Sensor Technology in Monitoring the Movement of Construction Waste**

Members took note of Paper CIC/ENT/P/029/13.

SW briefed Members on the results of the site test on the RFID system at a Housing Authority construction site in Yuen Long. The rationale of the use of passive RFID tag, rather than active RFID tag, was to avoid proprietary solution and allow solution providers' competition due to the open standard nature of passive RFID, as well as to avoid the need of using different RFID tag for different construction sites.

SW also briefed Members on the Proposed Technical Specification on UHF RFID System for Windshield Application.

The Secretariat would discuss with LSCM on how the RFID system could be incorporated into GPS to track the paths of the trucks for the disposal of construction waste. It was proposed to conduct another trial to cover the whole cycle of construction waste disposal with the use of RFID from the construction site to the waste reception point including the collection of data from the RFID tag.

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*[Ir CHAN Siu-hung left at this juncture.]*

*[Mr. Simon WONG left at this juncture.]*

*[Mr. Ringo YU left at this juncture.]*

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4.7 **Presentation of APEC BIM Workshop and the Government Symposium on BIM in Singapore**

IK delivered a presentation to Members on the global trends and status of different countries in BIM implementation. As for Hong Kong, CIC will launch a series of promotional activities for BIM in the year 2014.

A Member requested the challenges and areas of concern of implementing BIM be presented at the next meeting so as to get the whole picture of BIM implementation.

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[PMN: The promotion plan for BIM in 2014 is attached in Annex A.]

4.8 **Work Plan of the Committee on Environment and Technology 2014**

Members took note of Paper CIC/ENT/P/025/13.

The work plan for 2014 was circulated to members in July 2013. No major comments on the plan have been received. Members are welcome to make suggestions on new initiatives for the Committee.

4.9 **Any Other Business**

CIC Conference 2013 themed “Construction Innovation and Productivity” will be held on 29th November 2013. Those who are particularly interested in BIM should attend.

4.10 **Tentative Date of Next Meeting for 2014**

16 January 2014 at 2:30 pm at CIC Headquarters, 15/F, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong.

**All to note**

There being no further business, the meeting was adjourned at 4:30 pm.

**Working Group on Roadmap for BIM Implementation****Proposed Events for the Promotion of BIM in 2014**

The CIC will work in collaboration with BIM stakeholders to organise a number of events throughout 2014. Each event will be organised with individual stakeholder organisation(s).

<i>Month in 2014</i>	<i>Proposed Events</i>	<i>Target Audience</i>	<i>Proposed Organising Party</i>	<i>Proposed Co-organising Party</i>
Jan	Media Exposure	The industry	CIC	
Feb	Media Exposure	The industry	CIC	
Mar	Hong Kong Client Summit <i>[Theme: Vision and Plan for BIM in Project Clients]</i> <i>cum</i> <i>Charter of Adoption of BIM</i>	Project clients	CIC	DEVB, HKHA, MTRC, REDA
Apr	Seminar <i>[Theme: Project Management by BIM]</i>	Senior Professional	HKIBIM	HKIPM
May	Quick Training and Demonstration on BIM	New BIM users	HKIBIM + VTC + HKU	
Jun	BIM Show Case <i>cum</i> Smart BIM Object Design Competition	University students	HKIBIM + IVE + HKU/CU/ PolyU	
Jul	Stakeholders' Updates on Their Implementation #1 <i>[Theme:</i>	Representatives of major industry organisations &	CIC	

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	1. <i>Status Update on the use of BIM</i> 2. <i>R&amp;D Needs]</i>	research institutes		
Aug	Quick Training and Demonstration on BIM	New BIM users	HKIBIM + IVE + HKU/CU/ PolyU	
Sep	Government BIM Symposium, Singapore	Statutory agency & Government representatives	CIC	
Oct	BIM Exhibition	The Industry	TDC	CIC
Nov	HKIBIM Conference 2014	BIM Professional	HKIBIM	CIC
Dec	Stakeholders' Updates on Their Implementation #2 <i>[Theme: Users' Feedback on the Use of BIM Software]</i>	Representatives of major industry organisations & BIM software vendors	CIC	DEVB, HKHA, MTRC, REDA