## **Construction Industry Council**

## **Committee on Construction Site Safety**

Meeting No. 001/10 of the Committee on Construction Site Safety was held on Friday, 16 April 2010 at 2:30 pm at the Conference Room of the Hong Kong Construction Association (HKCA), 16/F, 180-182 Hennessy Road, Wan Chai.

Present:	CHEUNG Hau-wai AU Choi-kai CHEW Tai-chong CHOW Luen-kiu KO Jan-ming KWAN Yuk-choi LAM Oi-ki, Peter WAN Koon-sun WONG Chik-wing, Mike	(HWC) (CKA) (TCC) (LKC) (JMK) (YCK) (OKL) (KSW) (MW)	Chairman
In Attendance:	LEUNG Chi-kai PANG Long	(CKaL) (LP)	Buildings Department Construction Site Workers General
	_		Union
	LEUNG Man-ho	(MHL)	Development Bureau
	TSUI Wai	(WT)	Drainage Services Department
	LAI Chi-hung	(CHL)	Hong Kong Construction Industry Employees' General Union (HKCIEGU)
	Derrick PANG	(DP)	Hong Kong Construction Association
	Dominic LAM	(DL)	Hong Kong Federation of Insurers
	PUN K K	(KKP)	Hong Kong General Building Contractors Association
	Philip CHAN	(PhCN)	Hong Kong Institute of Architects
	YEUNG Chung-yuen	(CYY)	Hong Kong Occupational safety & Health Association
	Ada FUNG	(AF)	Housing Authority
	Terry CHING	(TCG)	Housing Authority
	James BLAKE	(JB)	Kowloon-Canton Railway Corporation
	TSO Sing-hin	(SHT)	Labour Department
	Christopher TO	(CT)	Executive Director
	WONG Chi-lap	(CLW)	Senior Manager (Safety Training & Trade Testing)
	Alex LEUNG	(AL)	Senior Manager (Council Services) 1
	Raymond KWOK	(RKK)	Manager (Council Services) 3

Apologies:	Thomas HO	(TH)	
	Ian EDWARDS	(IE)	Hong Kong Construction
			Association
	David TSE	(DdT)	Hong Kong General Building
			Contractors Association
	LAU Chi-kin	(CKiL)	Hong Kong Institution of
			Engineers
	Victor KWONG	(VK)	Hong Kong Occupational Safety
			and Health Association
	TANG Wah-shing	(WST)	Occupational Safety and Health
			Council (OSHC)
	LAU Chi-keung	(CKeL)	Real Estate Developers Association
			of Hong Kong
	Charles WONG	(CWG)	Director (Training)

#### PROGRESS REPORT

**Action** 

#### 1.1 Welcome Note from the Chairman of the Committee

The Chairman welcomed Members joining the Committee on Construction Site Safety (Com-CSS) and thanked their enthusiasm in enhancing construction site safety in Hong Kong.

## 1.2 Committee Membership, Terms of Reference and Meeting Rules

AL introduced Paper CIC/CSS/P/001/10 and briefed Members on the Terms of Reference (ToR) and the proposed Co-opted Members of the Com-CSS.

Members deliberated and supported the suggested list of Co-opted Membership. The Chairman explained to Members that according to CIC meeting rules, the number of Co-opted Members in a CIC Committee should not normally exceed the number of Council members joining the Committee. Members considered that given the specific nature of construction site safety issues, it would be desirable if experts and stakeholders representing the many sectors of the industry could participate in the works of the Com-CSS although the number of Co-opted Members would exceed that of the requirement. The proposed list of the Co-opted Members was supported by Members at the

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#### **Action**

meeting and the Secretariat was requested to consider the options for accommodating the proposed list of Co-opted members accordingly. (An update to the list of Co-opted Membership with incorporation of the latest nomination received from relevant organizations is provided at Annex A for reference.)

CIC Secretariat

Members were informed that the term of office for Co-opted Members of the Committee was 2 years (this term of office would expire on 31 January 2012) and would be eligible for reappointment. In addition, Co-opted Members would not have voting right.

The CIC Secretariat also introduced the existing establishment of various Task Forces formed under the Com-CSS. In addition, the Code of Conduct and the Meeting Rules approved by the CIC had also been explained to Members.

# 1.3 Approaches and Issues for Discussion at the Committee on Construction Site Safety

The Chairman presented Paper CIC/CSS/P/002/10 which set out some of the proposed approaches and issues for consideration by Members in order to determine the future direction for the Com-CSS.

The Chairman stated that in order to effectively utilise the limited resources, the industry should direct its efforts in areas which could best win the consensus of different sectors of the industry, the government and the public. A Member suggested that a key performance indicator (KPI) might be established so as to assess the result(s) achieved by the Com-CSS. It was also considered that such KPI should be easy to compute. The CIC Secretariat would seek advice from the Labour Department (LD) for the setting up of a KPI that could suit the Com-CSS.

CIC Secretariat/ LD

Members deliberated on the possible approaches and brainstormed on the actions that the Com-CSS might follow-up in future. Members acknowledged the importance of enhancing site safety training, in particular at the undergraduate level for construction related subjects. Members also concurred that it would be on-going mission for the Com-CSS to improve the

safety awareness among workers and all other construction related personnel.

Members suggested that CIC might consider organizing an award scheme to encourage and motivate all industry stakeholders to improve site safety. The CIC Secretariat reported that they were liaising with the Real Estate Developers Association of Hong Kong (REDA) and the Hong Kong Construction Association (HKCA) in organizing a safety award scheme to encourage developers' participation in the safety partnering programme (similar to the Pay for Safety Scheme).

The Chairman added that it would also be worthwhile for designers, consultants, works supervisors, contractors, and safety officers to review working procedures and method statements of the construction industry so as to improve safety as well as remove risks involved in construction site operations.

To facilitate the Com-CSS to review the nature and causes of safety incidents, LD was invited to provide at every meeting of the Com-CSS a summary of accidents to update Members on the latest development in site safety performance of the construction industry in Hong Kong.

LD

(DP left the meeting at 3:30 pm)

# 1.4 Confirmation of the Progress Report of the Com-CSS Meeting No. 004/09 held on 13 November 2009

Members took note of Progress Report CIC/CSS/R/004/09 and approved the progress report of the last meeting held on 13 November 2009.

#### 1.5 Matters Arising from the Previous Meeting

Agenda item 4.7

The Chairman of the Task Force on Working in Hot Weather (JB) and the CIC Secretariat held a meeting with the HKCA on 24 March 2010 to share the practical experience of working in hot weather and discuss feedback from HKCA on the application of the CIC

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Guidelines on Site Safety Measures for Working in Hot Weather. Summary of the discussion would be discussed in Agenda item 1.8.

Agenda item 4.10 (a)

The safe use of scaffoldings would be reviewed by the Task Force on Work Safety of Repair, Maintenance, Alterations & Additions (RMAA) Sites and any findings conclusions drawn by the Task Force would submitted the Com-CSS for be to consideration.

Agenda item 4.10(b)

OSHC reported that the sponsorship scheme was to promote the standards for the installation of reversing video device to the industry. Recently, the number of applications to the scheme was found declining, further extension of the sponsorship scheme would therefore not be considered.

Agenda item 4.10(c)

The proposed establishment of a task force to be chaired by Professor Francis Wong for the safety of refuse disposal would be reviewed after determination of the way forward for the Com-CSS.

Agenda item 4.10 (d)

The Task Force on Construction Site Safety Strategic Development (Task Force on SSD) was established and two meetings had been held previously. Details of the discussion at the Task Force would be discussed at Agenda item 1.13.

# 1.6 Progress Report of Meeting No. 001/10 on the Task Force on Site Safety of Working in Lift Shaft

AF explained Paper CIC/CSS/P/003/10 and reported the progress of the Task Force. Further to the discussion at Meeting No. 001/09, a Task Group had been set up for the preparation of a set of guidelines for the promotion of work safety in lift shaft before handing over to the lift installation contractor (to be known as

'Stage 1'). The draft Guidelines (Volume 1) were agreed by the Task Force at its Meeting No. 001/10. The final draft would be discussed at Agenda item 1.7 for agreement by the Com-CSS.

AF also stated that the Task Force would start to prepare the Guidelines (Volumes 2 and 3) to promote work safety of Stages 2 and 3 after completion of the Guidelines (Volume 1). She also explained to Members the timing of the three stages of works taking place in lift shaft should be:-

Stage 1 -	During construction stage and before handing over			
	to lift installation contractor			
Stage 2 -	During lift installation stage until issue of			
	Occupation Permit (OP) and handing over to			
	developer			
Stage 3 -	Throughout occupation stage			

#### 1.7 Guidelines on Safety of Lift Shaft Works

AF introduced Paper CIC/CSS/P/004/10 regarding the draft of the Guidelines on Safety of Lift Shaft Works (Volume 1). She highlighted that the Guidelines aimed to set out the good practices recommended by the CIC for enhancing work safety of site personnel working near or inside a lift shaft during the construction stage and before handing-over to the lift installation contractor.

Members deliberated on the Guidelines and noted that the LD might make reference to the content when enforcing relevant safety legislations. The CIC Secretariat supplemented that the 'Preface' and 'Disclaimer' sections, after being approved by the CIC, would be incorporated into the Guidelines before publication.

After discussion, Members supported the publication of the Guidelines subject to the incorporation of the additional comments to be provided by Buildings Department (BD). The finalized Guidelines would then be submitted to the next CIC meeting after receipt and incorporation of BD's comments for approval.

BD/ CIC Secretariat

# 1.8 Progress Report of Meeting No. 001/09 on the Task Force on Working in Hot Weather

JB briefed Members Paper CIC/CSS/P/005/10 on the progress of the Task Force on Working in Hot Weather. JB reported that the Task Force had been revitalized for review and possible updating of the Guidelines on Site Safety Measures for Working in Hot Weather. At Meeting No. 001/09, Members of the Task Force had reviewed the terms of reference and the membership list of the Task Force and evaluated the summary of discussions made at previous meetings. Issues related to the updating of the Guidelines such as critical milestones, prevention of Legionnaires' Disease and overseas experience on working in hot weather had also been deliberated by the Task Force.

JB also highlighted that at the same meeting, a Task Force member presented a research proposal prepared by a team (led by the University of Hong Kong (HKU)) for the study of the impact of heat stress on construction workers. The proposal of the research would be discussed at Agenda item 1.9.

To facilitate the updating of the Guidelines, an informal meeting with the HKCA was held on 24 March 2010. Preliminary concerns of the HKCA over the safety measures recommended in the Guidelines were noted.

## 1.9 Proposed Research on "Management of Heat Stress on Construction Workers in Hot and Humid Weather" by the Tsinghua, Hong Kong and Greenwich Universities

JB introduced Paper CIC/CSS/P/006/10 regarding a proposal received from a research team led by HKU (the Research Team) for a study titled "Management of Heat Stress on Construction Workers in Hot and Humid Weather" (the Study).

JB explained that in the practical guidelines already issued by the CIC on safety precautions for working in hot weather, it was stated that a scientifically based study to determine a heat measurement index would be followed. The objectives of the proposed study therefore coincided with the intention of the Task Force in updating the Guidelines. Having reviewed the proposed

methodology, the intended deliverables and programme, as well as the estimated budget for the research, the Task Force supported the Research Team to seek funding for the research from the CIC.

Members discussed and agreed that there was a need to carry out the research so as to establish a scientific heat stress measurement parameter to facilitate the adoption of site safety measures in hot weather.

Members then deliberated on the appointment of a single service provider without going through a tendering exercise as recommended by the Task Force. Members generally supported the appointment of the Research Team given that the team was formed by the collaboration of different universities and its members were found to be experienced and knowledgeable in managing the Study. Members also noted that one of the deliverables of the Study would be the assessment of physiological conditions of individual workers, which was considered to be necessary and critical in assessing the impact of hot weather on site personnel. In addition, Members considered the programme and the budget proposed for the Study were logical and reasonable.

#### (LKC and AF left the meeting at 4:25 pm)

Members also discussed whether other consultants could be identified for doing the research. Members noted that it might be possible to find other possible candidates, however, the appointment of the Research Team could minimize the cost of administration and the associated time required.

After deliberation, the Com-CSS recommended the appointment of the Research Team for the following rationale:

(a) It is a commitment as stipulated in the existing Guidelines that "CIC will conduct further research on assessment of heat stress and may refine the Guidelines in future". In view of the recent hot summer in Hong Kong and global warming, construction site workers are exposing to an increasing risk of working in hot weather. Given the number and extent of the

upcoming infrastructure projects and RMAA works, the timely commissioning of the Study for a scientific investigation into the heat stress effects would be imminent.

- (b) The estimated cost for the Study is around HK\$750,000 and the proposed Research Team members are experienced and familiar with the topic. There would be saving in administration cost in engaging the said Research Team by direct appointment to provide suitable and cost-effective service for the Study.
- (c) One of the researchers, Mr Mark Sharp of Greenwich University, has been involved in a similar study about heat stress management for the Hong Kong Police Force. His experience and findings would no doubt be beneficial in compiling a comprehensive study for working in hot weather.

The Com-CSS also agreed that a sample size of 200 persons should be adopted in the Study so that a more accurate assessment of the heat effect on different types of workers in different working environment could be obtained.

The Com-CSS asked the Secretariat to refer the recommendation of the Committee to the Committee on Administration and Finance for consideration under the procurement policy of CIC, noting that this case amounted to a single tender and that the Research Team was not the only consultant capable of carrying out the research.

CIC Secretariat

(TCC left the meeting at 4:50 pm)

# 1.10 Publication of the Practice Note regarding the Installation of Gondolas in New Residential Buildings by the Buildings Department

JMK introduced Paper CIC/CSS/P/007/10 and reported the latest status of the request made by the Com-CSS via a formal letter issued by the ex-CIC Chairman (Mr Keith Kerr) to the Director of Buildings asking for the preparation of practice notes on the installation of gondolas in new residential buildings.

CKA briefed Members that under PNAP no. ADV-14 issued in February 2010, the Building Authority had responded to the request of the CIC by stipulating the requirements of permanent access facilities (including the gondola system) for safe access to the external walls of buildings.

# 1.11 Progress Report of Meeting No. 002/09 on the Task Force on Behavioural Aspects of Site Safety

In the absence of the Task Force (TF) Chair, AL briefed Members on Paper CIC/CSS/P/008/10 about the progress of the Task Force. It was noted that at Meeting No. 002/09, representatives from the Housing Department and the OSHC were invited to present the Piloting Safety Climate Index (SCI) Surveys in Housing Authority's building and maintenance works contracts. The Task Force agreed that the SCI survey might be very useful in spotting potential problems at construction sites and could facilitate the formulation of effective measures targeting at the right audience. Besides, MTRCL also introduced their safety training initiatives adopted in the contract documents for all of their new projects. Representatives from the British Chamber of Commerce/ Construction industry Group (BCC/CIG) also presented the implications of training on safety behaviour. The BCC/CIG believed that the development of guidelines on leadership could reinforce the layers of protection and develop a positive safety culture, which in turn could also help reducing the risk of serious accidents.

It was noted that the Task Force would continue to take stock of any good experience of site management from behavioural aspects.

# 1.12 Progress of Activities of the Task Force on Site Safety Training

CLW briefed Members Paper CIC/CSS/P/009/10 about the progress of activities of the Task Force on Site Safety Training (STT). Further to the consultation on the proposed training needs matrix in respect of the competencies on safety aspects (the Safety Competencies Matrix) carried out in the 4<sup>th</sup> Quarter of 2009, the Convenor of the Task Force had been working with key

industry stakeholders for the development of a safety training course for site management staff after taking into account of the major comments and opinions received for the matrix.

An informal meeting was held on 4 March 2010 among the Development Bureau, the Housing Department, the LD, OSHC and the CICTA for the deliberation of the development of site safety training for the construction industry in Hong Kong.

Members noted that the informal meeting discussed the direction for the enhancement of Silver Card Training as well as the standards and requirements of a proposed safety training course for managerial and supervisory level of staff of the contractors and the consultants/ clients. Members also suggested the Task Force might explore the feasibility in strengthening the existing training for Green Card.

## 1.13 Progress Reports of Meeting No. 001/10 and No. 002/10 on the Task Force on Construction Site Safety Strategic development

The CIC Secretariat reported that the Task Force on SSD was set up with the aim to discuss the future direction of the Com-CSS. At Meeting Nos. 001/10 and 002/10, the Task Force had come up with many invaluable ideas on the possible way forward for the enhancement of construction site safety. It was agreed that the discussions and conclusions drawn at the Task Force meetings could form the basis and shed lights for the determination of the strategic direction for the Com-CSS.

Regarding the preliminary suggestion of requiring a fall protection plan to be submitted together with new building plan submission, CKA clarified that it might be out of the jurisdiction of the Buildings Ordinance.

#### 1.14 **Any Other Business**

The Chairman referred Members to take note to an email sent by TH on 14 April 2010 with suggestions for the way forward of the Com-CSS. The Chairman agreed that those strategic items discussed at the Task Force on SSD would be followed up by the Com-CSS.

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(JB left the meeting at 5:10 pm)

The Chairman also highlighted the implication of the adoption of Construction (Design and Management) (CDM). He noted that the United Kingdom (UK) had launched their new CDM regulations since 2007. The Chairman requested LD to deliver a short introduction to the Com-CSS about the CDM system adopted in UK.

LD

The CIC Secretariat tabled a paper (no. CIC/CSS/P/012/10) with the tentative meeting schedule for the Com-CSS in Year 2010. The CIC Secretariat would issue a notice of meeting to Members for confirmation of the meeting arrangement before each meeting.

#### 1.15 **Next Meeting**

19 May 2010 (Wednesday) at 2:30 pm at Room 1201 Murray All Building.

There being no further business, the meeting adjourned at 5:20 pm.

**Remark:** The mentioned papers discussed in the meeting of the Committee on Construction Site Safety can be made available to the Council Members from the CIC Secretariat upon request.

CIC Secretariat May 2010

## CIC/CSS/R/001/10 (Annex A)

#### **Construction Industry Council**

#### **Committee on Construction Site Safety**

#### **Proposed Co-opted Members**

#### A. Re-appointment

James BLAKE KCRC

Philip CHAN Hong Kong Institute of Architects

Ada FUNG Housing Authority

Dominic LAM Hong Kong Federation of Insurers

LAU Chi-keung Real Estate Developers Association of

Hong Kong

Jonathan LEUNG Development Bureau

PANG Long Construction Site Workers General Union

TANG Wah-shing Occupational Safety and Health Council

TSO Sing-hin Labour Department

#### B. New Appointment

Ian EDWARDS Hong Kong Construction Association

KUOK Hoi-sang Hong Kong Federation of Electrical and

**Mechanical Contractors** 

Victor KWONG Hong Kong Occupational Safety and

Health Association

LAI Chi-hung Hong Kong Construction Industry

Employees' General Union

LAU Chi-kin Hong Kong Institution of Engineers

(Chairman of Structural Division)

## CIC/CSS/R/001/10 (Annex A)

Derrick PANG Hong Kong Construction Association

David TSE Hong Kong General Building Contractors

Association

HKCSA to advise Hong Kong Construction Sub-contractors

Association (HKCSA)