

**Construction Industry Council**

**Consolidated Report on Review of Construction Standards**

**1. Purpose**

1.1 This report summarizes the main findings of the following task forces/groups under the Committee on Environment and Technology (Committee) after the review on the construction standards of their respective areas and seeks Members' views on the role of the CIC in relation to the local construction standards:

- (a) Task Force on Construction Standards for Infrastructures
- (b) Task Force on Construction Standards for Buildings
  - Task Group on Architectural Works
  - Task Group on Building Services Works
  - Task Group on Structural Works

**2. Background**

2.1 In view of the

- (a) phasing out of British Standards on structural design;
- (b) there is no central construction standards body in Hong Kong to deal with the local construction standards;
- (c) the existing approach of different project clients to develop their own specifications without unification; and
- (d) the Committee at its meeting held in June 2007 considered the establishment of a standards body unnecessary,

the Committee at its meeting held in October 2007 decided to set up two task forces to review the construction standards respectively for buildings and infrastructures and to identify the role to be played by the CIC.

2.2 Two task forces as mentioned in Paragraph 1.1 were set up for infrastructures and buildings respectively in March 2008 and April 2008.

- 2.3 As there is a wide variety of standards relating to building construction, three task groups under the Task Force on Construction Standards for Buildings was subsequently set up in June 2008 to focus on the architectural works, the building services works and the structural works.
- 2.4 The Task Force on Construction Standards for Infrastructures and the three task groups respectively on architectural works, the building services works and the structural works have separately submitted the following review reports to the Committee for deliberation at different meetings:
- (a) Report from Task Force on Construction Standards for Infrastructure on the Findings and Recommendations  
(Paper CIC/ENT/P/012/09 for the 2<sup>nd</sup> Committee meeting of 2009)
  - (b) Revised Report from Task Group on Architectural Works  
(Paper CIC/ENT/P/013/09 for the 3<sup>rd</sup> Committee meeting of 2009)
  - (c) Report from Task Group on Building Services Works  
(Paper CIC/ENT/P/010/09 for the 2<sup>nd</sup> Committee meeting of 2009)
  - (d) Report from Task Group on Structural Works  
(Paper CIC/ENT/P/030/08 for the 9<sup>th</sup> meeting of the Committee held in November 2008)

The relevant papers and reports on the Construction Standards will be provided to Members in a CD-ROM for reference.

### **3. Consolidated Findings**

- 3.1 Construction standards are being taken care of by the Works Departments of the Government, the Mass Transit Railway Corporation (MTR), and the Housing Authority for different types of construction works which are summarized as follows:

<b><u>Type of Development</u></b>	<b><u>Standards taken care of by</u></b>
Infrastructure development projects	Works departments of the Government; MTR
Government building projects	Architectural Services Department
Public housing projects	Housing Authority

<b><u>Type of Development</u></b>	<b><u>Standards taken care of by</u></b>
Private building projects	Buildings Department

- 3.2 The migration of British Standards to Eurocodes by 2010 involves mainly the design codes for buildings and civil engineering structures and the associated reference standards. The other British Standards would still be in force, reviewed and maintained by the British Standards Institution. Such move would not pose major problems to the industry as different organizations looking after the construction standards relevant to their development projects have already started looking into the issue and even migrating the use of British Standards to other internationally recognized standards like the BS-EN or IEC or continuing the update of their own design codes or codes of practice as appropriate.
- 3.3 Unification of specifications is considered unnecessary because individual project organizations have their own freedom to specify what they needs which are specific to their projects. Unification under that situation would result in widely adoption of supplements to the unified specifications which jeopardize the purpose of unification.
- 3.4 In practice, four types of specifications are maintained respectively for government development projects, public housing projects, private building works and railway projects rather than a unified set of specifications. Each of these four types of specifications is taken care of by the specific organizations though some harmonization is observed among them.
- 3.5 While unification of specifications is considered unnecessary, harmonization of materials specifications can however be considered if opportunity arises, e.g. raised by an organization under special circumstances, or simply by chance during the course of normal works.

#### **4. Role of CIC in Construction Standards**

- 4.1 With reference to the findings as stated in Paragraph 3, in particular the conclusion that unification of specifications is unnecessary, possible roles that the CIC can play in respect of the construction standards are:
- (a) Option A – the CIC serves as a platform to facilitate the exchange of information and collaboration of efforts to address the needs of the industry relating to the construction standards; or

- (b) Option B – the CIC plays a proactive role in coordinating the use and update of standards adopted by different project clients.
- (c) Option C – the CIC keeps track of changes in the construction standards adopted by the relevant local organizations handling the respective types of construction standards and conduct study on the development of construction standards in overseas countries.

### **Option A - CIC as a Platform**

- 4.2 As mentioned in Paragraph 3.1, construction standards of different types of development projects are being taken care of by different parties.
- 4.3 If any stakeholders consider the need of harmonizing particular standards or material specifications, the CIC can provide a platform to collaborate efforts of relevant organizations to address the issue through establishing an ad hoc task force to review the concerned matter.
- 4.4 Similar exercise as the one just completed by the Task Forces/Groups can be repeated over a certain period of time. Given the time taken from the formation of the Task Forces to the completion of the exercise being about one year, the comprehensive review exercise is recommended to be repeated at a time interval of about three to five years.
- 4.5 In-between the said periods, relevant works departments of the Government, either in the capacity of project clients or regulators, are encouraged to maintain close liaison with one another regarding the use of standards while CIC can help disseminate the information to other stakeholders as necessary.

### **Option B - CIC as a Coordination Body**

- 4.6 Given that there is no need to establish a construction standards body, and the unification of specifications is considered unnecessary, the scope of duties of the CIC under Option B as a coordination body would be smaller than originally anticipated.
- 4.7 Under Option B, the CIC will pro-actively co-ordinate with the local construction industry in respect of the updates from different project clients with a view to identifying the opportunities for harmonization of standards and, if applicable, co-ordinating the harmonization process.
- 4.8 As there is a large variety of standards adopted in the industry, staff with expertise in the respective areas, i.e. civil and structural engineering,

architecture, and building services, have to be recruited, which would have additional cost implication for the CIC.

- 4.9 To enable the CIC to achieve the coordinating functions, project proponents have to keep the CIC updated promptly whenever new or particular standards are adopted in their projects in order to trigger the necessary action of the CIC. Therefore, a sophisticated communication mechanism needs to be derived.

### **Option C - CIC as a Monitoring Agent**

- 4.10 Option C is somewhat between that in the Option A and Option B.
- 4.11 The CIC can keep track of changes in the construction standards regularly, e.g. on an annual basis, through making enquiries to those local organizations for updated status, and conducting search on the development of construction standards in overseas countries. Should there be major changes, the CIC can initiate discussions as appropriate.
- 4.12 Relevant organizations may also approach the CIC to raise discussion on construction standards.

### **Option A vs Option B vs Option C**

- 4.13 Option A can achieve the basic purpose of taking care of the changes in construction standards while there are concerns with resources in Option B. Hence, Option C is considered as a more practical approach for the CIC to help the industry keep track of the development of construction standards.

## **5. Recommendations**

- 5.1 Taking into account of the findings of the Task Forces/Groups as summarized in Paragraph 3 and the analysis on the possible roles of the CIC in respect of the construction standards in Paragraph 4, the Committee recommends that
- (a) establishment of a centralized standards body is not required;
  - (b) the migration of British Standards to Eurocodes by 2010 would not cause major impact to the industry as it involves mainly the design codes for buildings and civil engineering structures and the associated reference standards while the other British Standards would still be in force, reviewed and maintained by the British

Standards Institution. Such migration has also been well-taken care of by relevant local organizations.

- (c) unification of construction standards for the local industry is unnecessary; and
- (d) the CIC can play a role of keeping track of changes in the construction standards through making enquiries to the organizations looking after the respective standards on an annual basis, and conducting search on the development of construction standards in overseas countries.

## **6. Advice Sought**

- 6.1 Members are requested to take note of the findings of Task Forces/Groups on construction standards as recapped in Paragraph 3.
- 6.2 Members are requested to consider and if appropriate, endorse the recommendation of the Committee on Environment and Technology on the roles of the CIC in the construction standards as detailed in Paragraph 5.

**CIC Secretariat**  
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