

Standing Committee on Concrete Technology (SCCT)
Annual Concrete Seminar 2012

**Opening Address and
Report on Work of SCCT**

H.N. Wong, SCCT Chairman

18 April 2012

Reinforced concrete ...

one of the most important construction materials




Consumption in 2011	
<u>Concrete</u>	<u>Reinforcing Steel</u>
5 M m³	1 M tonne
\$ 3.5 B	\$ 6.5 B

Standing Committee on Concrete Technology (SCCT)

- Formed in 1982
- Promulgated under ETWB TC(W) No. 21/2004
- Central body for inter-departmental liaison on matters concerning concrete construction

香港特別行政區政府
The Government of the Hong Kong Special Administrative Region

政府總部
環境運輸及工務局
香港花園道東利大廈



Environment, Transport
and Works Bureau
Government Secretariat
Murray Building, Garden Road,
Hong Kong

Ref. : ETWB(W) 520/11/02
Group : 1, 7

20 July 2004

Environment, Transport and Works Bureau
Technical Circular (Works) No. 21/2004
Standing Committee on Concrete Technology

Background

The Committee was formed in 1982 with the principal aim of continuing the inter-office liaison on problems concerning concrete construction. As concrete is the most widely used material in construction, it is considered that this central body, aimed at considering all matters related to its use, should be maintained.

2. This Circular updates the membership composition of the Committee.

Scope

3. This Circular promulgates the membership and terms of reference of the Standing Committee on Concrete Technology (SCCT).

Effective Date

4. This Circular shall take immediate effect.

ETWB TCW No. 21/2004 Page 1 of 4

SCCT – Membership (2011 – present)

Department	Post	Name
Chairman	AD(T), CEDD	H N Wong (Richard Pang)
CEDD	SE/Concrete (Lab)	Peter W C Leung
CEDD	CGE/S&T	Herman Y K Shiu (Ken K S Ho)
ArchSD	SSE/101	Allen W L Siu (Simon Cheung)
BD	TS(Str)	Tony C P Cheung
CEDD	SE/QM&S	James Y C Chu
DSD	SE/QA	T Yu
HyD	SE/Gen(U)	Greg K Y Leung (Daniel Kwong)
HD	SSE/18	Francis C C Wong
WSD	SE/Des(2)	Albert K M Cheung
ITC	SA(3)	Denis K M Heung (C K Cheung)
DEVB	AS(WP)4	Eddie W K Wu
CEDD	Secretary	Roy K C Hung
Honorary Advisor		P C Wong

SCCT – Publication

Construction Standard

- Construction Standard CS1: 2010 – Testing Concrete
- Construction Standard CS2: 1995 – Carbon Steel Bars for the Reinforcement of Concrete

Specification

- Recommended Specification for Reinforced Concrete in Marine Environment
- Model Specification for Protective Coatings for Concrete

SCCT – Publication

Reports on Research and Development (examples)

- “Report on Strength Comparison of 100mm and 150mm Cubes”, Special Project Report No. SPR 3/96 (1996)
- “The 2004 Review on Prevention of Alkali Silica Reaction in Concrete”, GEO Report No. 167 (2005)
- “Final Report on Durability and Strength Development of Ground Granulated Blastfurnace Slag Concrete”, GEO Report No. 258 (2010)

Notable Recent Development

(1) Revision of CS2 : 1995

(Carbon Steel bars for the Reinforcement of Concrete)

- Existing CS2 published in 1995. Adapted from **BS4449:1988**, specifying product standards for rebars, and requirements for classification and certification by QA stockists and end purchaser testing.
- Current review of CS2 commenced in 2008. Upon consultation with stakeholders, the revision is **to be carried out in 2 phases**.

Phase 1 – Update of technical requirements of BS4449:2005

- Use of higher characteristic tensile strength of 500 MPa; specification of the chemical composition (relating to weldability) and surface geometry (for bond strength).
- Draft for consultation with stakeholders
- To be finalized for issue in 2012

Phase 2 – Introduce 3rd Party (i.e. Product) Certification Scheme for Manufacturing and Stockholding of Steel Reinforcing Bars

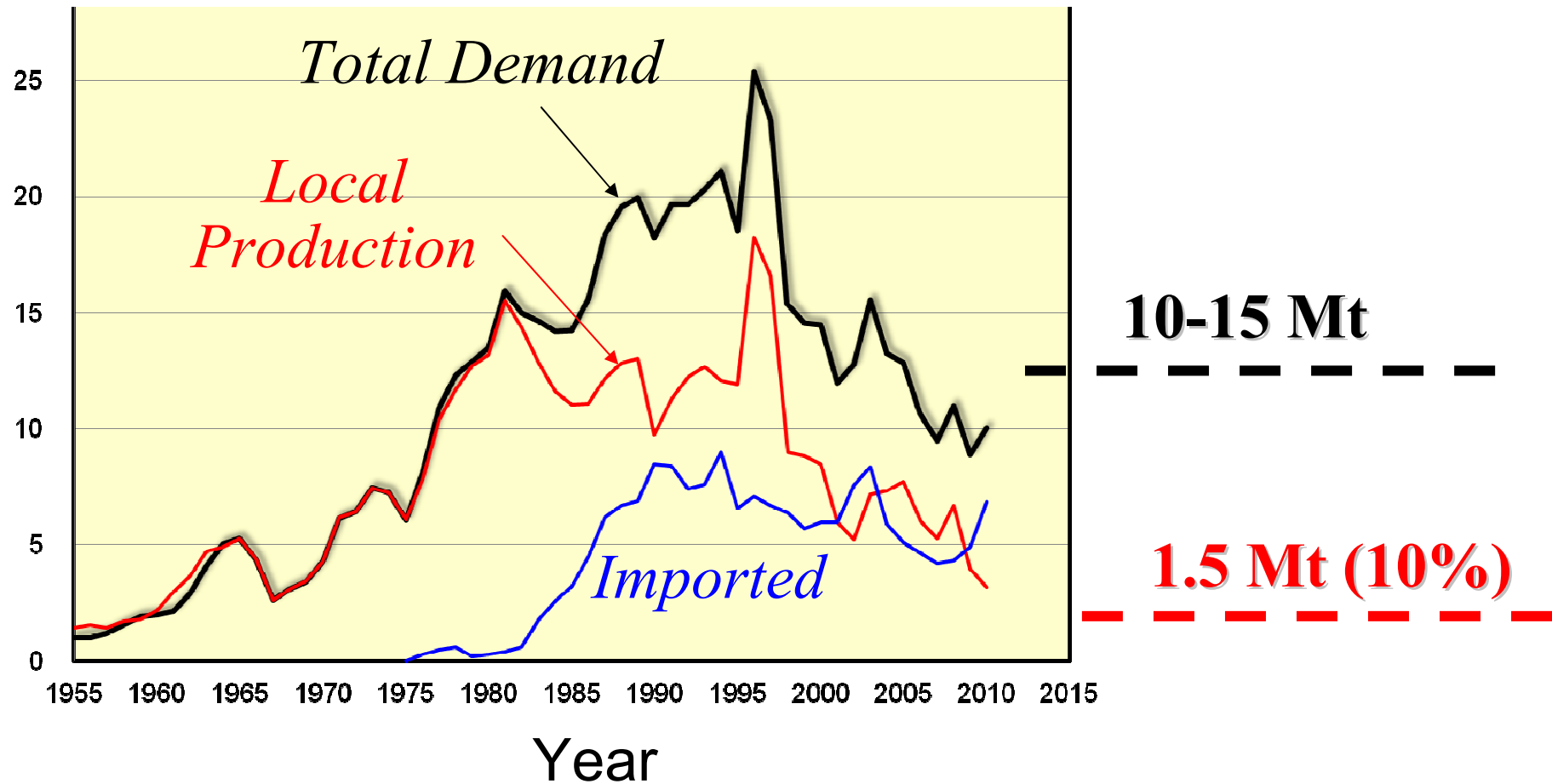
- To start after completion of Phase 1 revision.

(2) Preparation of CS3 (Aggregates for Concrete)

- Stand-alone local standard for aggregates
- Introduction of quality assurance system requirements on production and supply of aggregates
- Draft for consultation with stakeholders
- To be finalized for issue in 2012

HK's Demand for Rock Products (~ 80% used as aggregates)

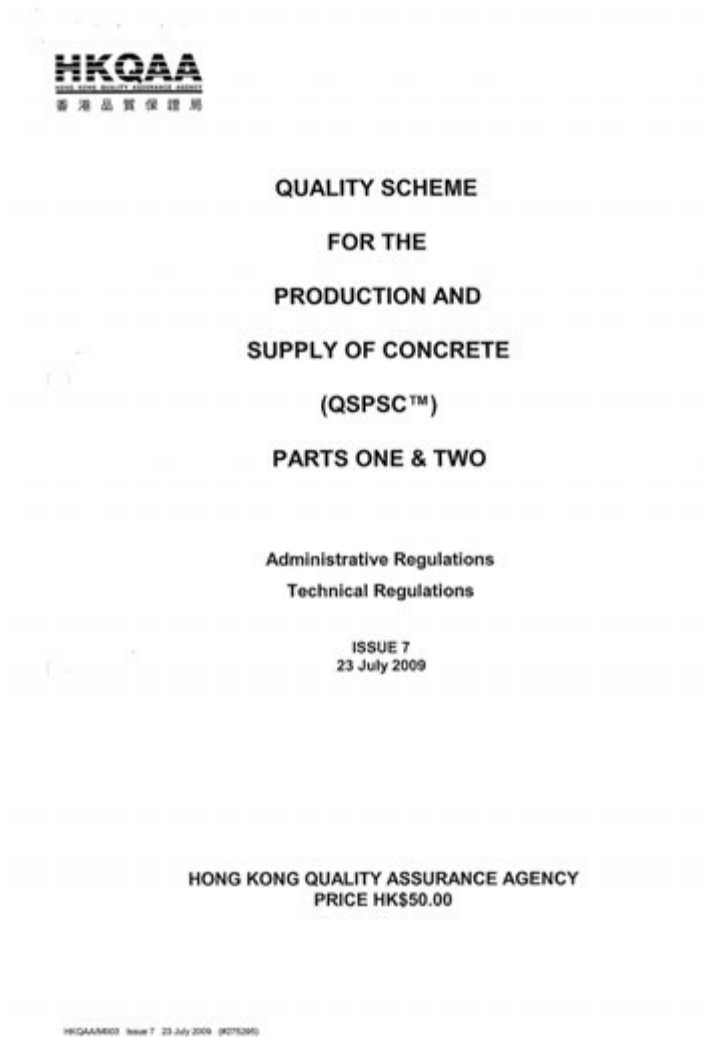
Million tonnes (Mt)



(3) Product Certification

Certification of product quality
and conformity,
through regular factory
surveillance
and periodic sampling and
testing of product
by a third party (**accredited
certification body**)

*Quality Scheme on Production and
Supply of Concrete (QSPSC) for
public works since Jan 2003*

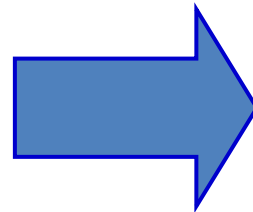


(4) Off-site Prefabrication (e.g. rebars)

On-site cut and bend

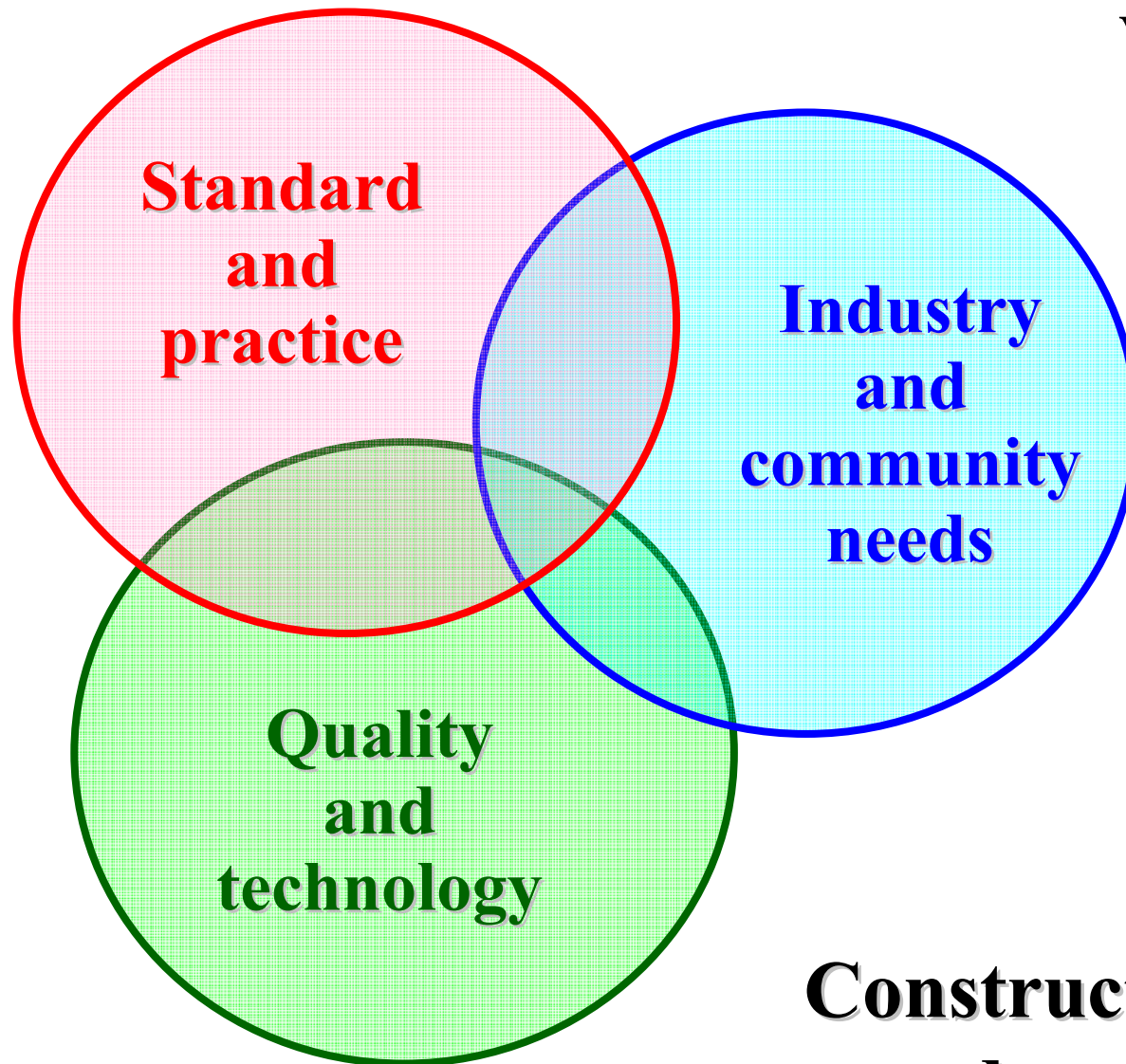


Off-site prefabrication



- ✓ working environment
- ✓ safety
- ✓ quality management
- ✓ site constraints
- ✓ productivity
- ✓ recruitment and training

**New challenges
(and opportunity)
in improving
traceability management
and industry practice**

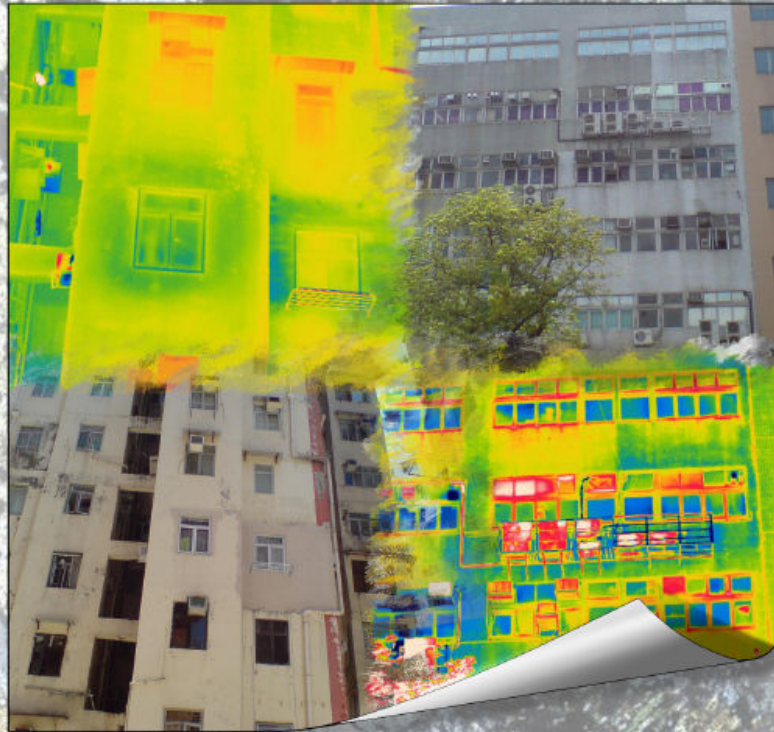


**Works standard
and practice**

SCCT

**Construction engineering
and materials science**

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Concrete: The More We Care The Longer It Serves

18 April 2012

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Thank You