



# **Standing Committee of Concrete Technology**

## **Annual Concrete Seminar 2006**

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## **Standing Committee of Concrete Technology**

- ◆ **Matters of concrete technology**
- ◆ **Review of Concrete Related Standards**
  - **Scope?**
  - **Progress?**



## Documents guiding the construction industry

- ◆ **Standards** 
- ◆ **Specification** 
- ◆ **Design Codes** 
- ◆ **Quality Assurance Document** 
- ◆ **Certification Standards** 



## **Standards:**

- ◆ **Key characteristics of**
  - **basic materials**  
e.g. steel, cement
  - **basic products**  
e.g. bolts & nuts, road blocks
  - **basic process**  
e.g. ISO 9001, CS1



## **Standards:**

- ◆ **Ensures**
  - **consistency of products**
  - **exchangeability**
  - **lower supply price**
- ◆ **Regional, National, International**





# Specification

- ◆ **Organization specific**
  - what basic materials, products, processes to be used  
(method specification)  
e.g. durability of concrete
  - key properties of resulting product  
(end-product specification)  
e.g. strength & workability of concrete





# Design Codes

- ◆ **Standard of good practice**
  - **design and construction**
  - **e.g. Road Note 29**  
**Highways Design Manual**
- ◆ **Safety**
- ◆ **Economy**
- ◆ **Theoretical vs prescriptive**
- ◆ **Regional, national....**  
**international?**







## **Quality Assurance Document:**

- ◆ **Ensuring product & process to standard**
  - **production objectives**
  - **production process**
  - **auditing & surveillance**
- ◆ **Contributes to users trust**
- ◆ **Organization Specific**
  - **matter of culture**
  - **minimum requirement**







## Certification standards

- ◆ **A framework**
- ◆ **Systematic rigorous audit & surveillance**
- ◆ **Third party on an organization**
  - **Standards of QA**
  - **e.g. Quality scheme for production & supply of concrete**
- ◆ **Community or sector specific**





## **Review of Standards**

- ◆ **Constituent Materials**
  - **Cement**
  - **PFA**
  - **GGBS**
  - **Aggregate**
- ◆ **Sampling & Testing of Concrete**
- ◆ **Steel reinforcement**
- ◆ **Concrete Specification**



## **Standards:**

- ◆ **Supply source**

- **Imported**

- Standard at the source**  
**e.g. Cement, GGBS**

- **Local**

- National standard + adjustments**

- e.g. PFA, Aggregate,**  
**Sampling and testing of concrete**

- Local**

- e.g. ASR Control**



## **Progress**

- ◆ **Cement : BSEN 197-1:2000**
- ◆ **GGBS : BS6699:1992**
- ◆ **PFA : BS3892-1:1997**
  - **Tests completed**
  - **Decide on local adjustments**
- ◆ **ASR : GEO Report 167 App. H**
- ◆ **Concrete : study BS8500, BS EN206**



**Thank You**