



## **FOCUS GROUP WORKSHOP - of BUILDING CONSTRUCTION CLIENTS**

**23 February 2016, Taj Lands End, Bandra, Mumbai**

# ***First Regional Roundtable Outcomes & Proposed Way Forward***

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## GAME PLAN for next 20 mins.

### Objectives of Ci3 INDIA & of this WORKSHOP

Overseas Initiatives overview  
Initiatives and Change Agendas  
Industry Development Bodies

Industry Reform

First Regional Roundtable Outcomes -  
*Prioritised Focus Areas from proposed Action Plan*

Revisiting and Moving Forward from 1<sup>st</sup> Regional Roundtable Outcomes  
e.g. Construction Clients Charter?

GAME PLAN for next 12 years? – How best can Ci3 India do better?  
... from Regional Roundtable & Workshop to National Roundtable to ....  
a viable and valuable Ci3 India

## Overall Objectives of Ci3 India (launched in Oct. 2015)

- (1) To identify current and imminent critical issues in the Construction Industry in India ...
- (2) To compile a Roadmap with Milestones for industry improvements in strategic, high impact and far-reaching domains
- (3) To launch (a) system improvement initiatives and (b) demonstration projects, in *prioritized focus areas*.

## Why kick-off with leading-edge Building Construction Clients?

**Breakthroughs** must be championed by a **united front** of **progressive clients** with long-term vision for boosting productivity, quality and sustainability, and value-driven project delivery.

Must also drive industry **Culture Change**

**Supply chains** only **respond** to paymasters' **selection and performance criteria**.

- Need '**Carrots & Sticks**' to incentivise & accelerate best practices & change mind-sets

## What's in it for Clients, their Supply Chains and Society?

All **stakeholders** benefit from significantly higher overall value, financial and reputational returns.

**Society** benefits from an efficient & effective industry – **too altruistic?**

Also, **cutting-edge clients** spearheading **Ci3** could reap more & faster rewards

- **too materialistic?** Realistic – must convince own stakeholders

**Today's (23 Feb. 2016) OBJECTIVES**  
**of FOCUS GROUP WORKSHOP of BUILDING CONSTRUCTION CLIENTS,**  
**Mumbai**

**To revisit, build on & move forward from [Oct. 2015 Ci3 India Regional Roundtable Outcomes](#):**

**To verify, complement and firm up a set of current and imminent critical issues in the Construction Industry in India**

**To suggest strategies for fine-tuning, enhancing & moving forward with proposed ([at the Oct. 2015 Regional Roundtable](#)) Action Plans .... including (but NOT limited to) those proposed for:**

- (1) Clients' Charter of Standards and Productivity Benchmarks & Norms**
- (2) Skills Development**
- (3) Innovations & Technology adoption in IT & Construction Technologies**
- ....**



**Ci3 Launch & Regional Roundtable participants, IIT Madras, Oct. 2015**





# Overview of Overseas Initiatives - Industry **Reform Initiatives and Change Agendas**

Ind

## Construction Industry Reform Reports with Change Agendas in some other countries

### - examples only:

**USA**, 1983 – Business Roundtable (Construction Committee) – **‘More Construction for the Money’**, Summary Report of the Construction Industry Cost Effectiveness Project

**UK**, 1998 - **‘Rethinking Construction’** – ‘Egan Report’

NOTE: This follows a series of periodic Reports on the UK Construction Industry

from 1944 (Simon Committee) to 1994 (Latham)

**Australia**, 1999 - **‘Building for Growth’**

**Singapore**, 1999 - **‘Re-inventing Construction’** – C21 Report

**Hong Kong**, 2001 - **‘Construct for Excellence’** - Construction Industry Review Committee (CIRC) Report

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***NOTE: Some Highlights & Outcomes of above initiatives are***

## Overview of Overseas Initiatives – Industry **Development Bodies and Reforms Implementation**

### **Construction Industry Development bodies in some other countries – examples only:**

Construction Industry Institute (CII), **USA**

**European** Construction Institute (based in UK), Construction Industry Institute **Australia** (CIIA)

Constructing Excellence (CE), **UK**

Construction Industry Council (CIC), **UK**

Construction Industry Council (CIC), **Hong Kong**

Building and Construction Authority (BCA), **Singapore**

Construction Industry Development Board, **Malaysia**

Construction Industry Development Board, **South Africa**

Construction Industry Development Authority, **Sri Lanka**

**Note 1:** We may also compare with **Construction Industry Development Council, India**

**Note 2:** Above does not include examples of professional and trade bodies and lobby groups



Refocusing on Ci3 INDIA and today's Mission - *First Regional Roundtable Outcomes -*  
*Prioritised Focus Areas from Oct. 2015 Action Plan - 1<sup>st</sup> Highlight*

## Skills Development

About 80% - 85% of construction workers are under skilled.  
**Huge need to bridge this skills gap.**

## Proposed Action plan

- Start with on-site skilling in project sites – certify workers
- Set targets – say from 2016, 20% of workforce should be certified, 40% in 2017 and so on, after which demand for skill development training institutes should increase
- For Engineer and Managers? – Survey existing institutes – eg. PMI, Institution of Engineers, CIDC, Universities
- One option - set up 'finishing schools' ('top-up') for young graduates with different specializations – Construction Management, Structural, MEP etc.

Refocusing on Ci3 INDIA and today's Mission ..... *First Regional Roundtable Outcomes -*

*Prioritised Focus Areas from Oct. 2015 Action Plan - 2<sup>nd</sup> highlight*

## **Clients' Charter of Standards and Productivity Benchmarks & Norms**

**Imperative for productivity standards and benchmarks ....**

only well-known productivity benchmark in India - CPWD Delhi Analysis of Rates

- only updated every 7-10 years
- methodological and technological changes may not be incorporated

### **Proposed Action plan**

- Set up a pilot platform to share productivity data across a 'benchmarking club' of progressive organizations
- Extend to a nationwide common platform to gather and develop productivity benchmarks, also incorporating updated methodological and technological changes
- Develop, validate and propagate standards for project planning (in design phase and procurement), and for safety and quality

**Proposal to initially agree and endorse the above in a CLIENTS' CHARTER**

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## Innovations and Strategies for Technology adoption in IT and construction technologies

Need for Re-integrating teams with available technologies.  
Skilling-up professionals with advanced technologies

### Proposed Action plan

- Clients create the need for awareness of the use and benefits of technology
- Disseminate the benefits of technology adoption to industry with
  - demonstration projects, cost-benefit case studies, sharing reports etc.
- Establish standards for precast construction technology
- Spread awareness of new management practices – Lean Construction etc.
- Build in demands for technology adoption (include BIM) in

## Revisiting and MOVING FORWARD from *First Regional Roundtable Outcomes*

### Some Suggestions for Brainstorming today:

A. Why not **Extend & Expand** proposed “Clients’ Charter of Standards and Productivity Benchmarks & Norms” to **other proposed focus areas** too?

Then **Construction Clients Charter’ (C3)** can cover **all identified critical areas** in the above Action Plan (including any proposed today).

B. **For Ci3 to work**, Construction Clients must eventually engage their **Construction Supply Chains** - for **both top-down and bottom-up ‘buy-in’ and commitment**

So should we target a “**Construction Consultants’ Credo**” ?  
and a “**Construction Contractors’ Code**” ?

i.e. two more C3s – thus **3C3 for Ci3**

**Our challenge is to translate rhetoric into reality -**

- **3 interlocking documents - Clients’ Charter, Consultants’ Credo and Contractors Code** - to be signed and subscribed to by leading players



# *Ci3 India's - Construction Clients Charter (our first C3)*

Brainstorm Structure & potential main Thrusts today???

– Examples only

- Aims - 12 year – Targets ....?
  - 8 years – Targets .....
  - 4 years – Targets .....
- Core Principles .....
- Basic Protocols .....
- ..... ...??

# Need for Realistic & Robust Performance Indicators – KPIs - [Examples from Hong Kong](#)

**Hong Kong Construction Industry Performance Reports – compiled & issued every 2 years**

*by Construction Industry Council in collaboration with Rider Levett Bucknall Limited*

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| 5 AREAS   | 4 CATEGORIES  | 2 SECTORS  |
|---|---|--|
| <ul style="list-style-type: none"><li>• Productivity (7 KPIs)</li><li>• Health &amp; Safety (3 KPIs)</li><li>• Environment (3 KPIs)</li><li>• Manpower (3 KPIs)</li><li>• Dispute Resolution (3 KPIs)</li></ul> | <ul style="list-style-type: none"><li>• Whole Industry</li><li>• Civil Engineering Works</li><li>• New Building Works</li><li>• RMAA* Works</li></ul> <p>* Repairs, Maintenance, Additions, Alterations</p> | <ul style="list-style-type: none"><li>• PUBLIC</li><li>• PRIVATE</li></ul> |

- **REVIEW** commissioned by **CIC** – awarded to **HKU CICID\*** - consultancy to review “Consultancy Services for **Assessing the Performance of the Hong Kong Construction Industry, Key Performance Indicators (KPI): An International Comparison**”

\* **Centre for Innovation in Construction and Infrastructure Development**

**Extract: HONG KONG Headline KPIs** (Separately for each Category and Sector)

| KPIs | DEFINITION   |
|------|--|
| P1   | (On site) Man-days per HK\$1,000,000 gross value of construction works<br>[PRODUCTIVITY KPI]   |
| P2   | (On site) Man-days per gross floor area [PRODUCTIVITY KPI]   |
| P3   | Construction cost Indices [KPI of COST TREND OF CONSTRUCTION WORKS ]   |
| P4   | Percentage of gross value of construction works to GDP<br>[KPI OF THE ECONOMIC SIGNIFICANCE OF THE CONSTRUCTION INDUSTRY]                    |
| P4a  | Percentage contribution of construction activities to GDP at basic prices<br>[KPI OF THE ECONOMIC SIGNIFICANCE OF THE CONSTRUCTION INDUSTRY] |
| P5   | Gross value of construction works per capita [PRODUCTIVITY KPI]  |
| P6   | Number of manual workers engaged per HK\$1,000,000 gross value of construction works at construction sites<br>[PRODUCTIVITY KPI]             |

# Need for Realistic & Robust Performance Indicators – KPIs - [Examples from UK](#)

## UK Construction Industry Performance Report 2015 – based on UK Construction Industry KPIs

### Broad Groups of KPIs

- Economic Indicators
- Client Satisfaction
- Contractor Satisfaction
- Profitability
- Predictability
- Respect for People
- Environmental Indicators
- Housing
- Non-Housing
- Consultants

VAPE – Value Added per Employee

**Note** – 2015 Report gives % figures for years from 1999 to 2015 – Trend % (vs. 'Last Year' and 'All Years')

| <u>ECONOMIC KPIs - All Construction</u>                      | <u>MEASURE</u>                        |
|--|---------------------------------------|
| Client Satisfaction - Product                                | % scoring 8/10 or better              |
| Client Satisfaction - Service                                | % scoring 8/10 or better              |
| Client Satisfaction - Value for Money                        | % scoring 8/10 or better              |
| Contractor Satisfaction - Performance - Overall              | % scoring 8/10 or better              |
| Contractor Satisfaction - Provision of Information - Overall | % scoring 8/10 or better              |
| Contractor Satisfaction - Payment - Overall                  | % scoring 8/10 or better              |
| Defects - Impact at Handover                                 | % scoring 8/10 or better              |
| Predictability Cost - Project                                | % on cost or better                   |
| Predictability Cost - Design                                 | % on cost or better                   |
| Predictability Cost - Construction                           | % on cost or better                   |
| Predictability Time - Project                                | % on time or better                   |
| Predictability Time - Design                                 | % on time or better                   |
| Predictability Time - Construction                           | % on time or better                   |
| Profitability (Return on Sales)                              | Median % profit before interest & tax |
| Productivity (VAPE Current)                                  | Median value added/ FTE employee      |



# Realistic & Robust KPIs? – More Examples from UK

Similar tabulated Breakdowns of:

**Economic KPIs - All Housing**

**Economic KPIs - All Non-Housing**

**AND**

**Respect for People KPIs - All Construction**

**Environment KPIs - All Construction**

**Construction Consultant KPIs**

Some Highlights from 2015 Report

60% of construction projects are completed **late**. (Note: 55% in 2014, **so worse in 2015**)

Better on ‘**Cost Predictability**’ – on or within budget on 69%

In Non-housing - **design phase** on time in 52% projects; **construction phase** in 45%

Client satisfaction with overall product has fallen three years in a row to 81%

“Overall ...seems construction is making limited progress towards government’s

Construction 2025 performance targets

**- aim to cut delivery time by 50% and reduce costs by 33%.**

## OTHER ISSUES? Scanned **Snapshots** of Selected **Samples** of Some critical ISSUES

To **provoke proposals** on what we really need **here & now**  
as well as in **medium term & longer term**

### Examples of other Critical Issues?

Selecting / designing **Appropriate Procurement & Delivery systems** –

e.g. 2015 **Deloitte** Access Economics Report to 'Consult Australia' on 'Economic benefits of better Procurement practices' – reconfirms **imperatives to improve Procurement** – can **reduce project delays** and **improve project quality** – by 7 %

**Professionalism, Ethics**, (e.g. Transparency, Anti-collusion strategies? and/or .....)

**Community Engagement and Stakeholder management**

**Establishing & Achieving Sustainability targets**

**Research, Development, Dissemination & Implementation; CPD & Training**

.....

Highways, Bridges,  
Railways & Metros,  
Airports, Ports &  
Harbours

Building  
Clients

Power, Industry, Water,  
Sewerage & Drainage,  
Irrigation & Dams ...

Contractor  
s

Consultant  
s

Sub-  
contractor  
s

Suppliers

Ci3

Construction Industry  
Improvement Initiative -  
*India*

from REGIONAL - Chennai, Bengaluru ... and Mumbai, Delhi  
to NATIONAL -

From Top Tier CITIES ... to Next Tier CITIES ...?