



## **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**





## ustry **Reform Initiatives and Change Agendas**

### 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

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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2016

## 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 [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 [KPI OF THE ECONOMIC SIGNIFICANCE OF THE CONSTRUCTION INDUSTRY]
P4a	Percentage contribution of construction activities to GDP at basic prices [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 [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

<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

VAPE – Value Added per Employee

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



## 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 ...?