



# **Ci3 *India* Building Clients' – Consultants' CONSOLIDATION ROUNDTABLE**

IIT Madras, **19 October 2016**

## ***Ci3 India* – Overview and Overall Status**

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## *GAME PLAN for next 20 mins.*

### **Objectives & Background of Ci3 INDIA**

**Outcomes from 1<sup>st</sup> Regional (Building Clients') Roundtable & 2<sup>nd</sup> Regional (Developers') Roundtable - *Identified Issues, Formulated Action Plan ...***

**Action Teams & their strategies and principal outcomes**  
– Working Papers, Other Outputs, 'Works in Progress'

**Inputs from Ci3 *India* CONSULTANTS' Roundtable – yesterday!**

### *What's next?*

- *5 White Papers*
- *Consolidating into a Ci3 India White Paper*

***GAME PLAN for next 9 years? – How best can Ci3 India do better?  
... from Roundtables & Action Teams to Pilot Actions, Improvements & Outreach  
... through a *viable and valuable Ci3 India****

## 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 Building Construction Clients & Consultants?

**Breakthroughs** must be championed by a **united front** of **progressive clients & their consultants** 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 & reputational returns**

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

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

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

# BACKGROUND – 3 Precursor Roundtables -

## [1a] Ci3 India Regional Roundtable of Building Construction Clients - Chennai, 14 Oct. 2016

KeyNote addresses from industry & academia set scene with pointers  
– to identify currently critical industry issues/ barriers

**Joint Brainstorming for Collective Breakthroughs through Ci3 India**

3 parallel focus group sessions:

*Procurement and Delivery*

*Productivity, Quality, and Sustainability*

*Construction Project Eco System*



**[1b] Ci3 India Regional Roundtable of Building Construction Clients**  
**(CONTINUED)**

**Post-Focus Group Consolidation session – identified 16 critical issues**

**- ISSUES 1-8:**

Shortfalls in standards for better project formulation and designs

Lack of client involvement and/or 'competent' management

Lack of trust between stakeholders

Acute shortage of skilled workmen

Lack of proper facilities for workers

Low productivity

Lack of productivity benchmarks and standards

Lack of innovation

[1c] Ci3 India Regional Roundtable of Building Construction Clients  
(CONTINUED)

**Post-Focus Group Consolidation session – identified 16 critical issues:**

**- ISSUES 9-16:**

Barriers to off-site (pre-cast/ pre-fab) construction

Inadequate quality

Inadequate governance by owners and transparency

Sub-standard and one-sided contracts

Need for better contractor selection system

Improper supply chain management and need to shift to alternate contracting approaches

Lack of technology adoption

Reluctance to adopt new work practices such as Lean practices

# [1d] Ci3 India Regional Roundtable of Building Construction Clients

(CONTINUED)

## ***ACTION PLANS proposed for:***

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

*Including* pilot platform to share productivity data among a 'Benchmarking Club'

....

### **(2) Skills Development**

*Including*

On-site skilling;

Setting progressive targets for % of certified workers on site

Managerial skills

....

### **(3) Innovations & Technology adoption in IT & Construction Technologies**

*Including*

Clients to create awareness of technology upgrade needs;

Precast & other technologies

ICT including BIM





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

## [2] Ci3 India Developers' Roundtable - Mumbai, 23 Feb. 2016

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

To suggest strategies for adding to, fine-tuning & moving forward with proposed - at the Oct. 2015 1<sup>st</sup> Regional Roundtable - Action Plans on:

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

Overview of the issues identified at 1st Regional Roundtable

One combined Focus group session - outcomes from the first Regional Roundtable were endorsed, in general. Degree of emphasis varied on their criticality

In addition, a few other critical issues were identified:

Inefficient design process management

Uneconomical design codes and operational standards

Outdated operational design codes

**Ci3 *India* Developers' Roundtable,  
Mumbai, Feb. 2016**



# Moving forward after the Chennai and Mumbai Roundtable

## S

- **19 current and imminent critical issues** were identified.  
Note - Some identified issues are comparable to findings of previous reported studies too eg. Sawhney et al. (2014)
- **To address** the above **identified 19 critical issues** were rationalized, consolidated & 'translated' into **Action Items**
- **Action Teams** were assembled to work on each Action Item
- The **Action Teams** include academics, industry participants from the Chennai and Mumbai Roundtables and other invited experts

## Ci3 *India* Action Teams

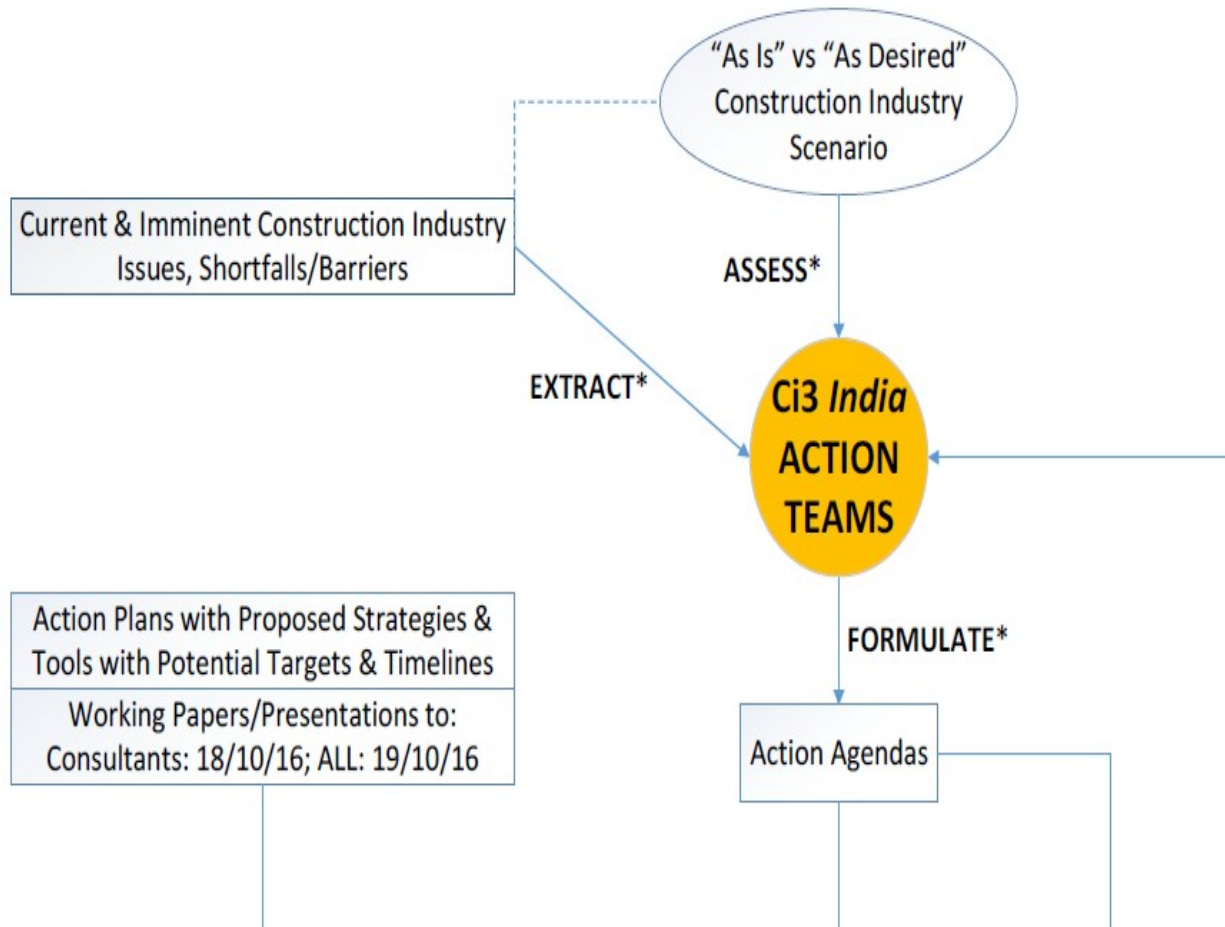
- Action Team - 1: Identification and formulation of Key Performance Indicators (KPIs)
- Action Team - 2: Strategies for significantly reducing & Costs and Time-frames
- Action Team - 3: Design Processes and Technology adoption
- Action Team - 4: Design Codes and Standards
- Action Team - 5: Human Capital (including Labour, Technical & Managerial and their Skills Development) and Productivity
- Action Team - 6: Construction Clients' Charter
- Action Team - 7: Ci3 *India* Institutional Platform

# Ci3 India Roadmap - Phase 1

Oct 2015:  
Building  
Clients' Round  
Table,  
Chennai

Feb 2016:  
Developers  
Round Table,  
Mumbai

Oct 2016:  
Consultants' &  
Consolidation  
Round Table



# Ci3 India Action Teams OUTPUTS & Work in Progress

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Interim OUTPUTS – Action Team **Working** Papers

+ Summary Presentations (Coming soon!)

Verifying, Refining & Consolidating Outputs ? – **Yesterday & Today**

Yesterday – Obtained Feedback + Inputs from Design & PM Consultants

Today – Brainstorming to **Refine**, then **Consolidate** with other Actions

[3] Ci3 India Consultants' Roundtable      - Chennai, 18 Oct.  
2016

Need to bring on board principal stakeholders including supply chain ... in stages

Solicited perspectives & inputs of Design Consultants and Project Management Consultants, before next inviting major contractors

*so that the industry can move forward together with a unified agenda*

Principal Additional Inputs from yesterday:



**Ci3 *India* Consultants' Roundtable,  
Mumbai, 18 Oct. 2016  
NEED 2 or 3 PHOTOS**

# Overview & Overall Status Summary

## Goal?

- a *national* campaign to galvanise our Construction Industry to **work together** to **significantly boost** and then **continuously improve** performance levels

## Completed Phase 1 – solid 1<sup>st</sup> INNINGS

since launching Ci3 India' in Oct. 2015

- **Critical issues were identified and verified** through **2 Roundtables**
- Consolidated Issues into **Action Items**
- **'Actioned'** by **Action Teams**
- **Presented to** and obtained **feedback from Consultants' Roundtable**
- Need to **NOW** (TODAY) formulate 'Solutions' & Roadmap for 'Ways Forward'

-with Action Team **White** Papers by 10 Dec. 2016

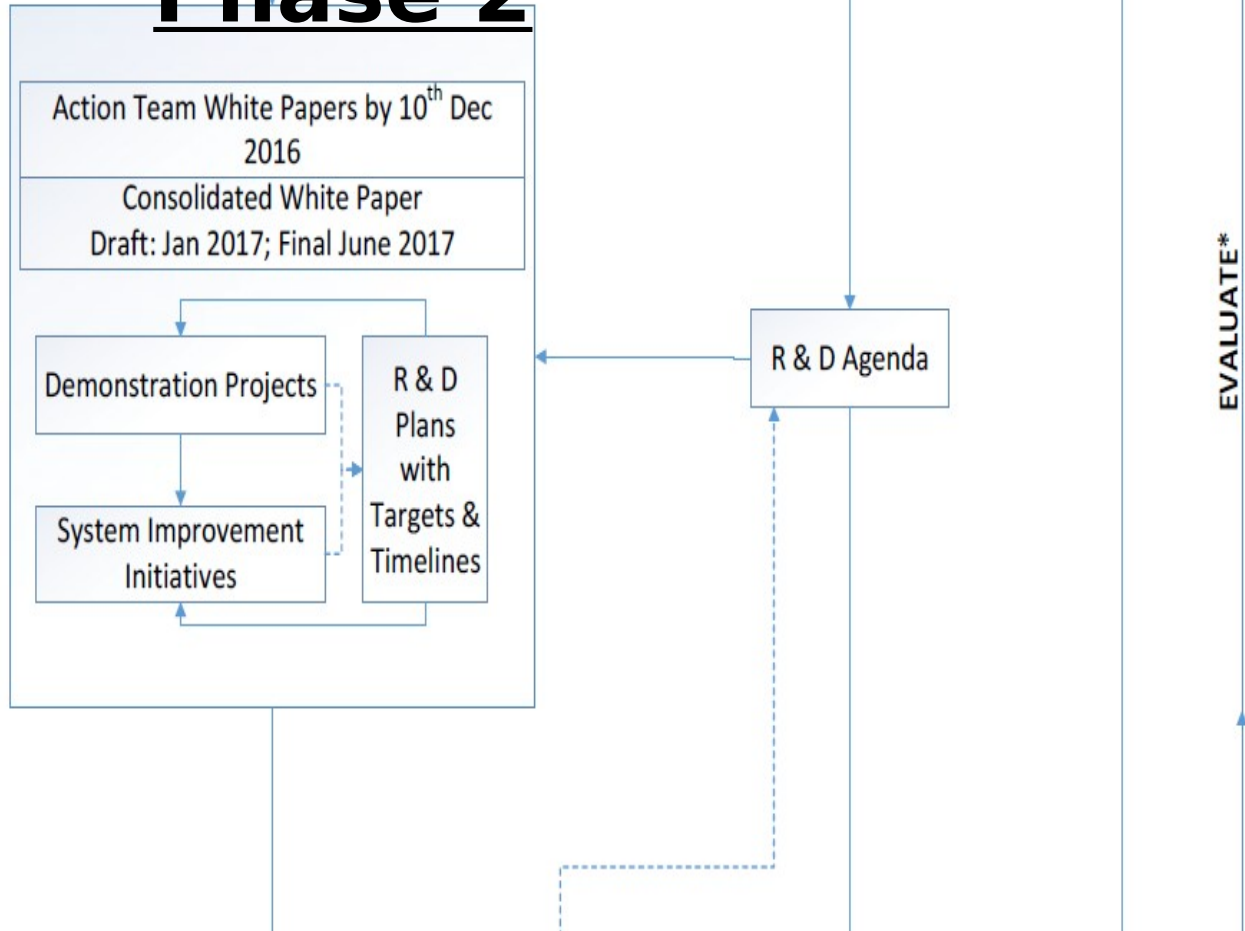
- **Propose** to consolidate to [Ci3 India White Paper by mid -2016](#) - **But HOW ?!**
- **Propelling Ci3 India Thereafter ? ... Decide at Way Forward session ?**

We are launching **Ci3 India Phase 2 – 2<sup>nd</sup> INNINGS**

- with this **Consolidation Roundtable**

# Ci3 India Roadmap - Phase 2

2017 – 2018  
+ Contractors  
+ Govt  
+ Facility  
Managers



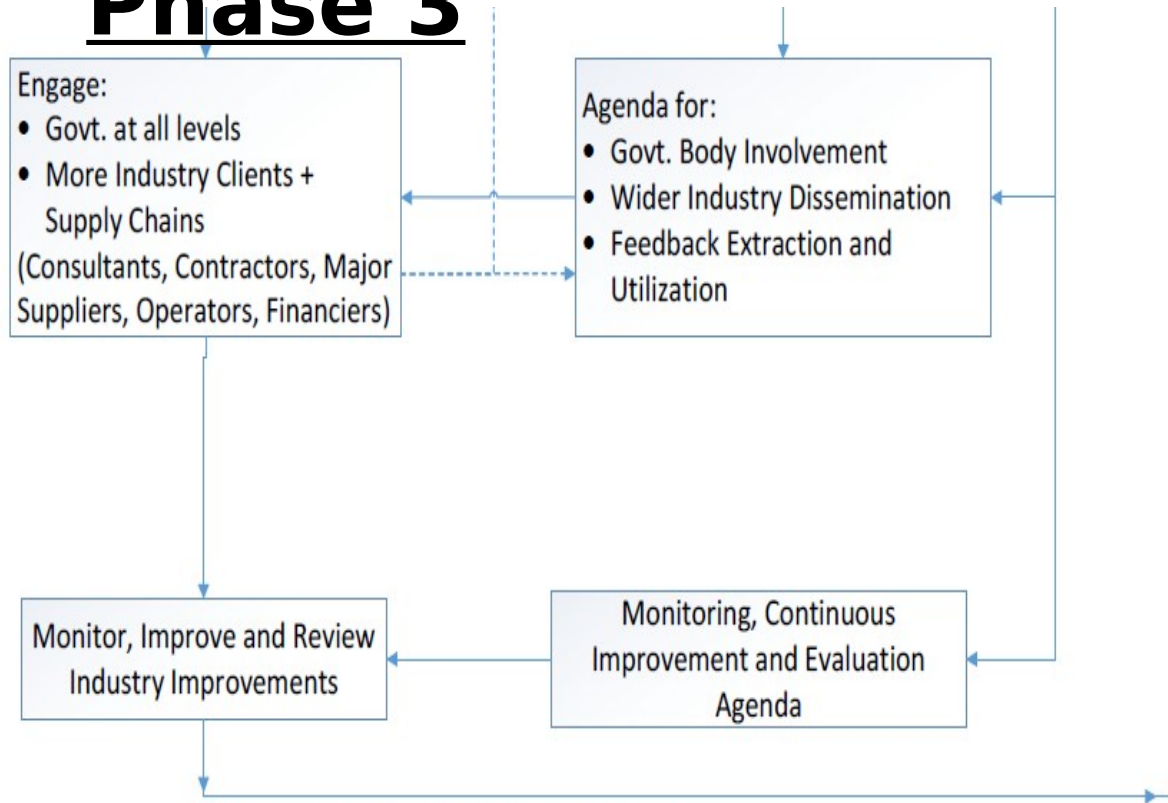
# Ci3 India

## Roadmap -

### Phase 3

2017-2018  
+ Suppliers  
+ Built Asset  
Managers

2018- 2019



**\*EVERY 3 YEARS FROM 2019 ONWARDS**