



PIANC WG 194 : A Framework for Early Contractor Involvement

APAC 2022 PRESENTATION – 4 TO 7 SEPTEMBER 2022



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Agenda

- State of the Market
- Workgroup WG194
- Key takeaways
- Contract types
- Case Studies



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Arcadis 2022 Global Construction Disputes Report

Most effective claims avoidance techniques

2021 Rank		2020 Rank
1	Contract and specification reviews	2
2	Risk management	1
3	Constructability reviews	3 (tie)

Most important factors in the mitigation/early resolution of disputes

2021 Rank		2020 Rank
1	Owner/contractor willingness to compromise	1
2	Accurate and timely schedules and reviews by project staff or third parties	2
3	Contractor transparency of cost data in support of claimed damages	3

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State of the market in Australia

Government Procurement: A sovereign security imperative

March 2022

House of Representatives Standing Committee on Infrastructure, Transport and Cities

Early market engagement

The Department of Infrastructure, Transport, Regional Development and Communications recognises the importance of undertaking appropriate market engagement. It explained that:

Early engagement with contractors can assist with better design and procurement models, driving a more efficient and cost-effective process. Regardless of the method selected, sufficient upfront planning and preparatory work will assist with improving relationships between proponent and contractor, balance risk allocation, manage and appropriately price risk.

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Workgroup Info



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Workgroup Members



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Workgroup External Reviewers



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1. Introduction to ECI - Definition

“Any strategy initiated by infrastructure owners towards contractors, key supply chain members and stakeholders with the purpose of optimizing values in project delivery and objectives through their participation and knowledge sharing in stages of project planning and design prior to execution contract award.”

WG 194 Definition of ECI

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1. Introduction to ECI - Content

Introduction to ECI

- 1.1 Background: History & Context
- 1.2 What is Early Contractor Involvement?
- 1.3 Objectives & Structure of the Report



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Contracts in development -FIDIC Collaborative Contract Task Group 17

- Applying collaborative principles when working together:
- act in good faith;
- communicate and keep each other updated;
- act proactively, transparently and flexibly;
- be focused on good collaboration and the goals of the project;

Kiri Parr, Andrea Chao (FIDIC Task Group 17 (Collaborative Contracts))

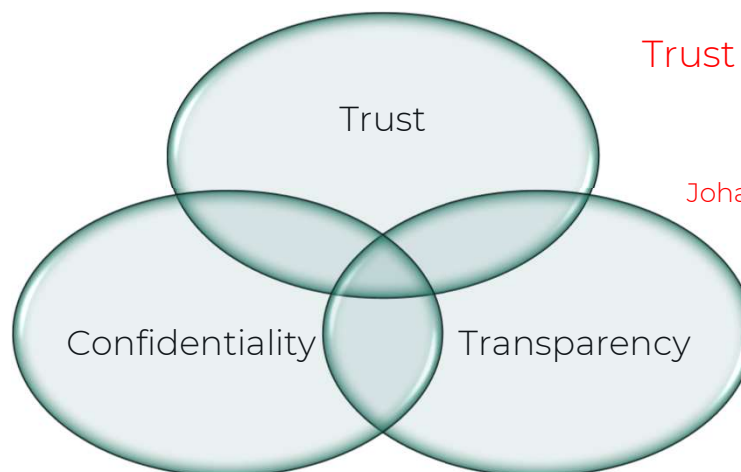
KEY TAKEAWAYS FROM
CONTRACTS IN DEVELOPMENT

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3. Guidance on ECI implementation - Trust



Trust comes on foot
but leaves on
horseback".

Johan Thorbecke, Dutch
politician 1848

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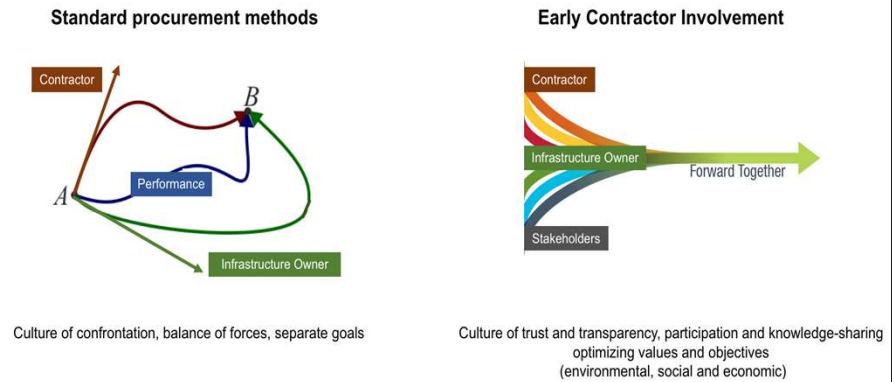
2. ECI Choice & Setup - Content

ECI Choice & Setup Factors

- 2.1 Influencing Factors
 - 2.1.1 Principal Benefits
 - 2.1.2 Recurring Barriers
 - 2.1.3 Project-specific Factors
- 2.2 Selection & Setup
 - 2.2.1 Types of appearance
 - 2.2.2 Setup Choices

Traditional transactional vs Relational Contracting

Breaking down the adversarial approach



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2. ECI Choice & Setup – Benefits

	Performance related	Cost related
Main Direct Benefits	Costs and schedules better defined early on	Construction methodology better defined early on
Other Direct Benefits	Design with improved constructability & innovative techniques	Construction risk better identified & risk better allocated early on
Indirect Benefits	Greater trust & understanding between client & contractor	Increased value for money
	Sustainability included in design, construction & permitting	More reliable & accurate business cases
		Relational contracting



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2. ECI Choice & Setup – Barriers

Recurring challenges for clients & contractors when applying Early Contractor Involvement:

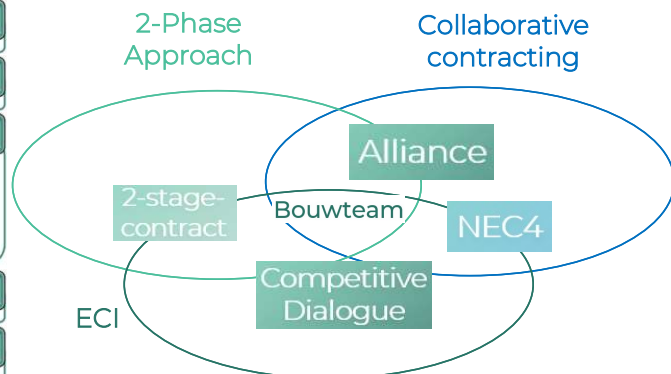
Cultural	Accepted practise to choose contractor & fix price on basis of lowest price via competitive tender	Accepted practise not pay contractors for early efforts & contractors to minimize divulgation	Accepted practise to opt for 'control' approach leaving little room for creative activities
Client Capture	Procurement rules (public owners) and/or corporate governance (private owners)	Unclear / misaligned liability concerns	Assess price reasonableness without comfort of competition
Commitment	Organizational commitment: transparency, investing in different skills	Financial commitment: costs of early collaboration phase	Offloading of all design risks down contractual chain



2. ECI Choice & Setup – Selection

ECI can be related to collaborative contracting or 2-phases approach. These methodologies can be defined by:

- Competitiveness (single/ multiple contractors)
- Procurement process vs. contractual relationship
- Early start
- Reduction # bidders
- Degree of involvement of the Client
 - Team setup
 - Design collaboration
 - Overall coordination
- Pricing method
- Collaboration w/ key supply chain members



3. Guidance on ECI implementation - Feasibility

CHECKLIST: WHEN IS EARLY CONTRACTOR INVOLVEMENT APPROPRIATE?

Description	1	2	3	4	5
Company culture, at which level are the characteristics below present?					
Client					
Probity					
Transparency					
Equal Treatment of all engaged contractors					
Fairness					
Open communication					
Clarity through clear rules of engagement					
Protection of intellectual property					
Consultant					
Probity					
Transparency					
Equal Treatment of all engaged contractors					
Fairness					
Open communication					
Clarity through clear rules of engagement					
Protection of intellectual property					
Contractors					
Are ECI suitable contractors available to execute the project?					
Design					
The functional requirements are difficult to realise within the given budget					
Sustainability requirements are strongly involved					
The design should be innovative					

Description	1	2	3	4	5
Budget					
There is pressure on the budget					
Not all costs have been identified					
There is uncertainty with regard to specific costs					
Construction					
The construction methodology has been poorly defined					
The construction conditions are challenging					
Construction risk is unclear and badly allocated					
The transport situation is challenging					
General					
All parties involved are open for the ECI way of working					
There is a lot of uncertainty and risk in the project					
There is a financial solid business case for the project					
There is time pressure on the project					
There are a lot of different stakeholders involved					
The legal situation facilitates ECI					
A situation of 'client capture' will not arise					
Contractor selection					
The assessment method for selection of the contractor is well defined					
The assessment method for selection of the contractor is clear to all parties					
Compensation for the losing contractor(s) has been included in the budget					



4. Framework for an ECI - Contract Forms

Pre-project pure ECI only

- FIDIC White Book 2017
- JCT PSCA 2016

Two Stage (ECI) Project

- AIA A134 2019
- NEC4 ECC X22
- CCDC 30 – IPD
- Bouwteam DG 2020
- AIA IPD

Project Partnering

- NEC4 Alliance
- PPC 2000
- PAA



4. Framework for an ECI - Contract Form Model

NEC 4 – Alliance

- Project Type
- Origin/History
- Area of Usage
- Scope of Usage
- Parties
- Contract Documents
- Subcontracting / Early Supply Chain Involvement
- ECI Provisions
- Project Scope
- Budgeting method
- Pricing Mechanism
- Gain/Pain Scheme
- Decision Making Procedures
- Risk Management Approach
- Early Warning Register
- Insurance
- Collaborative Provisions
- Responsibilities
- IP Provisions
- No claims
- Liability
- Termination
- Resolution Disputes
- Resource
- Summary

Checklist and overview of the type of Contract and the relevant provisions

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Case Studies - Australia & Worldwide

Port of Melbourne Port Phillip Bay Channel Deepening Project



Country: Australia
Infrastructure: Port
ECI Start year: 2004
Value (MEUR): 600
ECI Model: Alliance
Experience:
Special learnings:

- Innovation
- Sustainability
- Selection of advisors + ECI expert

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Case Studies

Fremantle Deepening

Country: Australia

Infrastructure: Dredging

ECI Start year: 2009

Value (MEUR): 170

ECI Model: Australian standard contract

Experience: +

Special learnings:

- No environmental issues due to public consultation and good communication client – contractor
- Early involvement of contractor accelerated the project delivery



Kangaroo Island

Country: Australia

Infrastructure: Deep-water port

ECI Start year: 2015

Value (MEUR): 40

ECI Model: Project Alliance Contract

Experience: +

Special learnings:

- Contractor must be realistic
- Trust is needed for Negotiation
- Flexibility to share risks

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Thank You!

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