

Terms of Reference

A Framework for Early Contractor Involvement in Infrastructure Projects

1. Background

It is increasingly acknowledged that the consequences of budgetary constraints and the increasingly complex nature of infrastructure works affect both preparatory and procurement processes for large or complex infrastructure projects in general and for waterborne transport infrastructure projects in particular. Early Contractor Involvement in these processes is therefore very valuable in certain cases. Previous efforts such as the Forum on Early Contractor Involvement organized by IADC have started up knowledge exchange and discussions addressing various aspects of Early Contractor Involvement related to maritime infrastructure construction. These efforts did not address frameworks relating to how the relevant parties in an ECI process should act. This lack of guidelines often results in inefficiencies, misaligned focus or distortions in the relationship between the parties involved. Therefore there is a need to establish a set of structured and well accepted guidelines to the ECI process. A new effort is proposed to fill this need by developing i) a framework derived from existing methods and ii) approaches for informing decision makers managing procurement and early development of waterborne transport infrastructure construction projects.

2. Objective

The mission of the proposed WG is to provide a framework to decision makers for managing ECI processes for waterborne transport infrastructure projects. It will show decision makers how to transition from a price-oriented, diverging and onerous approach to a risk-oriented, focused and lean collaboration.

The objectives of the working group can be split in two Parts:

i) First part:

- Collate and review other existing information on ECI and similar processes
- Give an overview of the trends driving ECI
- Analyse relevant factors in ECI (drivers and barriers)
- Explore the range of existing ECI approaches
- Identify and research recent ECI cases, summarizing them in an understandable manner as to how it was approached and gathering feedback from the stakeholders involved.
- Understand and address challenges and benefits of ECI including impact on innovation, environment, project management and time for completion.
- Evaluate the effectiveness of the different ECI approaches and of the different alternative moments in the life of the Project for Contractor Involvement.



- ECI analysed from the point of view of different regulations on procurement of infrastructure projects (EU Directive 2014/24, regulations from USA, Japan, etc.)

ii) Second part:

- Develop guidance for decision makers to define feasibility/appropriateness, objectives and scope when starting up an ECI
- Develop a reference framework that deals with responsibilities and conduct between the stakeholders (e.g. a code of conduct, a template cooperation agreement)

3. Earlier Reports to be reviewed

The ECI Framework report will integrate current knowledge from existing frameworks, such as those recently developed by the IADC report on "Public Procurement Rules in the European Union and Early Contractor Involvement". It can build on the IPPC report "ECI: A new Strategy for buying the best in infrastructure development in the Netherlands" and show decision makers how to select a framework that aligns all parties towards a more efficient and focused ECI process.

The WG will review the following PIANC WG Reports:

- InCom WG 21-2005 "Economic aspects of inland waterways"
- InCom WG 25-2013 "Maintenance and Renovation of Navigation Infrastructure"
- MarCom WG 31-1998 "Life Cycle Management of Port Structures - General principles"
- MarCom WG 103-2008 "Life Cycle Management of Port Structures – Recommended practice for implementation"
- InCom WG 110-2010 "Governance Organisation and Management of River Ports"
- InCom WG 129-2013 "Waterway Infrastructure Asset Maintenance Management"
- EnviCom WG 143-2013 "Initial Assessment of Environmental Effects and Navigation and Infrastructure Projects"
- EnviCom WG 150-2014 "Sustainable Ports – A Guide for Port Authorities"
- MarCom WG 158-2014 "Masterplans for the Development of existing Ports"
- EnviCom TG3-2008 "Climate Change and Navigation: A review of Climate Change drivers, impacts, response and mitigation"

The Working Group will agree the range of other national and international reports and publications to be reviewed.

4. Scope

The scope of the group will extend to maritime and civil infrastructure. The report should include case studies, identify good practices in the management of Early Contractor Involvement and provide frameworks to manage ECI.

It is suggested that the Working Group addresses the following topics:

- Relevance of the regulatory framework regarding contracting civil and waterborne infrastructure projects. Compliance issues.
- Impact on Risk Management, Life Cycle Assessment, and relations with stakeholders.
- Advantages for innovative solutions and environmental improvement: possibilities for a “Working with Nature” approach.
- Advantages at a planning stage, prior to EIA.
- Impact of Performance Specifications from the earliest stage versus Technical Solution driven approaches with detailed Technical Specifications.
- Transparency and confidentiality: How to address this topic.
- Objective criteria for awarding the contract.
- Impact on Tender Costs.
- The impact of BIM, Lean Management and similar tools on ECI.

5. Intended Product

The outcomes will be presented in a well-structured and practical guidance document targeted at the waterborne transport infrastructure development sector. The document will be suitable for use by senior managers and decision makers. It will also provide reference frameworks such as a code of conduct for practitioners but it will not be a detailed technical handbook.

The resulting report should comprise:

- An introduction to ECI, providing an appropriate level of background information, including definitions of different approaches falling under the ECI definition, benefits and challenges,
- An analysis of the existing approaches and their effectiveness to deal with the challenges and seize the benefits, exemplified by relevant cases and feedback from stakeholders.
- A guideline on selection of ECI + defining goals & scope.
- A set of reference frameworks addressing all relevant aspects in the relationship between client and contractor such as conduct, liabilities and responsibilities: a Code of Conduct, a form for ‘ECI cooperation agreement’, etc.
- A list of relevant existing national and international publications.

6. Partners and associated activities

Partnership shall be set up with relevant Sister Associations as IADC, IAPH, etc. Other international associations that may have a similar interest and are viable to contribute should be sought for participation as Consultants and Contractors Associations.

The Group will draw on the practical experience and expertise of its members, and on international experience accessed through a proposed series of 2-3 facilitated regional workshops.

7. Working Group Membership

The working group should be led jointly by MarCom and InCom, and should include members from other Commissions. Designation of WG members should follow the standard procedure defined by PIANC Rules and Regulations plus some more members designated according with the particular scope of the WG.

Members of the WG should include representatives from the target readership, i.e. project owners, contractor and consultant associations, contractors, consultants, regulators, governments, policy makers, public bodies, relevant international organizations, infrastructure investors and practitioners who are tasked with managing client-contractor relationships. The range of expertise should cover at least all parties involved in large waterborne infrastructure partners such as owners, investors, engineers and contractors. A regulator should be included to provide a regulatory perspective in order to match ECI with public contract regulations.

The development of guidance should be done by a multi-stakeholder approach. Therefore members from organizations representing several stakeholders will be invited to participate, next to experts from the PIANC community.

8. Relevance to Countries in Transition

The primary audience in both developed countries and countries in transition would be decision makers in planning and procurement that have responsibility for preparatory and procurement processes for infrastructure projects.

9. Climate Change

Climate Change needs to be considered in relevant waterborne infrastructure and civil engineering projects regardless of the contractual framework.

However, potential benefits of ECI on prevention and mitigation of Climate Change will be addressed by the WG. ECI at a planning stage, prior to the EIA allows for consideration of best possible solutions from the beginning, avoiding the case where environmental permits granted without knowledge of all possible solutions could preclude improvements regarding prevention of Climate Change.