Guidance Document on Procurement and Contract Selection

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Chairman CEDA DMC Contract Working Group
Background

• DMC members identified knowledge gap in industry
• Decreasing margins and increasing commercial risk changing the way contracts are procured
• Terms of Reference drafted June 2017 to inform industry stakeholders
Background

Issues to be addressed include:

- Types of project procurement re: commercial risk allocation;
- Contracting methods e.g. EPC, D&B, traditional;
- Alternative tender types e.g. early contractor involvement;
- Review of project types (e.g. reclamation, offshore wind etc.) against procurement methods;
- Advantages and disadvantages of contracting methods for all parties including contractors and client/owner bodies; and
- Links/references to current available propriety standard conditions used for dredging and offshore works.
Idea of Output

• Draft guidance paper to inform and to be practical guide for users
• Predominantly aimed at contract awarders i.e. owners
• Style, format and content to align and be complimentary to the Dredging Management Checklist
• Potential for online use?
Working Group

- Working group to investigate procurement and contracts set up Summer 2017
- Working group has 15 members
  - 5 nations
  - Contractors, owners, lawyers, consultants, designers etc.
Outline Structure

• General introductory section
• “Key Aspects”
• Scoring matrix
General Introductory Section

• Outline narrative explaining procurement process with considerations
• Explanation of certain procurement methods and contract types
• Centered around flowchart, mapping from post-concept to entering into contract phase
General Introductory Section
“Key Aspects”

• Fundamental concept introduced in the document
• Based around the principle of 6 key items for consideration against which the contract selection can be “measured”
• Align closely with items within the Dredging Management Checklist
“Key Aspects”

• **Project Scope** – How fixed or open is the scope of work?

• **Physical / Environmental Site Conditions** – How well known are the physical conditions at site?

• **Employer’s Control / Contractor’s Flexibility** – How much control does the Employer want? How much flexibility to work will the Contractor have?

• **Risk Allocation/Liabilities** – What balance of risk do the parties wish to make? Who is best placed to manage risk?

• **Time & Schedule** – Is the end date critical or is there flexibility with when the works can be completed?

• **Price & Valuation** – How much surety of price does the Employer want?
## “Key Aspects”

<table>
<thead>
<tr>
<th>Project Scope</th>
<th>Complexity of project</th>
<th>Fitness for purpose</th>
<th>Performance / quality of service</th>
<th>Design effort needed</th>
<th>Design requirements</th>
<th>Achievability of the employer’s requirements</th>
<th>Selection of placement site</th>
<th>Technical requirements</th>
<th>Measurement of volumes</th>
<th>Survey requirements</th>
<th>Quality control</th>
<th>Material supply</th>
<th>Material to be dredged</th>
<th>Site conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complexity of project to be appreciated by Employer for contract and procurement type selection; influencing content of project outlining documents and determining pricing and risk assessment by Contractor. Checks to be made by Employer if deliverables / products are fit for purpose. Checks to be made by Employer if deliverables / products are of required quality. Design effort needed to be reflected by party in charge of design development: (Consultant on behalf of Employer, (Consultant on behalf of) Contractor or jointly. Design requirements to be unambiguously specified, in principal by Employer, but depending on contract type, with input by Contractor, especially when cost savings are achievable. Employer to verify if requirements indeed can be / are met, Contractor to accept during Contracting. Achievability of technical requirements to be checked and accepted by Contractor. Method of volume measurement to be specified and adhered to, as basis for acceptance and payment. Survey requirements are to be specified, to provide essential data for contract evaluation. Employer’s specifications on Quality Control procedures to be priced, accepted and adhered to by Contractor. Employer’s specifications on Material Supply to be priced, accepted and adhered to by Contractor. Characteristics of material to be dredged are essential for project development options and are directly influencing contract pricing and risk assessments by Contractor. Employer to provide required information, possibly in combined effort with (tendering) Contractor(s). Responsibility for correctness of data to be identified. Site conditions, influencing design and construction limitations, to be provided by Employer. Consequences thereof to be incorporated by Contractor in in work plans and pricing, with adequate margin for natural or operational variability.</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
</tr>
</tbody>
</table>

| Remarks / clarification | |
|-------------------------|---------------------------------|----------------------|------------------------------|----------------------|-------------------|---------------------------------|----------------------|----------------------|---------------------|-------------------|----------------|----------------|-------------------|----------------|

- **Initiation / Feasibility Phase**
  - Preliminary Scoping Studies
  - Initial Permitting
- **Conceptual Design**
  - Basis of Design
  - Conceptual Design
- **Basic Design**
  - Contract Drafting
- **Detailed Design**
  - Detailed Design
- **Procurement**
  - Tendering / Negotiations
  - Contract Award
- **Execution**
  - Execution - Planning
  - Execution - Operation
- **Project Closeout**
  - Project Closeout
  - Operational Phase
  - Maintenance
  - Decommissioning

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**Central Drudging Association**
Scoring Matrix

• Tool provided to “score” the key aspects and to compare to certain contract types
• Key aspects “scored” on a 1-10 pre-defined scale
• Results plotted against certain contract types
Scoring Matrix

- Construct Only – Charter;
- Construct Only – Remeasurable;
- Construct Only – Lump sum;
- Maintenance – Performance Based – Lump Sum;
- Design & Construct – Lump Sum; and
- D&C++/EPC – Lump Sum.
## Scoring Matrix

<table>
<thead>
<tr>
<th>Key aspects to be considered</th>
<th>Qualification (to be assessed within given range)</th>
<th>Standard/Typical Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Project Scope</td>
<td>fully fixed &lt;=&gt; very open</td>
<td>10</td>
</tr>
<tr>
<td>B. Physical / Environmental Site Conditions</td>
<td>fully explored &lt;=&gt; very uncertain</td>
<td>10</td>
</tr>
<tr>
<td>B. Employer’s Control / Contractor’s Flexibility</td>
<td>Contractor freedom to operate &lt;=&gt; Employer in control</td>
<td>10</td>
</tr>
<tr>
<td>D. Risk Allocation/Liabilities</td>
<td>Contractor &lt;=&gt; Employer</td>
<td>10</td>
</tr>
<tr>
<td>E. Time &amp; Schedule</td>
<td>strict time frame &lt;=&gt; flexible time frame</td>
<td>10</td>
</tr>
<tr>
<td>F. Price &amp; Valuation</td>
<td>fully fixed &lt;=&gt; rate contracts</td>
<td>10</td>
</tr>
</tbody>
</table>

Scale - 1 to 10
Scoring Matrix

Construct Only - Charter

A. Project Scope
B. Physical / Environmental...
C. Employer's Control /...
D. Risk Allocation/ Liability
E. Time & Schedule
F. Price & Valuation

D&C++/EPC - Lump Sum

A. Project Scope
B. Physical / Environmental Site Conditions
C. Employer's Control / Contractor's...
D. Risk Allocation / Liability
E. Time & Schedule
F. Price & Valuation

Construct Only - Lump Sum

A. Project Scope
B. Physical / Environmental Site Conditions
C. Employer's Control / Contractor's...
D. Risk Allocation / Liability
E. Time & Schedule
F. Price & Valuation
Scoring Matrix

Chart Title

- A. Project Scope
- B. Physical / Environmental Site Conditions
- B. Employer’s Control / Contractor’s Flexibility
- D. Risk Allocation/Liabilities
- E. Time & Schedule
- F. Price & Valuation

Legend:
- Construct Only - Charter
- Construct Only - Remeasureble
- D&C++/EPC - Lump Sum
- Construct Only - Lump Sum
- Performance Based/Maintenance - Lump Sum
- Sample
Summary

• Single-point reference document regarding procurement and contract selection
• Aim to assist the contract awardee in assessing and/or tailoring method
• Use of Key Aspects to “score” and compare methods