Effective Contract-Type Selection
in the Dredging Industry

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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.
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
**STEP 1: PROJECT BASIS (SCOPE/OWNER REQUIREMENTS)**

- Type of Dredging
- Preparation Elements
- Execution Elements

**STEP 2: PACKAGING OF WORK**

Work breakdown structure
- What type of dredging does my project need?
- What is the available capacity and/or expertise?
- Which elements does my project need?
- How do we bundle outsourced elements?

**STEP 3: RISK/OPPORTUNITY ANALYSIS**

Risk and market analysis
- Consider technical, legal, financial, geographical, spatial, and safety elements.
- Client knowledge/expertise level.
- Who is best suited to manage the various types of dredging and other aspects of risk?
- When/how to involve contractors?

**STEP 4: CONTRACT TYPE SELECTION**

What type of contract is best suited for the packaged work according to the risk and market analysis?
- Charters (equipment hire)
- Unit rates (transport or measured volume)
- Lump sum – Construct only
- Maintenance/performance-based – Lump sum
- Design & construct
- Design & construct++ / EPC
“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
<table>
<thead>
<tr>
<th>Key Aspects</th>
<th>Parameters/Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Project Scope</td>
<td>How fixed or open is the scope of work?</td>
</tr>
<tr>
<td>B. Physical/Environmental Site</td>
<td>How well known are the physical conditions at site?</td>
</tr>
<tr>
<td>Conditions</td>
<td></td>
</tr>
<tr>
<td>C. Risk Allocation/Liabilities</td>
<td>What balance of risk do the parties wish to make? Who is best placed to manage risk?</td>
</tr>
<tr>
<td>D. Owner’s Control/Contractor’s</td>
<td>How much control does the owner want? How much flexibility to work will the contractor have?</td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
</tr>
<tr>
<td>E. Time &amp; Schedule</td>
<td>Is the end date critical or is there flexibility regarding when the works can be completed?</td>
</tr>
<tr>
<td>F. Price &amp; Valuation</td>
<td>How much security of price does the owner want?</td>
</tr>
</tbody>
</table>
Scoring Matrix

• Tool provided to “score” the key aspects and to compare to certain contract types
• Key aspects “scored” on a 1-10 scale:
  – 1 = Owner certainty
  – 10 = Owner uncertainty
• Results plotted against certain contract types
Scoring Matrix

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

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

Visualization of Owners's uncertainty
(higher value indicates increased uncertainty)

Sample Score

Construct Only - Charter
Construct Only - Remeasureble
Construct Only - Lump Sum
Performance Based / Maintenance - Lump Sum
Design & Construct - Lump Sum
D&C++/EPC - Lump Sum
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 contracting options
Save the date for...

CEDA UK webinar:

Future Considerations for the Ports and the Dredging Industry

- Date: 23 October 2020
- Time: 10.00 – 11.15hrs (London time)
- Free of charge, registration required

www.dredging.org
Thank you for participating!

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