

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

“Key Aspects”

Key Aspects	Parameters/Considerations
A. Project Scope	How fixed or open is the scope of work?
B. Physical/Environmental Site Conditions	How well known are the physical conditions at site?
C. Risk Allocation/Liabilities	What balance of risk do the parties wish to make? Who is best placed to manage risk?
D. Owner’s Control/Contractor’s Flexibility	How much control does the owner want? How much flexibility to work will the contractor have?
E. Time & Schedule	Is the end date critical or is there flexibility regarding when the works can be completed?
F. Price & Valuation	How much security of price does the owner want?

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

— Construct Only - Charter

— Construct Only - Remeasurable

— Construct Only - Lump Sum

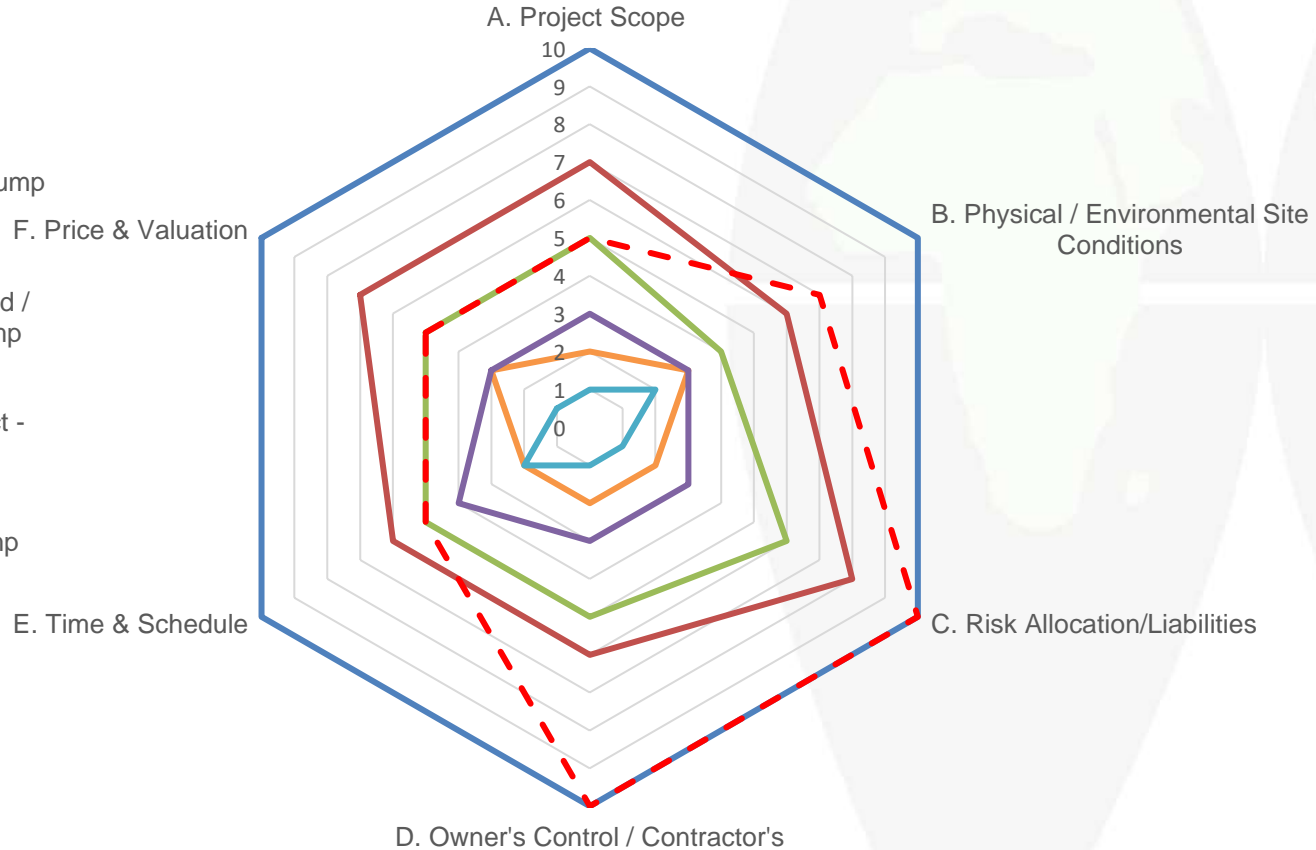
— Performance Based / Maintenance - Lump Sum

— Design & Construct - Lump Sum

— D&C++/EPC - Lump Sum

- - - Sample Score

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



Summary

- Single-point reference document regarding procurement and contract selection
- Aim to assist the contract awarder 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



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