Effective Contract-Type Selection in the Dredging Industry

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Background

- DMC members identified knowldge gap in industry
- Decreasing margins and increasing commerical risk changing the way contracts are procured
- Terms of Reference drafted June 2017 to inform industry stakeholders

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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.

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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- Draft guidance paper to inform and to be practical guide for users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?

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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.

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Outline Structure

- General introductory section
- “Key Aspects”
- Scoring matrix

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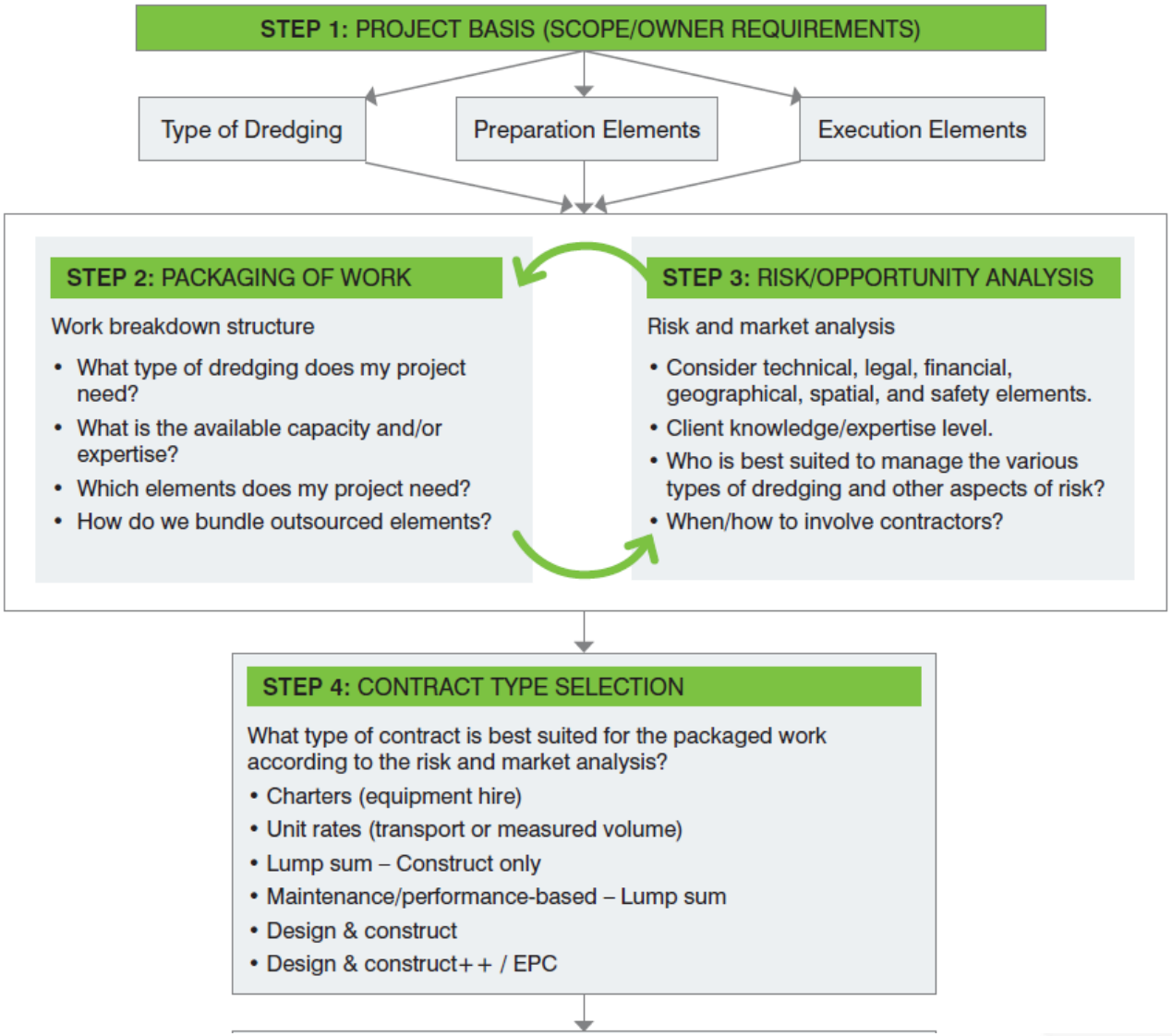
General Introductory Section

- 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



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“Key Aspects”

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

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“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?

“Key Aspects”

B. Physical/Environmental Site Conditions	
Sub-category	**Remarks/Clarification**
Material to be dredged	Characteristics of material to be dredged are essential for project development options and directly influence contract pricing and risk assessments by contractor. Owner to provide required information, possibly in combined effort with (tendering) contractor(s). Responsibility for correctness of data to be identified.
Site conditions	Site conditions, influencing design and construction limitations, to be provided by Owner. Consequences thereof to be incorporated by contractor in work plans and pricing, with adequate margin for natural or operational variability.
Site information/data quality	Reliability of site information/data quality clearly to be specified by owner, with adaptive procedures if deviations are encountered.

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Scoring Matrix

- Tool provided to “score” the key apsects 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

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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

	Qualification - Uncertainty for Owner to be assesed within upper and lower end of range		Standard/Typical Types					
Key Aspects	**Lower end (score=1)**	**Upper end (score=10)**	**Construct Only - Charter**	**Construct Only - Remeasureble**	**Construct Only - Lump Sum**	**Performance Based / Maintenance - Lump Sum**	**Design & Construct - Lump Sum**	**D&C++/EPC - Lump Sum**
A. Project Scope	Fully fixed	Very open/uncertain	10	7	5	2	3	1
B. Physical / Environmental Site Conditions	Fully explored	Very uncertain	10	6	4	3	3	2
C. Risk Allocation/Liabilities	Risks and liabilities with Contractor	Risks and liabilities with Owner	10	8	6	2	3	1
D. Owner's Control / Contractor's Flexibility	Contractor freedom to operate	Owner in control	10	6	5	2	3	1
E. Time & Schedule	Strict time frame	Flexible time frame	10	6	5	2	4	2
F. Price & Valuation	Fully fixed	Remeasurable based on rates	10	7	5	3	3	1

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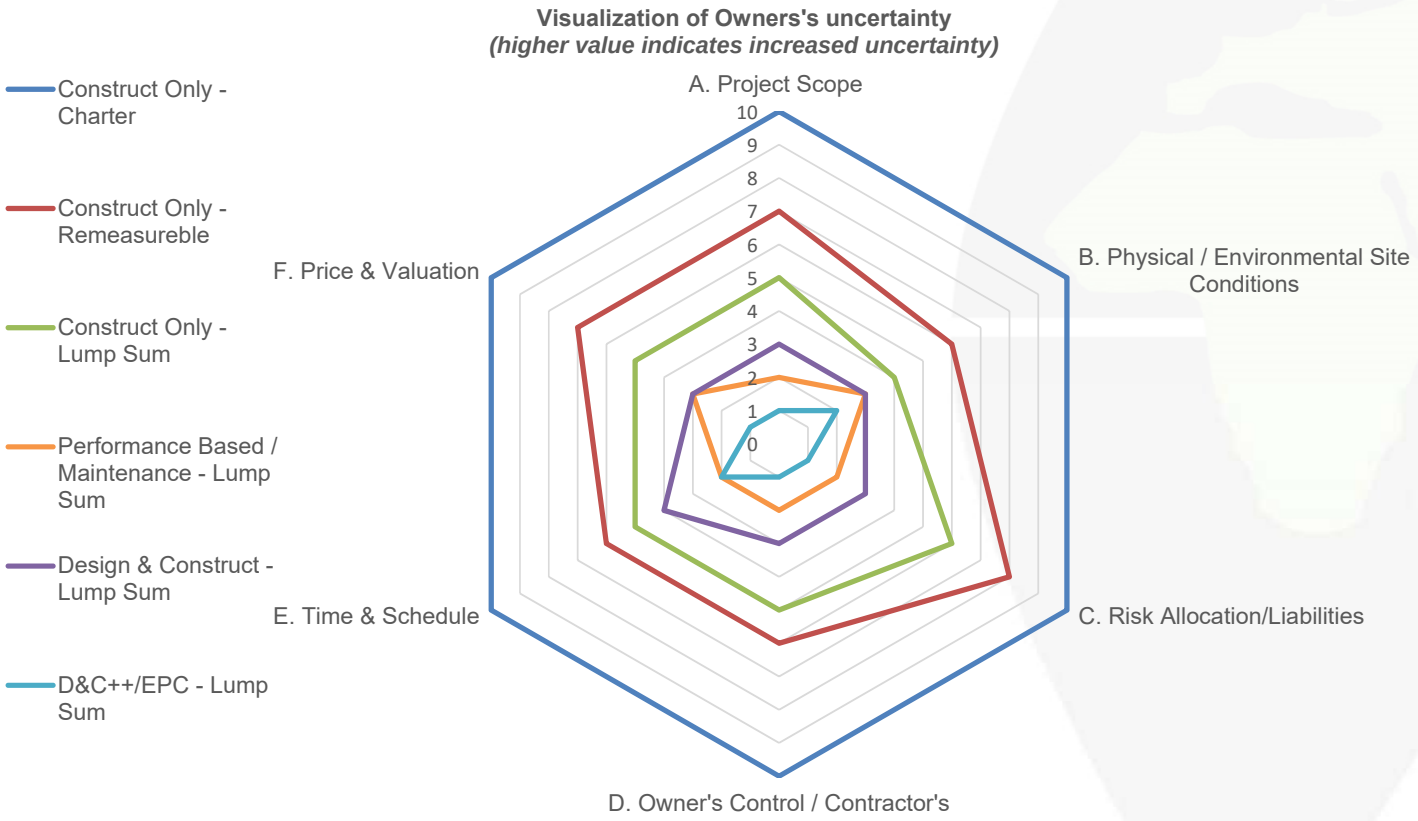
Scoring Matrix



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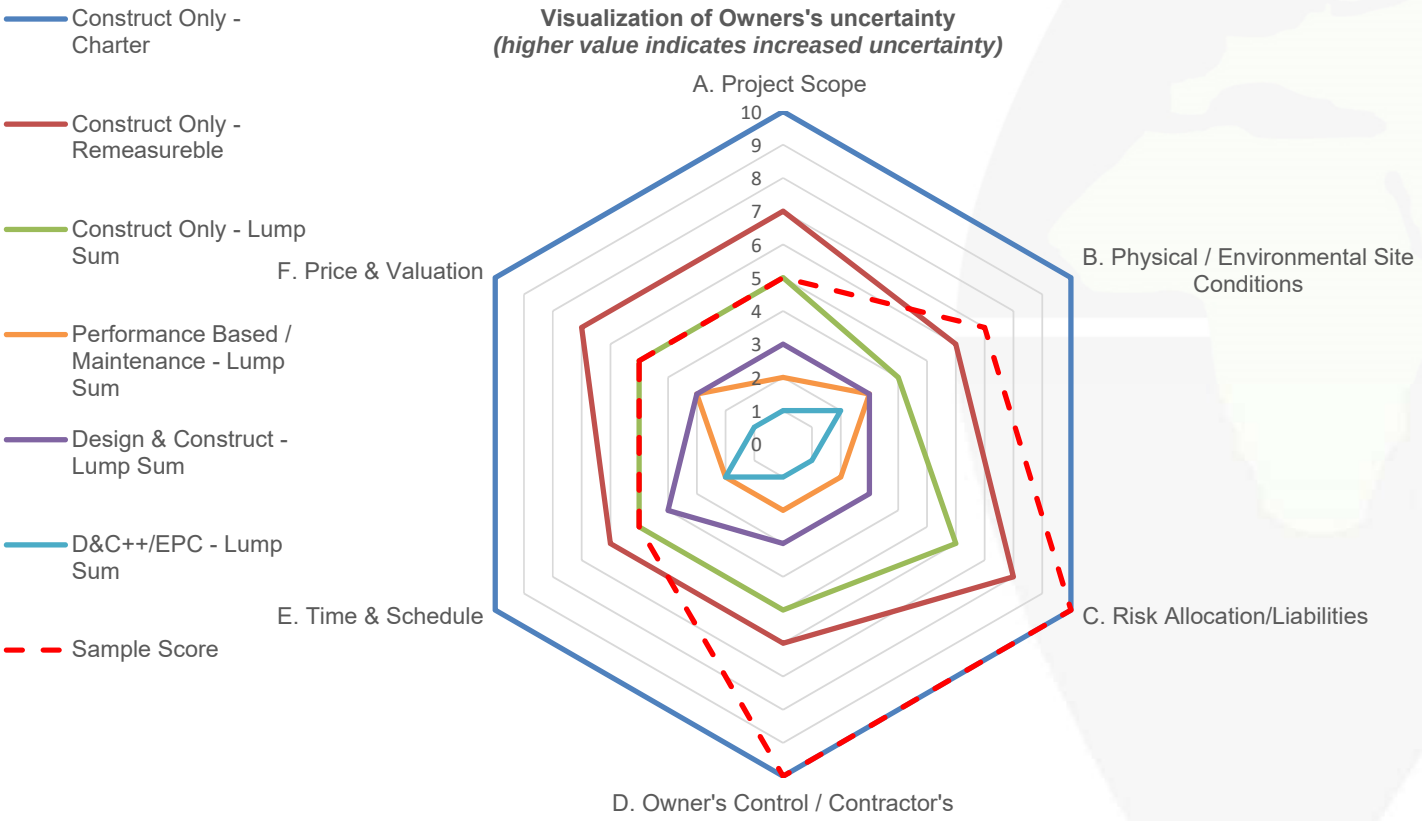
Scoring Matrix



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Summary

- Single-point reference document regarding procurment 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

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