EQUIPMENT DECISION GUIDE / 22 OCTOBER 2026

Available is not the same as suitable.

Five checks before committing to marine equipment

A vessel being available answers a timing question. A specification sheet answers some technical questions. Neither is a complete basis for committing to a marine campaign.

IADC's equipment guidance identifies material, site configuration, transport, placement and deployment as factors in dredger selection.[S1] Its equipment-and-methods guidance also considers technical, environmental and economic tradeoffs.[S2] The five checks below are an original decision framework for organising that assessment. They are not an equipment certification or a project design standard.

1. Define the result before the asset.

Write a short requirement describing the work to be completed, acceptance criteria, location and programme. Separate conditions that must be met from preferences that could change. Ask which decision the equipment assessment is meant to support: a budget, a tender method, a charter shortlist or a purchase. Each needs a different level of certainty.

Decision record: A requirements sheet with a named decision owner and a list of unresolved assumptions.

2. Test the site and the ground.

Check what the available survey, investigation and access information actually covers. Record dates, limitations and gaps before using it. A proposed operating depth or headline capacity is not, by itself, proof of suitability at the intended location. Material classification and testing support judgments on dredgeability, handling and use; they need appropriate specialist interpretation.[S3]

Decision record: A site-and-ground constraints list showing what is confirmed, what is assumed and what could change the shortlist.

3. Assess the complete production chain.

For dredging, consider excavation, transport and placement together. For other marine work, identify the equivalent sequence from working operation to completed output. Ask who supplies each supporting activity and where the handovers occur. The integrated dredging process and its environmental footprint extend beyond excavation alone.[S2]

Decision record: A simple responsibility and interface map. Assign an owner to each dependency rather than leaving it inside a general exclusion.

COMPARE AND VERIFY

4. Compare the campaign, not just the rate.

Put the options on the same basis. Identify mobilisation and release, the main asset, auxiliary resources, operating inputs, people, maintenance arrangements and the assumptions used for non-working time. IADC explicitly recognises deployment time and cost in equipment choice.[S1] Keep uncertainty visible: a cheaper quote based on a narrower scope is not a comparable alternative.

Decision record: A like-for-like comparison with inclusions, exclusions, sensitivities and the evidence still required. Use cost benchmarks as context; obtain current, project-specific commercial terms before committing.

5. Verify the asset and the authority to offer it.

Before progressing from a shortlist to a commitment, assign checks for identity, current particulars, inspection evidence, applicable certification, condition and delivery readiness. Establish whether the counterparty is the owner, an authorised representative or another intermediary. Record the source and date of availability information. A catalogue entry should remain a lead until it is verified.

Decision record: A verification log, a clear representation basis and named parties responsible for specialist due diligence.

The useful output is a short, traceable decision: which options remain credible, what each depends on, and what must happen before a commitment. It may justify an equipment mandate; it may also show that the project definition needs work first.

Considering a purchase, charter or equipment strategy? Send the organisation, project location, scope, stage, timing and decision required through Royal's contact page. The next step is to define the assessment and responsibilities. A detailed technical review is scoped separately.

This is a general decision aid. Equipment acceptance, specialist engineering, safety, class and regulatory checks remain project-specific responsibilities.

Source notes

The five-check structure is an original decision aid. Sources support the general selection considerations. No specific vessel or project has been assessed.

[S1] IADC, Equipment: selection factors. [S2] IADC, Equipment and Methods: process and tradeoffs. [S3] PIANC WG144 (2016): public overview. Accessed 22 October 2026. The paid PIANC report was not accessed.