HOW CONTRACTING STRATEGIES CAN HELP REDUCE PROJECT COSTS

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We’ve been here before, but we do need to re-focus.

Project costs were already too high BEFORE the drop in oil prices!

Operators can engage in drastic cost cutting exercises with oil prices down,

One way to cut costs is to adopt alternative contracting strategies; you can cut project costs by considering:

A. Risk Sharing Strategy,
B. Efficient Define & Selection
C. Improving Project Schedules
D. Choosing “good-enough” rather than “best-in-class”
**A: RISK SHARING STRATEGY**

Adapt contractual terms and conditions such that:
- burden of obligations are shared and realistic,
- identify who can best manage the risk.

Operators need to take on global risks: currency risks / changes in law / local unrest / extreme weather ...... but also maybe......commodity prices / financing....... These are difficult for contractors to manage.

Management teams that make contractual decisions quickly, with accountability.

Transparent management of interfaces & dispute resolution as matters arise by integrated team.
The right parties need involvement at the right time: developer selects a management team with the appropriate skills (Operator & Contractor).

Good projects are characterised by people with empowerment throughout the complete project life cycle.

The management team buy into the technical and commercial solution (including risk) by considering:

- **Simplification**: challenge requirements; inexpensive at the start of a development,
- **Standardisation**: build on success,
- **Avoiding / minimising change**
- **Innovation**: development requires a new approach,
Project Schedules mostly include several approval cycles between each stage / gate; both internal approvals and regulatory / government approvals.

Schedules can be improved by:

• *reducing the number of cycles / stages*,
• *more extended scopes of work*, whilst maintaining
• *appropriate governance* both at / between gate reviews.

To optimise contracting strategy operators can work with engineering companies to *develop designs to an appropriate level*, before awarding construction/installation contracts.

The value chain is optimized by the right parties inputting at the right time to *engender ownership and alignment*. 
D: ”GOOD-ENOUGH” STRATEGY

**Optimise design at an early stage.**

**Remove unnecessary belts & braces;** make better use of risk assessments and mitigation protocols.

**Standardisation and Simplification** - reduce complexity, review sparing philosophies.

**Streamlined decision processes** - we have a well established industrial section with high levels of competency.

Operator specifications are often very different and yet lessons can always be learnt from others. Such lessons should be used to simply future decisions and **facilitate low level risks being made where appropriate.**
There is a viable approach between the 1960/70’s “gung ho” years and the more recent post-millennium “risk-averse / conservative” period.

Extending only “field-proven” technology into deeper water, misses out on technological opportunities and slows down industry progress.

This is an established industry and many solutions are self-evident, however:

• The search for innovation can often draw on technologies already proven from other sectors,
• Research programmes can be accelerated.
To *maximise the life / modify the use of existing facilities* may require Brownfield modifications; this necessitates a change in contracting strategy:

- Greenfield projects have higher CAPEX, with managed risks. Larger “bankable” turnkey contractors are often used.
- Brownfield projects tend to have a lower CAPEX. There is more inherent risk due to:
  - Fewer degrees of freedom,
  - Potential conflict of interest when using a vertically integrated contractor,
  - More risk is held by the Operator.

*Smaller contractors* are often used on a reimbursable basis, *increasing competition / flexibility and lowering base costs.*
Learn from past experience in low cycles; *preserve expertise by maintaining a minimum of activity* to optimize developments.

Demographics of the O&G industry shows *significant gaps in certain age groups* due to the previous downturns; let’s not do it again!

Today, there is a *risk of losing valuable knowledge* when people are forced to leave the industry.

Another risk is a forced *concentration of service companies, eliminating competition, increasing costs* when the situation improves.
30 x 5MW turbines, Inter-array cabling and export cable, Offshore Substation Platform & Onshore Substation. US1.2bn$.

Principal Contractor / Owners Engineer.
- Conceptual Design, FEED
- SSP Jacket & Deck Design
- Project Management Services
- Contract Administration

Early involvement through to hand over to operations. **Multi-contracting** strategy with **shared objectives**, accelerated **application of new technology**, integrated **PM team** with **full budgetary ownership**.

“Deep water” 30m!
ORMONDE (2/2) – A TRUE SUCCESS STORY

- Full field commercial development **FIRSTS**
  - 2M man hours with no significant injury (non RIDDOR reportable)
  - 5MW Turbine Installation (Repower = risk)
  - Deep water and pre-piled jacket sub-structures (early deployment of prototype design)
  - Production line jacket fabrication (31 x 600Te)
  - Foundation & WTG installation ahead of schedule (pre-piling 2 months early)
  - SSP 2 months early
  - Longest export cable without a splice (42km)

- Key Indicators:
  - Power **Production > design capacity (104%)**
  - **Generation at 42%+** (prior norm 28-32%)
  - First development **on time / on budget**
  - **RenewablesUK Major Project Award**
If you want to see some case studies of really deep water, please come along to see DORIS / ODE on Stand 500.

1992 – 93
Baldplate Compliant Tower, Amerada Hess, Gulf of Mexico

2001
Girassol UFR - Total Exploration & Production Angola – First hybrid riser tower and first pressure-balanced deepwater bundle in 1,350m

2002 – 06
Moho Bilondo FPU – Total Exploration & Production Congo – deepest Congo development, FEED, Detail Design

2007 – 13
Shtokman Integrated Gas Condensate Development, Barents Sea, Russia, FEED
Your independent engineering partner for optimised solutions