



**International Research  
Ship Operators**



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New Concept for Fixed Price Technical Support and Planned Maintenance

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# Introduction



- **Scope:**
  - Management evolution that makes fixed-price viable and attractive – inevitable?
  - Approach to bidding fixed-price
  - Pro's & Con's
  - Vessel asset management philosophy
  - Conclusion



# Vessel Management Evolution

# Background



The major change in shipping over the last twenty years has been communications

But it hasn't really changed ship management other than to cause a drift of responsibility from ship to shore

Diminish the decision making of those on board



# And what about tomorrow?

- However, it is my belief the existing ship management model is not sustainable due to:
  - Owner appetite for risk sharing/cash-flow smoothing
  - Technology
  - Supplier strategy
  - Transitioning on board skills



# Influence of change:

## On Board

- Navigation/collision avoidance/routing can all be automated
- Blackboxes and fault reporting replacing intervention
- Electro/control system technicians becoming essential
- Moving to 1<sup>st</sup> line maintenance only
- Reducing on board manpower

## Ashore

- Superintendent role diminishing as ability to intervene is reduced – conduit to manufacturer rather than “vessel supremo”
- Logistics planning for manufacturers service technicians increasing
- Port call maintenance planning and scheduling increasing
- Replacement rather than overhaul



# Summary:

- **Against a background of:**
  - Changing client appetite
  - Changing supplier strategy
  - Improving communications/bandwidth
  - Shore-based diagnostics & analysis
  - Reduced capability on board to intervene
- **CMRE approached us with an offer we couldn't refuse.....**



# Approach to Bidding





# CMRE ITT was founded on:

- The organisations drive to fix and smooth cash-flow
- A division of maintenance between level 1 – 4 as found typically on naval vessels
- Shore side monitoring ability/technology
- Predicative maintenance



# What information is required to bid for a fixed price contract?

- An intimate knowledge of the vessel is not required – but helps.
- Full oversight of the vessel equipment is required and then you apply your knowledge of the equipment/components to build a cost.
- Calculate maintenance schedules over the contract duration.
- Agree a base line for spares and consumables (ROB's) is required.
- Produce a budget and cash-flow model in order to offer fixed price and ascertain working capital, potential timing and commitments.
- Bidding to buy the business won't work!
- Bidding to cover all eventualities won't work!

# How did we approach the challenge:



- A more stringent approach to budgeting at the component level
- Forecast cash requirement and timing (working capital required)
- Planning to perform closer and more frequent vessel system verification recognising a possible reduction in reporting from the vessel
- Modify on board maintenance tasks to recognise change in:
  - Working practices
  - Competence
  - Limitation to intervene



# How did we approach the challenge (cont):

- Select an overarching management system to provide a framework:

## ISO 50001 – Asset Management Systems

- Differs from ISO 9000 in so far as the vessel (asset) becomes the focus of the system whereas 9000 focusses on the service.



# Key features of ISO 50001

- Focussed objectives
- Operational roles
- Information requirements
- Management of change
- Operational planning and control
- Non-conformity & corrective action
- Obsolescence management



# PRO'S & CON'S



# Pros & Cons of Fixed Price:

- Owners fear they will pay too much
- Managers fear they will get caught out by major unplanned expense
- Owners fear managers will cut back on maintenance and pocket the cash!
- Owners want regular cash-flow and risk sharing
- Requires reasonable contract duration
- Contracts have limitations and ultimately level of trust required between both parties
- Fixed price contract can only be operated by substantial managers willing and capable of carrying the risk (working capital and contingency)



# Conclusion

- The nature of vessel operation/maintenance/management has changed discretely over the last five years.
- The rate of change will increase rapidly over the next 5 – 10 years transitioning from ship husbandry to asset management.
- Risk sharing will be a normal part of the mix.
- Companies capable of offering this capability will by necessity have to be of substance.
- Is the vessel the core reason for the owner to exist or is it a working platform to allow the owner to execute his core business?





Thanks  
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For the opportunity to present today.