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> Straits Project 7 Feasibility Study on Emergency Towing Vessel (ETV) Service in SOMS



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BACKGROUND

- ✤34th TTEG Agreed for a concept study to examine the feasibility and requirements for ETV services in the SOMS.
- ✤35th TTEG S\$50,000 was provided from the IMO Straits of Malacca and Singapore Fund for the study. The study to be completed and presented at the 4th CF.
- Project awarded to Smit Singapore. Concept study report was presented at the 4th CF in Malacca.



CONCEPT STUDY KEY RECOMMENDATIONS

♦ETV Roles

Response times and areas of operations and ideal number of ETV assets

Specific requirements for the ETV response and technical specifications

✤Basic design of ETV, such as the capacity of the tug, its capabilities, and other operational characteristics.



ROLES OF ETV IN SOMS

Primary Role

Provide emergency towing service on a 24/7 basis in the Straits to remove the threat of significant pollution that may be posed by casualty vessel.

Secondary Role

- HNS/ Oil Pollution response
- Fire Fighting
- Search and Rescue
- First Emergency Response -Damage assessment and Oil recovery
- First Aid Salvage Diving, Refloating vessel from stranding/ grounding
- TSS Patrolling Detection and warning of hazards to navigation
- Maintenance of Aids to Navigation



ETV RESPONSE AREAS



Response Area	Malacca strait ETV 1	One Fathom Bank ETV 2	Singapore strait ETV 3
BP (Tonnes)	147	105	162
Max area radius (NM)	185	85	95
Vessel Speed (Knots)	18.5	17.0	19.0
Endurance (Days)	35	25	25



ETV SPECIFICATIONS

	Malacca Strait ETV 1	One Fathom Bank ETV 2	Singapore Strait ETV 3
L.O.A (m)	75.9	71.9	75
Breadth (m)	15	15.5	15.5
Draught (m)	6.0	5.2	5.7
Nos. Crew	13	13	13
Nos. Supernumerary	10	10	10
Bollard pull (Tonnes)	147	105	162
Design Speed (Knots)	18.5	17.0	19.0
Endurance (Days)	35	25	25
Main engine (MW)	13.3	9.5	15.3
Bow Thruster (kW)	2 x ~ 800	2 x ~ 800	2 x ~ 800
Stern Thruster (kW)	1 x ~ 600	1 x ~ 600	1 x ~ 600



ETV CONCEPT DESIGN

REQUIREMENT

	Malacca Strait: ETV 1	One Fathom bank: ETV 2	Singapore Strait: ETV 3
1 Endurance on economic speed [days]	35	25	25
2 Anti-roll tank [Y/N]	Yes	Yes	Yes
3 Extra Accommodation [No. people]	10	10	10
4 Dynamic positioning [1 / 2 / 3]	DP 1	DP 1	DP 1
5 Fire Fighting [Y/N]	FiFi 1	FiFi 1	FiFi 1
6 Helicopter deck [Y/N]	No	No	No
7 Survivor capacity [No. people]	50	50	50
8 Project containers [TEU]	2	2	2

QUESTOR MODELLING





3D MODEL



WIRE FRAME MODEL







CONCLUSION

- ✤ 36th TTEG Agreed to the ETV Concept study's findings and recommendations.
- 36th TTEG Agreed to further look into the legal and liabilities aspects; the different types of ETV services provided in other regions; and propose a suitable model for the SOMS.
- 37th TTEG Singapore presented on the various modalities adopted in other countries for ETV services. Three littoral states agreed to establish a Singapore-led Correspondence Group (CG) where each country would further consult the national authorities on their respective legal, regulatory and operational frameworks, and report the findings back to the CG.



Thank you.

