

**MARITIME POLICY RESEARCH GRANT CALL ON
MARITIME MANPOWER DEMAND-SUPPLY STUDY**

**GRANT CALL
2025**

CALL-FOR-PROPOSALS

**Singapore Maritime Institute
29 Media Circle, #08-03, ALICE@Mediapolis, Singapore 138565**

BACKGROUND

1. Manpower is one of the key factors critical in sustaining Singapore's competitiveness, contribution and growth as a premier Global Hub Port and leading International Maritime Centre (IMC). It is crucial that MPA establishes a comprehensive understanding of the drivers impacting the demand and supply of maritime manpower in Singapore, especially in view of growing domestic constraints (e.g. manpower, land) as well as keen global competition for qualified maritime expertise.
2. MPA has commissioned 5 studies on maritime manpower since 2013. These studies have covered various important elements in manpower development. Benefits and compensation benchmarks and competency frameworks for key maritime jobs were the initial focus. Subsequently, the sector's short to long-term demand and supply of maritime manpower and future skills were also studied, alongside refreshes of past work. Together, these studies have provided a strong foundation to guide MPA's manpower policymaking.
3. The Grant Call shall conduct rigorous research to develop an econometric model for forecasting labour demand and supply for the next 5 to 10 years in Singapore's maritime sectors and overall industry. Domestic, regional, and global trends should be considered, including the impact of digitalisation and decarbonisation related efforts on jobs and skills demand.
4. The Grant Call shall be open from 06 March 2025 to 16 April 2025.

SCOPE OF STUDY

5. The Study shall constitute an analysis of the key drivers of manpower demand and supply in Singapore's maritime sector, covering the impact of domestic, regional and global factors on the quantity and the skills required for the maritime workforce, across key job families. It should cover the full maritime industry – the Port, Shipping and Maritime Services clusters, including Maritime Technology firms. Policy recommendations to address challenges and capitalise on opportunities should be provided, with specific analysis on the impact of decarbonisation and digitalisation on the maritime workforce.
6. The Study shall include the development of a robust, bottom-up econometric model incorporating manpower data from workforce records and key variables influencing labour demand and supply in the next 5 to 10 years, across the maritime industry as specified above.¹ Variables assessed should span from domestic factors like local demographic trends, to global shipping indicators like freight and bulk indices.
7. After researching and developing the model, the Researcher is expected to transfer knowledge on its source code and underlying economic theory to the MPA team. This extends to all relevant knowledge for subsequent maintenance of the model, including how the data is sourced and cleaned, and methods used for analysis and findings presented.
8. Findings should be validated with industry stakeholders across maritime sub-sectors. Possible mediums include surveys, interviews, focus groups or workshops, conducted with

¹ Model should be in Python or R, for ease of access.

relevant personnel such as C-Suite executives, senior human resource managers and/or line managers from key enterprises.

9. A mid-study update shall be provided in 6 months upon the project start date. The final report shall be submitted and the model transferred to MPA team by the end of **12 months** from the project start date, with presentations by the Researcher on the outcomes to MPA and MOT senior management.
10. In summary, the study's overall deliverables will consist of:
 - a. Development of a robust, bottom-up econometric model incorporating manpower data from workforce records and key variables influencing labour demand and supply
 - b. Comprehensive report covering:
 - i. Industry manpower forecasting with snapshots for next 5 & 10 years, including documentation of econometric model & variables used, source code, and relevant scenarios
 - ii. Deep dive into impact of digitalisation and decarbonisation on maritime workforce
 - iii. Recommendations for manpower strategies in view of the study's findings.
 - c. Knowledge transfer on model source code and underlying economic theory to the MPA team, including data sourcing and preprocessing to run the model
 - d. Industry engagement to validate findings – aimed at 60-70 companies for robust sample size
 - e. Presentation to MPA and MOT senior management on findings and recommendations

ELIGIBILITY CRITERIA

11. The Study is open to Researchers (and associated R&D team) from Singapore-based organisations ("Organisation"). This is limited to Institutes of Higher Learning (IHLs), Research Institutes (RIs) and not-for-profit research laboratories and units in Singapore.
12. The Organisation shall have a designated Research office or equivalent who will be responsible for the grant applications or funded projects of the organisation, including:
 - a. Supporting the Study;
 - b. Allowing the Study to take place in organisation premises;
 - c. Ensuring necessary resources and infrastructure to effectively administer operational processes (fund disbursements, progress reporting, inventory management, etc.); and
 - d. Ensure the Researchers (and associated R&D team) have the necessary competencies and track record to ensure successful completion of the Study.
13. The main Researcher or Principal Investigator (PI) shall i) hold a full-time appointment in an eligible Organisation; and ii) possess domain knowledge of the maritime industry, a strong understanding of the drivers in maritime manpower demand and supply, and experience in related econometric modelling.
14. Teams may choose to include multiple Researchers as Co-Principal Investigators (Co-PIs). At the point of application, Co-PIs must hold a full-time appointment in a Singapore-based IHL or RIs.
15. Teams may choose to include Collaborators who are researchers in private companies, overseas universities, or other local IHLs and public sector RIs.

16. All research work must be done in Singapore, unless approved by SMI.

FULL PROPOSAL SUBMISSION

17. Applicants are required to ensure that information submitted complies with SMI terms and conditions and collaboration guidelines (**Annex A**). The following may result in the proposal being rejected without review:

- a. Missing, incomplete or inaccurate information;
- b. The application must have the Director of Research (DOR) or equivalent, endorsement. Please ensure the proposal is not in “Pending DOR verification” or “Pending DOR’s endorsement” stage. Applications which are incomplete, late or not endorsed (electronically by the corresponding R&D Organisation) would not be considered. No revision shall be made to the application after submission;
- c. Applications that do not align with the study objectives outlined in Paras 5-10 above;
- d. Duplicates of proposals submitted to any other public funding agencies for simultaneous funding considerations; and
- e. Applications that do not meet the eligibility criteria outlined in Paras 11-16 above.

18. The proposal must be written in English and present a comprehensive and concise case for support via the application document (**Annex B**).

19. Applicants must submit an accompanying presentation deck (**Annex C**) with the proposal and the proposed budget (**Annex D**). Additional reference slides can be included as an Annex to the presentation, where necessary.

20. Relevant privileged or confidential information shall be disclosed in the application to help convey a better understanding of the proposal. Any such information should be clearly indicated in the application.

21. Selected applications shall be invited to present to the Review Panel Committee (RP), comprising SMI, MPA, relevant technical and industry experts. The RP shall rank applications based on the evaluation criteria in Table 1.

Table 1: Evaluation Criteria

	Evaluation criteria	Weightage
A	<p>Methodology</p> <ul style="list-style-type: none"> - Is the proposed methodology robust and feasible/viable? - Are the characteristics and quality of data available appropriate for the project? - Is the scope comprehensive and international benchmarks relevant? - Are the recommendations proposed upgradable/future-proof? 	40%
B	<p>Industry Partnership and Technical competency</p> <ul style="list-style-type: none"> - Does the research performer/team possess the necessary capabilities to conduct the research successfully? - Does the PI have the track record to lead and conduct the research successfully? - To what extent does the proposed industry partner’s relevant experience and track record complement and contribute value add to the project? 	30%

	Evaluation criteria	Weightage
C	Project management <ul style="list-style-type: none"> - Are there clear quantitative and qualitative milestone targets in the project plan with key deliverables? - Comprehensiveness of the project management plan, including risk analysis and mitigation plan - Does the project team have ready research resources to complete the study on time? 	15%
D	Project budget <ul style="list-style-type: none"> - Reasonableness of project budget 	15%

22. The reviewers may seek additional information to elaborate or clarify areas in the application during the review process.
23. Applications shall be accepted from 06 March 2025, 0900 Hrs and shall close on 16 April 2025, 1700 Hrs (SGT) / GMT+8). Late applications shall not be accepted. Extension of submission deadline may be exercised at SMI's sole discretion.
24. All applications submitted shall receive an email acknowledgement by SMI within 3 working days. All applicants shall be notified by no later end of July 2025 on the outcomes of their applications.
25. Projects shall commence within **1 month of award**.

KEY TIMELINES

26. Interested applicants are to refer to Table 2 for the key timelines:

Table 2: Key Timelines

S/N	Item	Date
1	Launch of grant call	06 Mar 2025
2	Grant Call briefing	13 Mar 2025
2	Submission Deadline	16 Apr 2025
3	Shortlisting of applications for evaluation	May 2025
4	Review of proposals	Jun 2025
5	Expected award of proposal	Jul 2025
6	Expected commencement of Study	Aug 2025
7	Mid-study Update	Feb 2026
8	Submission of Final Report, Transfer of Model and Presentation to MPA and MOT Senior Management	Aug 2026

PROPOSAL EVALUATION AND AWARD PROCESS

27. A briefing shall be arranged on 13 March 2025, 11a.m at Level 19, Board Room, mTower, 460 Alexandra Road, Singapore 119963 to allow any queries pertaining to the grant call to be addressed. Attendance at the briefing session is compulsory.
28. Applications shall be evaluated via a three-stage selection process: (i) Technical Review Committee, (ii) Review Panel Committee and (iii) SMI Governing Council. Applicants may be requested to make presentations as part of the evaluation process.
29. Applicants of this grant are allowed to collaborate with other institutions and industry partners.

FUNDING SUPPORT

30. Indirect Research Cost (IRC) may be claimed at a cap of 20% of the approved qualifying cost. The total funding support includes the IRC and approved qualifying direct costs of the R&D project.
31. All costs and expenses incurred by the applicant in preparing or submitting the application shall be borne entirely by the applicant.
32. All information and intellectual property generated from the study shall be owned by SMI.

DISCLAIMER

33. SMI reserves the right to reject any or all applications submitted under this grant call. For the avoidance of doubt, the submission of any application may not necessarily lead to the award of a grant.
34. SMI shall have the absolute discretion to accept or reject any application submitted without being liable to give any reason thereof. SMI reserves the right to retain the applications submitted by all parties without liability for the costs of such documents.

CONTACT DETAILS

35. All applications shall **only be submitted** to the below email address with subject head "SMI Grant Call" followed by Host Institute and PI Name, (e.g. "SMI Grant Call, ABC University, Mr XYZ).

Attn: Ms Frances Goh
Singapore Maritime Institute
frances@maritimeinstitute.sg

LIST OF ANNEXES (TO BE ATTACHED SEPARATELY)

- Annex A – SMI Grant Terms and Conditions and Collaboration Guidelines
- Annex B – R&D Application Form
- Annex C – Presentation Template
- Annex D – Budget Excel Form