



## **Global** Maritime and Port Services Pte Ltd

**We are a privately-owned Singapore-based marine and port operations and engineering design consultancy company. Our services include the following:**

- **Port Design Master Planning.**
- **Detailed Engineering Design of Marine Structures.**
- **Independent Engineering Advisor.**
- **Navigation and Hydrography Expert Advice.**
- **Supervision of Port and Jetty Construction.**
- **Technical and Operational Audit and Due-Diligence Verification.**
- **Project Management.**
- **Container Terminal Operations and Maintenance System.**
- **Review of Port Regulations.**
- **Technical Advisory for Public Private Ports Partnership.**
- **Port Community IT System Architecture Design.**
- **3D Renderings and Animation.**
- **Port and Maritime Training and Education.**



**Global Maritime and Port Services Pte Ltd (GMAPS)** was established in 2004 as a privately-owned Singapore-based port and marine operations and engineering design consultancy company. Its competencies include strategic and concept master planning; hydrography advice and service; Navigation expert advice; QP supervision of port and jetty construction ; technical audit and due-diligence verification; project management; terminal operations and maintenance; front-end engineering design; detailed structural analysis; detailed engineering design; port and maritime training and education; independent engineering advisor; ship statutory inspections and surveys; review of port regulations; terminal operations and port community IT systems architecture designs and 3D renderings and animation.

## SENIOR PARTNERS:



**Executive Chairman: GOON Kok Loon**  
Port management & operations specialist with over 40 years international work experience including mergers and acquisitions, and greenfield port developments. Former Deputy Group President, PSA Corporation Ltd. and President of its International Business Division.



**Executive Director: Capt. Wilson CHUA**  
Master Mariner. An expert in Hydrography and aids to navigation with over 45 years of experience in anchorages, traffic separation schemes and sea space management. Former Singapore Chief Hydrographer.

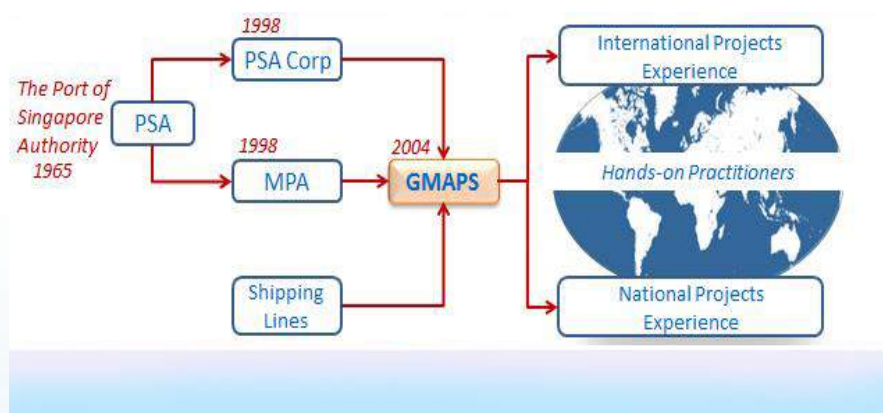


**Executive Director: L. K. SHERI**  
Specialist in developing Maritime and Port Regulatory Legal Frameworks. Former Chief Legal Officer, Maritime and Port Authority of Singapore.



**Managing Director: Capt. James FONG**  
Extra Master Mariner. Specialist with decades of experience in managing, operating and controlling navigation, port and marine operations. Former Singapore Port Master.

GMAPS partners and senior staff were among a core group of PSA officers who developed the wharf facilities to facilitate the start of containerisation in Singapore as early as the 1970s, and who later carried on with creating new infrastructure which enabled the port to grow over four decades. Currently, well over 30 million TEUs of containers a year are handled across the PSA wharves. Singapore's port is the world's busiest, where a vessel enters or leaves the port limits every 3 minutes. These officers also ventured regionally and into China, the Middle-East, India and Europe.



GMAPS collaborates with specialist professionals to apply the combined experience to work with clients to master plan and develop state-of-the-art facilities and operating infrastructure.



Cert No: QS-2014-24



GMAPS is registered with the Asian Development Bank as a consultant body. It has also achieved bizSAFE Enterprise Level 2 from the Workplace Safety and Health Council. A GeBiz Trading partner, it has also received ISO 9001:2015 and OHSAS 18001 : 2007 certifications. It is an associate member of the International Association of Ports and Harbors(IAPH).

# Port & Marine Engineering Consultancy

GMAPS partners and senior staff have held senior managing and operating positions for many years in the erstwhile Port of Singapore Authority (PSA) and its successor organisations, the Maritime & Port Authority of Singapore and the PSA Corporation, as well as Singapore logistics companies. These consultants have carried out assignments for Government authorities and agencies as well as private sector clients in Singapore, Brunei, Bangladesh, Indonesia, Saudi Arabia, Bahrain, Panama, Sri Lanka, Thailand, Myanmar, Nigeria and United Arab Emirates.

GMAPS in-house engineering team specialises in:

- Marine Structures Design & Coastal Engineering
- Development of Port Master Plans & Feasibility Studies
- Harbour Design & Terminal Layout
- Shore Protection & Breakwaters Design
- Design of Jetties, Piers and Mooring Systems
- Dredging/Reclamation Design and Management
- Project Management & Contract Administration
- Marine Facilities Maintenance
- Met-Ocean Investigations.

Its core group of in-house engineers comprises the following:



**LAW Kok Hwa**  
**Senior Vice President**

Registered Professional Engineer. Civil Engineer with over 30 yrs of experience in planning and design of marine structures, site supervision and project management. Headed major development works to develop container terminals in Singapore and overseas ports owned and managed by PSA.



**R BAWAJEE**  
**Executive Director**

Registered Professional Engineer. Specialist in Construction and Contract Management with over 40 years experience in managing international marine construction and land reclamation projects including soil improvement works.



**Franklin WUISAN**  
**Senior Architect**

Over 25 years of experience in port construction project in Singapore, India, Yemen, Portugal, S Korea, Saudi Arabia and Japan.



**Prashant HINGWE**  
**Senior Civil & Structural Engineer**

Over 5 years of experience in maritime projects involving analysis, design and conceptual planning for port and harbour developments.



**Market Study, Master Plan and Engineering Design, Bangkok Port Terminal 3**

The existing container and general cargo terminals at Klong Toey Bangkok Port is to be redeveloped into a new state of the art terminal 3 capable of handling up to 1.4 million TEUs pa.

GMAPS scope of work includes detailed market study and competitive analysis, highway and marine traffic studies, detailed terminal layout plans and engineering design for the wharf and terminal infrastructure.

# Engineering Projects Gallery

GMAPS wholly-owned subsidiary, **GMAPS Engineering Services Pte Ltd (GES)**, is registered with the Professional Engineers Board of Singapore. The Directors of the company include registered Professional Engineers, Law Kok Hwa and R Bawajee, who each has more than 30 years of extensive worldwide engineering experience.

**Port Detailed Engineering Design**  
Jazan Economic City Port, Saudi Arabia  
Client: Jazan Economic City Co. Ltd. (JEC)



**Independent Advisor and Technical Consultant**  
for Italian-Thai Development,  
Dawei Sea Port and Special Economic Zone Project, Myanmar



**Port Upgrade and Expansion**  
Laem Chabang Port Phase 3 Development, Thailand  
Client: Port Authority of Thailand



**Tender Design, King Abdul Aziz Port Second Container Terminal, Dammam, Saudi Arabia**  
Client: Hyundai Engineering & Construction Co. Ltd.



**Engineering Design and Tender Management**  
Inland Port, Taliabu Island,  
Maluku, Indonesia  
Client: Salim Wanye (Shanghai) Enterprise Group Co.



**Project Management, including Obtaining Approvals, Tender Management and Construction Supervision,**  
Marine Jetty and Offshore Supply Base, Loyang, Singapore  
Client: TOLL Offshore Petroleum Services



# Port Operations & Logistics Consultancy

GMAPS senior consultants have an average of 20 years of local and international experience in container terminal, general and bulk cargo operations and management, including warehousing and port logistics. They have worked in senior management positions in the former Port of Singapore Authority, PSA Corporation Ltd, Jurong Port, and the Maritime & Port Authority of Singapore.

GMAPS provides consultancy services in:

- Project feasibility studies
- Market competitive analyses and cargo volume projections
- Operation of ports, including container terminals
- Operation of multi-purpose ports, conventional general cargo, bulk cargo, car terminals
- Operation of passenger cruise terminals
- Audit of cargo terminal operations and maintenance procedures
- Port and terminal handling equipment user specifications and selection.



Our in-house port and container terminal operations/logistics experts include the following:



**MOHD MUSTAFA Bin Haji Mohd**  
**Vice President/Senior Consultant**

Logistics Management and Warehouse Operations expert with extensive international experience particularly in Middle East. He also worked in PSA, handling both conventional and container operations before venturing into main core shipping handling operations and marketing.



**KOH Ler Hian**  
**Senior Consultant (Equipment)**

Port equipment expert with more than 25 years of local and international experience dealing with the procurement and maintenance of all types of container and cargo handling machinery. Having worked in PSA for 13 years, he specialises in providing consultancy for preparation of tender specifications for port equipment.



**SOON Soon Beng**  
**Vice President/Senior Consultant (Port Finance)**

Over 30 years of experience in financial modelling, cash flow projections and sensitivity analyses, with 15 years working in the Port of Singapore Authority. Worked abroad for several years in Yemen, Portugal and Pakistan.



**FONG Kum Hor**  
**Vice President/Senior Consultant**

Over 40 years of experience in ports and logistics sector, spearheading major projects in PSA, He was also Deputy General Manager for the Voltri Terminal Europa in Italy where he managed the greenfield terminal from 1997-2000.



**WONG Siew Chuang**  
**Vice President/Senior Consultant**

Port Economist with more than 40 years experience in port and shipping industry. Former Deputy Research Manager of PSA Corporation Ltd. He worked at Drewry Shipping Consultants before joining GMAPS in 2013. While in GMAPS he spearheaded numerous port consultancy projects for clients in China, Indonesia, Thailand, Vietnam, Korea, Cambodia, Myanmar, Japan, Qatar, Oman, Guinea in West Africa, Madagascar, Nigeria and Saudi Arabia.

# Port Operations Projects Gallery



**Roadmap for Operations and Redevelopment of Bo Aung Kyaw Terminal, Yangon, Myanmar**  
**Client: Nilar Yoma Trading Co. Ltd**

Assessment of existing port facility in Yangon to enable client to bid for the lease concession and operate the terminal.



**Port Logistics Efficiency And Productivity Study, Bangladesh**  
**Client: Asian Development Bank**

Feasibility study on improving the logistics efficiency and productivity for Mongla port and Benapole inland port in Bangladesh.



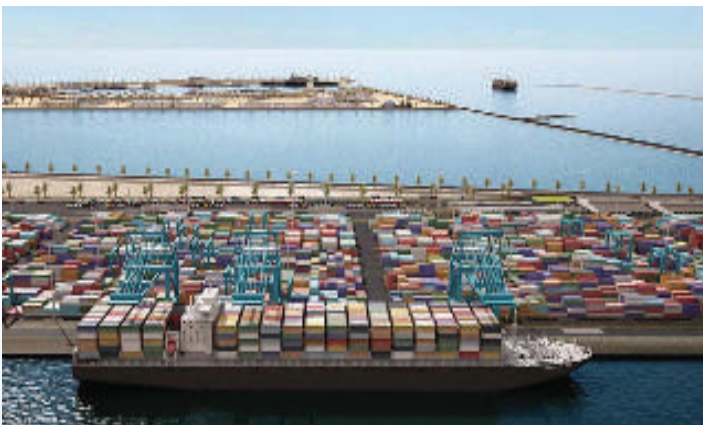
**Enhancing Container Freight Station Capacity & Operations Efficiency, India**  
**Client: Gateway Distriparks.**

Assessment on current operations of designated ICD in Mumbai, India. Identify, define and recommend areas for improvements in process efficiency so as to enhance capacity.



**Terminals Process Mapping and Re-engineering, Sharjah**  
**Client: Sharjah Ports Authority.**

Process mapping and analysis, benchmark and identify gaps, re-engineering port operations and management training for Ports Khalid, Hamriyah and Khorfakkan of the Sharjah Ports Authority.



**Business Model Study for Doha New Port Project, Mesaieed Doha Qatar**  
**Client: Qatar Ports Management Company**

Study of the New Port's market and competitive position in relation to regional ports. Develop a comprehensive strategy to formulate a suitable business model to manage the New Port. Identify suitable terminal operator.



**Feasibility Study To Develop an International Hub Port, Nantong, China**  
**Client : Keppel T&T**

Technical, commercial and financial viability study for investment in the development of an international container hub port on the reclaimed land in the Nantong - Tonghai area.

# Marine Services Consultancy

GMAPS senior staff are master mariners with several years of experience commanding foreign-going vessels. They are experts in their respective fields such as hydrography & bathymetry, safety of navigation, administration of vessel traffic movements (VTMS) and enforcement of port regulations.

GMAPS marine services include the following;

- Application of ISPS Code
- Hydrography advice and services
- Advice on STS & Bunkering Services
- Advice on handling of hazardous cargo
- Ship routing
- Navigation Expert Advice
- Navigation and Berthing Simulation studies
- Placement of appropriate aids to navigation
- Advisory on waterways, approach channels and anchorages
- Risk assessment.

Our senior consultants include the following:



**Capt Wilson CHUA**  
**Executive Director**

Master Mariner. An expert in hydrography and aids to navigation with over 45 years of experience in anchorages, traffic separation schemes and sea space management. Former Singapore Chief Hydrographer.



**Capt James FONG**  
**Managing Director**

Extra Master Mariner. Specialist with decades of experience in managing, operating and controlling navigation, port and marine operations. Former Singapore Port Master.



**Capt Mark GOH**  
**Executive Director**

Master Mariner. Sailed on various vessel types with NOL. Command experience on both container vessels and bulk carriers. Over 15 years of experience in the shipping industry. Project Director for marine operations.



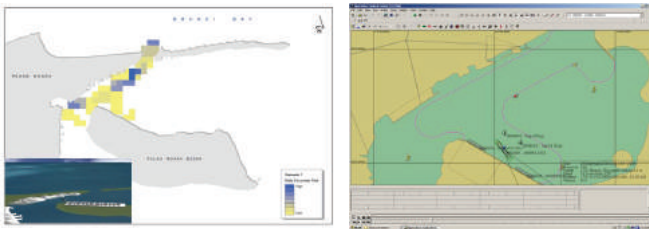
**Capt TEOH Woi Khon**  
**Senior Consultant**

Master Mariner. Command experience on general cargo and container vessels. Over 30 years of experience in the shipping industry. Former PSA Container Terminal Ship Planner. Senior Consultant for marine operations.



**Capt LEE Cheng Wee**  
**Senior Consultant**

Former Deputy Director (Port Division) cum Port Master in the Maritime & Port Authority of Singapore. Has in-depth experience in managing, operating and controlling navigation, port and marine operations.



**Navigation and Traffic Impact Assessment Studies for Development of Pulau Muara Besar, Brunei**



**International Ship and Port Facility Security Code (ISPS)**



**Vessel Traffic Information System (VTIS)**



**Feasibility Study on Ship Bunkering Business in the Port of Tanjung Priok**

# Port IT System Architecture Design

GMAPS senior consultants have extensive hands-on experience in designing port operations IT infrastructure and applications.

GMAPS provides consultancy services for:

- IT network design and specifications for terminal operations processes
- IT Systems architecture design for port community systems
- 3D renderings and animation.

Our IT experts include the following:

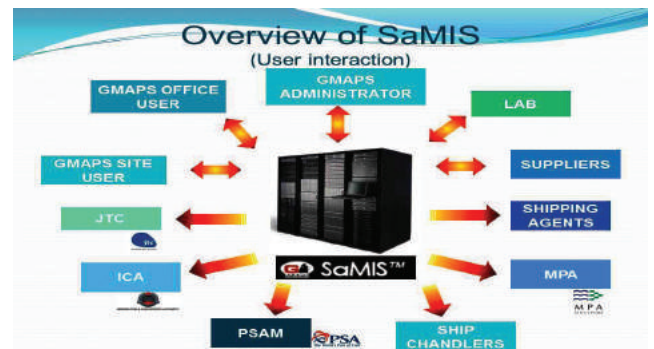


**Velu ILAYARAJA**  
**Senior IT Manager/Project Manager**

With more than 10 years of experience in managing both IT Infrastructure and Web Application projects. Has commissioned several IT infrastructure projects providing wired and wireless internet services covering high-rise properties and university campuses.

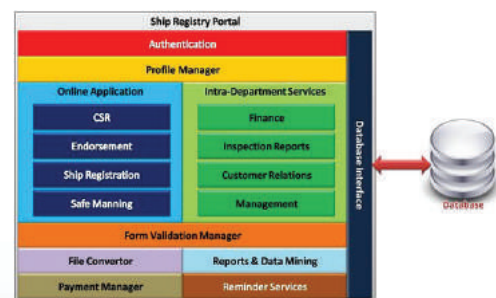
## Sands Management Information System™

GMAPS developed a web-based proprietary (SAmIS)™ vessel location and cargo handling system to track and manage the voyage and movement of vessels from port of origin to final destination. With advance notification of the vessel's ETA, GMAPS is able to plan and allocate berthing space according to vessel size and cargo type and quantity. Data mining and viewing of processes can be accessed on line 24/7 by clients and relevant authorities.



## Bahrain Ship Registry Portal

GMAPS was engaged by the General Organisation of Ports (GOP), Kingdom of Bahrain to computerise and automate its transactions portal with its shipping community for its ship registry. GMAPS designed the system architecture of the Ship Registry Portal for GOP.







# Training & Development Services

GMAPS draws its strength from its senior practitioners who have had long standing associations with world-class ports, shipyards and government organisations. They have the expertise, in-depth knowledge and experience in maritime and port industries.

GMAPS has developed and conducted a wide range of specialised courses for the maritime industry in Singapore and internationally. It provides:

- Quality training in nautical concepts and maritime skills
- Training in port and logistic operations and management
- Port financial analysis
- IMO & ILO Standards (eg. SOLAS, STCW)
- Training for merchant naval ratings
- Workplace safety and health
- Cargo handling and stevedoring
- International Safety Management (ISM) Audits
- Training course for instructors (IMO MC 6.09)
- IMDG. Code (IMO MC 1.10)



**FONG Kum Hor**  
**Vice President/Senior Consultant**

Over 40 years of experience in ports and logistics sector, spearheading major projects in PSA, He was also Deputy General Manager for the Voltri Terminal Europa in Italy where he managed the greenfield terminal from 1997-2000.

## Port Regulations Review

GMAPS' team of consultants has extensive experience in reviewing the governance and regulatory framework of ports and marine terminals activities and the provision of marine services. In particular, its executive Director, LK Sheri, had been responsible for the administration and updating of Singapore's maritime legislation and regulations while he was with MPA. He was also involved in setting out the regulatory framework for the corporatisation of PSA Corporation and Jurong Port.

GMAPS provides consultancy services in:

- Reviewing port regulations and other legislation governing maritime activities;
- Drafting standard operating procedures for port authorities;
- Reviewing licensing structure for port facility providers and operators;
- Advising on compliance matters pertaining to international conventions such as MARPOL, ISPS, SOLAS, STCW.

Our legal experts include the following:



**L. K. SHERI**  
**Executive Director**

Specialist in developing Maritime and Port Regulatory Legal Frameworks. Former Chief Legal Officer, Maritime and Port Authority of Singapore.



**Gurcharanjit Singh HUNDAL**  
**Principal Legal Counsel**

Over 20 years of legal experience. A specialist in corporate legal matters, legal consultant involved in EPC (FIDIC) contracts for Renewable Energy (BOOT and Turnkey) projects across different regulatory regimes in Asia and Europe.

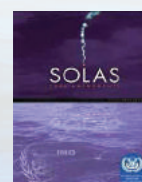


### Regulations Review, Port of Owendo, Gabon

In 2010, the Gabon Ports Authority (GPA) appointed GMAPS to review and enhance the Regulatory Framework of Gabon's Port and Marine Services Facilities. The assignment was to review and refine the existing regulations, introduce similar and consistent regulations for identified port and marine services and facilities which were not covered by any specific set of regulations, develop and implement a set of standard operating procedures that will enable GPA's personnel to efficiently regulate and supervise the industry.

### Licensing Regulations, GOP, Bahrain

Similar services were also provided to the General Organisation of Sea Ports (GOP), Kingdom of Bahrain in line with GOP's aim to regulate, develop and promote the Kingdom's maritime and logistics industrial zones by applying international standards and optimising all opportunities for GOP's clients.



# Project Management

GMAPS team of professional managers and supervisors provide project management services for project cargo logistics, construction and installation of marine structures, warehousing and storage operations.

GMAPS scope of services include the following:

- Site planning and management
- Monitoring and managing movements of vessels and barges
- 3D volumetric survey measurement on vessels
- Loading/discharging and storage/extraction of project cargo
- Calculation of vessel stability and lashing
- Vessel mooring supervision
- Surveys for navigational aids/mooring buoys
- Terminal management & Facilities management
- Maritime safety and security

## Management of Sand Deposition Sites

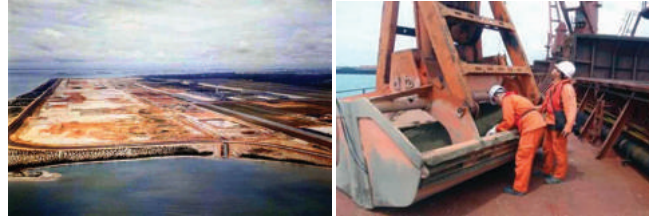
GMAPS has been engaged by the Jurong Town Corporation to manage its import and storage of marine sand from distant sources. This entails monitoring vessel movements from loading site to discharge point using an in-house supported Electronic Information Management System, certifying sand quality and quantity and maintaining workplace safety and security.



Sand Import and Deposition Project, Singapore

## Management of Dredging and Reclamation Works

GMAPS full-time personnel have decades of experience in major reclamation projects. One of GMAPS' key reclamation specialists is Er. R Bawajee. Some prominent projects managed by Mr. Bawajee include the Changi East reclamation for the Singapore international airport (2000 ha.), Pulau Tekong Besar (500 ha.), Sentosa Cove and various other Singapore islands.



Changi Reclamation, Singapore

## Terminal Management

As part of a consortium, GMAPS has been engaged by the Building And Construction Authority to operate the Pulau Punggol Aggregate Terminal (PPAT). In its capacity as Berth Operator, GMAPS manages the terminal's daily operations of receiving cargoes from bulk carriers and barges. GMAPS also provides facility management services for PPAT.



## Management of Project Cargo and Heavy Lift Operations

GMAPS team of Master Mariners are well qualified in planning the loading, discharging and lashing of project cargo and heavy lifts, including calculations of vessel stability.



**R BAWAJEE**  
Executive Director

Registered Professional Engineer. Specialist in Construction and Contract Management with over 35 years in managing international marine construction and land reclamation projects including soil improvement works.



**Capt Mark GOH**  
Executive Director

Master Mariner. Sailed on various vessels types with NOL. Command experience on both container vessels and bulk carriers. Over 15 years in the shipping industry.



**Andrew Lee**  
Director, Operations

Andrew joined GMAPS as an Assistant Operations Manager in 2008 and held various managerial positions before rising to the position of Director, Operations. Andrew possesses a Diploma in Maritime Studies from Singapore Polytechnic and a Bachelor's degree in Maritime Studies from Australian Maritime College, University of Tasmania. He is a certified ISM, ISPS and ISO 9002 Marine Auditor, having performed audits onboard chemical and gas carriers. He sailed onboard oil tankers and had experience working in container ports in Singapore and the Asia-Pacific. He has over 10 years experience managing marine projects.



**Amy TEO**  
General Manager, Operations

Amy joined GMAPS as an Operations Analyst in 2009 and held various managerial positions prior to taking on the role of General Manager, Operations. Amy possesses a Diploma in Computer Engineering from Temasek Polytechnic, a Bachelor's degree with honours in Computer Engineering from University of Manchester and a Postgraduate Diploma in International Business from University of Salford. She has nearly 10 years experience managing marine projects such as land reclamation and vessel terminal management.

## SOME OF OUR KEY CLIENTS



**Global Maritime and Port Services Pte Ltd**

190 Macpherson Road, #07 - 03, Wisma Gulab, Singapore - 348548.  
Tel: (65) 674 888 95 Fax: (65) 674 888 59

Email: [info@gmaritime.com](mailto:info@gmaritime.com) Website: [www.gmaritime.com](http://www.gmaritime.com)  
Company Registration: 200400536H