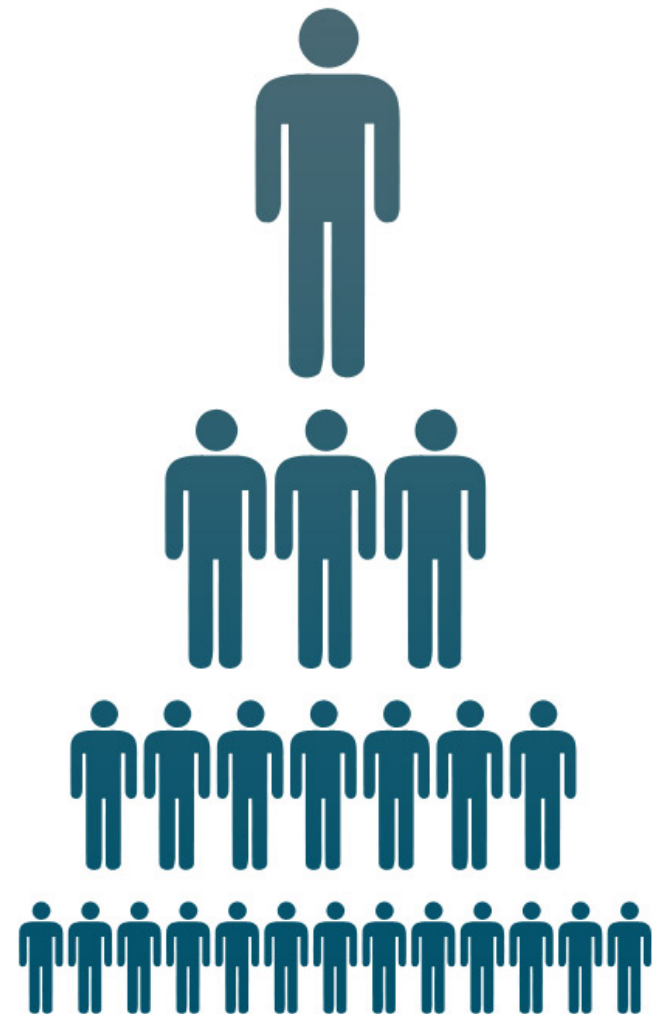


SHIPPING COMPANY ORGANIZATION STRUCTURE MEETING TMSA REQUIREMENTS

Ioannis Makris

Angelakos Hellas SA

**Technical Manager
Naval Architect & Marine Engineer**



SHIPPING

- Shipping is carriage of goods by water facilitating 90% of world trade.



FLEET MANAGEMENT

Fleet management refers to the management of ships while at sea. Ships are normally given to fleet management companies that handle aspects like crewing, maintenance and day-to-day operations.

Ship owner concentrates on cargo booking.



FLEET MANAGEMENT

- Fleet Management Companies are certified by Recognized Organization (RO).
- Daily follow up is done in accordance with safety, quality, environmental and health procedures.

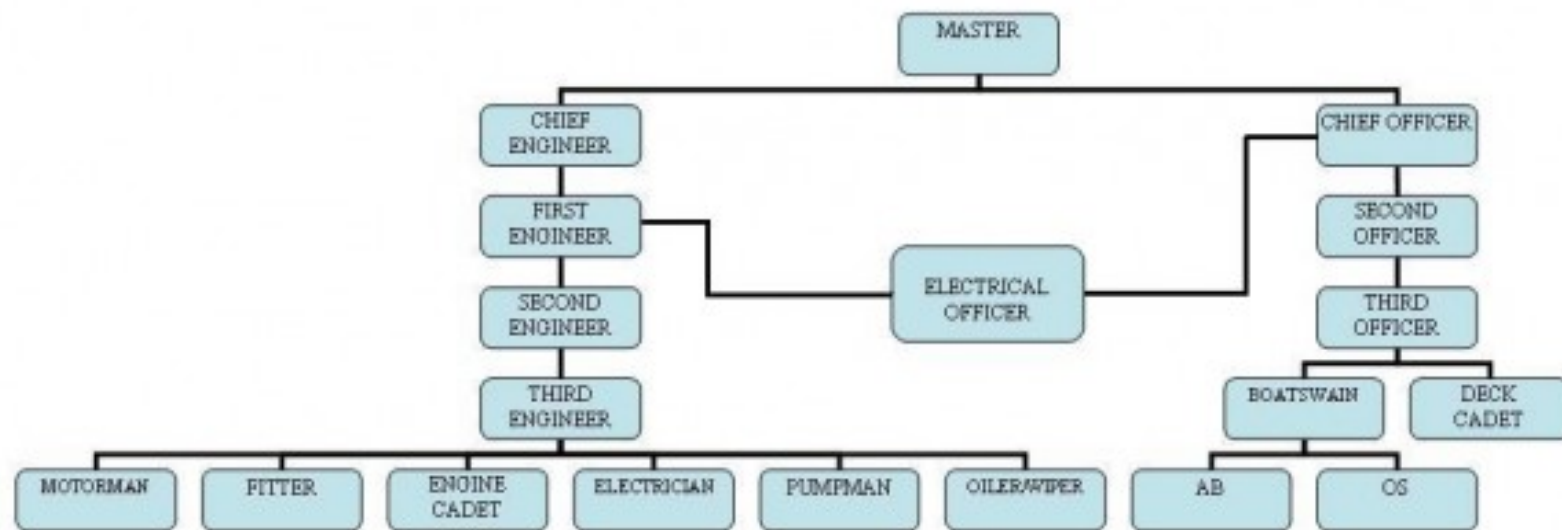


SHIPPING INDUSTRY DATA

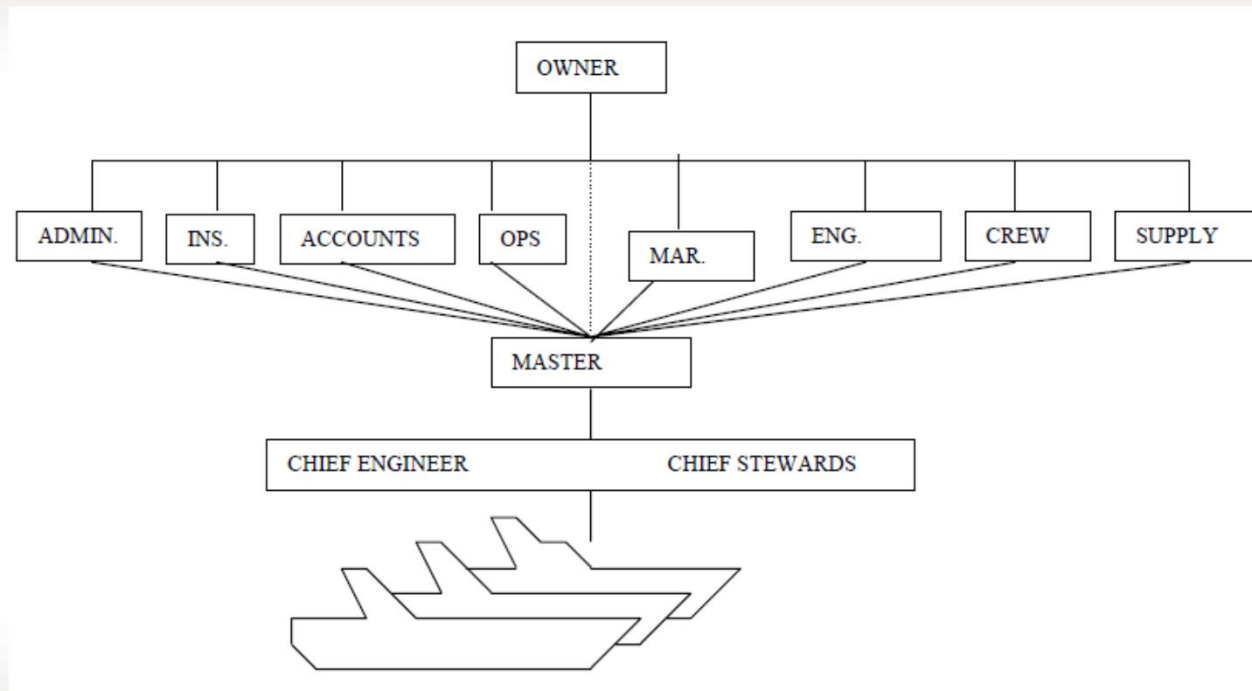
Worldwide exist between 8,000 and 10,000 fleet management companies.



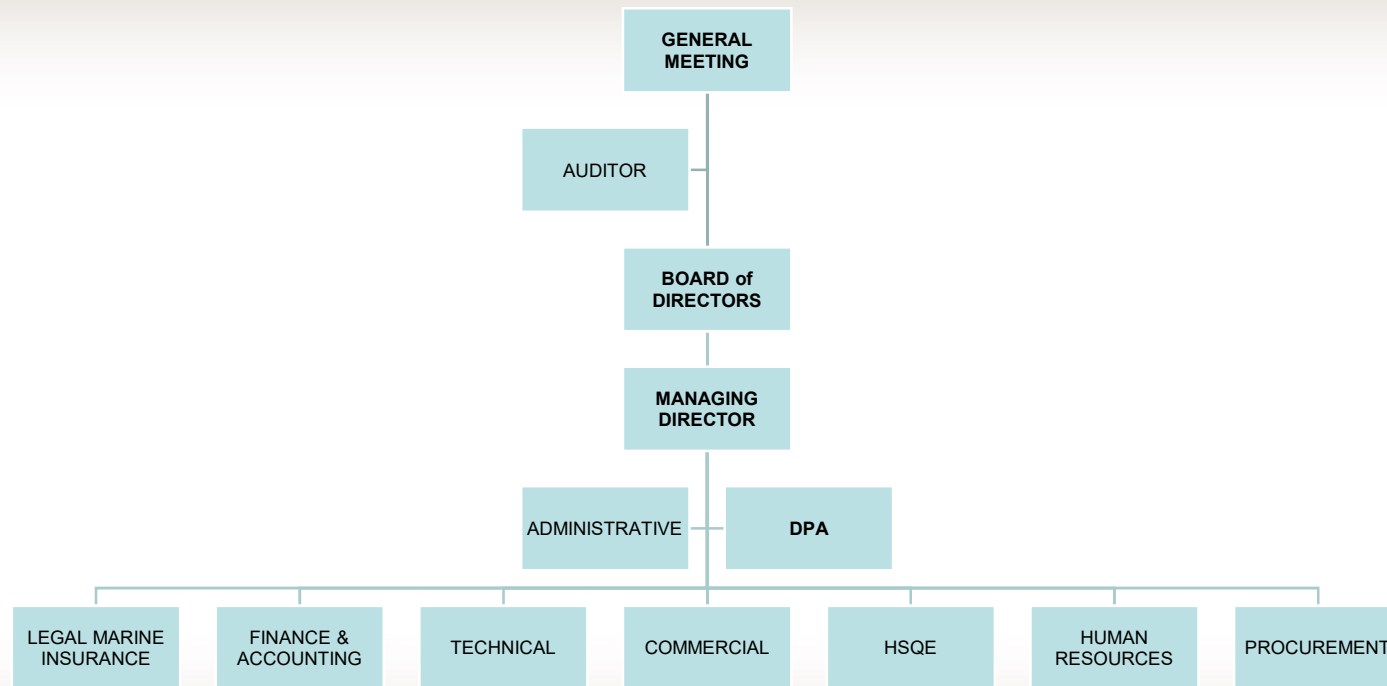
ONBOARD ORGANIZATION



SHORE ONBOARD INTERACTION

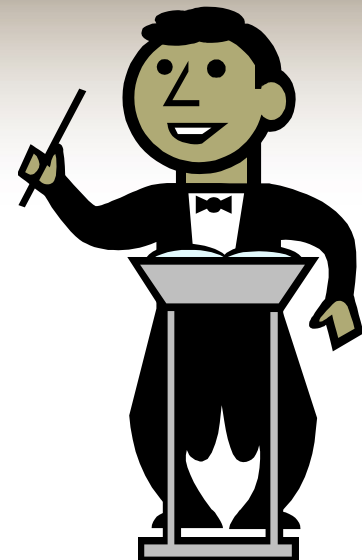


FLEET MANAGEMENT COMPANY OUTLINE



MANAGING DIRECTOR

- Decision Making Person.
- Efficient & Effective coordination.
- Link between BoD and Company personnel.

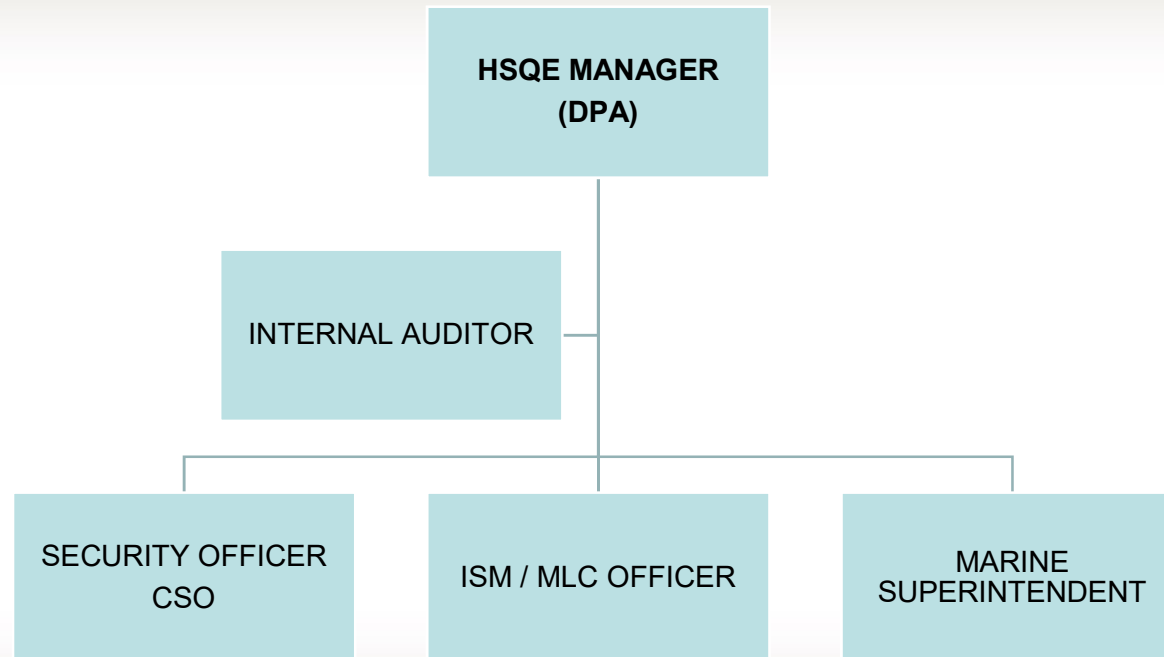


DESIGNATED PERSON ASHORE

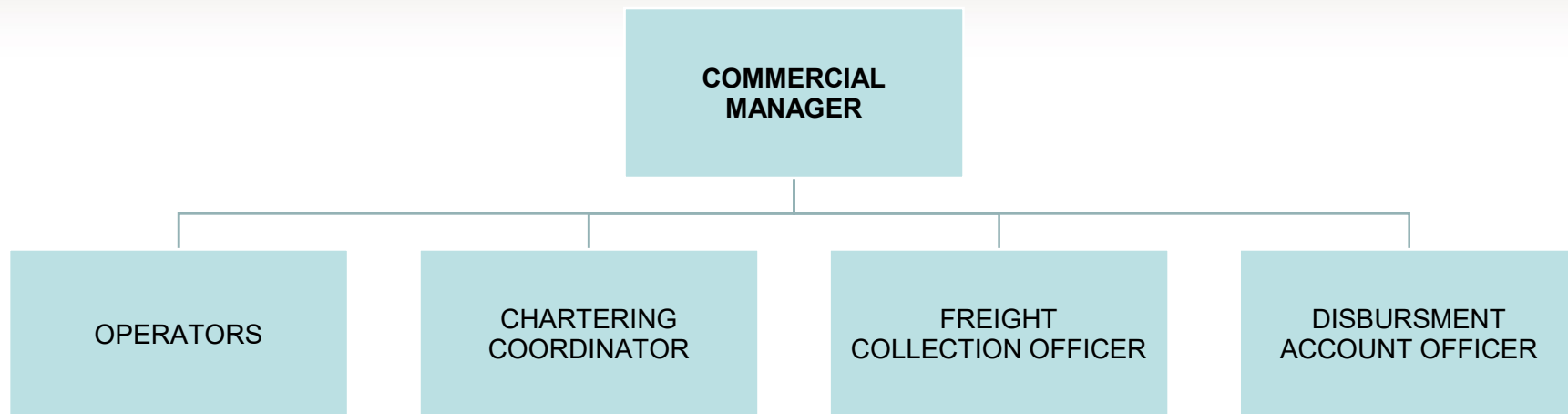
- The DPA is the person based ashore whose influence and responsibility should significantly affect the development and implementation of a safety culture within the Company.
- Most often head of HSQE department.



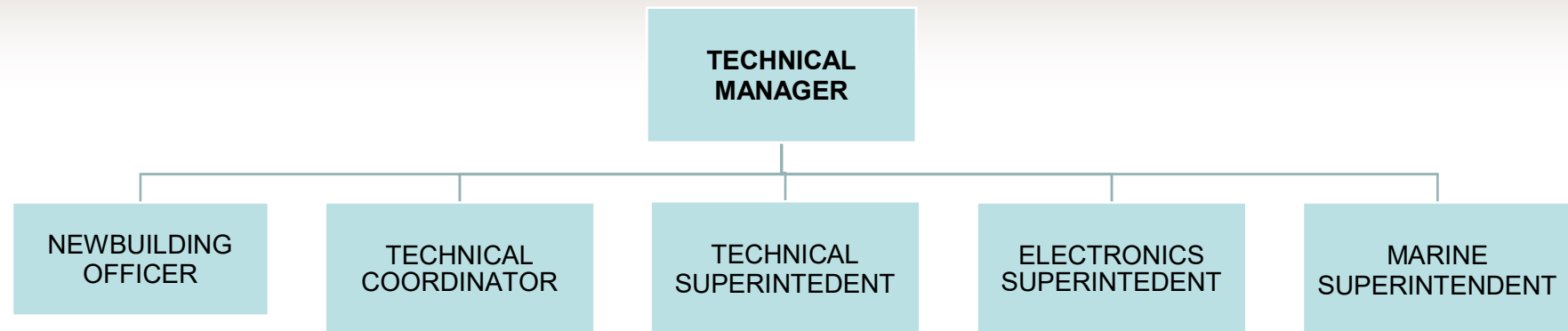
HSQE DEPARTMENT



COMMERCIAL DEPARTMENT



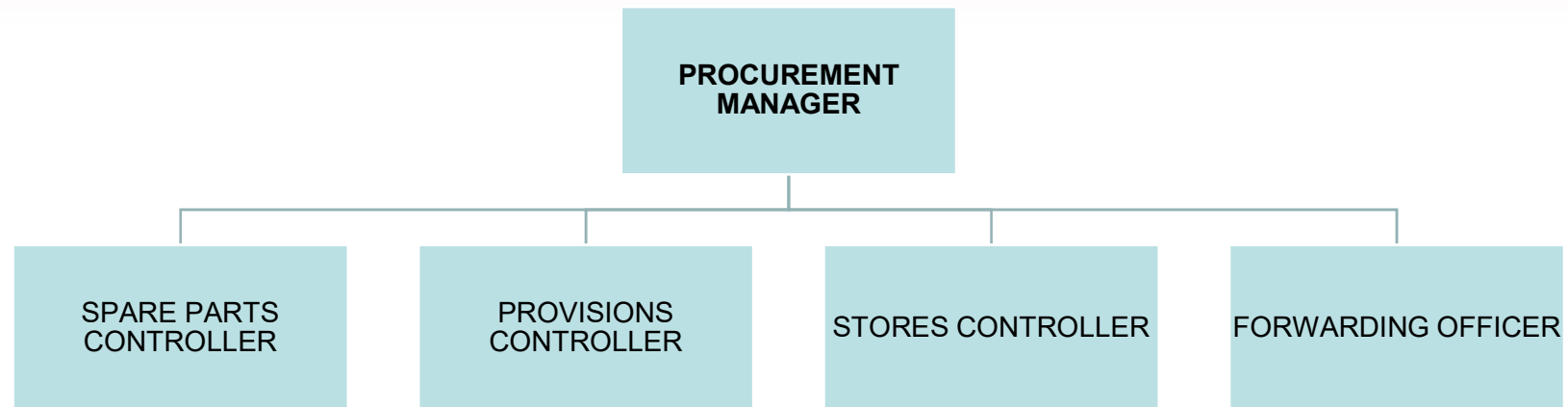
TECHNICAL DEPARTMENT



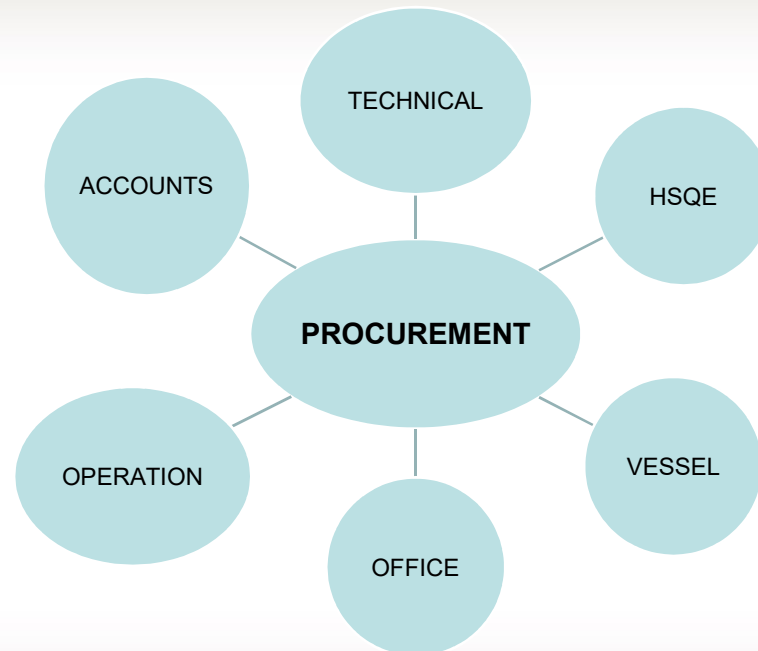
HUMAN RESOURCES DEPARTMENT



PROCUREMENT DEPARTMENT



PROCUREMENT DEPARTMENT



VARIOUS DEPARTMENTS

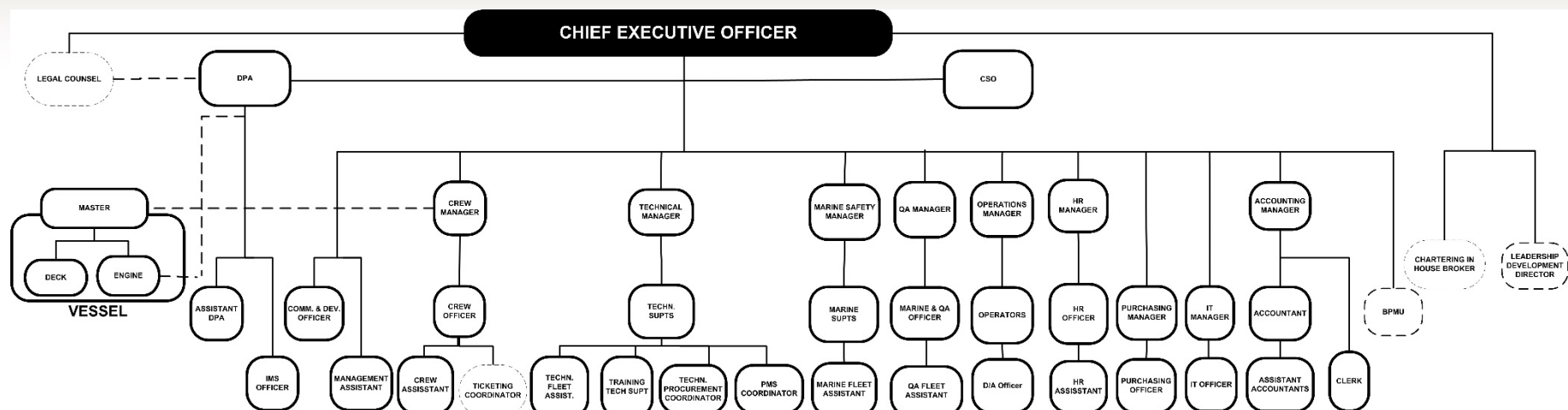
- Accounting & Finance.
- Information Technology & Telecommunication.
- Legal & Marine Insurance.
- Chartering.



ANDRIAKI SHIPPING



ALMI TANKERS

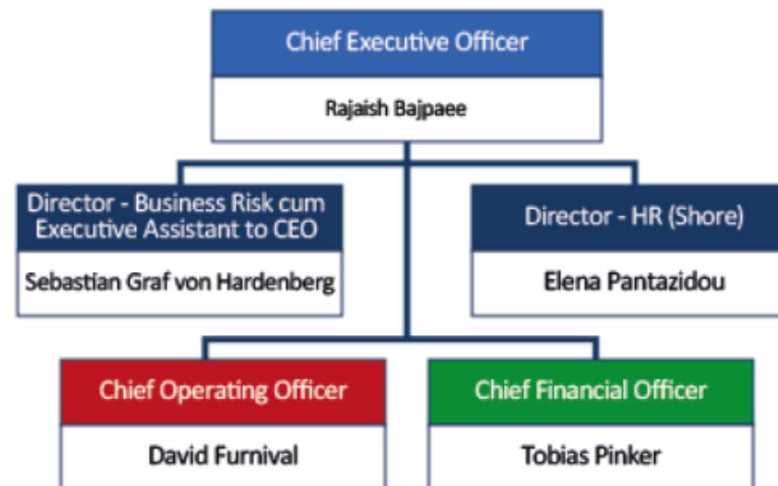


BERNHARD SCHULTE MANAGEMENT



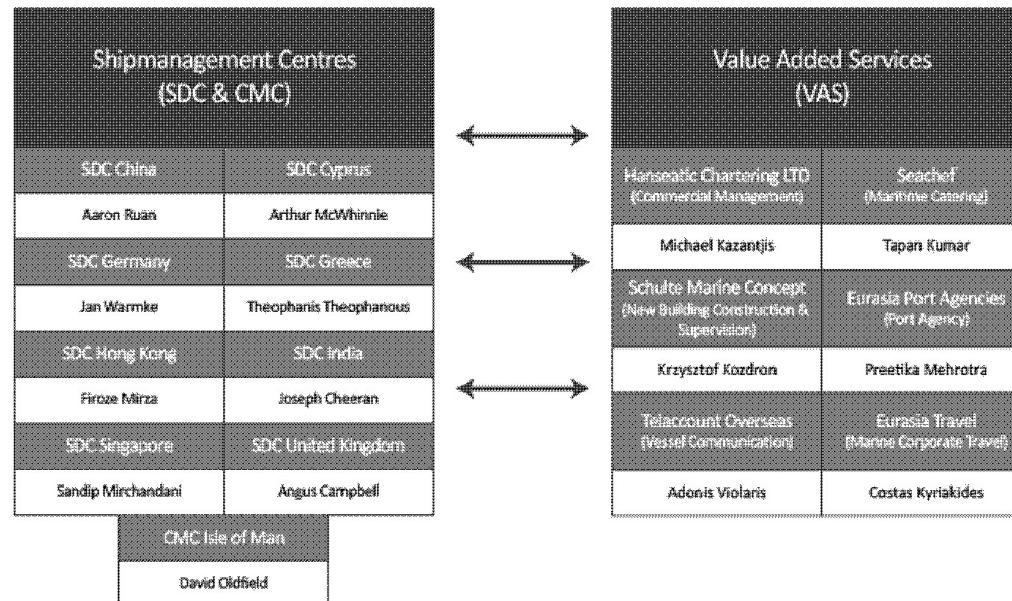
BERNHARD SCHULTE MANAGEMENT

Bernhard Schulte Shipmanagement - Executive Committee



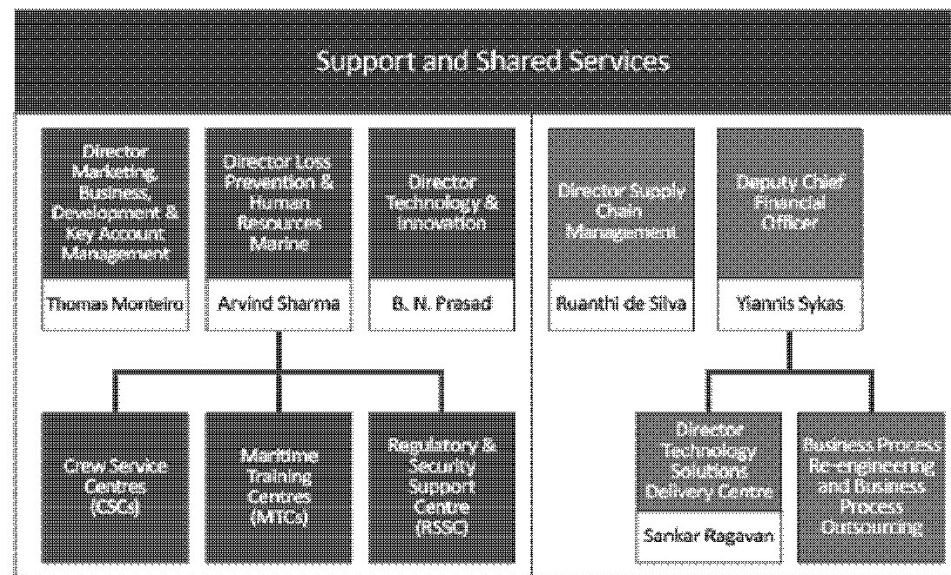
BERNHARD SCHULTE MANAGEMENT

Bernhard Schulte Shipmanagement - Service Delivery



BERNHARD SCHULTE MANAGEMENT

Bernhard Schulte Shipmanagement - Support and Shared Services



TANKER MARITIME INDUSTRY REGIME

SPECIAL



TANKER MARITIME INDUSTRY REGIME



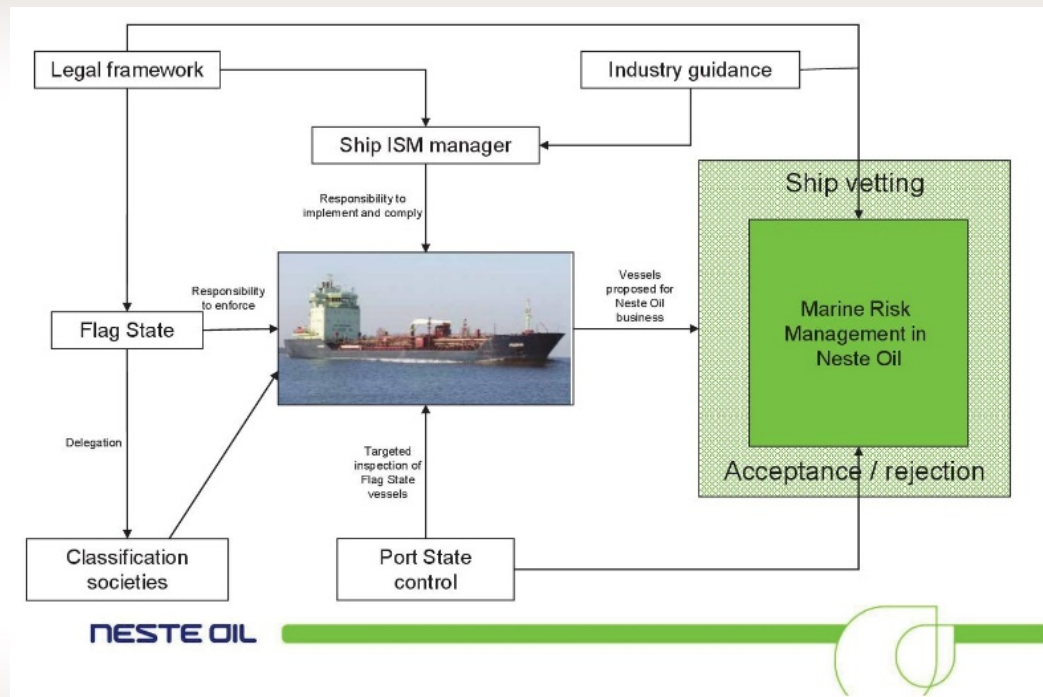
- The Oil Companies International Marine Forum is a voluntary association of oil companies with an interest in the shipment and terminalling of crude oil, oil products, petrochemicals and gas.
- *OCIMF does not involve itself in commercial Issues, including vetting, but restricts its activities to those issues affecting **safety and environmental protection**.*



TANKER MARITIME INDUSTRY REGIME



TANKER MARITIME SAFETY REGIME



OIL COMPANIES PERSPECTIVE OF VETTING INSPECTIONS

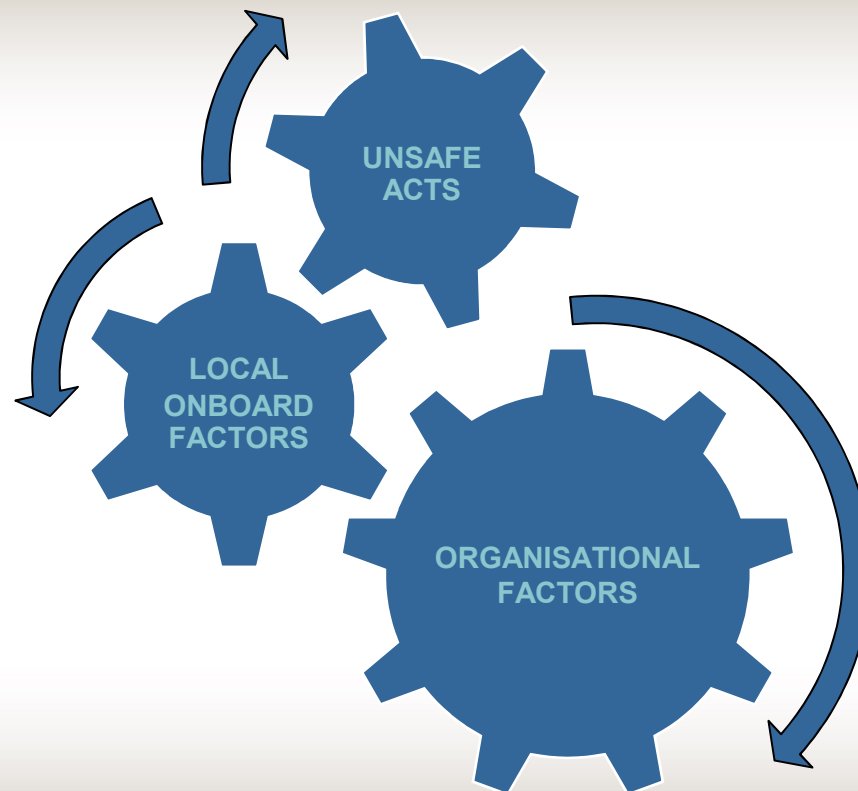
- At its best, ship vetting is a part of systematic marine risk management, with a target to eliminate proactively sub-standard shipping and to ensure and improve marine supply chain safety.
- It uses information derived from ship inspections, incidents and accidents.
- Ship owners are consulted to raise safety awareness.
- There are clear requirements that vessels must meet in order to be accepted for use.
- Many of its practices originate from quality and safety management principles.



SHIPPING COMPANIES PERSPECTIVE of VETTING



ACTUAL MEANING of VETTING



TANKER MANAGEMENT AND SELF ASSESSMENT

- OCIMF's Tanker Management and Self Assessment (TMSA) program was introduced in 2004 as a tool to help vessel operators **assess**, **measure** and **improve** their safety management systems. It complements industry quality codes and is intended to encourage self-regulation and promote **continuous improvement** among tanker operators.
- The TMSA guidelines define 12 principles or key elements of management practices providing a checklist approach for ship operators who are aiming to achieve safety and environmental excellence. The elements define the objectives and key performance indicators required to meet the main objective of the element and guidance on how the objective should be achieved.



TANKER MANAGEMENT AND SELF ASSESSMENT

TMSA consists of 12 elements:

1. MANAGEMENT, LEADERSHIP & ACCOUNTABILITY
2. RECRUITMENT & MANAGEMENT OF SHORE PERSONNEL
3. RECRUITMENT & MANAGEMENT OF SHIPS PERSONNEL
4. RELIABILITY AND MAINTENANCE STANDARDS
5. NAVIGATIONAL SAFETY
6. CARGO, BALLAST AND MOORING OPERATIONS
7. MANAGEMENT OF CHANGE
8. INCIDENT INVESTIGATION & ANALYSIS
9. SAFETY MANAGEMENT – MONITORING ASHORE & ON VESSEL
10. ENVIRONMENTAL MANAGEMENT
11. EMERGENCY PREPAREDNESS & CONTINGENCY PLANNING
12. MEASUREMENT, ANALYSIS & IMPROVEMENT



TANKER MANAGEMENT AND SELF ASSESSMENT



TMSA is a **LEADING INDICATOR**,
as compared to other inspections which are
TRAILING INDICATORS.

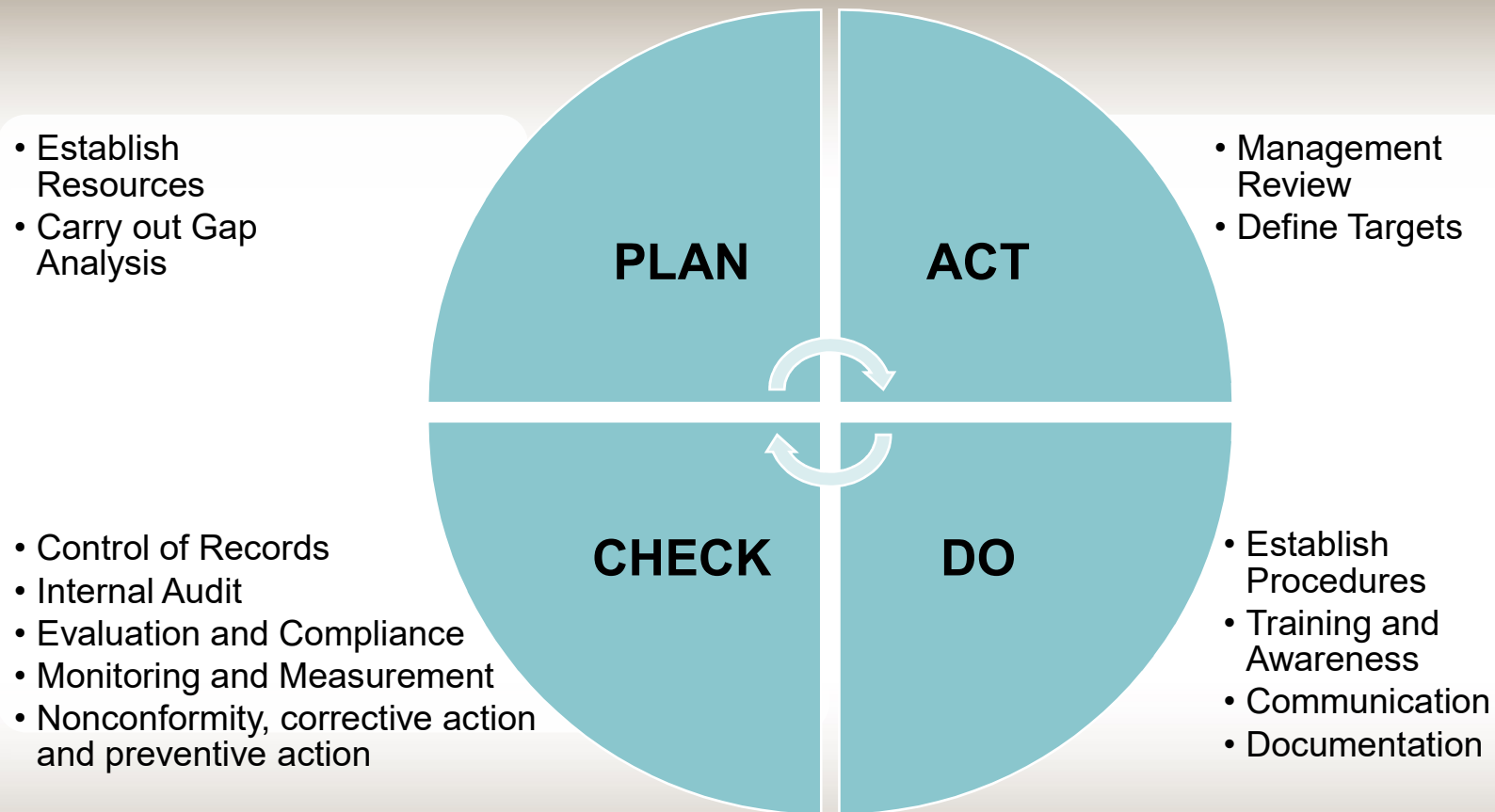


TANKER FLEET MANAGEMENT

- Tanker Fleet Management Companies are certified by Recognized Organization (RO) and **audited by Oil Majors**.
- Daily follow up is done in accordance with safety, quality, environmental, health and **tanker industry procedures/standards**.



BEST PRACTICES GUIDE - TMSA



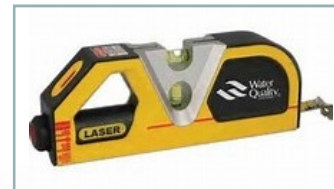
BEST PRACTICES GUIDE - TMSA



CHECK



BEST PRACTICES GUIDE - TMSA



BEST PRACTICES GUIDE - TMSA



OCIMF TMSA OBJECTIVES

- Encourages assessment of management systems against listed KPIs in accordance with best practices guidance to achieve them.
- Results used to develop phased continuous improvement plan for safety and environmental performance.
- Encourages higher standards of ship management.
- Method for distribution of data where ship operator retains control.
- The concept of “Risk Assessment” becomes an integral part of the Management system.
- Performance evaluation based on four (4) stages.

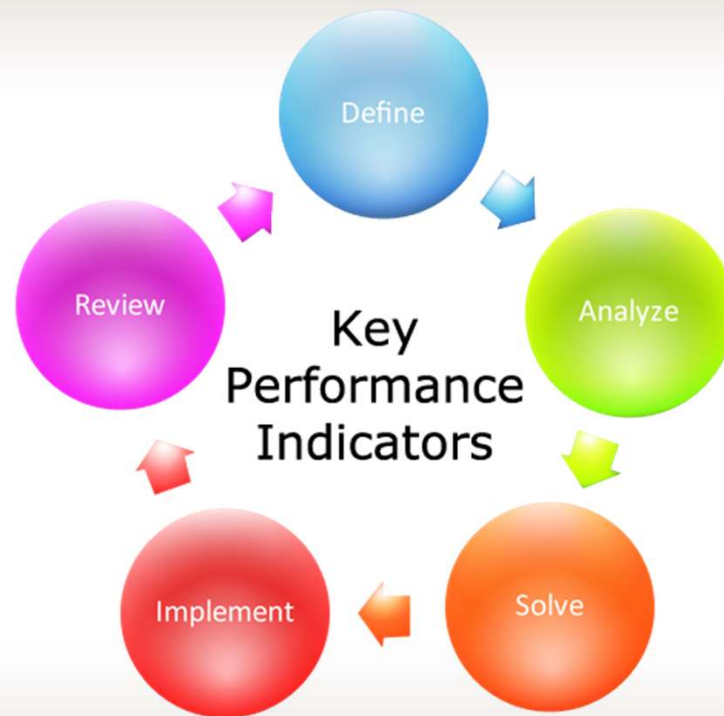


KEY PERFORMANCE INDICATOR

- More than 250 KPIs have been introduced in order to fulfill TMSA requirements



KEY PERFORMANCE INDICATOR



MANAGEMENT TARGETS

- Ship owner / operator must conduct necessary investigations and provide information to oil major's vetting department to enable positive close out of observed deficiencies.
- Treatment actions must include preventive measures.
- Sufficient time is required from the operating company to implement improvements.
- Re-inspection of the vessel and audit of vessel manager might be necessary to follow-up.
- Documentation of the vetting process is important to build up safety performance history.

ANALYSIS, EVALUATION AND TREATMENT



MANAGEMENT MISTAKES

When it comes to company's TMSA readiness, we should avoid the most common assumption pitfalls such as:

- TMSA will be similar to all our other vetting requirements.
- Our current ISM system will provide everything needed for TMSA.
- The TMSA focus is on the ships, not the company as a whole.
- A TMSA 'deficiency' on one ship will not affect the whole fleet.
- Our relationship with cargo owners will resolve any issues.
- Special preparation prior to a TMSA audit is not necessary.
- Present documentation system is sufficient.

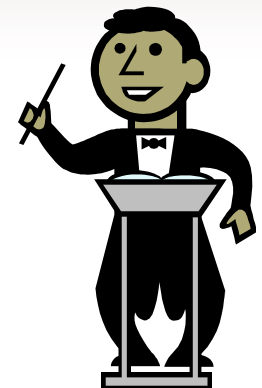


MANAGING DIRECTOR

Element 1: MANAGEMENT, LEADERSHIP & ACCOUNTABILITY

Element 7: MANAGEMENT OF CHANGE

- Decision Making Person.
- Efficient & Effective coordination.
- Link between BoD and Company personnel.
- **Commitment in Company's Policies.**



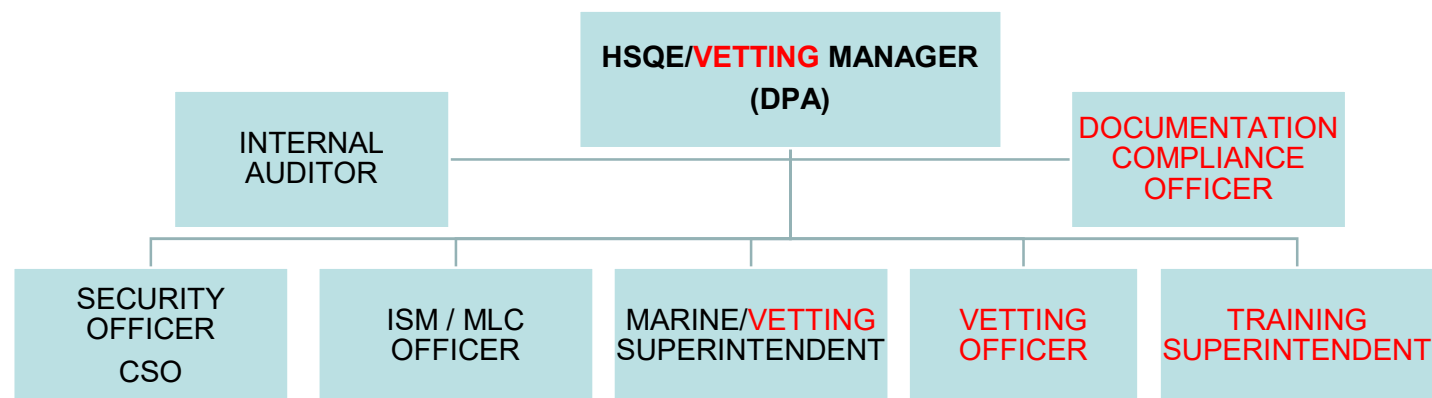
HSQE DEPARTMENT

Element 8: INCIDENT INVESTIGATION & ANALYSIS

Element 9: SAFETY MANAGEMENT - MONITORING ASHORE & ONBOARD

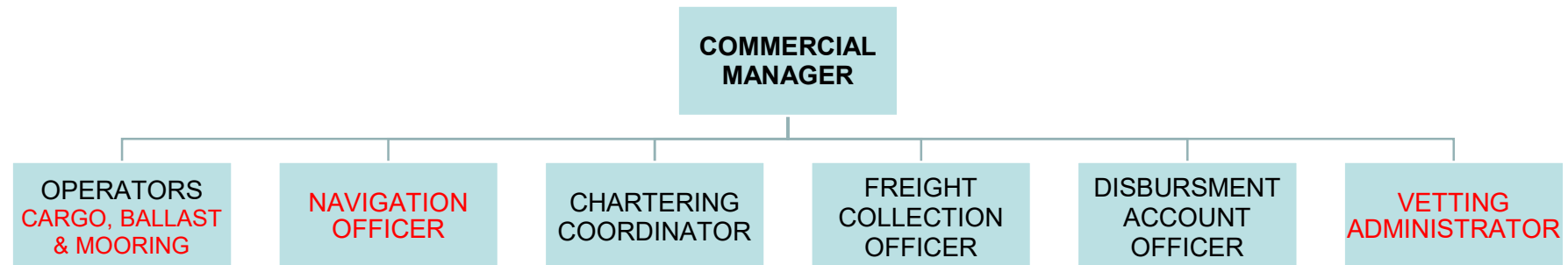
Element 10: ENVIRONMENTAL MANAGEMENT

Element 11: EMERGENCY PREPAREDNESS & CONTINGENCY PLANNING



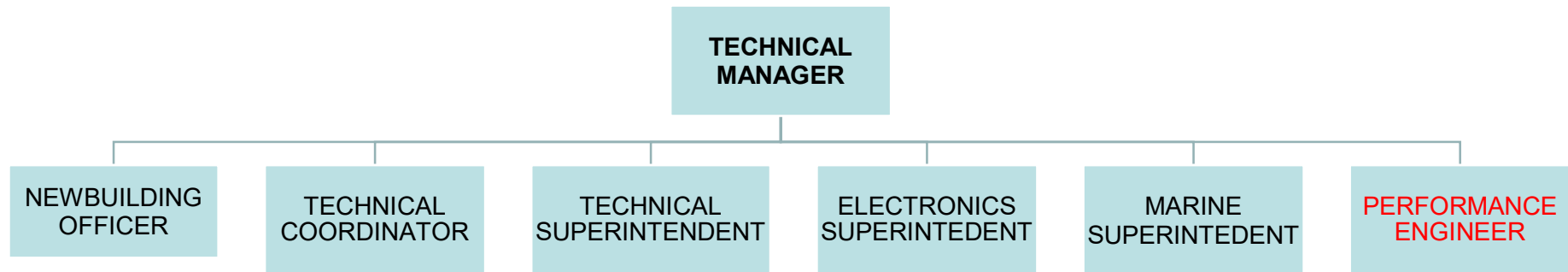
COMMERCIAL DEPARTMENT

- Element 6: NAVIGATIONAL SAFETY
- Element 7: CARGO, BALLAST AND MOORING OPERATIONS



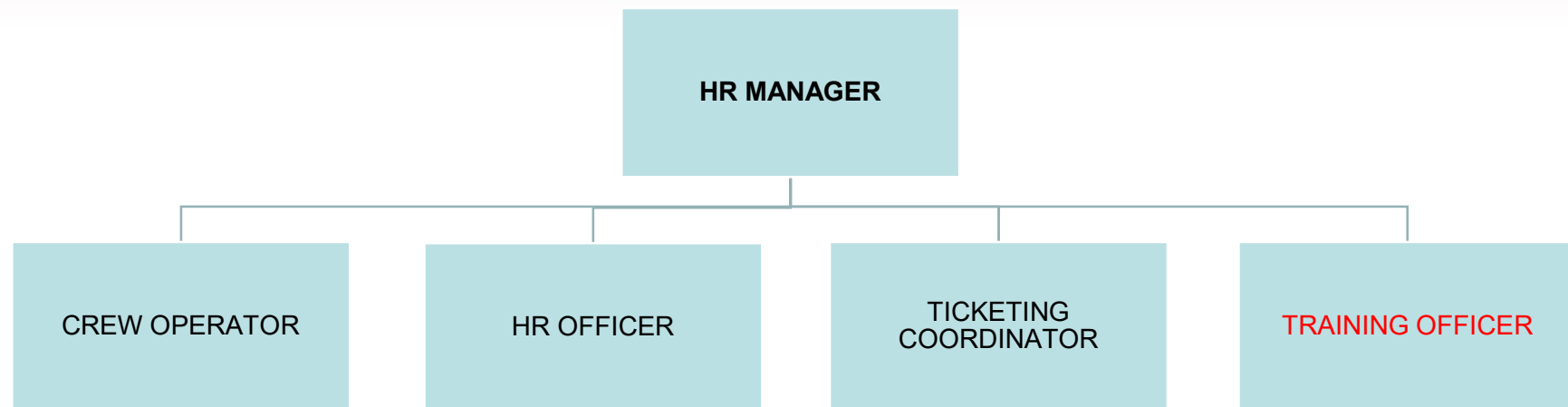
TECHNICAL DEPARTMENT

- Element 4: RELIABILITY AND MAINTENANCE STANDARDS
- Element 12: MEASUREMENT, ANALYSIS AND IMPROVEMENT

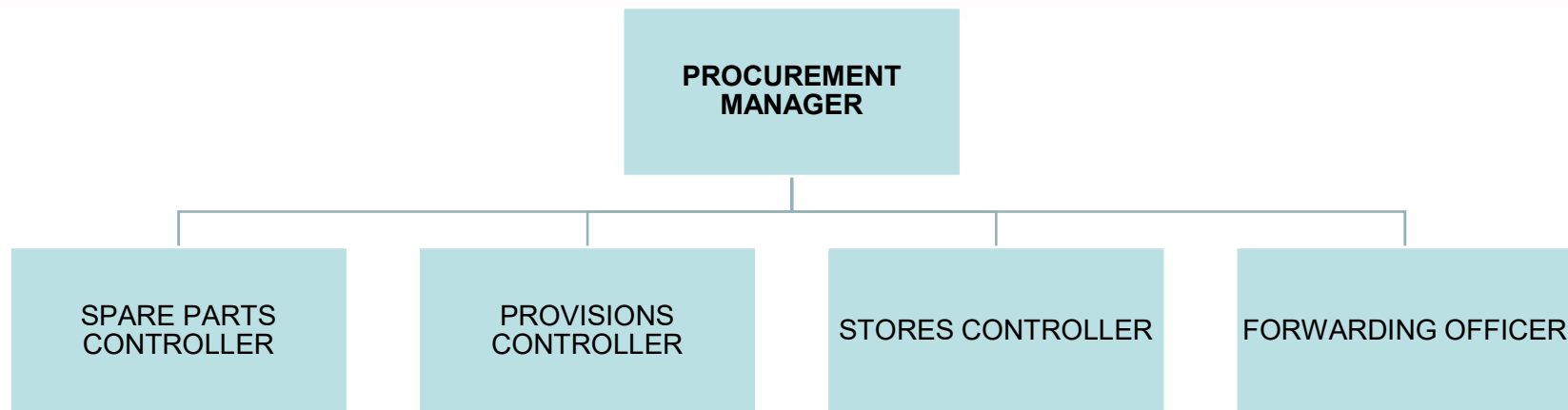


HUMAN RESOURCES DEPARTMENT

- Element 2: RECRUITMENT & MANAGEMENT OF SHORE PERSONNEL
- Element 3: RECRUITMENT & MANAGEMENT OF SHIP'S PERSONNEL



PROCUREMENT DEPARTMENT



IT DEPARTMENT

TMSA is not specifically about information technology - indeed information technology is only mentioned once in the document but there is a very strong IT angle.

Shipping companies have started to open up the **information technology & communications budgets**.

Shipping companies have an incentive to spend money on:

- Improved build management systems.
- Better ship-shore communication.
- Computer based training tools and simulators.
- Crew communications facilities.



IT DEPARTMENT

- It is very important to use an integrated software system for effective calculation of KPIs for TMSA compliance.
- Most KPIs specified in the OCIMF questionnaire require the processing of data that are derived from multiple software modules and the execution of specific algorithmic calculations on that data.
- If the modules are not integrated then the automatic calculation of the KPIs is impossible and can only be performed manually, a process that will take a considerable amount of manhours obtaining results of questionable precision.



IT DEPARTMENT

More specifically IT can support shipping companies to Integrating Performance Improvement with Business Value in the following areas:

- **Informative Supports:** For learning and/or for deepening in the corporate environmental and safety policy.
- **Supports of Formation:** Offering all the necessary tools for the manager who intends to plan and maintain the corporate policy.
- **Compliance Tools:** To verify the correct environmental management of the enterprise, and to search new interventions to improve efficiency.
- **Legislative Support:** Integrate all rules & regulations into corporate policy.



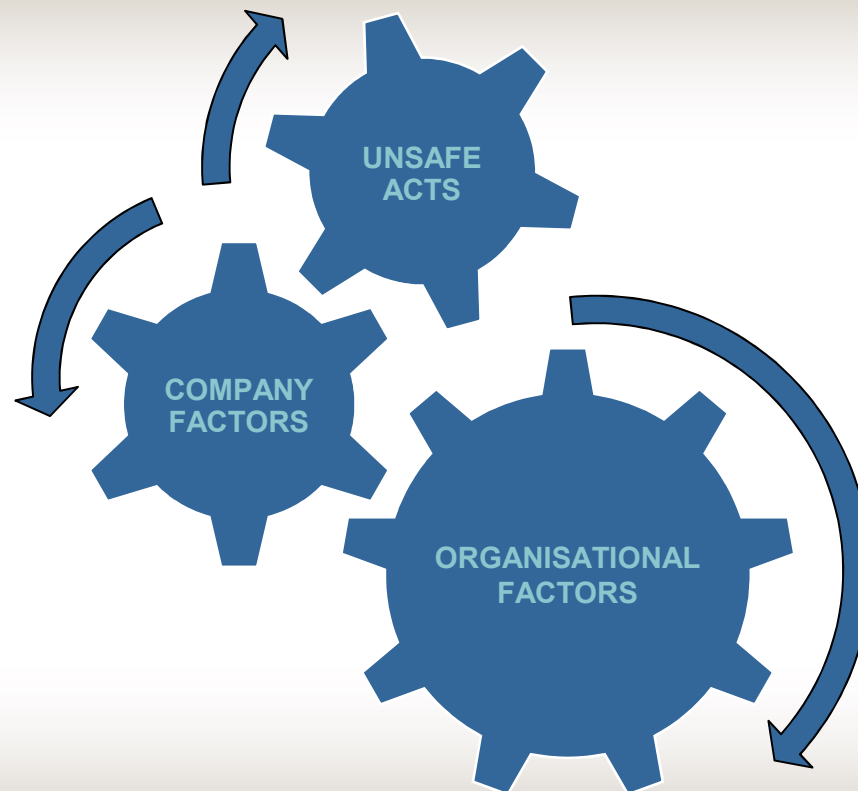
INTEGRATED FLEET MANAGEMENT SYSTEMS

Some of the benefits of implementing integrated fleet management systems include:

- Provide user friendly man-machine interfaces.
- Enable common operating standards and procedures to be applied across the fleet.
- Provide an efficient and cost effective means of process improvement and bench marking.
- Ensure compliance with the increasing maritime regulations.
- Provide means of sharing common information.
- Increases interdepartmental communication and building up company's culture.



ACTUAL MEANING of OFFICE AUDIT



CONCLUSION

- TMSA goes beyond current shipping industry standards taking a look at the most fundamental aspect of running a good ship – its crew, their training and continuous improvement practices.
- Besides the objectives of TMSA are indeed lofty such as:
 - Incident-free operations
 - Improved management systems
 - Best practices transferred across the fleet
 - Feedback and easy access to the charterer on performance of operator,
 - No-Blame culture
 - Continuous improvement in standards
- Therefore Tanker Operators will notice that TMSA, though is in same mode as ISM Code, is different, living and evolving.



CONCLUSION

- Mandatory first to develop the organizational chart meeting TMSA requirements.
- The size of the company is the lead item on the final structure.
- Organizational chart is live organism continuous developing.
- Clear identification of departments, roles and responsibilities, led by decision making personnel with high managerial skills.
- Department's interaction and integration is a need arisen from TMSA implementation.
- Role of DPA is more important than ever.
- Fleets subdivision.
- Commercial Department.
- Information Technology Department.



CONCLUSION

- Human Resources Department focusing on applying Training scheme.
- Personnel professionalism and specialization.
- Mixing ratio between employees
 - Age
 - Origin
 - Educational level
- Continuous measurement of performance by introduction of KPIs.

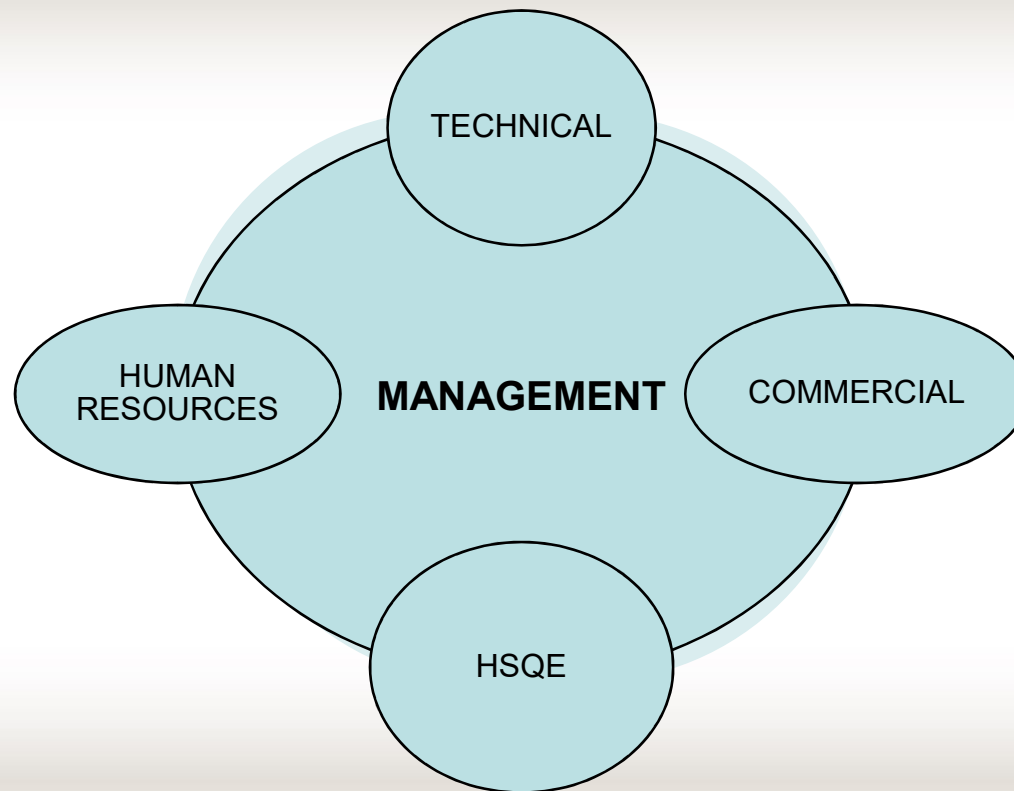


CONCLUSION

- Shipping is a highly risky business and the economic rules that govern it are not infallible. Proper organisational chart is the one that can achieve optimum results, minimising the risk and the cost.
- Management companies remain on the standard balance of three (3) persons to run one vessel rather than going to a ratio of 1.8 person per vessel under their management, on the basis that management company runs more than six (6) vessels.



CONCLUSION



GLANCE in the FUTURE



BUSINESS INTELLIGENCE



THANK YOU

