

MONALISA 2.0 Final Conference



E-Navigation: Safer efficient and more environmentally friendly. The Cyprus Perspective.

Andreas Chrysostomou, Director, Department of Merchant Shipping



e-Navigation is the harmonized collection, integration, exchange, presentation and analysis of maritime information onboard and ashore by electronic means to enhance berth to berth navigation and related services, for safety and security at sea and protection of the marine environment'

Technology

Deployment of new technologies should be based on a systematic assessment of how the technology can best meet defined and evolving user needs architecture, information, communications technology and software, should be modular and scalable.

If current technological advances continue without proper coordination there is a risk that the future development of marine navigation systems will be hampered through a lack of standardization on board and ashore, incompatibility between vessels and an increased and unnecessary level of complexity.



WHY e-navigation On-Board

Facilitate safe and secure navigation of vessels having regard to hydrographic meteorological and navigational information and risks;

Facilitate vessel traffic observation and management from shore/coastal facilities, where appropriate;

Facilitate communications, including data exchange, among ship to ship, ship to shore, shore to ship, shore to shore and other users;

Provide opportunities for improving the efficiency of transport and logistics;

Support the effective operation of contingency response, and search and rescue services;

Integrate and present information onboard and ashore through a human interface which maximizes navigational safety benefits and minimizes any risks of confusion or misinterpretation on the part of the user;

Incorporate training and familiarization requirements for the users throughout the development and implementation process;

WHY e-navigation Off - shore

better data collection for marine domain awareness;

more effective information management;

better provision of information to vessels;

greater quality assurance;

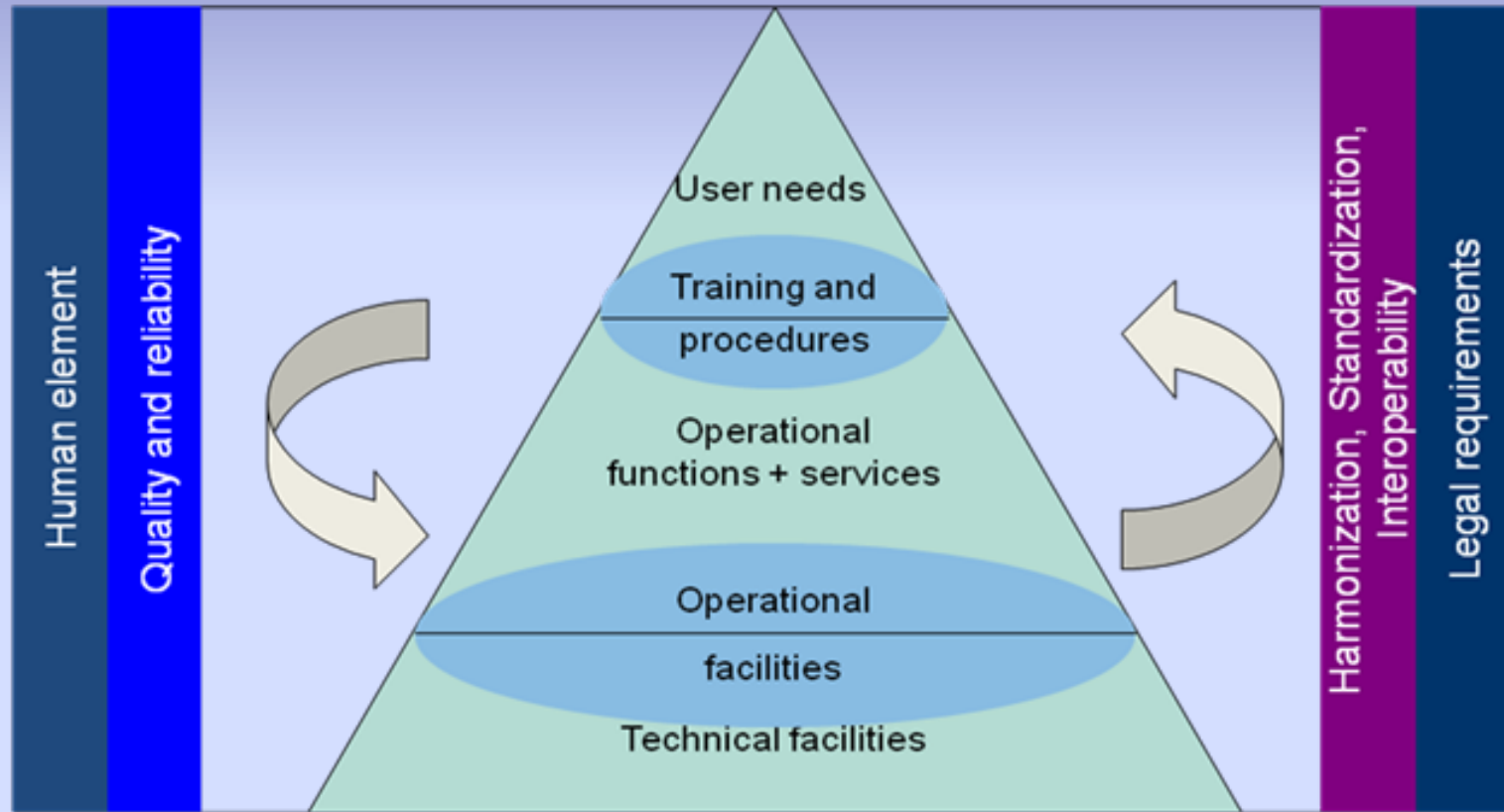
more effective sharing of information between authorized shore users to reduce the burden on seafarers and improve **logistic** management;

and

to support Search and Rescue (SAR) operations by improving access to relevant information and ensuring effective communication



e-navigation process



Ship environment

Communication

Shore environment

BENEFITS

Safety

- reduced groundings and collisions
- improved accident investigation
- more effective search and rescue

Environmental benefits

- reduction of accidents
- more efficient counter-measures.

Security enhanced

- improved tracking and monitoring.
- Efficiency of operation
- reduced waiting times

Lower fuel consumption

Tracking and utilization of assets

