



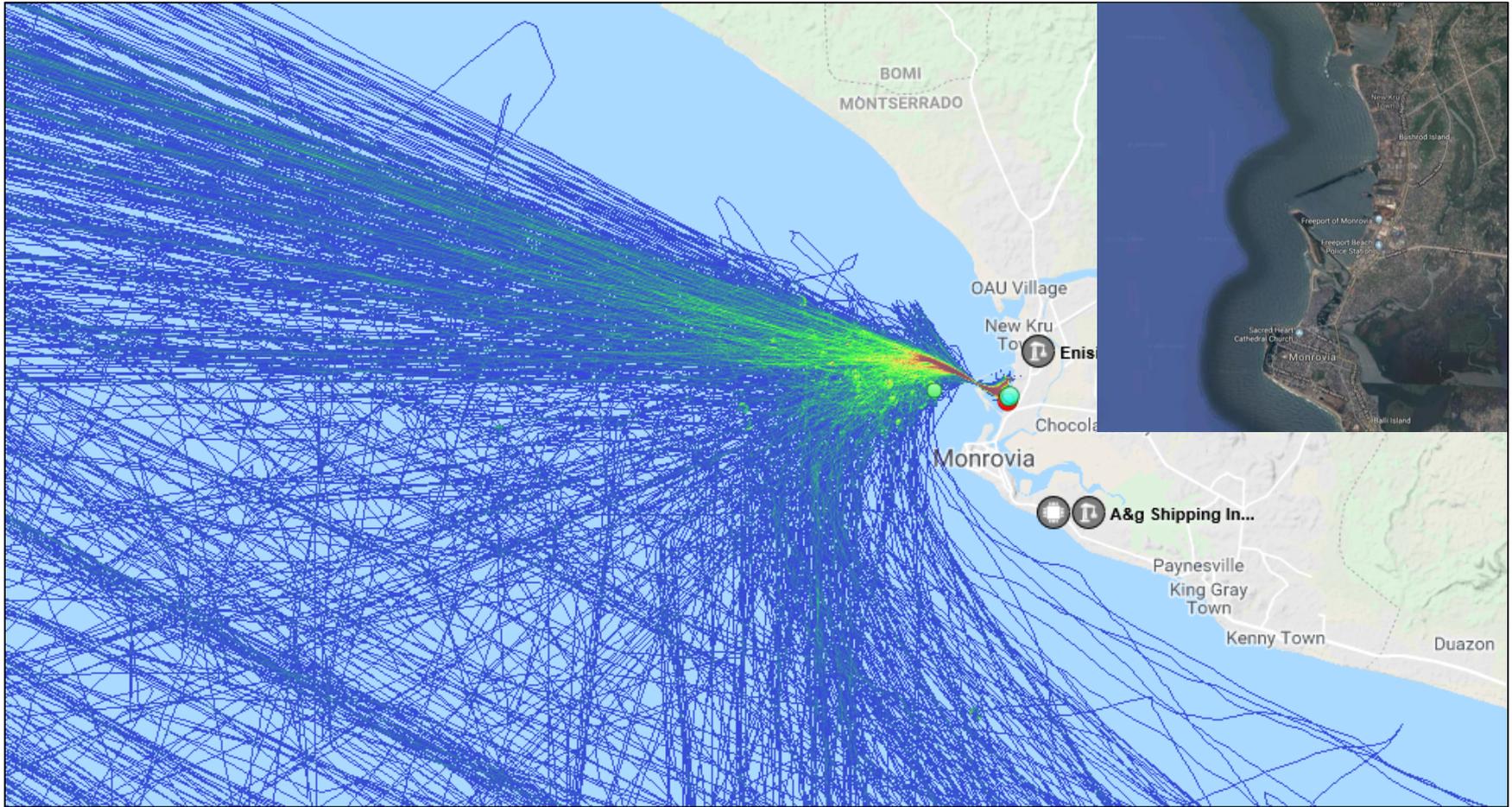
IALA STANDARDS – FINDING YOUR WAY

Effective implementation of IALA Standards

Kevin Gregory



The problem – do I need a VTS?





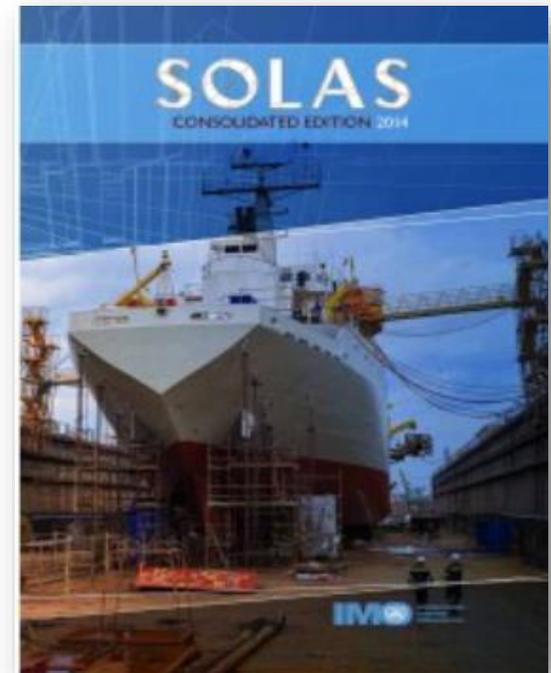
The obligations



The Safety of Life at Sea Convention, 1974 sets the overarching international obligations for the safety of navigation.

Chapter V – Safety of Navigation

- **Regulation 12** – Vessel Traffic Services
- **Regulation 13** – Establishment and operation of aids to navigation





SOLAS V Regulation 12 – Vessel Traffic Services



1. Vessel traffic services (VTS) contribute to safety of life at sea, safety and efficiency of navigation and protection of the marine environment, adjacent shore areas, work sites and offshore installations from possible adverse effects of maritime traffic.
2. Contracting Governments **undertake to arrange for the establishment** of VTS where, in their opinion, the **volume of traffic or the degree of risk justifies** such services.
3. Contracting Governments planning and implementing VTS shall, wherever possible, **follow the guidelines developed by the Organization**. The use of VTS may only be made mandatory in sea areas within the territorial seas of a coastal State.
4. Contracting Governments shall endeavour to secure the participation in, and compliance with, the provisions of vessel traffic services by ships entitled to fly their flag.



Where do I start??



- Methods
- Decision making
- Options VTS/LPS or other?

Risk Assessment

CA Framework & Governance

VTS Requirements

- Regulations
- Authorisation
- Training & Certification
- Audit
- Enforcement

- VTS Area
- Procedures
- Personnel & Training
- Technology
- Funding

VTS Effectiveness

VTS Implementation

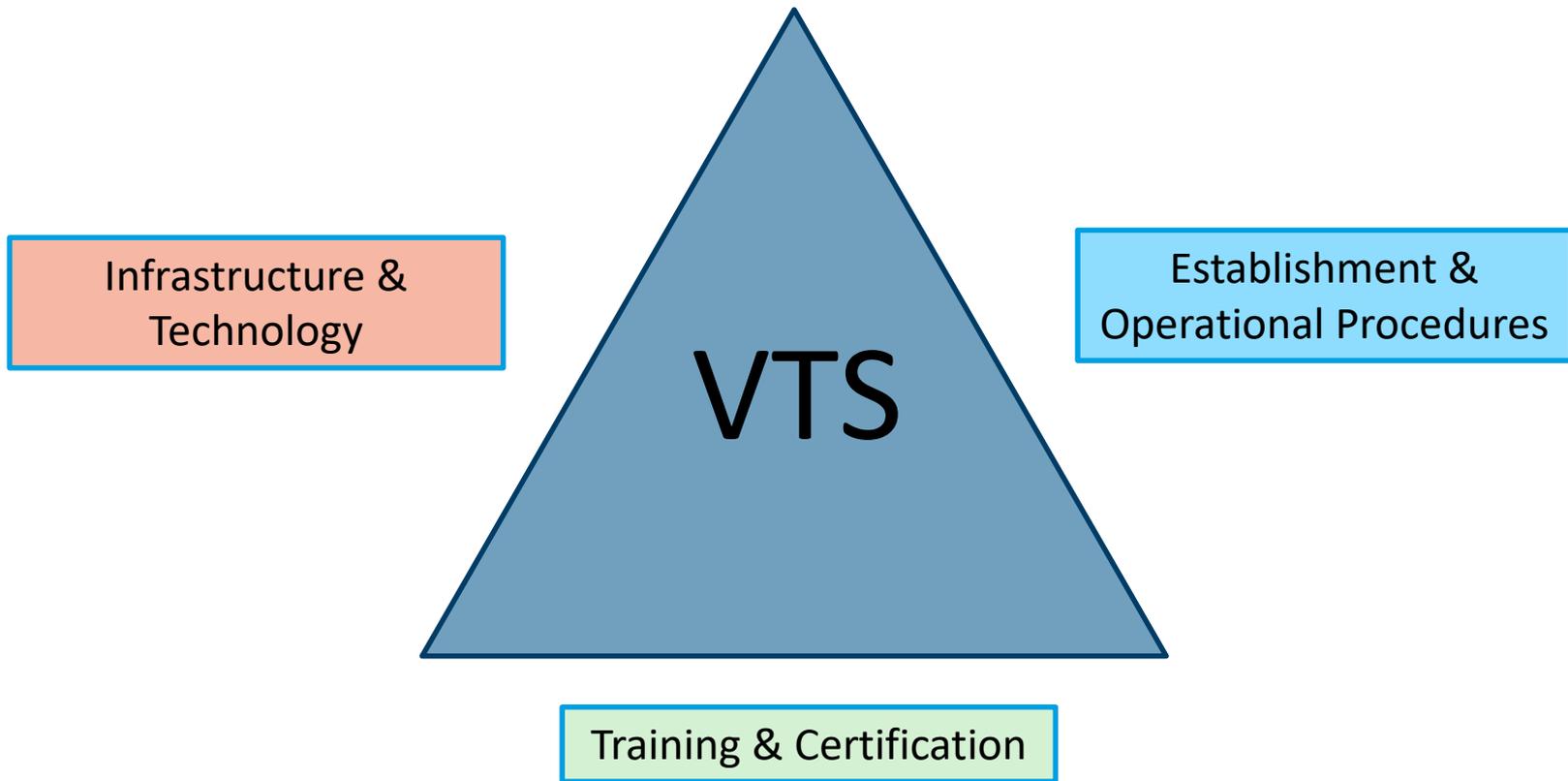




Solving the problem

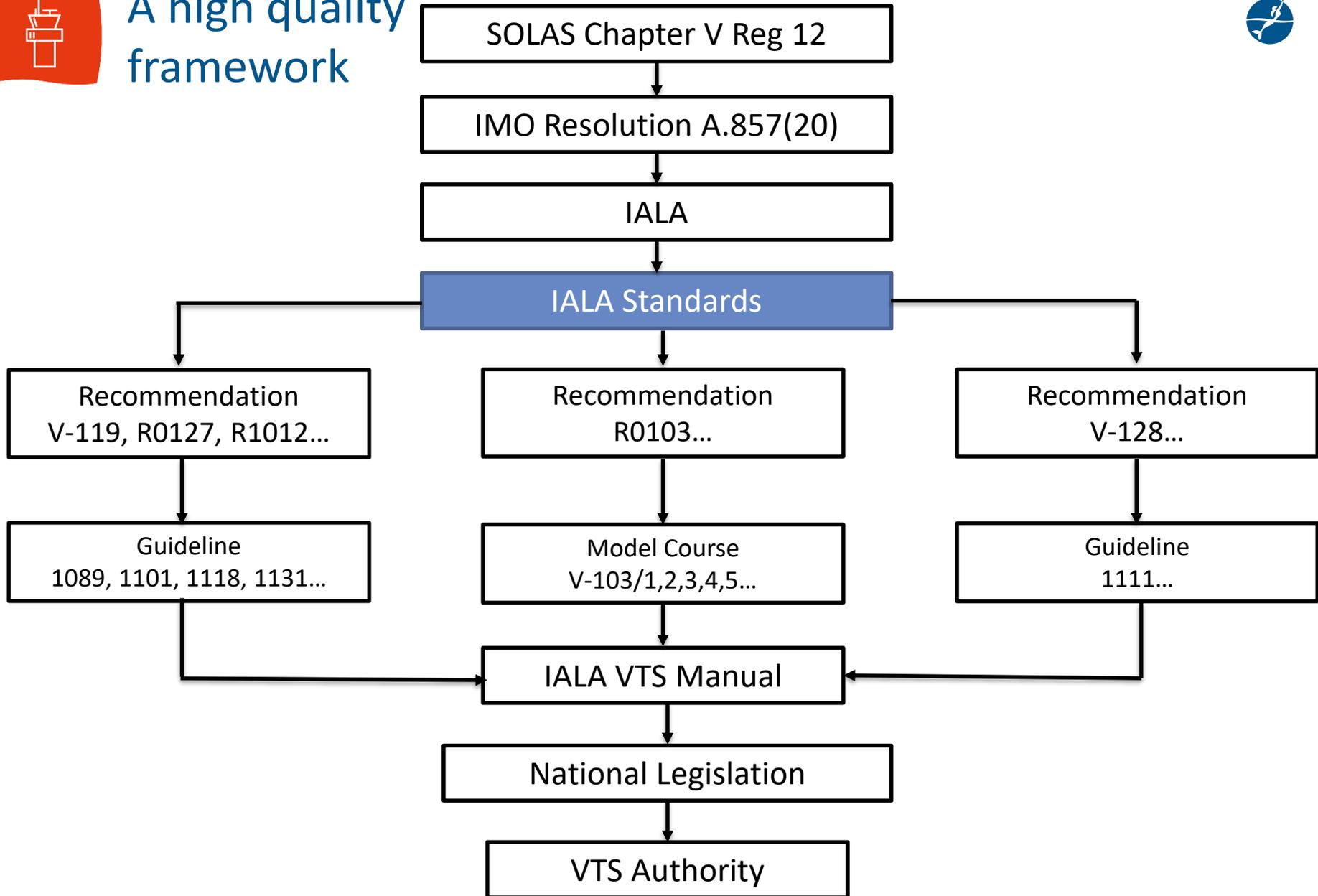


How do I get from the problem on the ground (or water) to fulfilling my SOLAS obligations?





A high quality framework

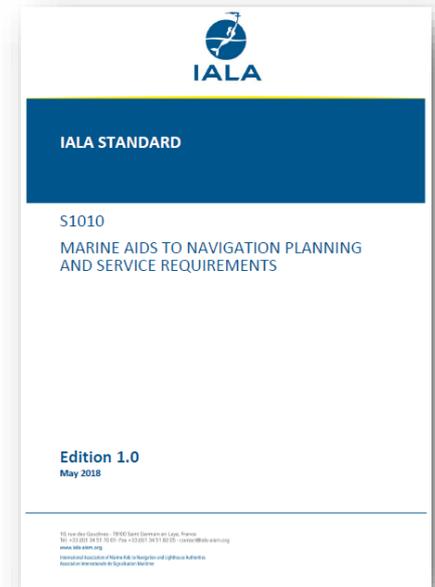




The Standard references **normative** provisions, detailed in the listed IALA Recommendations, covering, inter-alia:

- Obligations and Regulatory Compliance,
- Marine Aids to Navigation Planning,
- Virtual Marking,
- Levels of Service,
- **Risk Management,**
- Quality Management.

Normative = **shall** be observed if compliance with the Standard is claimed.





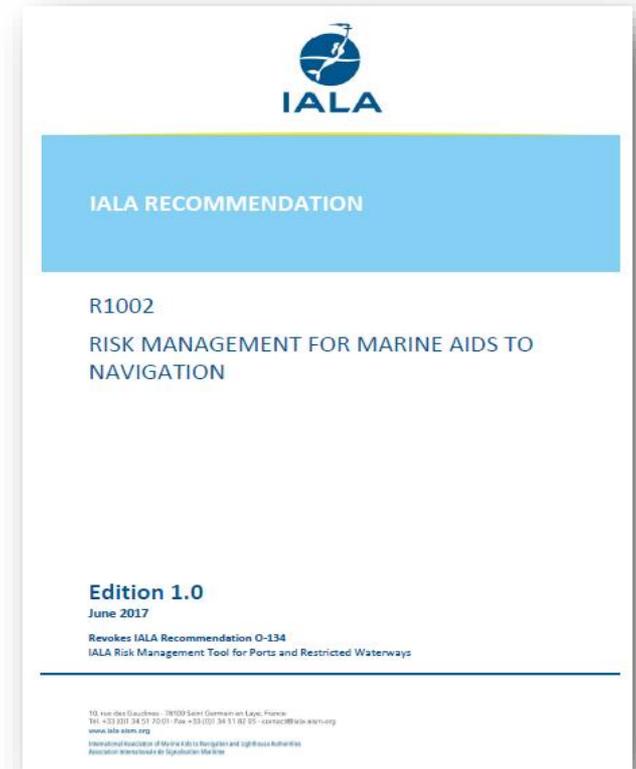
IALA Recommendation R1002

Risk Management for Marine Aids to Navigation



RECOGNIZING that the **safety and efficiency of vessel traffic** and the protection of the environment would **be improved if risk management tools**, employing harmonized standards and criteria, **were used** during the assessment of risks in waterways

RECOMMENDS the use of risk management and **IALA risk management tools** when assessing the risks in waterways, as part of the **decision-making process** for marine aids to navigation.

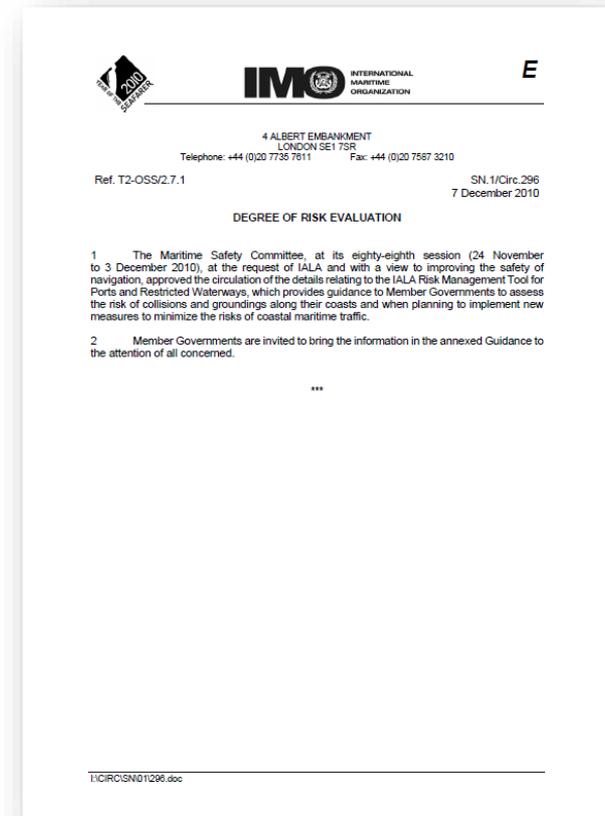




IMO Safety of Navigation Circular SN.1/Circ296



*The Authorities responsible for the safety of navigation are **encouraged to use the tools** described in the Circular to **assess the risks of collisions and groundings** along their coasts and **when they plan to implement new measures** to minimize the risk of coastal maritime traffic.*

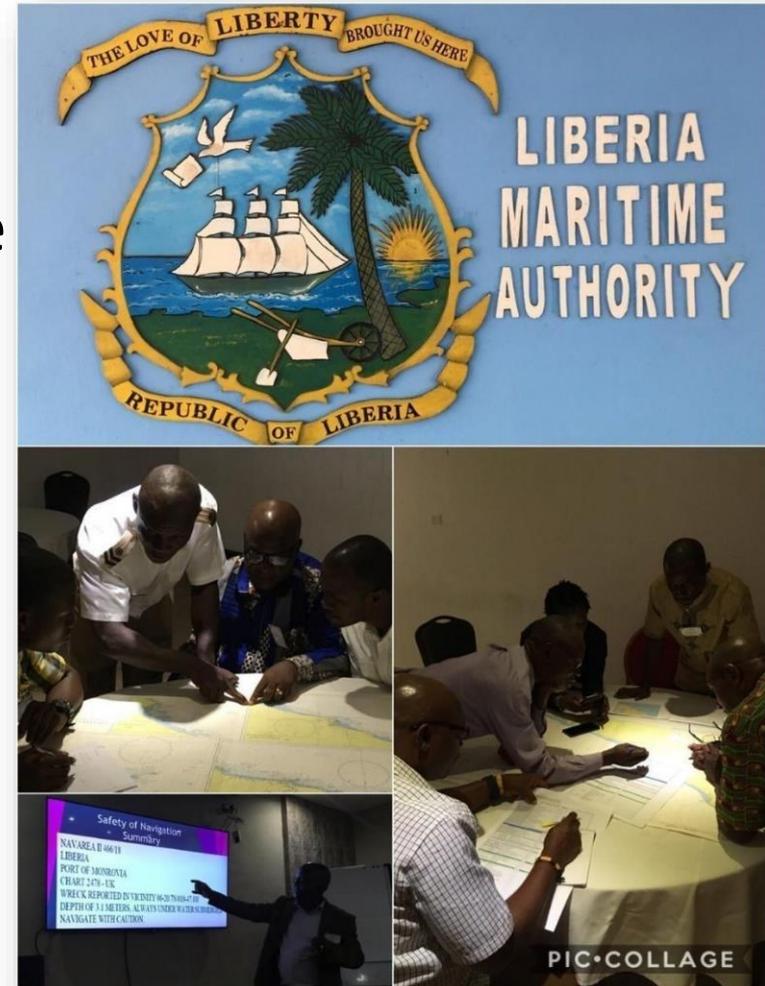




Implementation of Guideline 1138



- Guidelines are designed for practical use – to show you the way to implementation.
- They are designed by experts, people faced with the same problems.
- They provide options and suggestions of best practice.





IALA Guideline 1138



The use of SIRA (Simplified IALA Risk Assessment)

- 1 • Select waterway to be analysed
- 2 • Define zones and describe each area
- 3 • **Identify** hazards in zone and develop scenarios
- 4 • **Assess** probability and consequence of each scenario
- 5 • Identify (**specify**) and prioritize risk control options
- 6 • Produce comprehensive report (**decide**)
- 7 • Communicate result to decision makers (**act**)

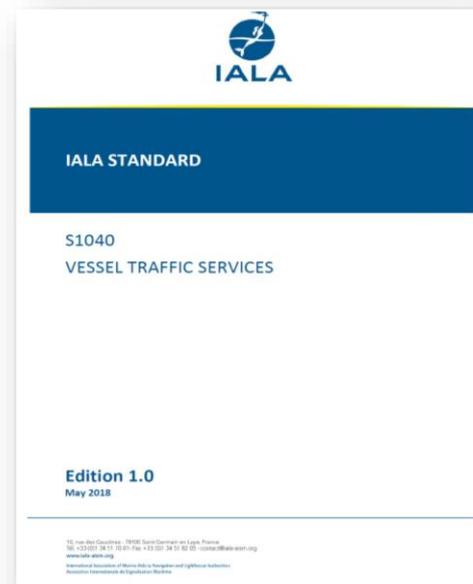


IALA Standard S1040 Vessel Traffic Services



Use Standard 1040 to consider and implement the results of the risk assessment:

- VTS implementation,
- VTS operations,
- VTS technologies,
- VTS communications,
- VTS audit and assessment,
- Quality Management.



One outcome is that a VTS may not be needed at all, a Local Port Service or other AtoN may be the solution.

The use of the Standards will provide you with objective and fact based evidence to support this.



Standard 1040 – Vessel Traffic Services

What do I need to do?



Standard 1040

Recommendation V-119



Do I need a VTS, if so what should it look like?

Recommendation R0127



What kind of procedures do I need?

Recommendation V-128



What equipment and technology do I need?

Recommendation R1012



How should we communicate with vessels?

Recommendation R1013

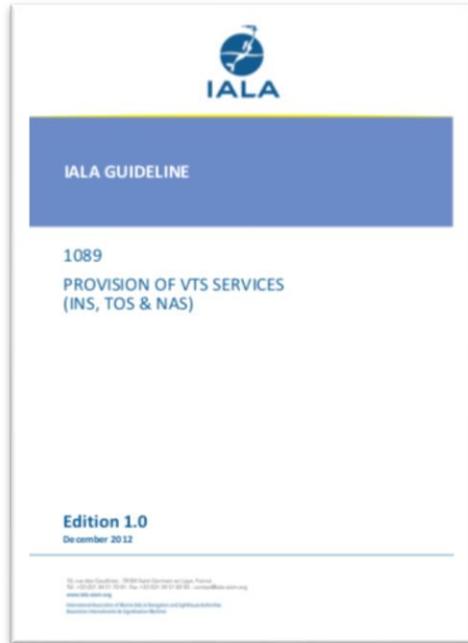


How do I monitor our performance?

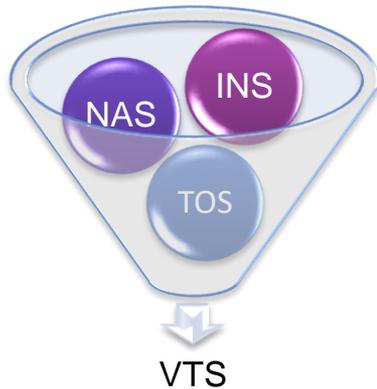


Recommendation R0127 – VTS Operations

Example – Guideline 1089 – Provision of VTS Services



A Traffic Organisation Service should be responsible for separating traffic in the interest of safety. This separation could be defined in space, time and/or distance.



The VTS operator allowed the vessel to drift into a dangerous position close to the exit from the outbound TSS.

The VTS operator was reluctant to contact either vessel to offer advice, on what was a rapidly developing dangerous maritime traffic situation



Standard 1050 – Training and Certification

What do I need to do?



Standard 1050

Recommendation R0103

How do I recruit and train my team?

Recommendation O-149

How should training organisations be run?

V-103/1 - Operator

V-103/2 - Supervisor

V-103/3 - OJT

V-103/4 – OJT Instructor

V-103/5 - Revalidation





Recommendation R1012 – VTS Communications

Example – G1132 – VTS VHF Voice Communication



Had warning messages with appropriate message markers been broadcast earlier, it might have prompted both *Union Moon's* master and the PEC holder to take avoiding action sooner.



The VTS requested that *Stena Feronia's* bridge team make radio contact with *Union Moon* directly, thereby distracting the PEC holder and possibly delaying him from taking avoiding action.

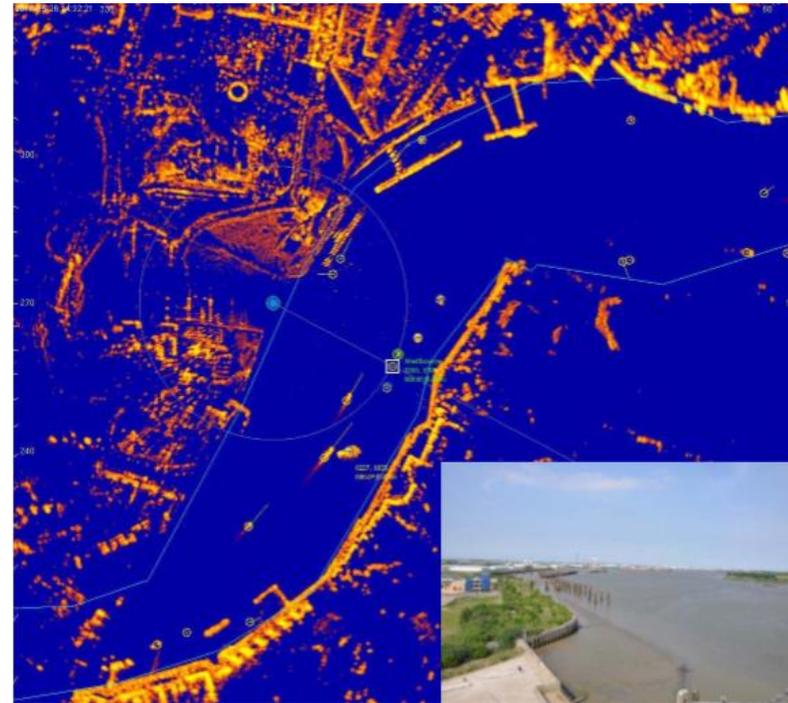
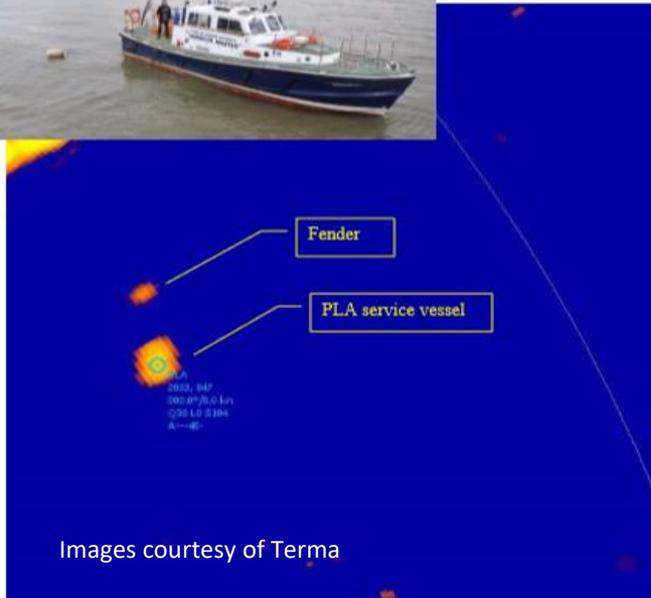


The VTS did not provide sufficient traffic information to *Union Moon*.



Recommendation V-128 – VTS Operations

Example – Guideline 1111 – Operational and Technical Requirements



The Operational requirements should form the basis for the entire system lifecycle, its definition and its verification and validation following implementation.

The Operational requirements are defined in accordance with Recommendation V-119 on the Implementation of Vessel Traffic Services and these are used to derive the technical requirements.



IALA Standards – an integrated framework



- Use the Standards and their associated Recommendations, Guidelines and Model Courses to plan your AtoN and VTS provision.
- Use the Standards to demonstrate why you have or have not implemented certain measures.
- Use the Standards to demonstrated compliance with SOLAS Chapter V Regulations 12 & 13.
- Use the Standards to serve the mariner with harmonized AtoN and VTS delivery.



IALA Standards – an integrated framework



S1010
ATON PLANNING
AND SERVICE
REQUIREMENT



S1020
ATON DESIGN
AND DELIVERY



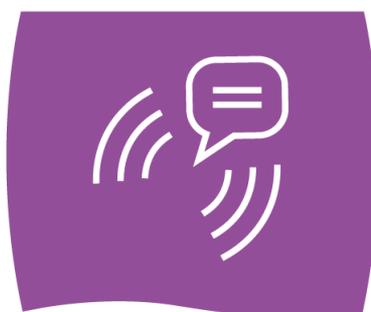
S1030
RADIONAVIGATION
SERVICES



S1040
VESSEL TRAFFIC
SERVICES



S1050
TRAINING AND
CERTIFICATION



S1060
DIGITAL
COMMUNICATION
TECHNOLOGIES



S1070
INFORMATION
SERVICES



QUESTIONS?

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