



IALA RISK MANAGEMENT TOOLBOX - CURRENT PROVISION AND POTENTIAL DEVELOPMENT

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OpenRisk II Project Kick-Off Conference, 6 –7 March 2024



The IALA Risk Management Toolbox

- What is it?
- Why does it exist?
- How was it developed?
- What tools does it contain?
- What future development of the toolbox do IALA anticipate and/or require?

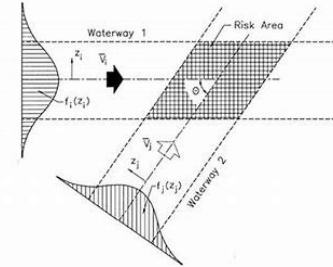




What is the IALA Risk Management Toolbox?



- Group of quantitative and qualitative methods
- Reflect a range of user risk management maturity
- Developed collaboratively – IALA committees and World-Wide Academy



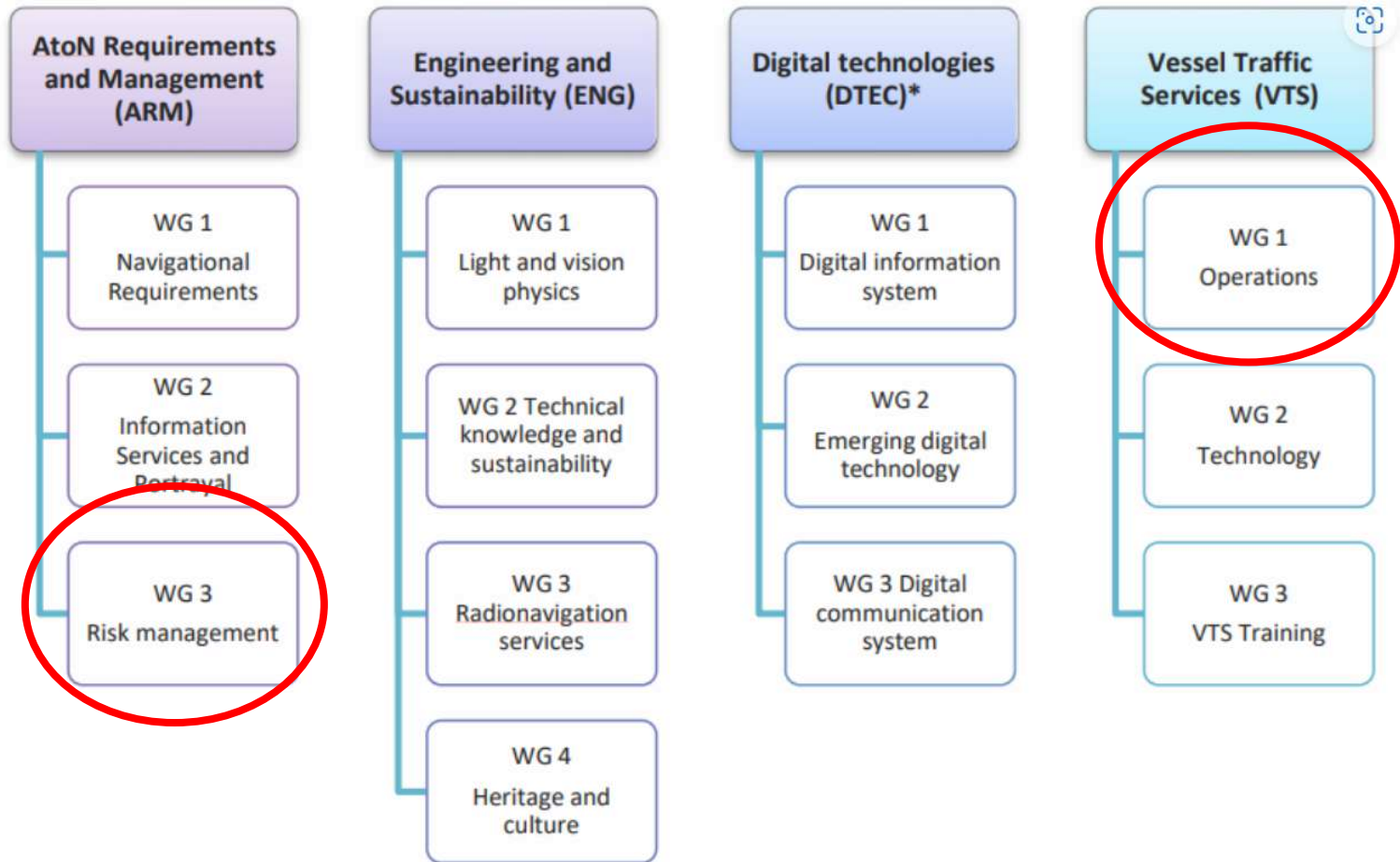
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IALA Deputy Secretary-General





Toolbox purposes





Toolbox development milestones



**IALA World-
Wide Academy
established**



2012

**SIRA
method
published**



2017



2010

**IWRAP Mk II
first released
commercially**



2017

**Revised
PAWSA tool
published
by IALA**




2022

**Review of all Risk
related
recommendations and
guidelines including
Simulation and IRMAS
G1018**




Hierarchy of IALA Risk Related documentation



IALA STANDARD

S1010
MARINE AIDS TO NAVIGATION PLANNING
AND SERVICE REQUIREMENTS


Edition 1.0
May 2018



IALA RECOMMENDATION

R1002
RISK MANAGEMENT FOR MARINE AIDS TO
NAVIGATION

Edition 1.1
June 2017
urn:mim:iala:pub:r1002



IALA GUIDELINE

G1018
RISK MANAGEMENT

Edition 4.0
June 2022
urn:mim:iala:pub:g1018:ed4.0

Standard S1010

Identifies the recommendations and guidelines covering Marine Aids to Navigation planning and service requirements (including R1002)

Recommendation R1002

Recommends using the risk management and IALA risk management tools (including G1018)

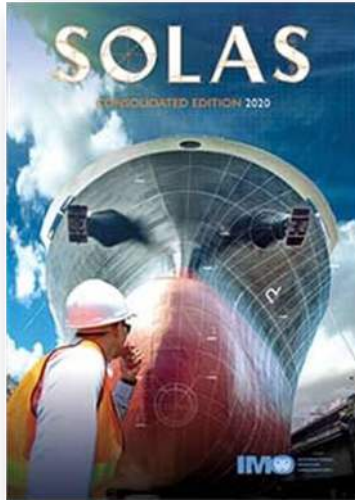
Guideline G1018

Risk Management

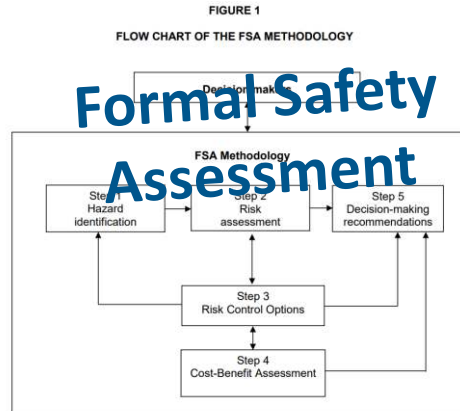
<https://www.iala-aism.org/guidance-publications/>



External influences into IALA Guideline G1018



Formal Safety Assessment



- 1 The Maritime Safety Committee, at its eighty-eighth session (24 November to 3 December 2010), at the request of IALA and with a view to improving the safety of navigation, approved the circulation of the details relating to the IALA Risk Management Tool for Ports and Restricted Waterways, which provides guidance to Member Governments to assess the risk of collisions and groundings along their coasts and when planning to implement new measures to minimize the risks of coastal maritime traffic.
- 2 Member Governments are invited to bring the information in the annexed Guidance to the attention of all concerned.



IALA GUIDELINE

G1018 RISK MANAGEMENT

G1018 RISK MANAGEMENT

Informal document SC.3/WP.3 No. 13 (2022)
Agenda item 8 (a)



ASSEMBLY
32nd session
Agenda item 12

A 32/Res.1158
28 January 2022
Original: ENGLISH

Edition 4.0
June 2022
urn:mml:iala:pub:g1018:ed4.0

The text of this document, together with the Convention on the International Regulations for Preventing Collisions at Sea, 1972, and the Convention on the International Maritime Organization, are available on the IALA website: www.iala.org
Approved by the Council of the International Maritime Organization in 2010 and amended in 2012 and 2014.
Revised and approved by the Council of the International Maritime Organization in 2022.

Resolution A.1158(32)
Adopted on 28 January 2022
(Agenda item 12)

GUIDELINES FOR VESSEL TRAFFIC SERVICES

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulating the guidelines concerning maritime safety and the prevention and control of marine pollution from ships,





Current toolbox tools



IRMAS including OPRA

One Page Risk Assessment included in G1018



SIRA

Simplified IALA Risk Assessment
G1138



PAWSA

Ports and Waterways Safety Assessment G1024



IWRAP

IALA Waterway Risk Assessment Programme G1023



Simulation

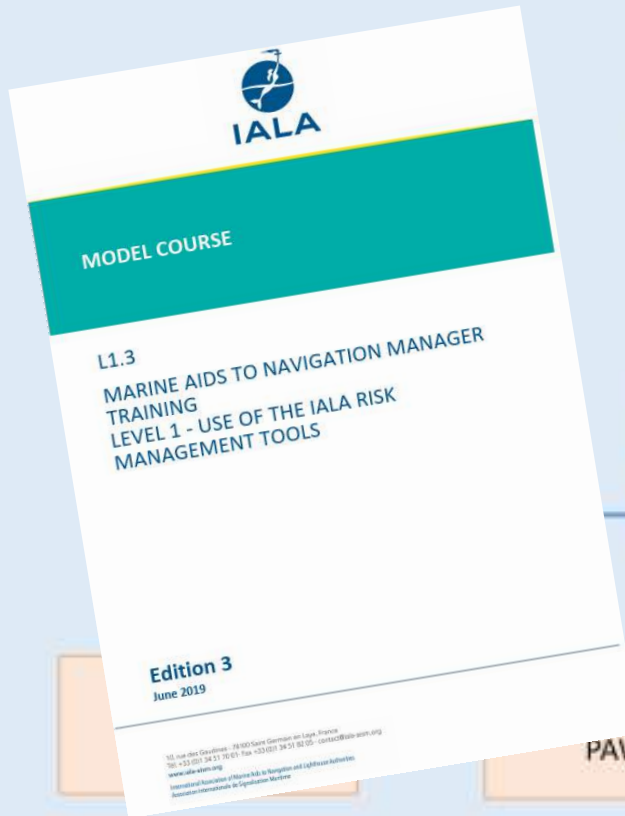
Summarized in G1058



**Risk =
Probability or
Likelihood X
Consequence**

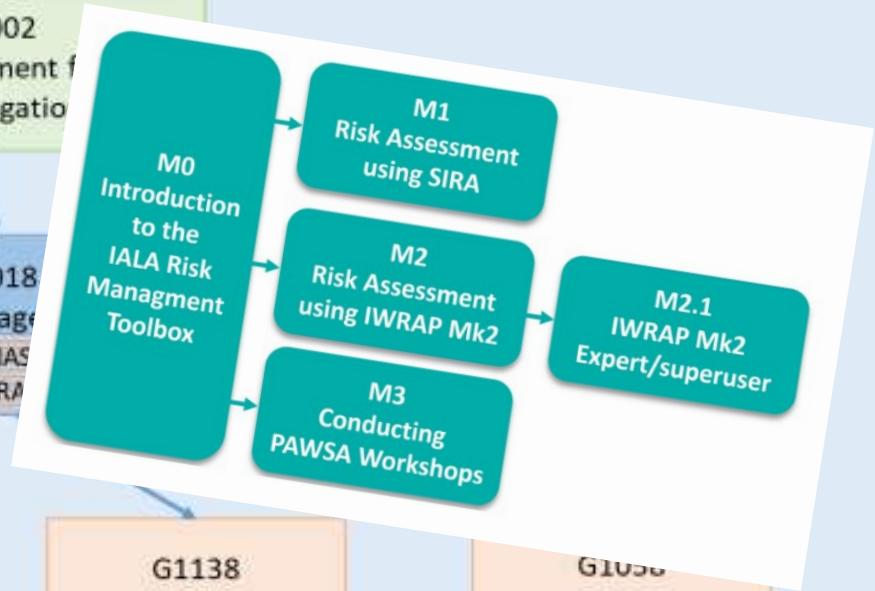


Risk Guidelines and Model Courses



R1002
Risk Management for
to Navigation

G1018
Risk Management
IRMAS
OPRA



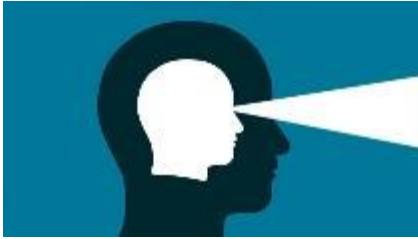
L24
PAWSA

G1138
SIRA

G1050
Simulation

Training syllabus
Risk Management – PAWSA, IWRAP, SIRA & SIMULATION

<https://academy.iala-aism.org/www/training/course-schedules/>

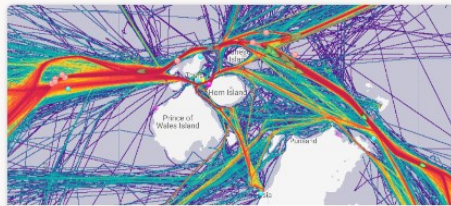


Future risk management toolbox developments and requirements....



Greenprophet.com

- Continue to refine existing tools



Risk Management Tools Global Survey

- Sector and comparable industry tools in use

North Bound(Causation Reduction Factors)			South Bound(Causation Reduction Factors)		
	Causation Reduction Factor	Resulting Causation Factor		Causation Reduction Factor	Resulting Causation Factor
Headon:	1.00	0.5000 E-4	Headon:	1.00	0.5000 E-4
Overtaking:	1.00	1.1000 E-4	Overtaking:	1.00	1.1000 E-4
Powered Grounding, on route	1.00	1.6000 E-4	Powered Grounding, on route:	1.00	1.6000 E-4
Powered Grounding, no turn	1.00	1.6000 E-4	Powered Grounding, no turn	1.00	1.6000 E-4
Drifting Grounding	1.00	1.0000	Drifting Grounding	1.00	1.0000
Powered Allision, on route:	1.00	1.6000 E-4	Powered Allision, on route:	1.00	1.6000 E-4
Powered Allision, no turn:	1.00	1.6000 E-4	Powered Allision, no turn:	1.00	1.6000 E-4
Drifting Allision	1.00	1.0000	Drifting Allision	1.00	1.0000
General	1.00		General:	1.00	

North Bound
Mean time btw. checks: Global Value

South Bound
Mean time btw. checks: Global Value

Global Settings...

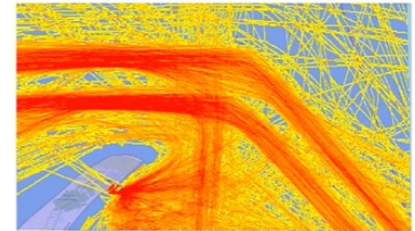
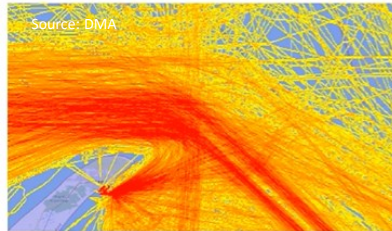
- Causation factors



- Developing ideas of what is risk?



Future risk management toolbox developments and requirements.



- How to identify optimal risk control options

- Collection of data based effectiveness evidence



- Discrete dynamic scenario modelling



- Maintain user focus



Thank you for listening

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