

# iala-aism

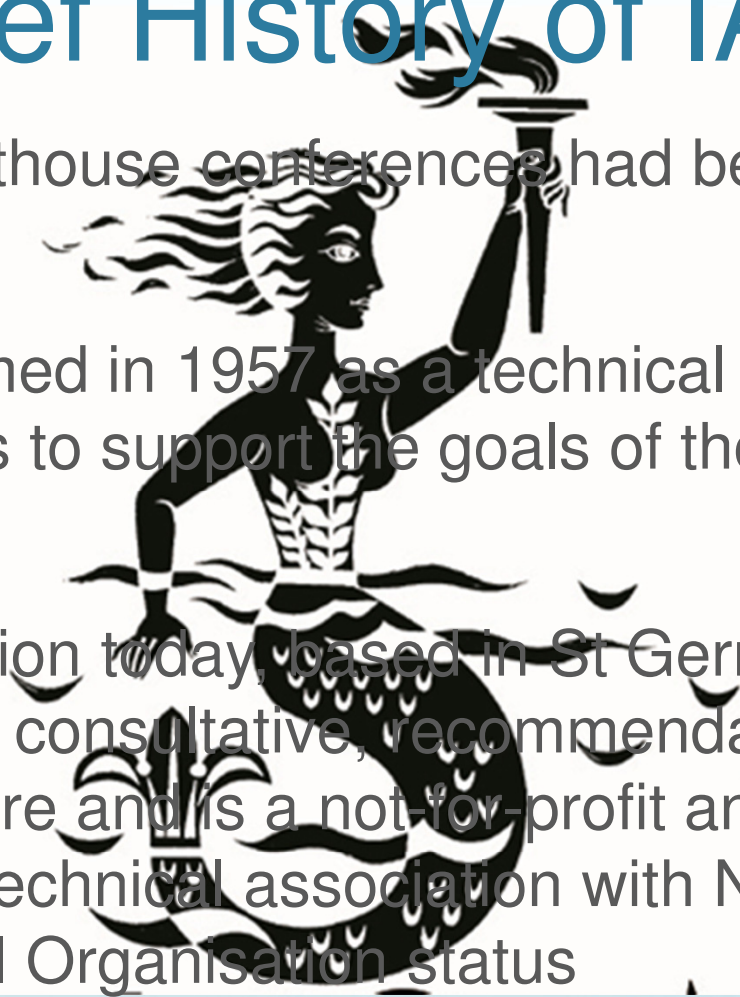
Secretary-General Francis Zachariae



## **Update on the IALA Risk Management Toolbox**

# A Brief History of IALA

- ★ Technical lighthouse conferences had been convened since 1929
- ★ IALA was formed in 1957 as a technical association based in Paris to support the goals of those earlier conferences
- ★ The organisation today, based in St Germain-en-Laye, France, has a consultative, recommendatory, and technical nature and is a not-for-profit and non political international technical association with Non-Governmental Organisation status



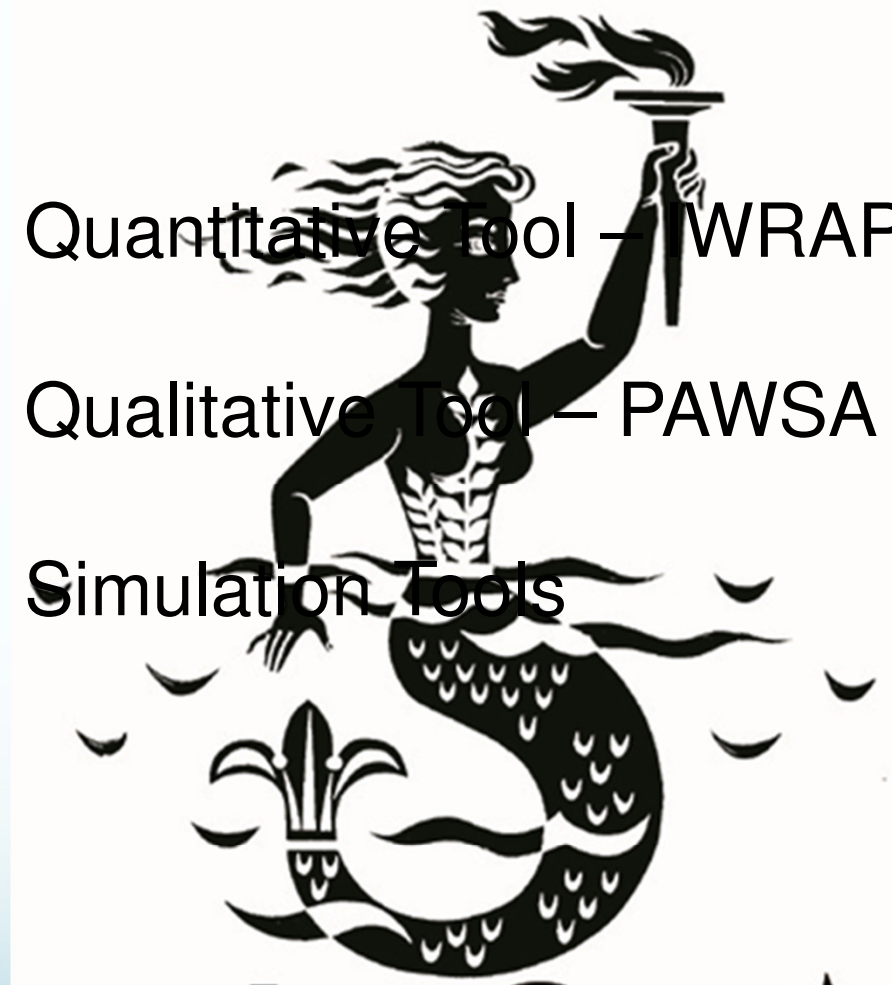
# IALA buoyage Agreement



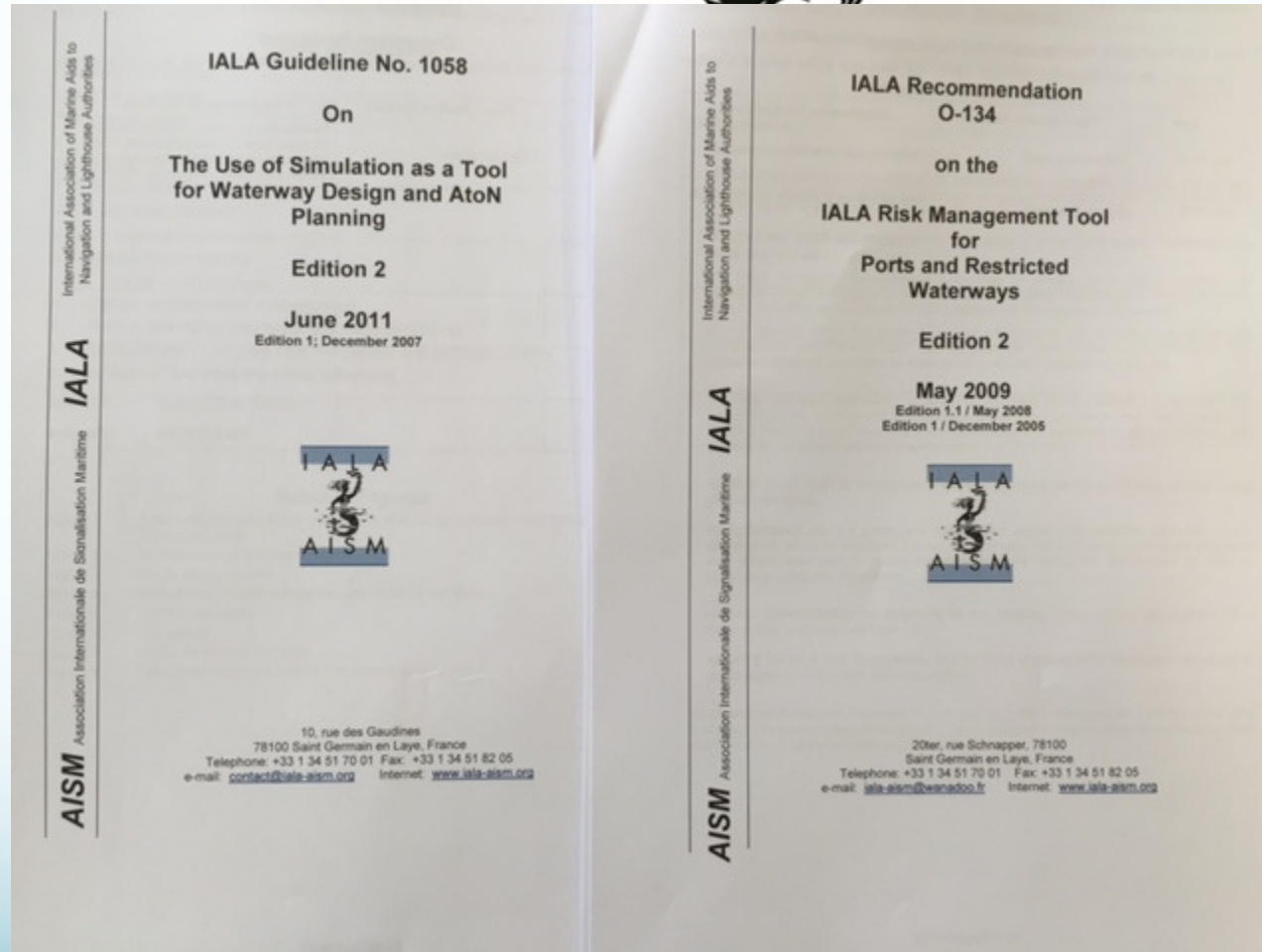


# Risk Management Toolbox

- Quantitative Tool – WRAP
- Qualitative Tool – PAWSA
- Simulation Tools

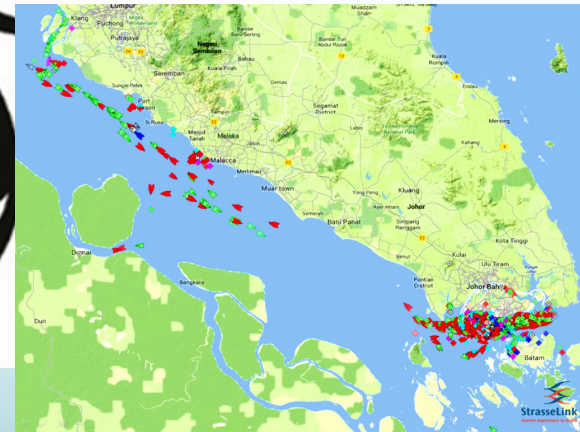
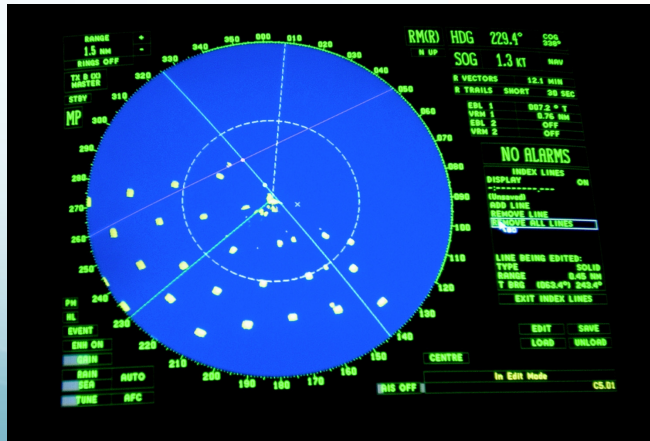


# IALA Recommendation and Guideline

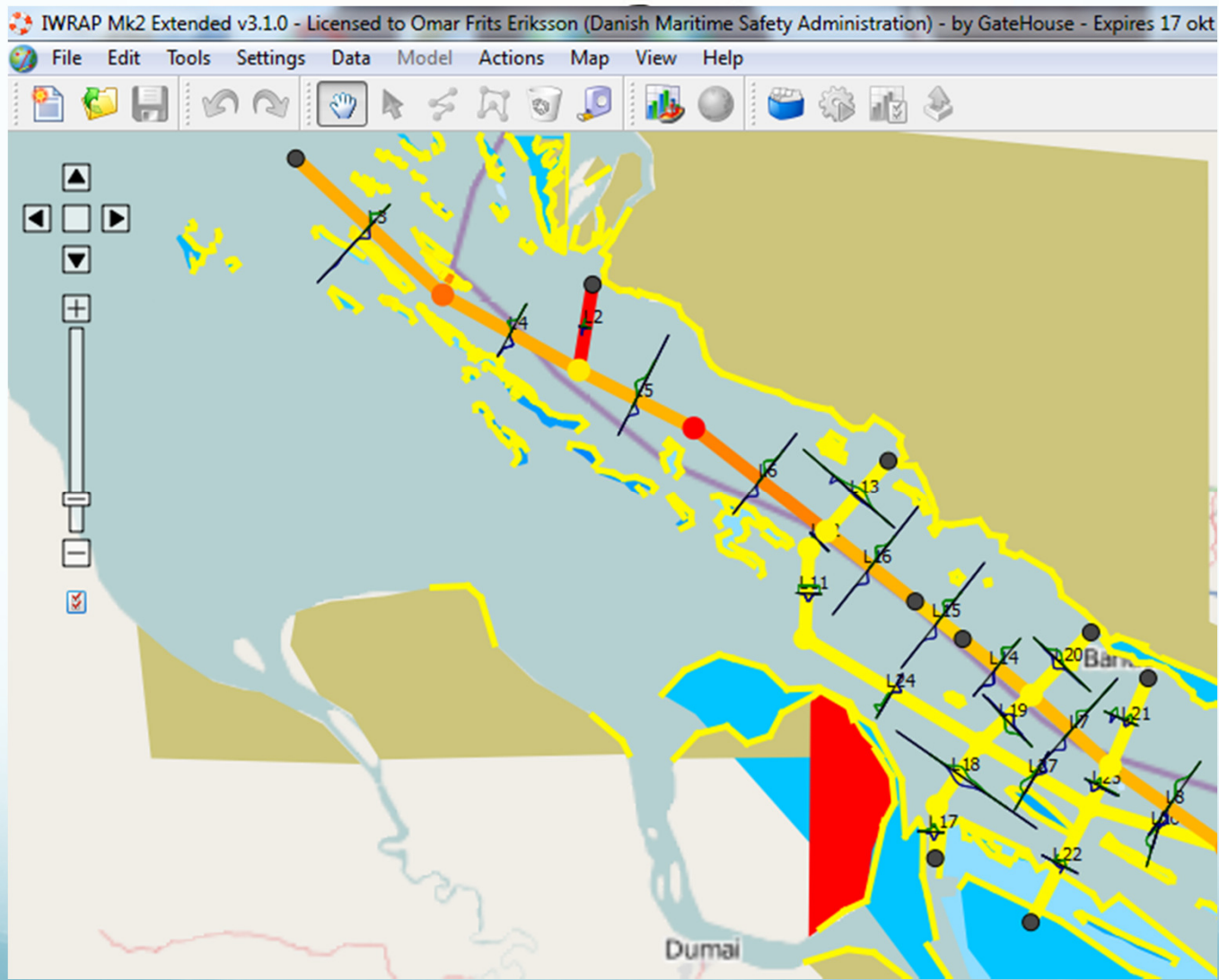


# Risks to Navigation

- How to quantify risks?
- How to measure traffic volume?



# IWRAP Mk II





# Port and Waterway Safety Assessment tool (PAWSA)



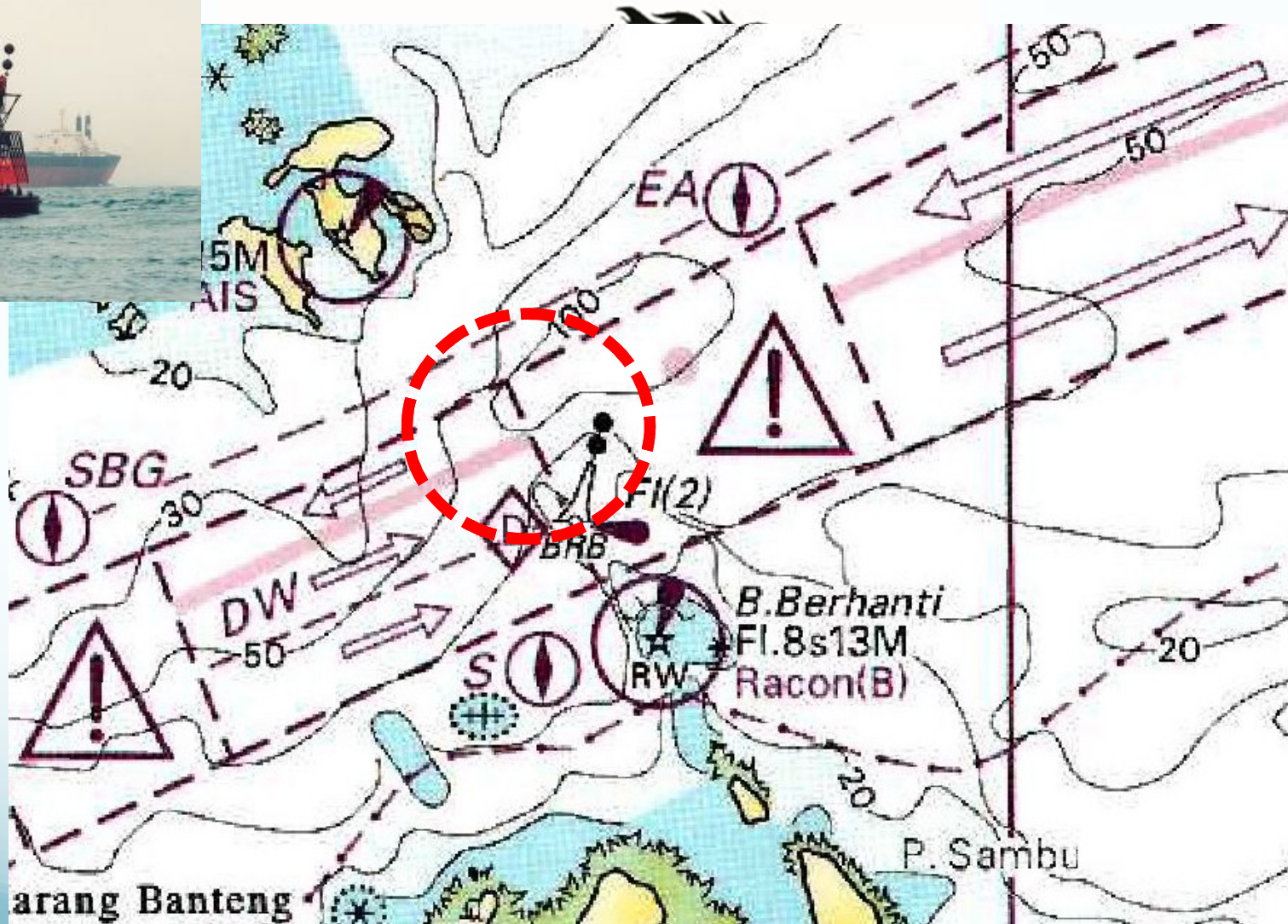
Waterway Risk Model					
Vessel Conditions	Traffic Conditions	Navigational Conditions	Waterway Conditions	Immediate Consequences	Subsequent Consequences
Deep Draft Vessel Quality	Volume of Commercial Traffic	Winds	Visibility Impediments	Personnel Injuries	Health and Safety
Shallow Draft Vessel Quality	Volume of Small Craft Traffic	Water Movement	Dimensions	Petroleum Discharge	Environmental
Commerical Fishing Vessel Quality	Traffic Mix	Visibility Restrictions	Bottom Type	Hazardous Materials Release	Aquatic Resources



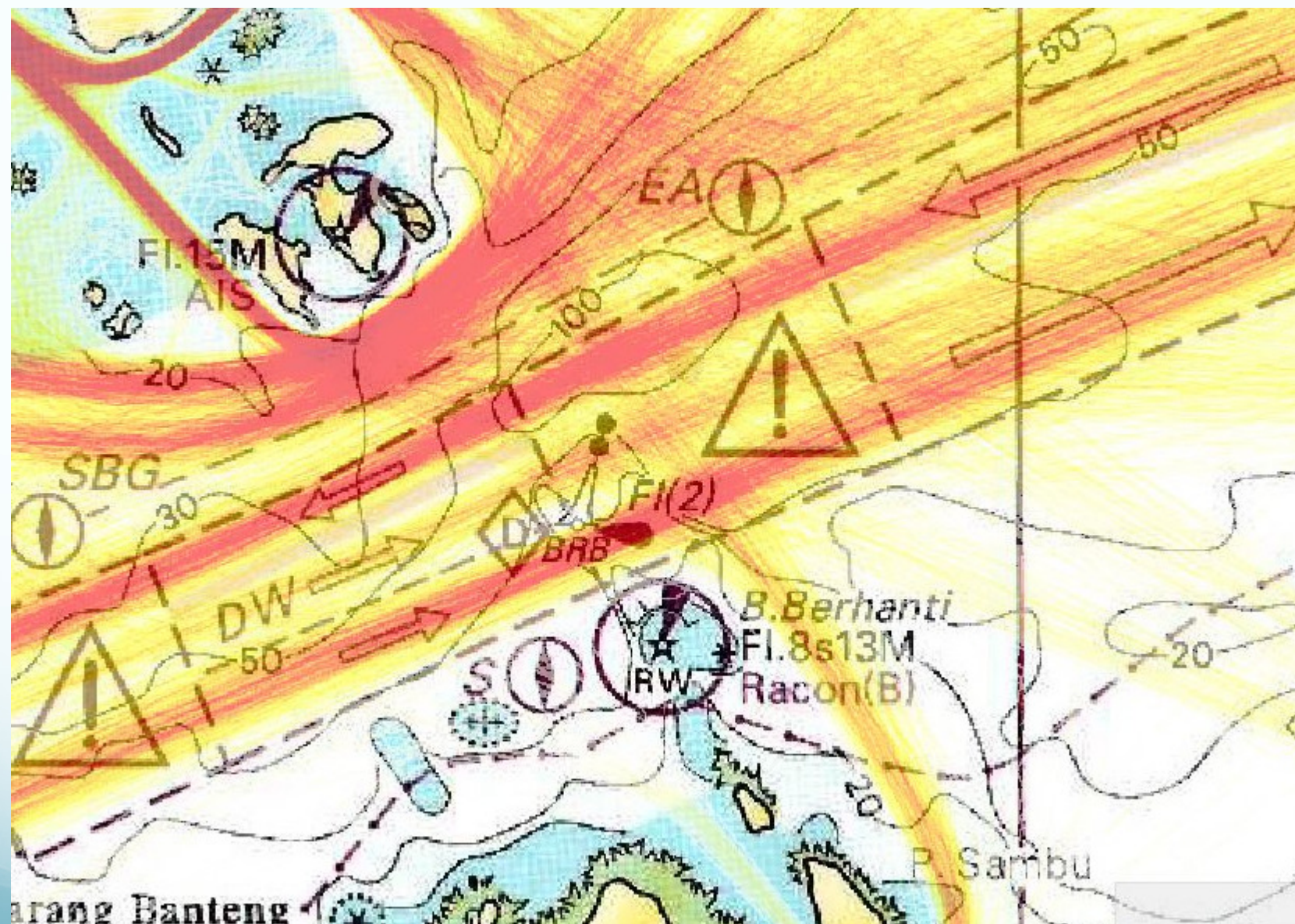
# Simulation



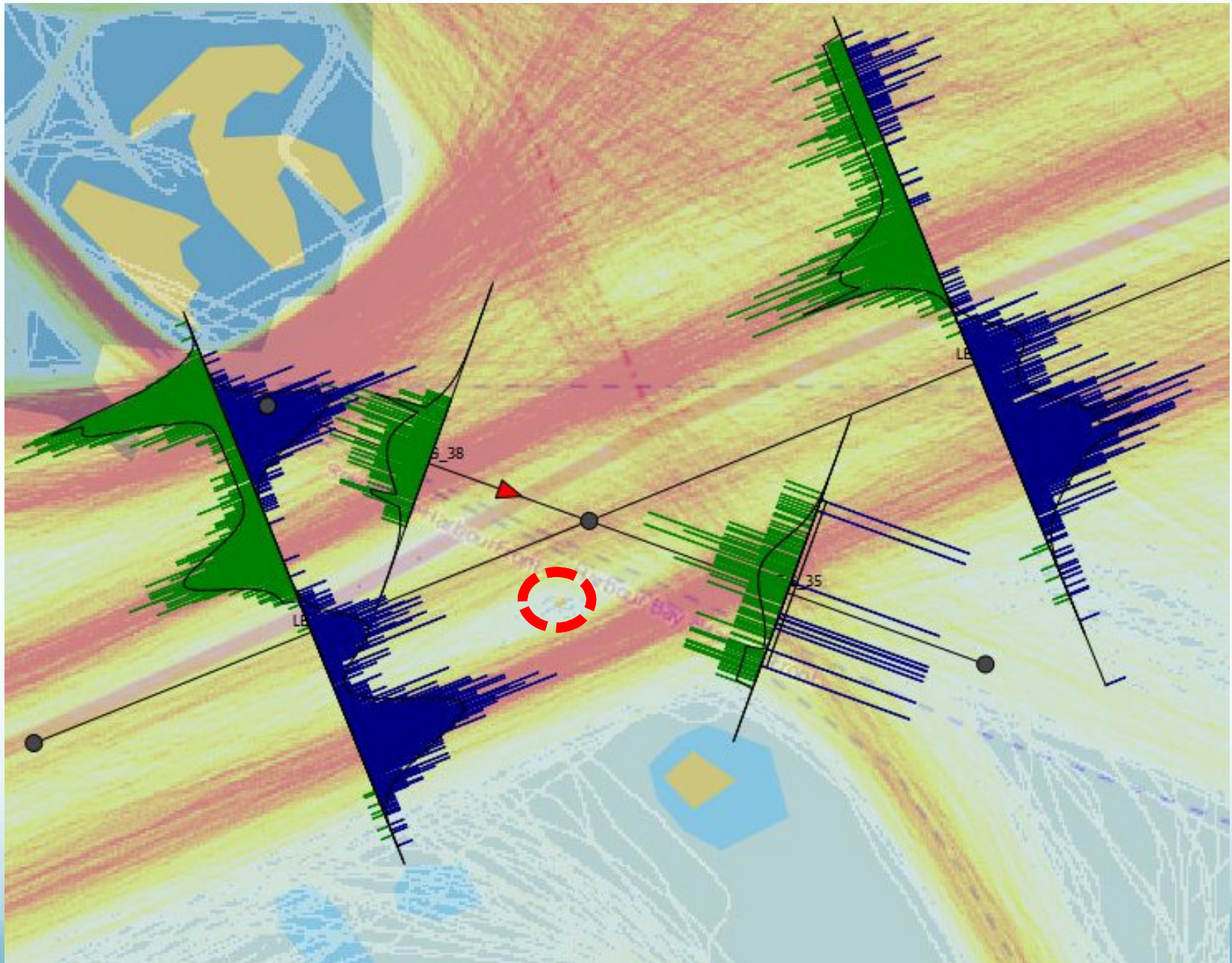
## IWRAP case study Batu Berhenti area















*website – <http://www.iala-aism.org>*

