



**TAL
TECH**

EESTI MEREAKADEEMIA

OVERVIEW OF PROJECTS

WATERWAY SAFETY MANAGEMENT RESEARCH GROUP

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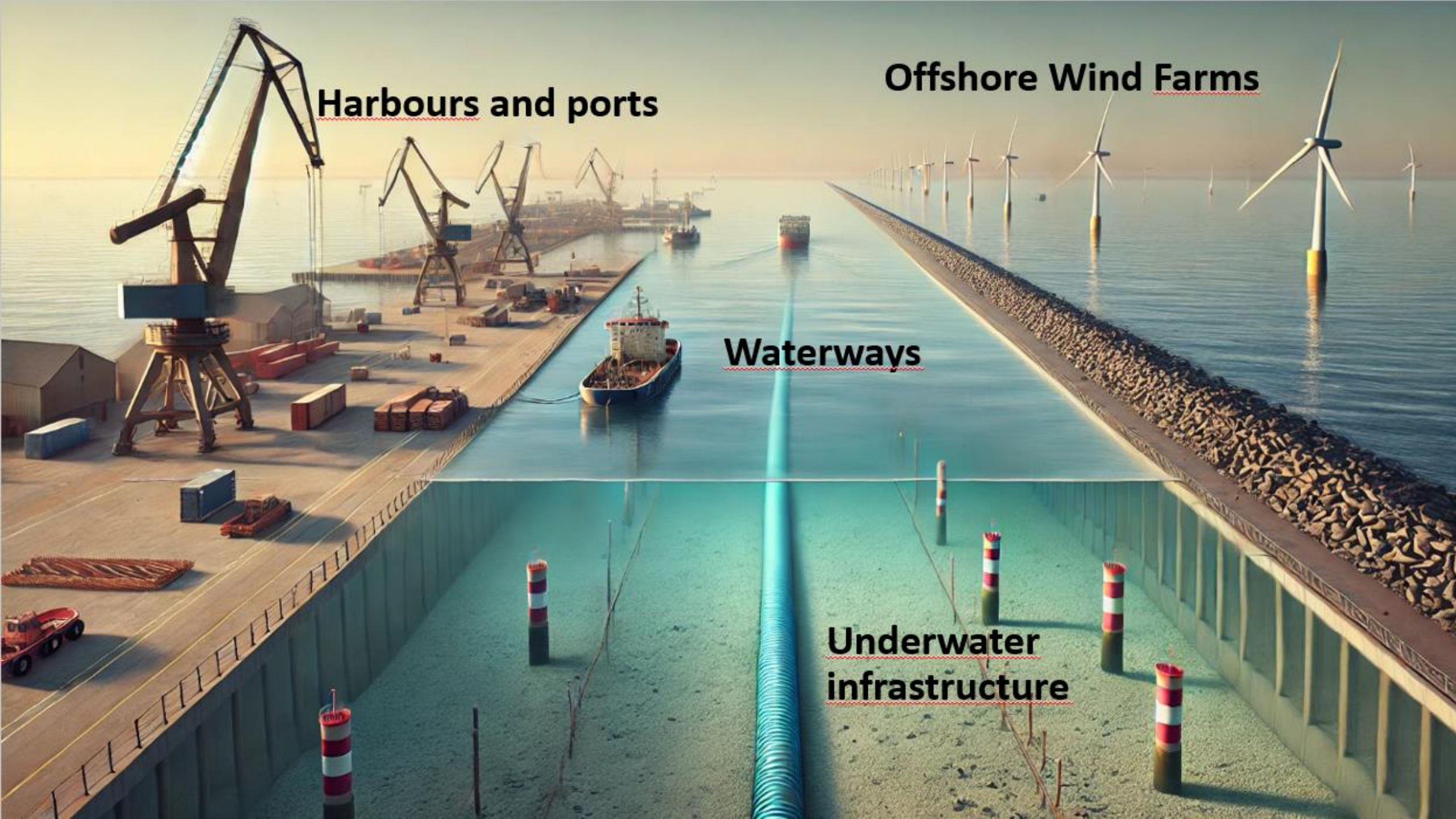
NAVIGATIONAL RISK ASSESSMENT

Harbours and ports

Offshore Wind Farms

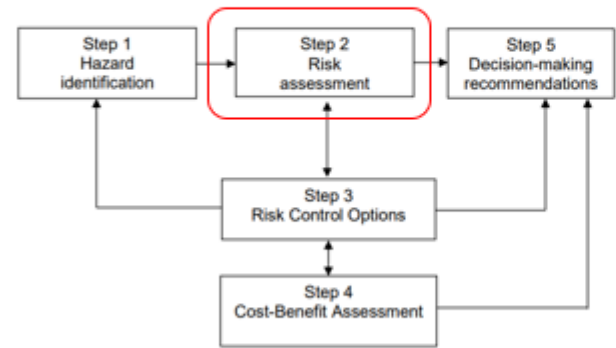
Waterways

Underwater
infrastructure



Methodology used for evaluating navigational risk

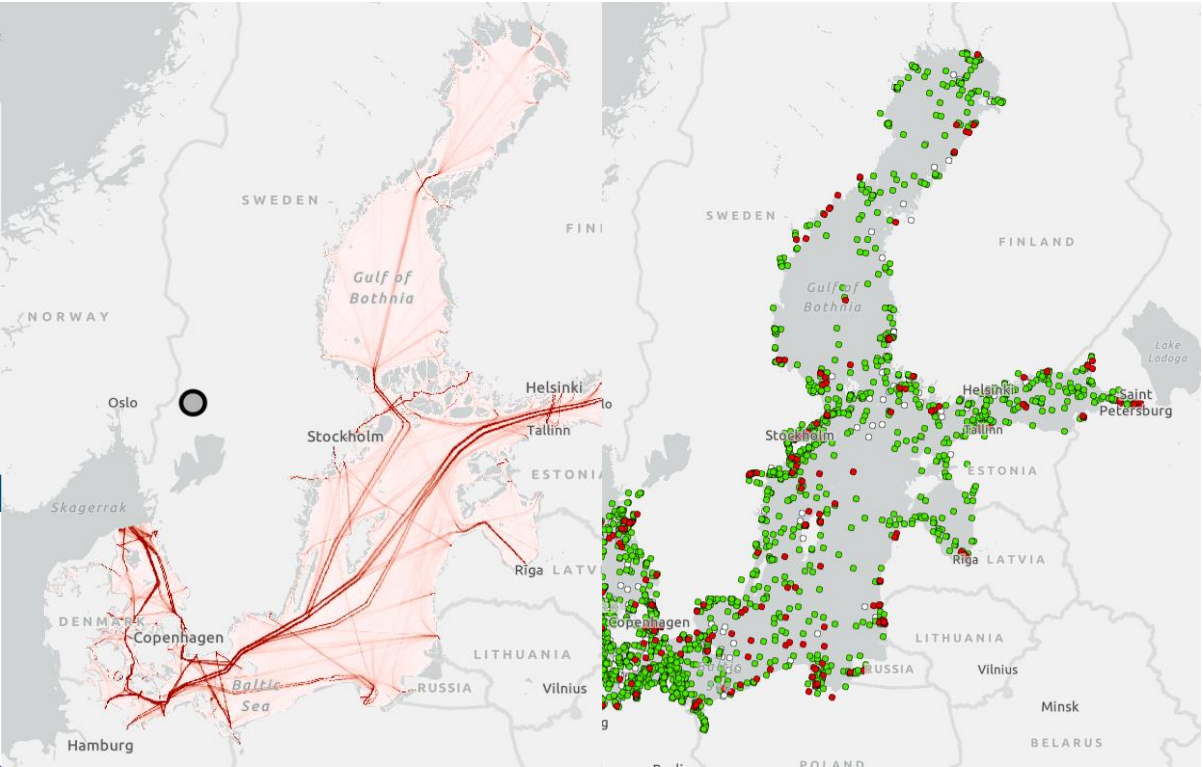
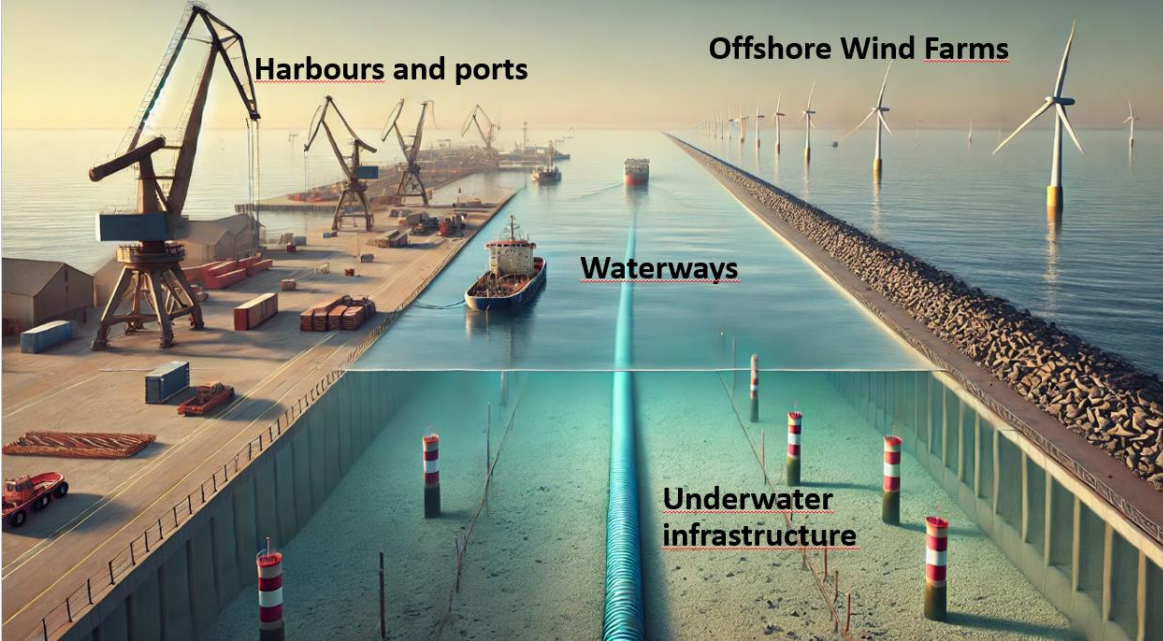
Based on the IMO formal safety assessment (FSA) process



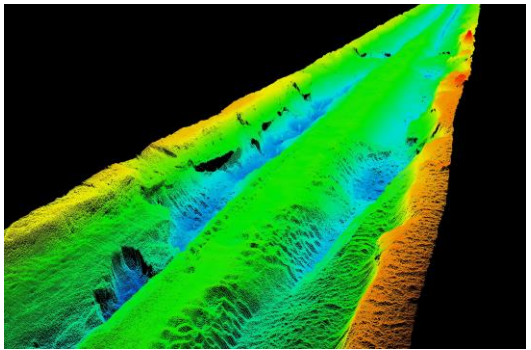
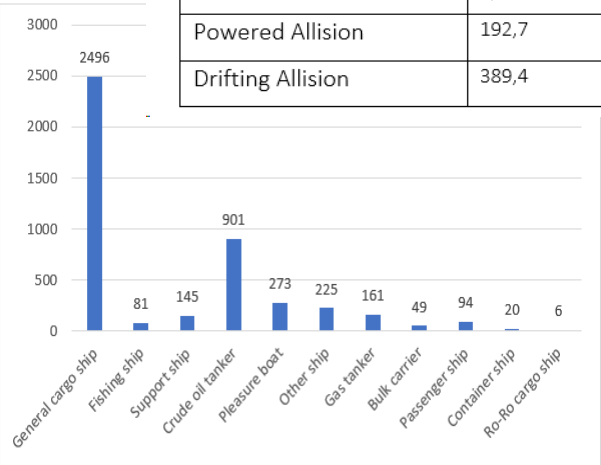
Flow chart of the FSA methodology (IMO, 2018)

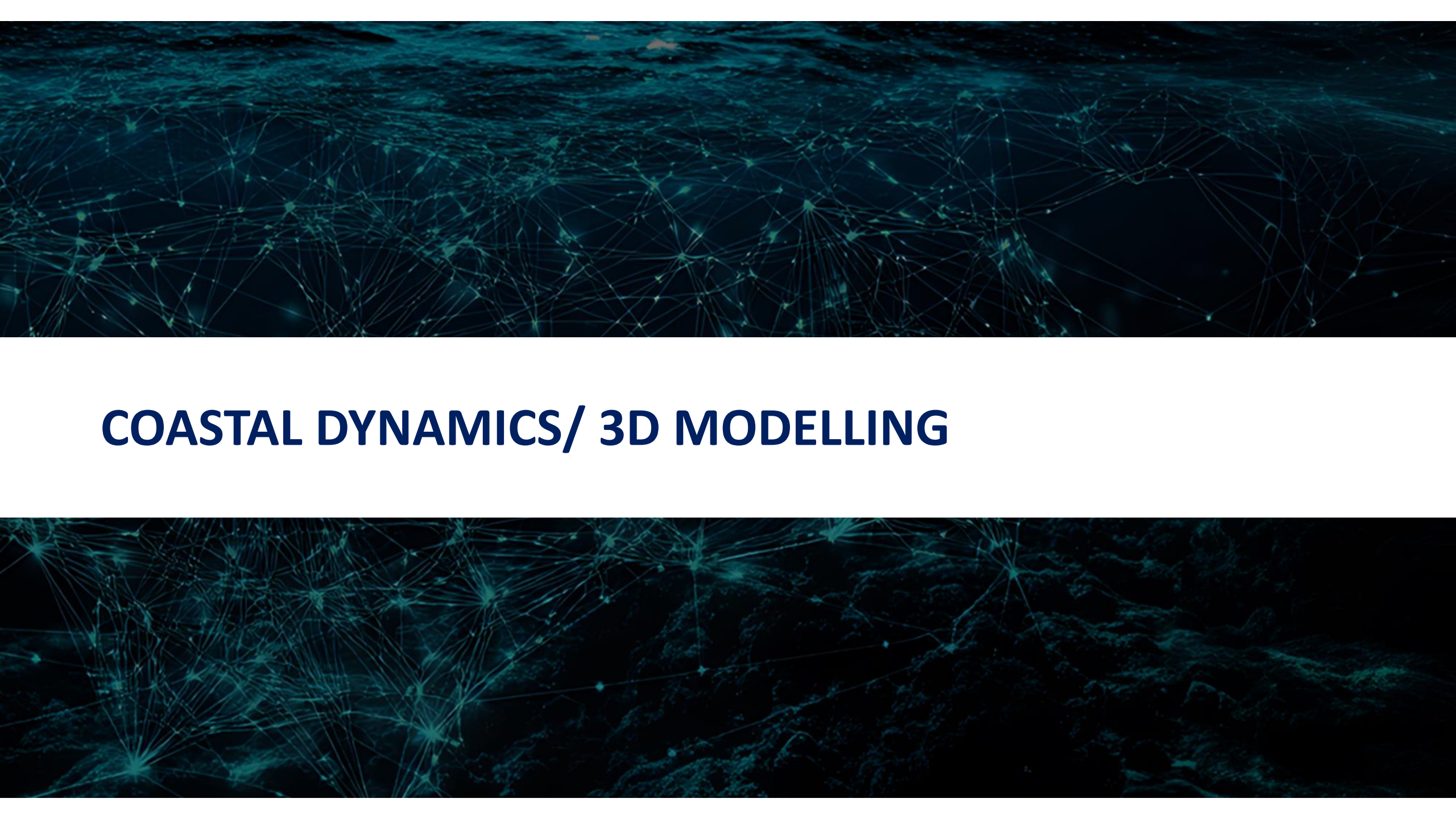
• Risk = probability x consequences

		Probability				
Consequence	Rank	1	2	3	4	5
	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5

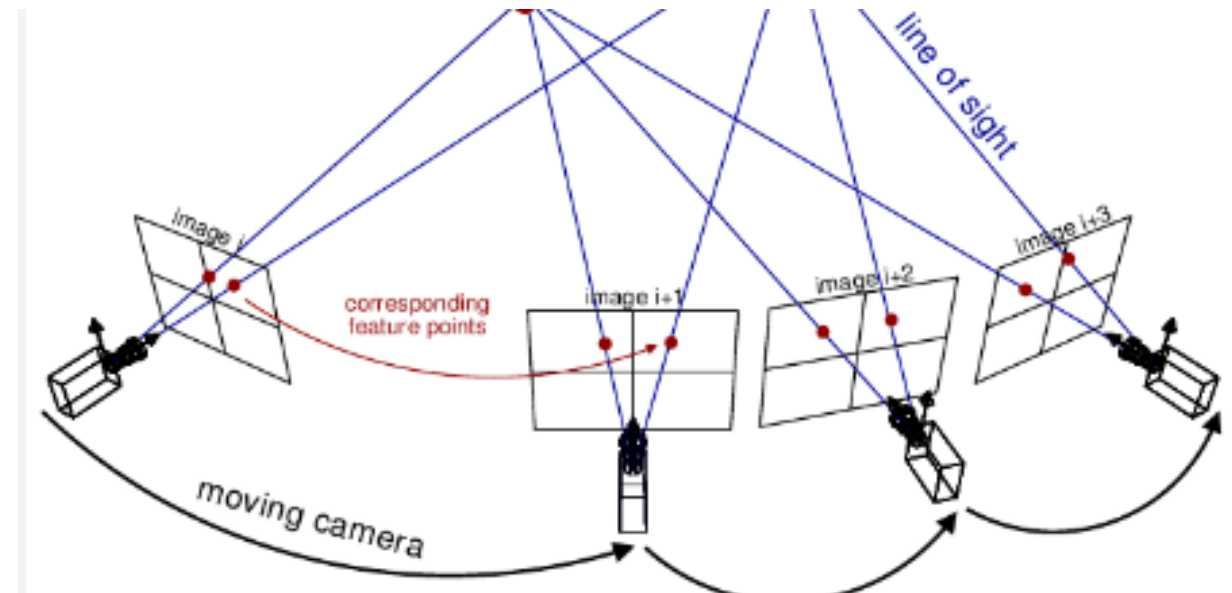
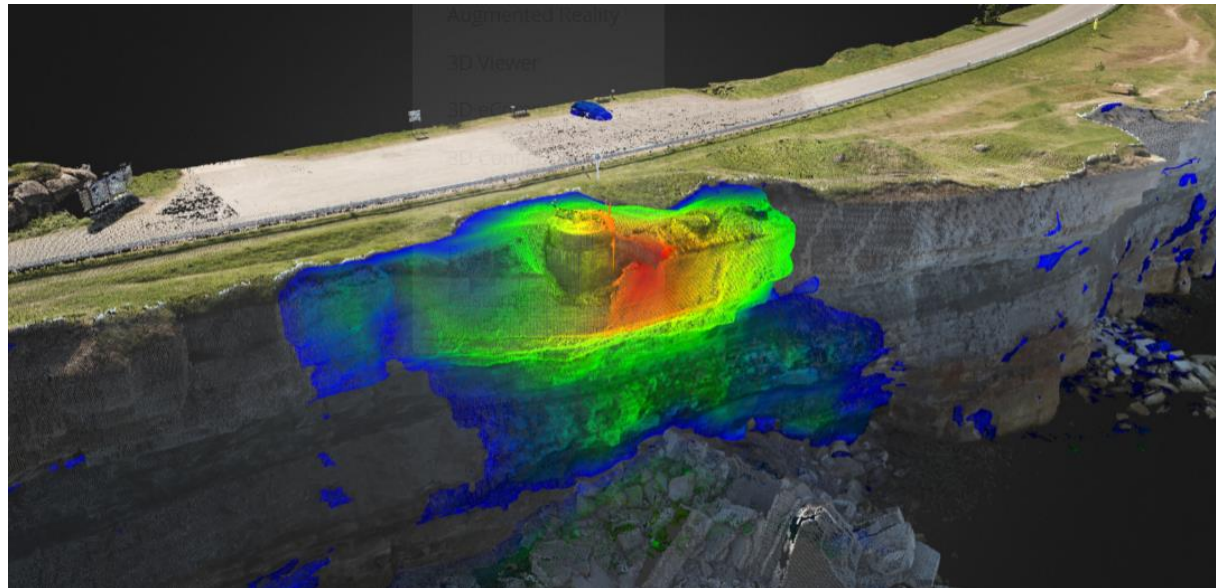


Type of incident	Insident return period (years)	Ranking definition
Overtaking	1,09E+06	Very rear or unlikely
HeadOn	4,30E+05	Very rear or unlikely
Crossing	1,85E+06	Very rear or unlikely
Merging	1,79E+07	Very rear or unlikely
Bend	3,66E+06	Very rear or unlikely
Powered Allision	192,7	Rare
Drifting Allision	389,4	Rare





COASTAL DYNAMICS/ 3D MODELLING





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THANK YOU!

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