

MT



Manoeuvring Capability others

DWT, L, B, Speed, ...

Area with initial probability

t, X, Y, P

Dynamic

Probability index

Heatmap

Highest probability

Other vessels summarized and separate

Predicted capability envelope

Routeplanner

Hazards

Simulate

CS

Situation Awareness

Decision making

Test with Seafarers using tool

Advise crew using tool

VHF & AIS

Protocols

Communication

In practice

Talk with seafarers

Regulations & Education

Shared

Mental model

Model of thoughtproces, with general considerations

Possible decisions

Validate by testing tool

Master & other crew

Information available at bridge

Instruments

Parameters

Usage

Regulations

Implementation

In practice based on seafarers

COLREGs Local

Marin

Regulations

Well-clear

Safe motion parameters

Szlapczynski

course, speed

Iterate map for every timestep

Filter low probabilities

Filter situation

TSS

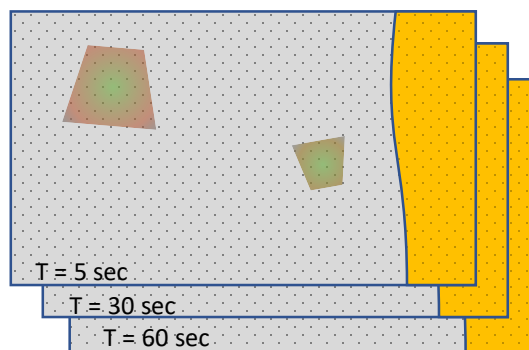
Map/radar

Static objects

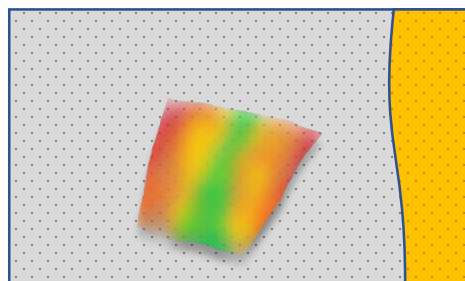
No implementation Only specific cases



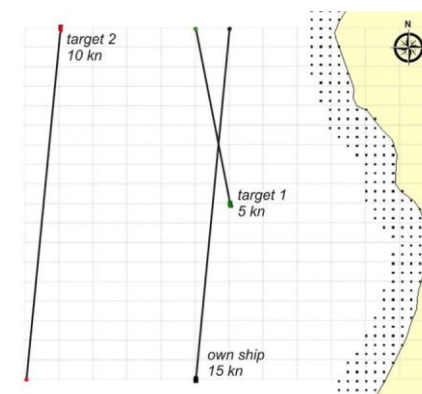
Heatmap others



Heatmap own vessel



Safe motion parameters



Traffic Separation Scheme

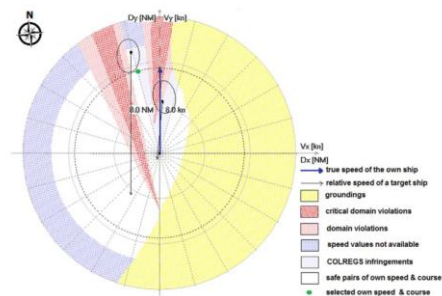
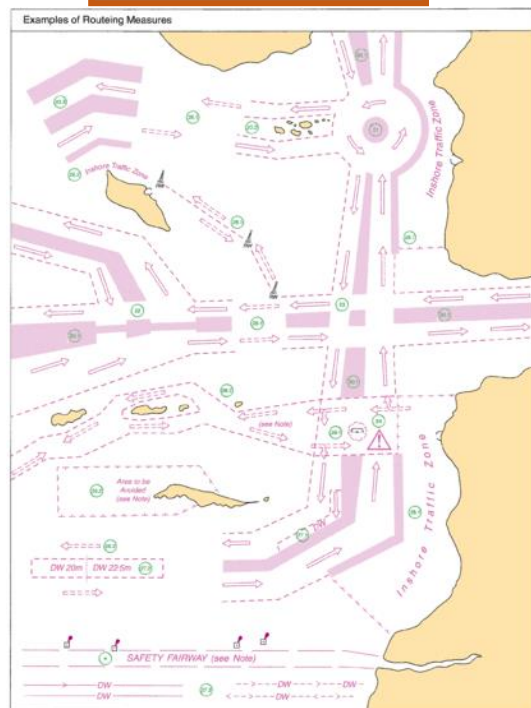


Fig. 9. The display view for scenario 1.