

Pooling resources: sub-regional co-operation to enhance pollution preparedness

Northern Part of the Baltic Proper

(Sub-region 3)



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BRISK/BRISK-RU Final Conference

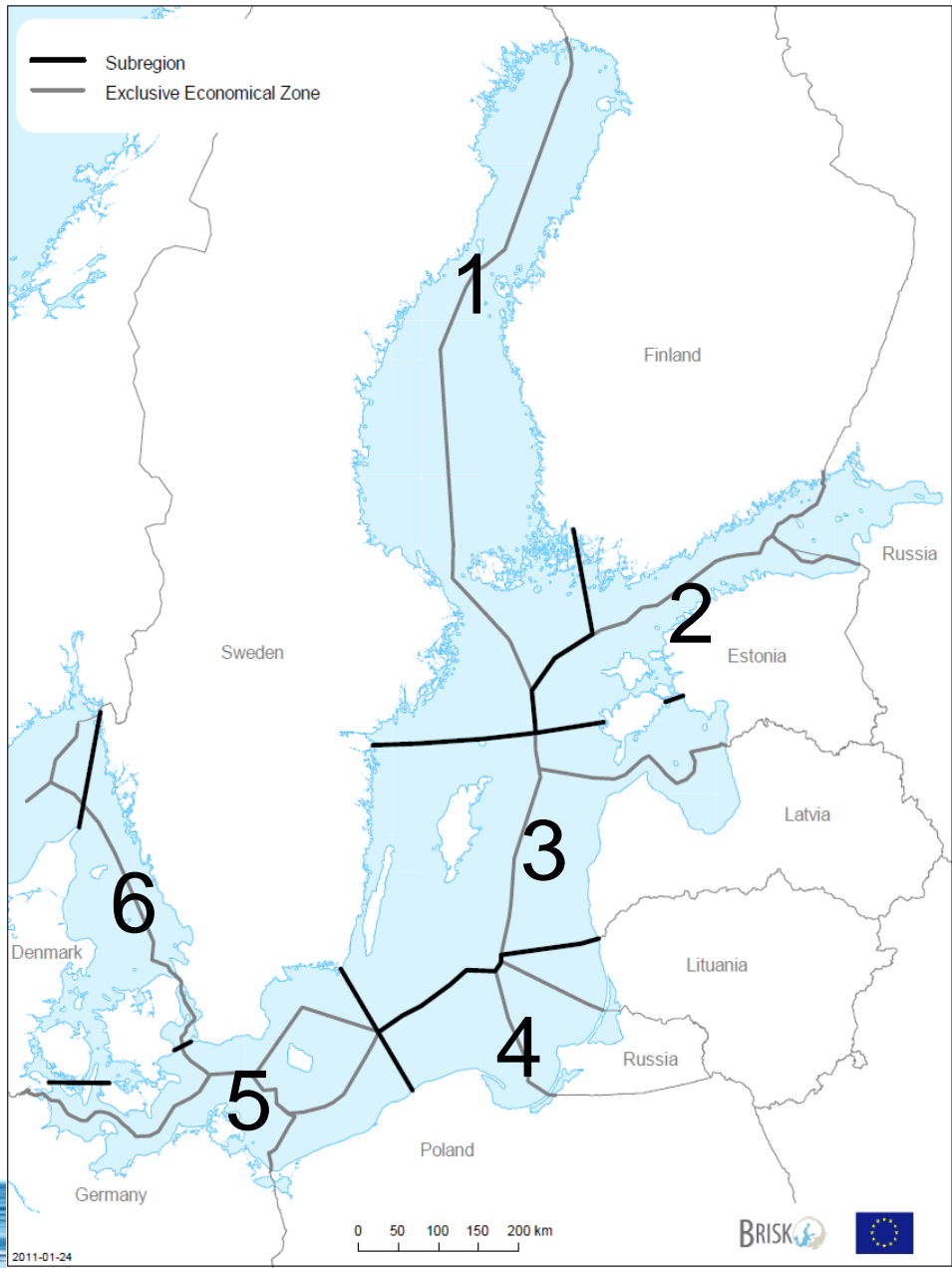
8 December 2011, Helsinki



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Baltic Sea Region
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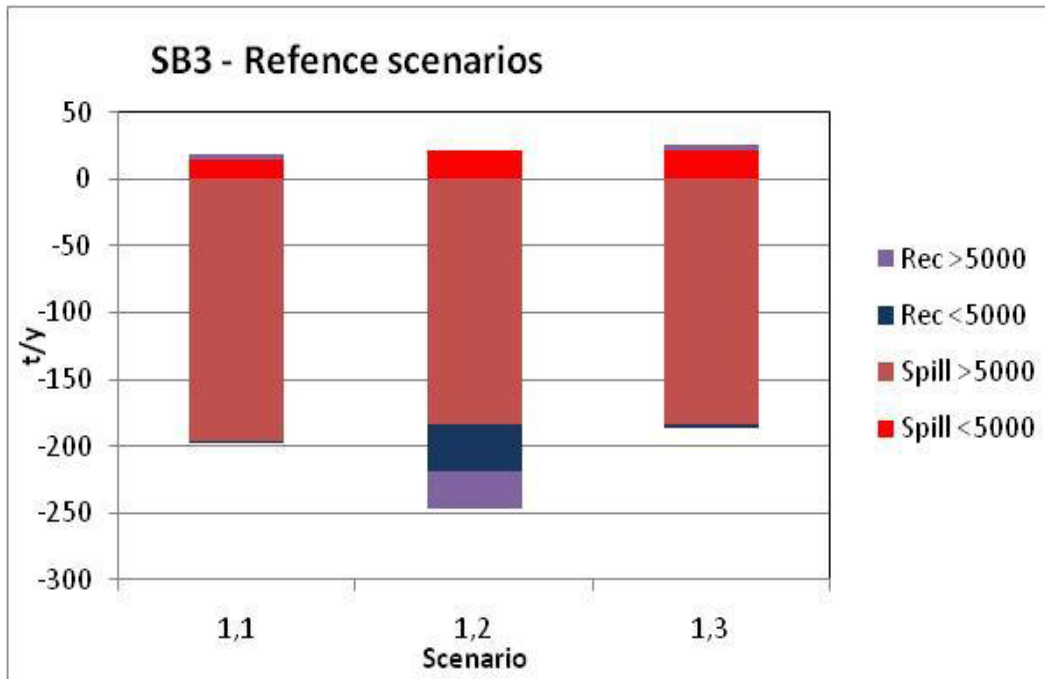


SWE-EST-LAT plan

Joint Swedish-Estonian-Latvian Response plan to maritime incidents involving oil and other harmful substances and co-operation in aerial surveillance

- updated draft (November 2011)
- will be coordinated among responsible institutions of respective countries and prepared for signing (2012)
- contains: general definitions; response regions; procedures of information, activation, reporting, co-ordination, responsibility and diplomatic clearance, principles for response to pollution, aerial surveillance, financial matters, exercises;
- Joint Swedish-Estonian-Latvian recovery capacity in SR3 is roughly estimated to be 6000 tons for the time being.

Reference scenarios



1,1 - no navigational aids (NAVA), existing response capacity;

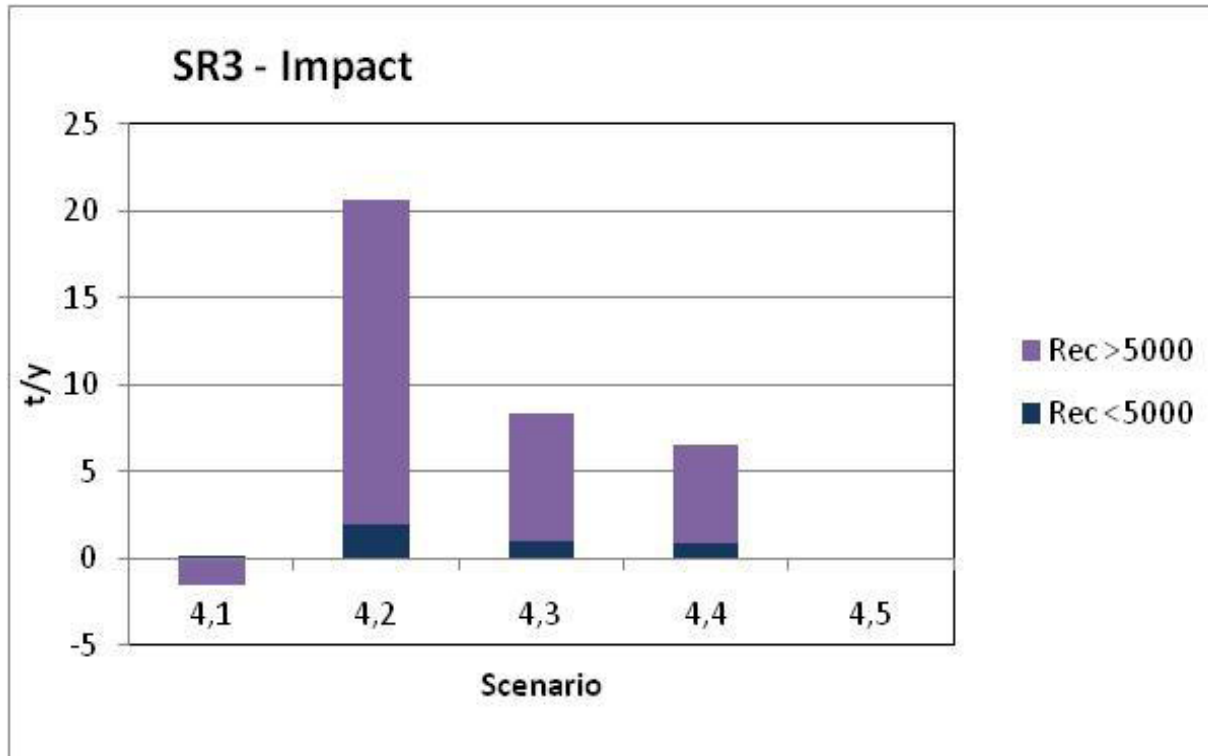
1,2 – existing NAVA, no response;

1,3 – existing NAVA, existing response capacity.

Red columns: Expected long term annual average spill

Blue columns: Expected long term annual recovery

Response scenarios



Increase of oil recovery (tons per year)

4,1 – re-allocation of existing capacities (vessels);

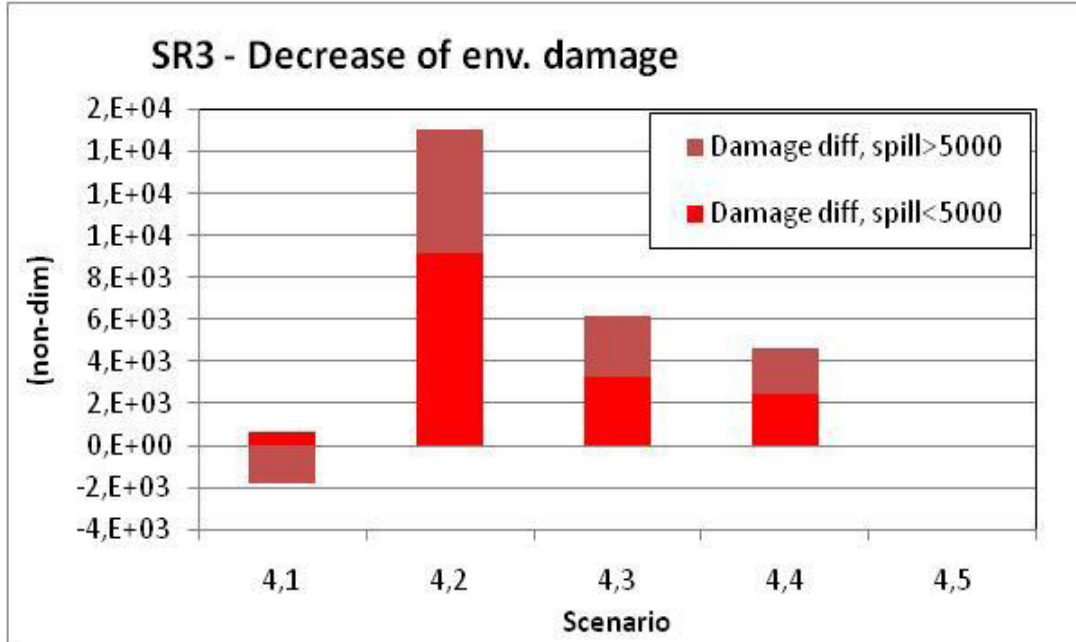
4,2 – additional booms and skimmers

4,3 – 50% more booms and skimmers

4,4 – night visibility

4,5 – recovery of oil from ice

Response scenarios



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4,3 – 50% more booms and skimmers

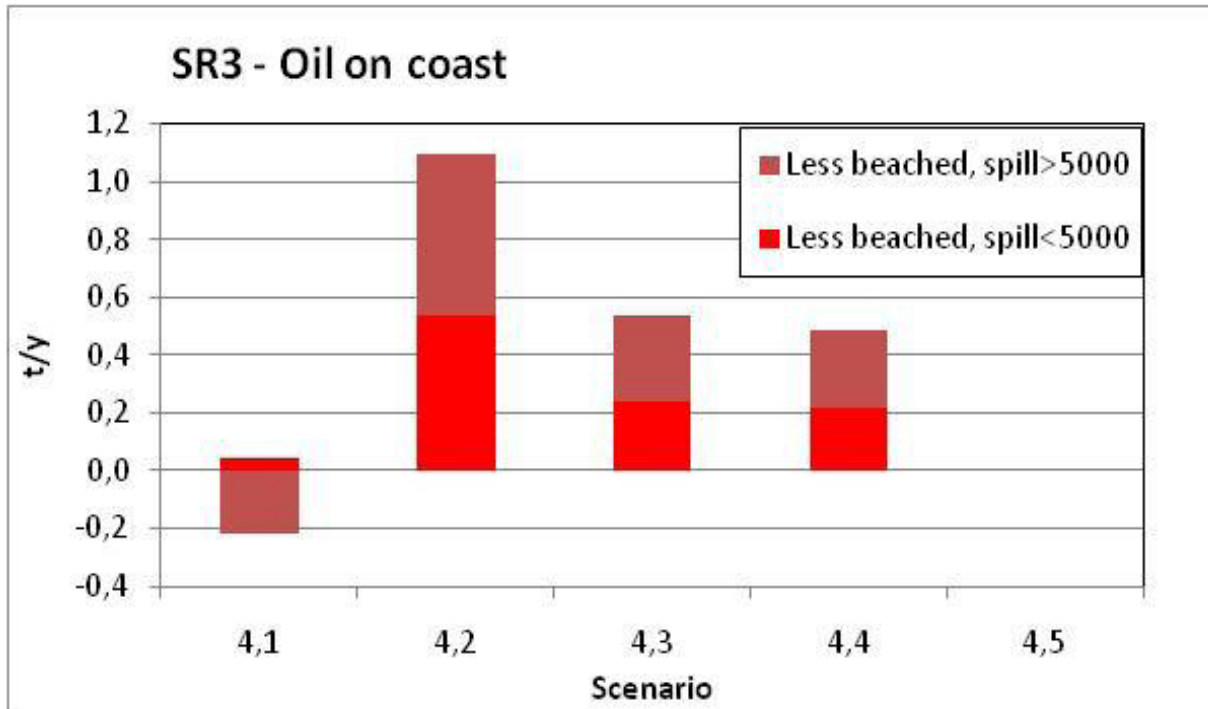
4,4 – night visibility

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Reduction of environmental damage

(tons per km² weighted)

Response scenarios



Reduction of beached oil (tons per year)

4,1 – re-allocation of existing capacities (vessels)

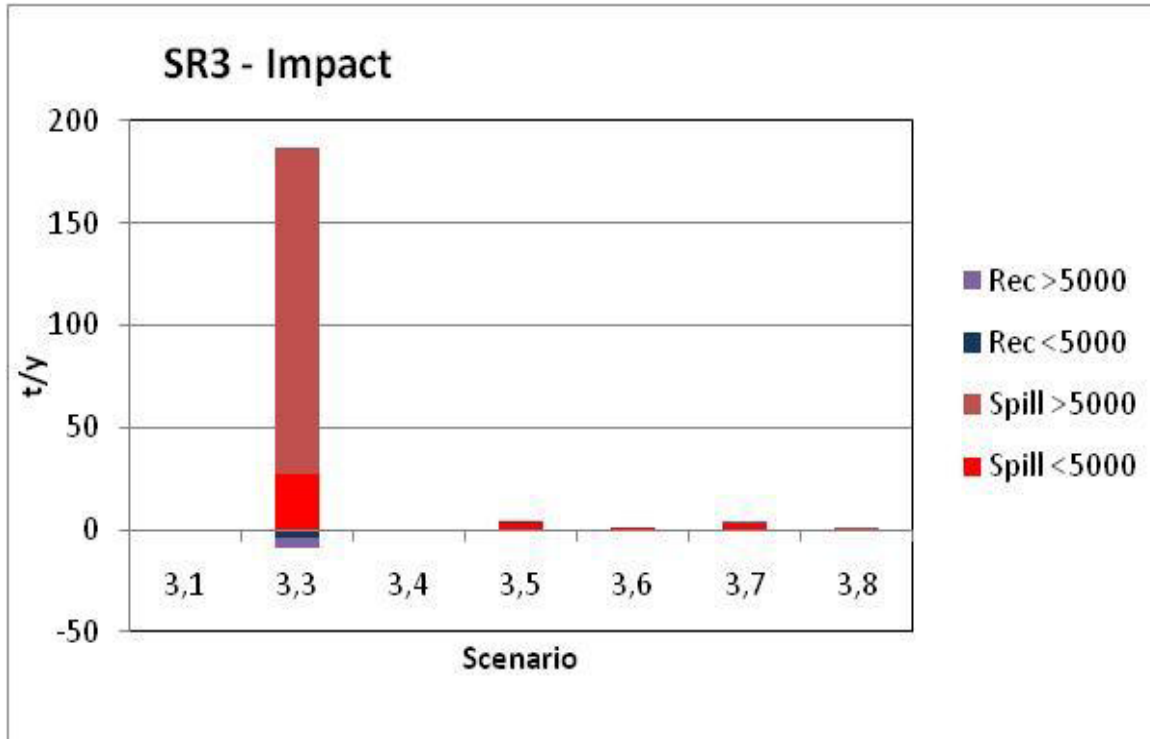
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Additional scenarios (navigational aids 2020)



Red: Decrease of spill (tons per year)

Blue: Increase of oil recovery (tons per year)

3,1 – mandatory pilotage in The Danish Straits.

3,3 – maximum vessel traffic System (VTS), Kattegat, Fehmarn, Bornholm and Gotland hotspots.

3,4 – traffic separation schemes (TSS)

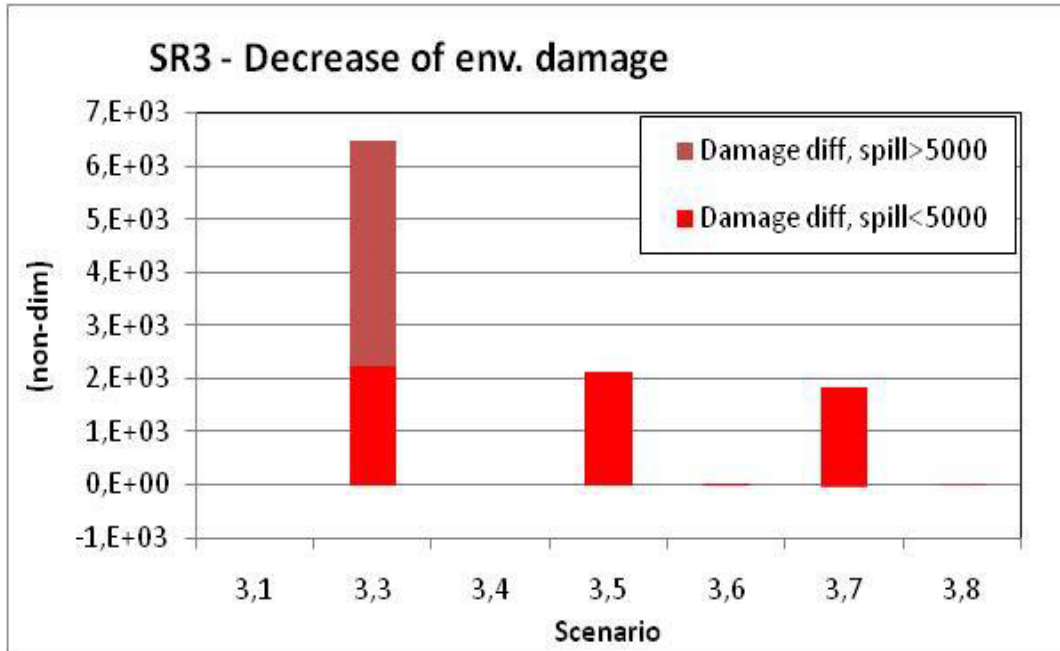
3,5 – electronic chart display and information system (ECDIS) for all large ships.

3,6 – double hull at cargo tank (<5000 BRT).

3,7 – double hull at bunker tank.

3,8 – escort towing for all tankers in narrow shipping lanes where towing is done now.

Additional scenarios (navigational aids 2020)



Reduction of environmental damage (tons per km² weighted)

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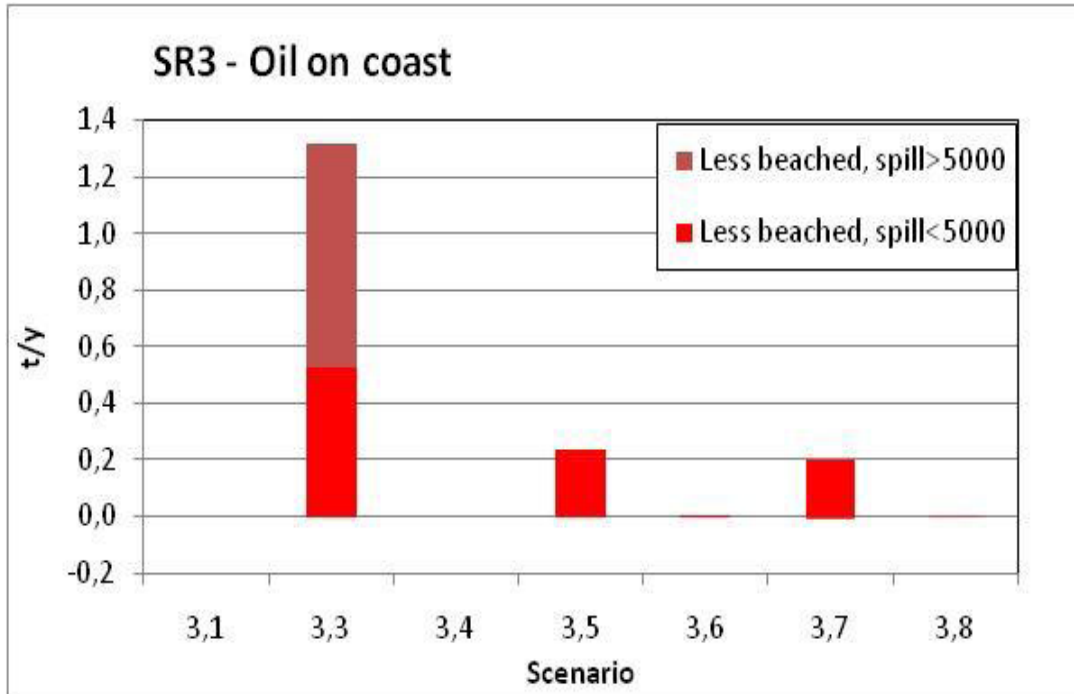
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Main conclusions

- Most significant effect on reduction of amount of spilt oil and oil on coast in SR3 would provide implementation of VTS (scenario 3,3);
- Major investment in additional response capacity will have minor effect on the ability to recover oil and oil on coast, and will not be cost effective, if the calculation of 10% recovery rate is used;
- Investment in shallow water response capacities will have an effect on ability to recover oil and oil on coast, especially in the South-eastern part of SR3;
- Investment in night vision capability will have some effect on the ability to recover oil and on oil on coast at relatively low cost.

Recommendations for improvement of pollution preparedness in SR3

- Reconsider spatial distribution and possible reallocation of response capacities in the Central and Southern part of SR3 (i.e. more capacity on the island of Gotland, reallocation of capacity from the Gulf of Riga to the Baltic coastline);
- Replace outdated equipment with equipment of state of the art;
- Invest in shallow water response and night vision capacities;
- Develop sea surveillance systems that can be used for anomaly detection functions.