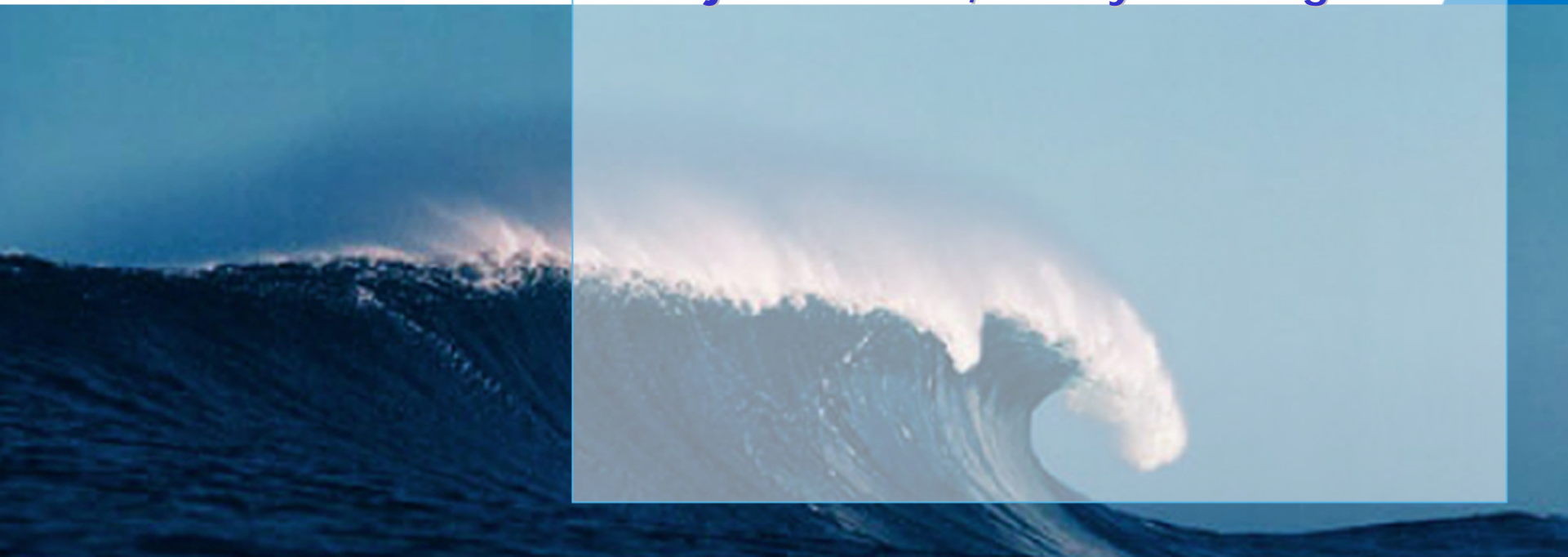


**STIRES Project**  
**Sanctions on Ship Source**  
**Pollution**  
**Lisbon 22/23 March 2006**  
**Paul Wilkins**  
**Project Officer, Safety of Navigation**



# SafeSeaNet – The Sensor Systems

- AIS
- Radar/VHF DF/VTS
- LRIT
- Satellite Imagery

## **STIRES – The SafeSeaNet Information, Relay and Exchange System**

## **SRIT – Short Range Identification and Tracking**

**Original Study objective:**

**Paragraph 2, Article 9 of Directive 2002/59**

**For the benefit of – Member States' Services**

## Paragraph 2, Article 9 of Directive 2002/59

*The process of building up all necessary equipment and shore-based installations for implementing this Directive shall be completed by the end of 2007. Member States shall ensure that the appropriate equipment for relaying the information to, and exchanging it between, the national systems of Member States shall be operational at the latest one year thereafter.*

- sets down requirements, but do not indicate technical solutions.

=> The objective of the study was therefore to indicate potential alternative technical solutions for complying with the Directive's requirements.

## Information the Member States Exchange by the Directive

Port notifications

[Article 4 of Directive 2002/59](#)

Hazmat notifications

[Article 13 of Directive 2002/59](#)

**Ship (MRS&AIS) notifications**

[Article 9 of Directive 2002/59](#)

Alert notifications

[Article 16 of Directive 2002/59](#)

Security notifications

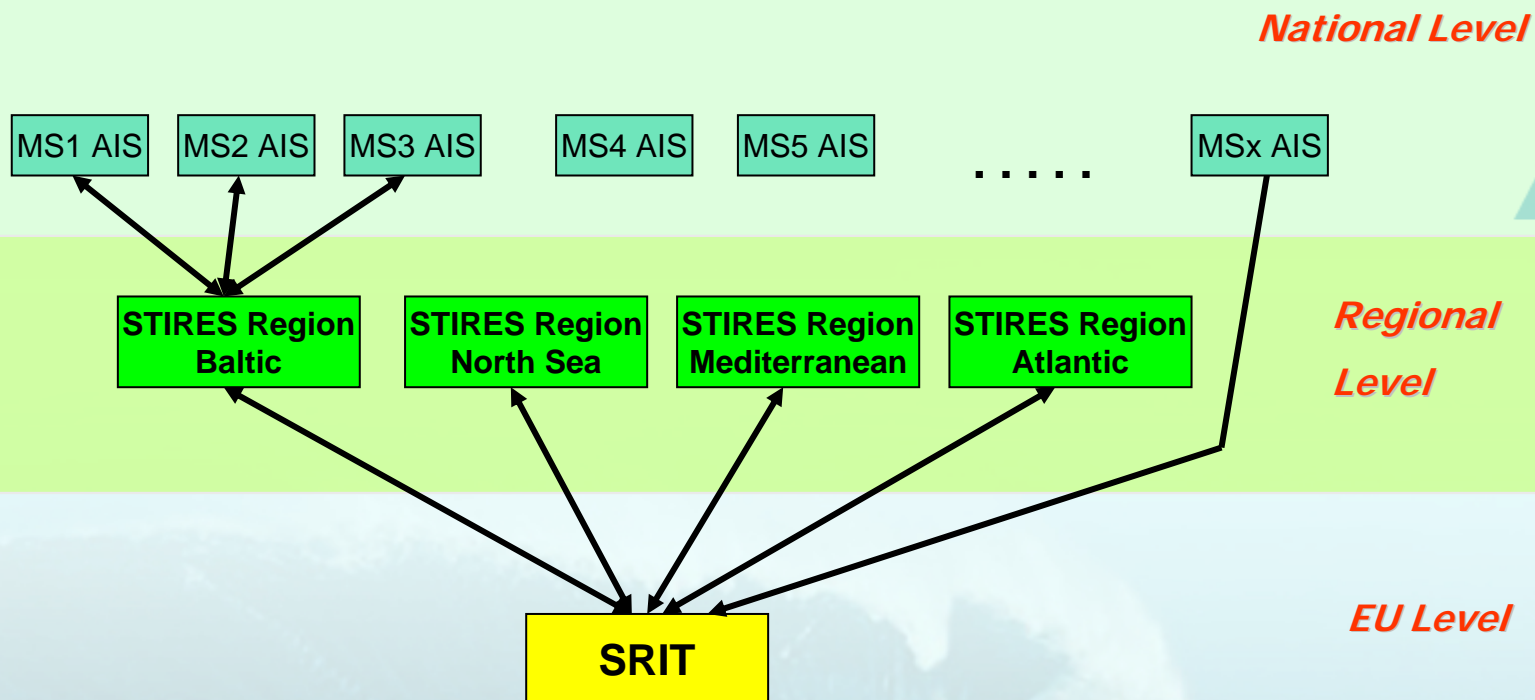
[Article 4 of Regulation 725/2004](#)

Waste notifications

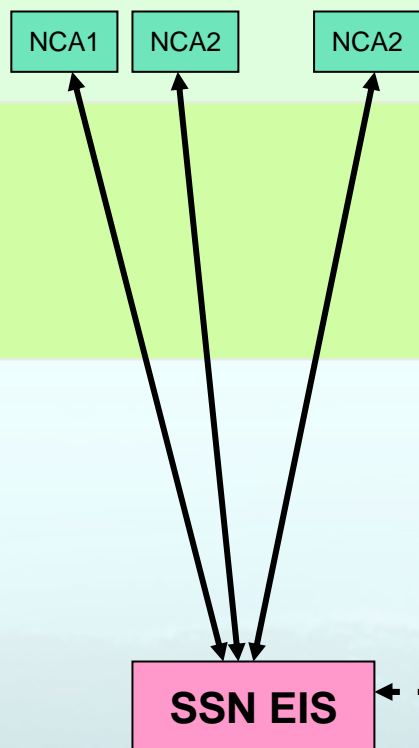
[Article 12 of Directive 2002/59](#)

## STIRES module

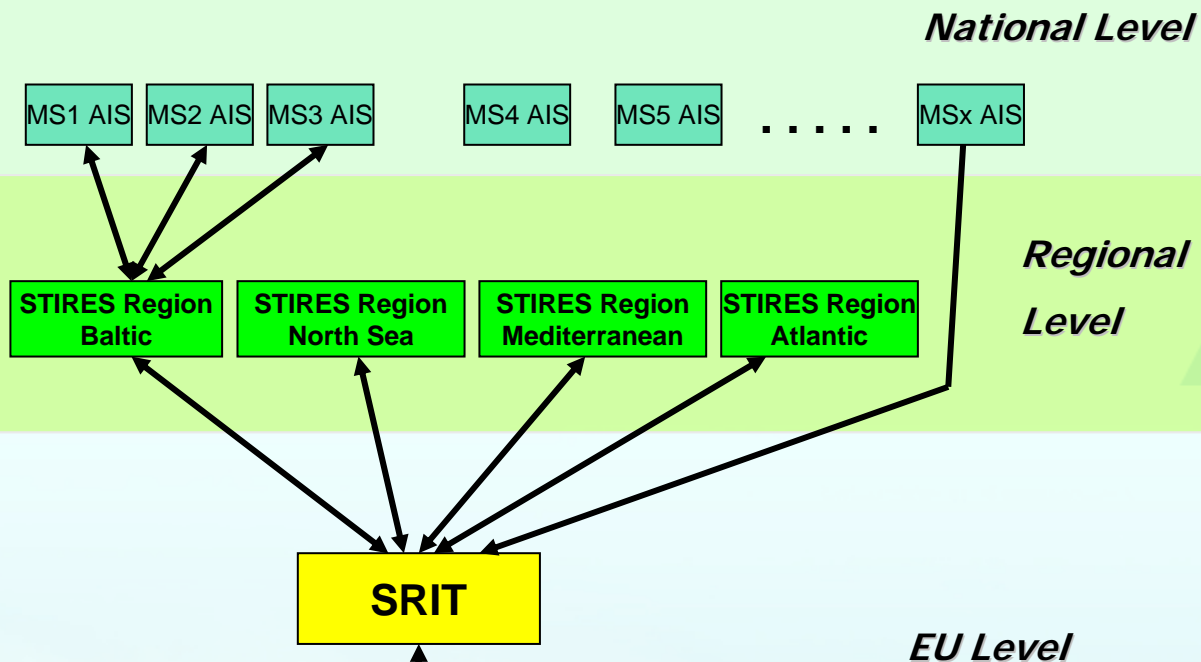
### Examples of connections to MS AIS networks



## Existing SSN



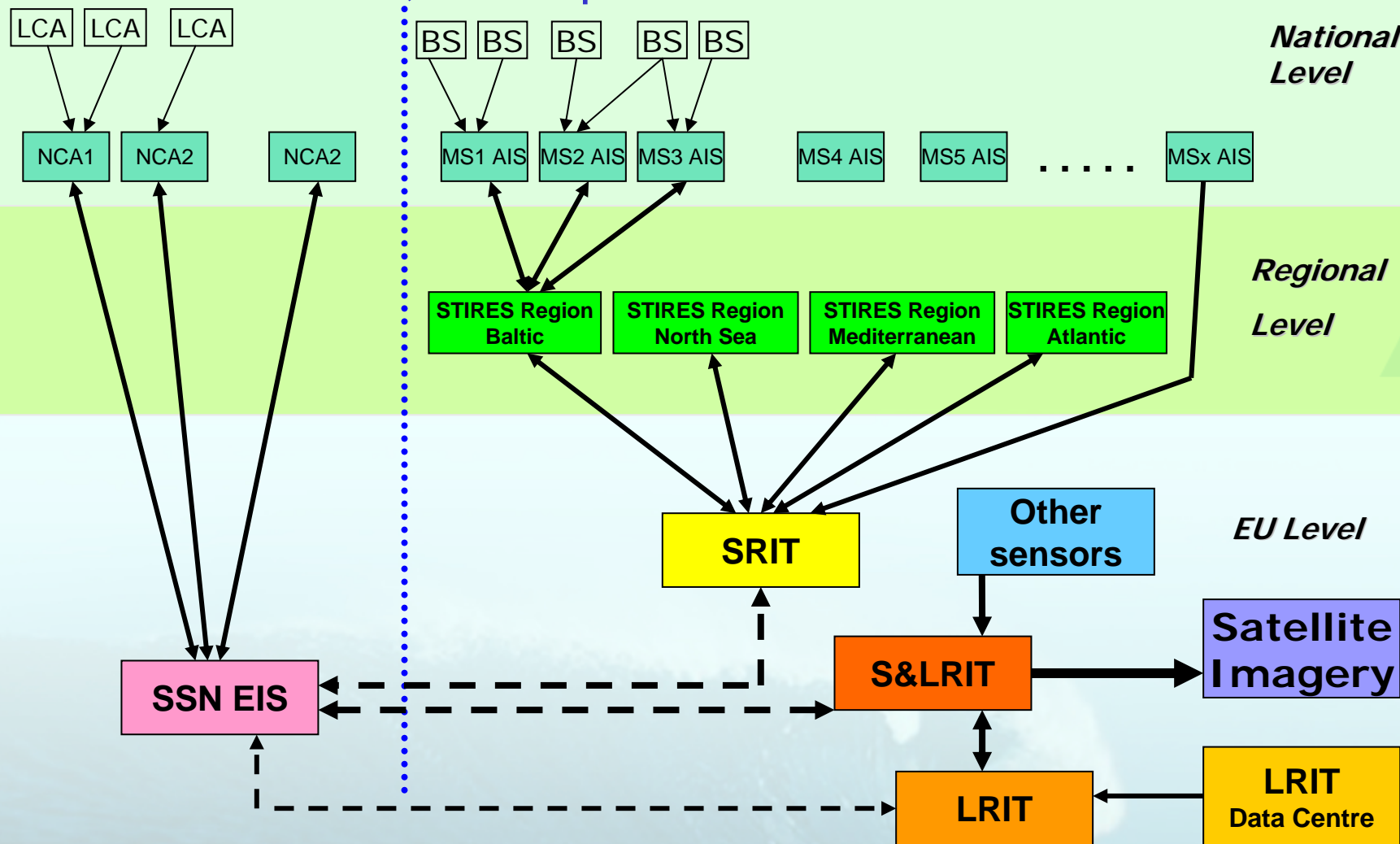
## STIRES module



Enhanced SSN

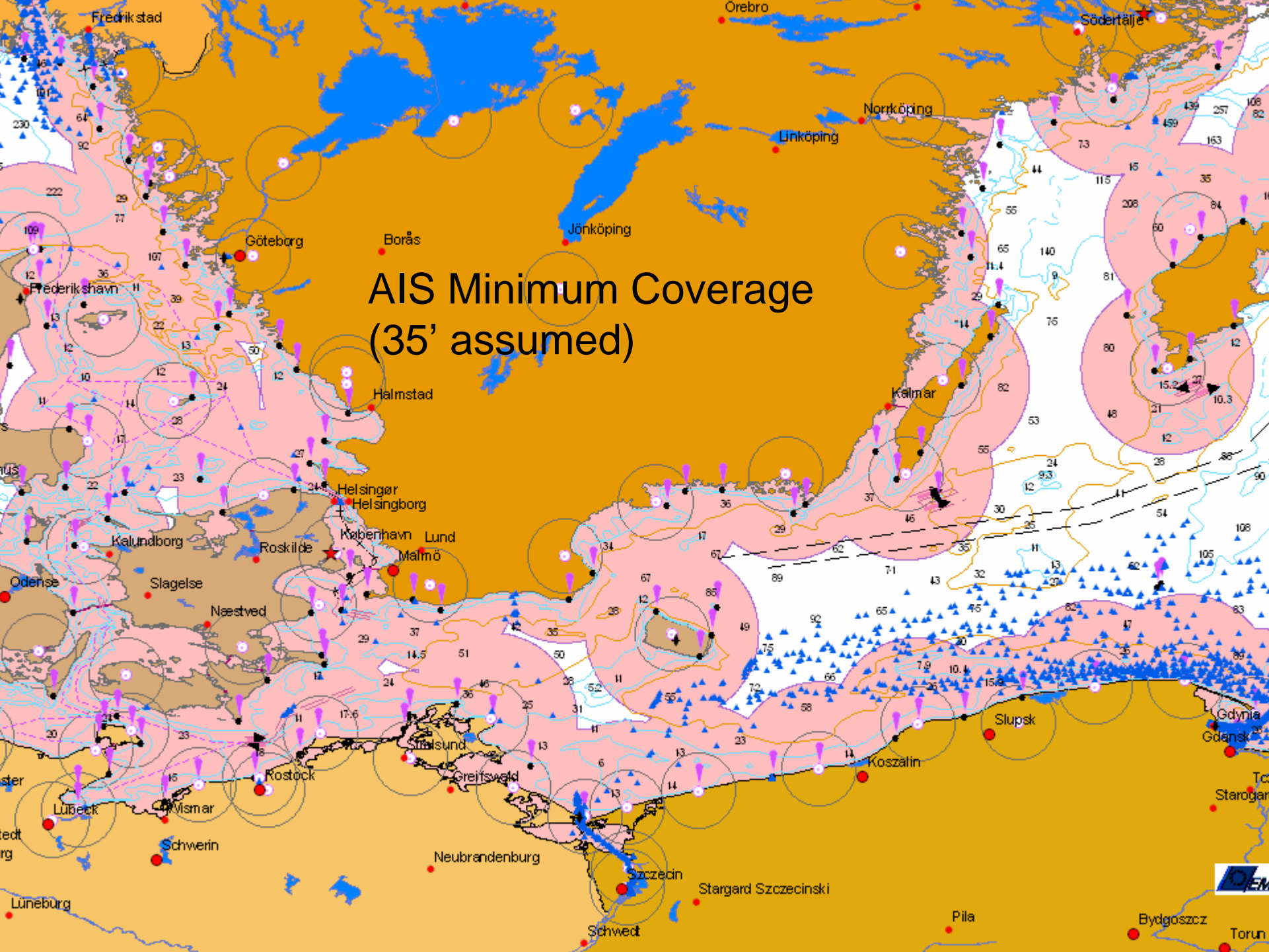


## Further, future possibilities in SSN

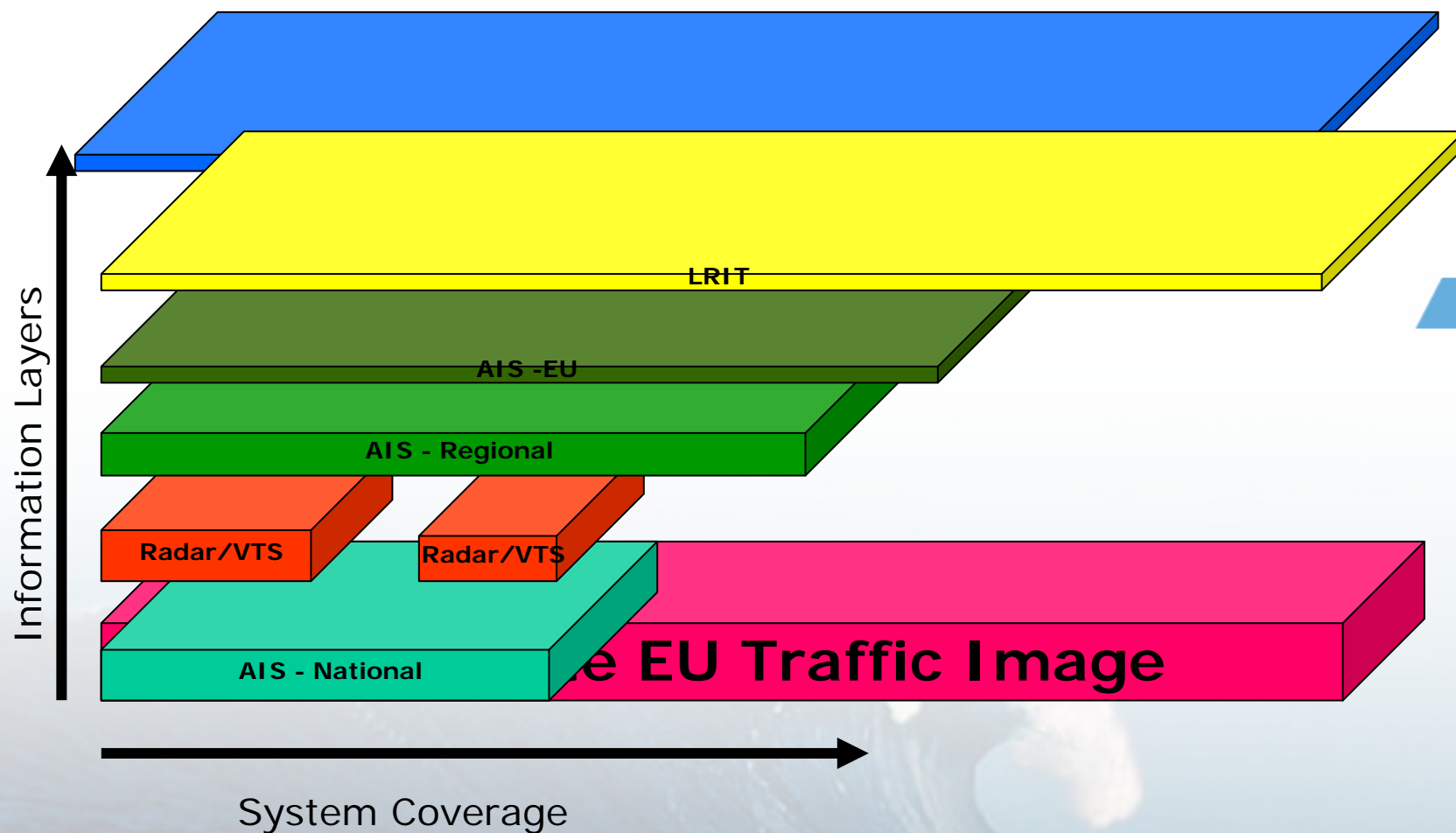




# AIS Minimum Coverage (35' assumed)



## Information Layers for Traffic Imagery



# Identification of applications

## a) Traffic monitoring

- Situation awareness
- Early warning
- Target tracking
- Coordination
- Redundancy potential

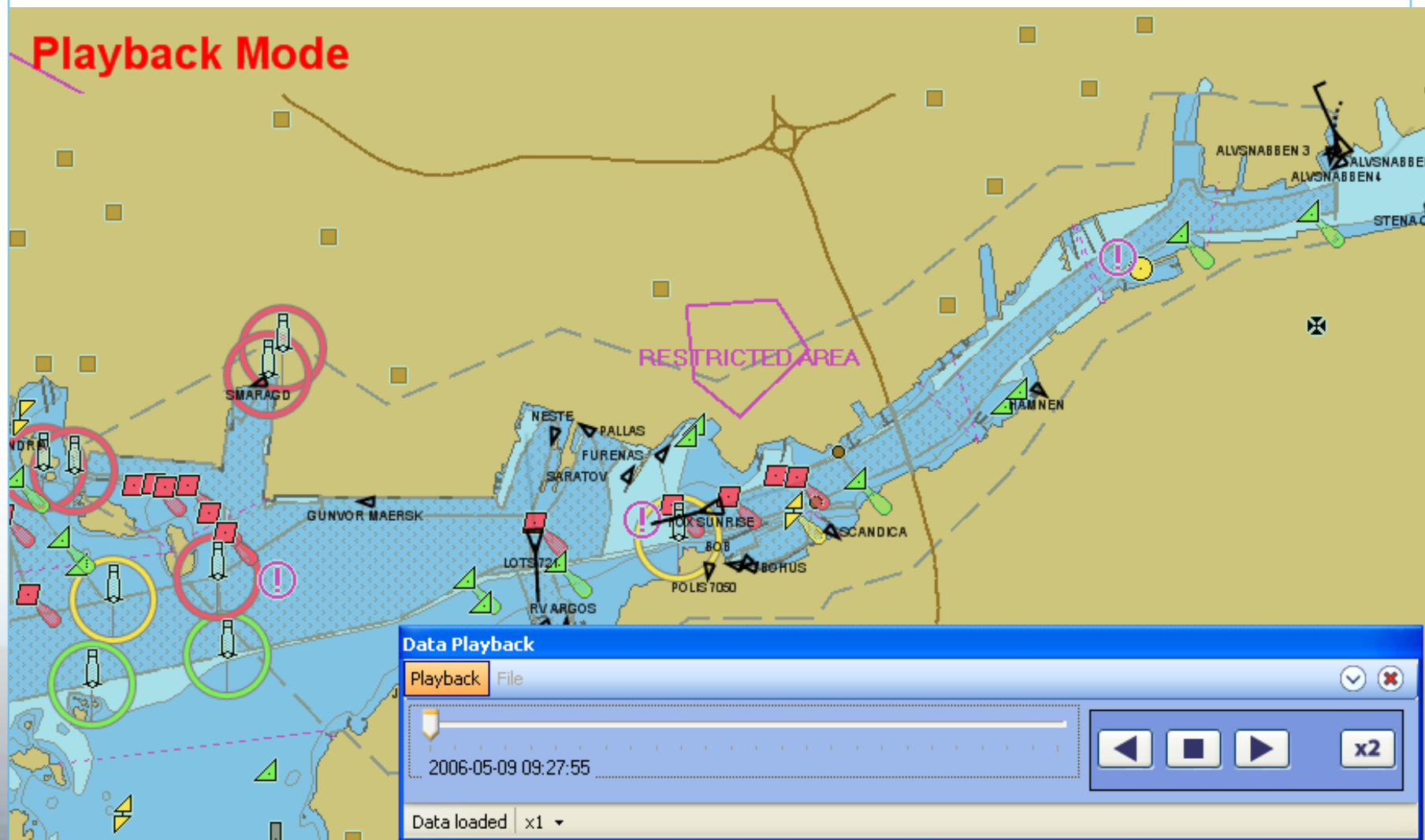
## b) Semi-automatic ship reporting

## c) Risk assessment and planning for efficient vessel traffic

## d) Accident and incident investigation

## e) Benefits from combining data at central level

## Playback Mode



## Study Recommendation => Creation of the STIRES Module

- To enable the “exchange and relay” of the information required by the Article 9 paragraph 2 of Directive 2002/59
- Collected data would be exchanged or relayed to the authorised administrations of the Member States in accordance with a predefined table of access rights and at a rate sufficient to satisfy their needs.
- Hence, further extended situation awareness

## Real time ?

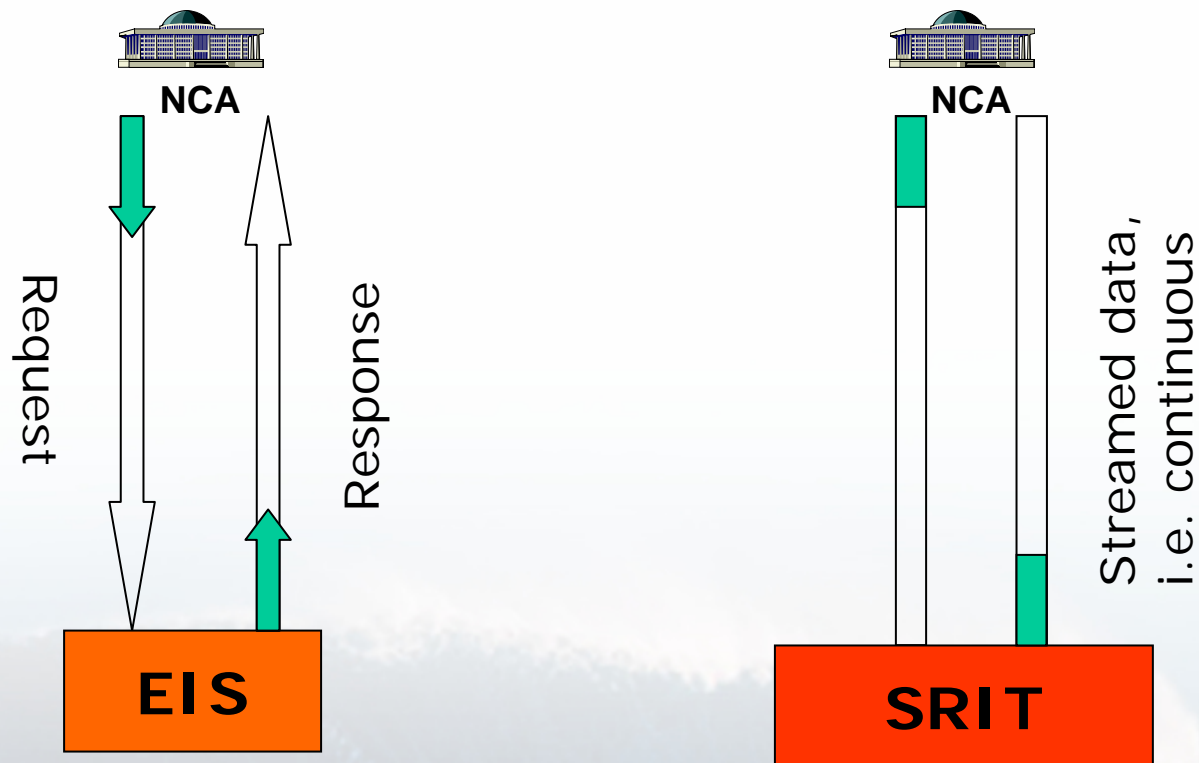
“Real time” exchange should be understood in the context of data :

- delivered end-to-end,
- non-stop,
- one vessel report after another

The data originated by the on board AIS => is picked up by the MS shore based AIS network and => relayed to the regional or EU network, at a sampled rate, without any delay.



## The differences of streamed Information Exchange within SSN





## Other features of the STIRES module

- Linkage of STIRES module within SSN
- A single interface for ship notifications/AIS messages
- New warning functionality added to the data stream for distribution to the Member States
- Additional User Functions at central level (e.g. superimposing traffic image over satellite pictures)
- A combination of SRIT and LRIT (a further future possibility)

# EMSA SRIT Pilot Project

- EMSA pilot project for 2007/2008
- Creation of the SRIT server
- Facilitation of exchange at the EU level