



Welcome to the WINMOS Final Seminar

7.4.2016

President Hotel

Baltic Sea is one of the busiest maritime areas in the world

- More than **2000 ships** are navigating the Baltic Sea at any given time
- More than **750 million tonnes** are transported to and from the Baltic Sea's ports every year
- That is about **15 %** of the world's maritime transportation



Winter navigation Cooperation



Develop **safe**, **reliable** and **efficient** winter navigation

Strategic and operational **cooperation** between the Baltic Sea countries

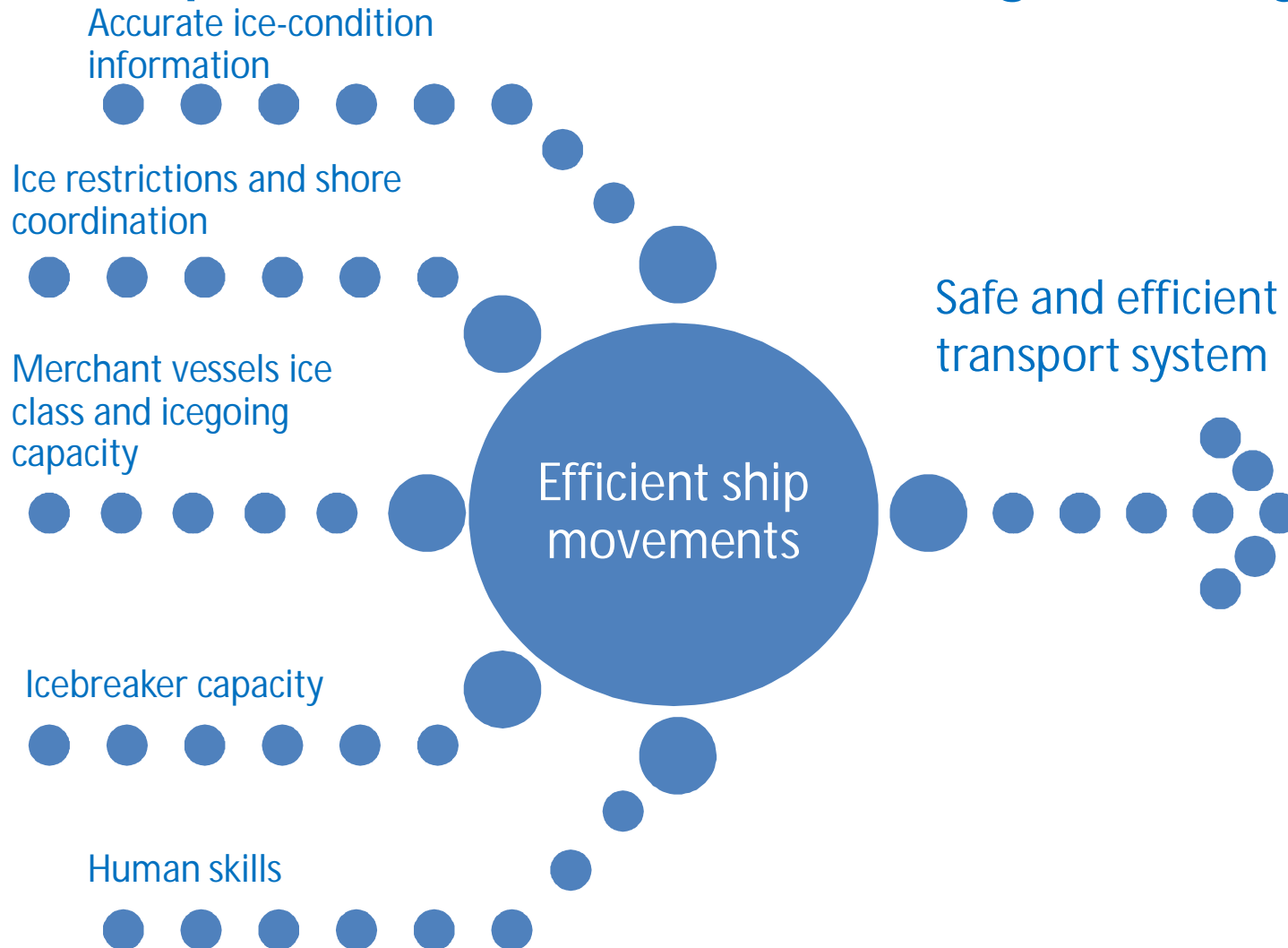
Long-term vision to create a joint **Baltic Icebreaking service**

Winter is a natural barrier Increased logistical costs

- Icebreaking costs
- Increased fuel costs
- Transport delays
- Damages to merchant vessels



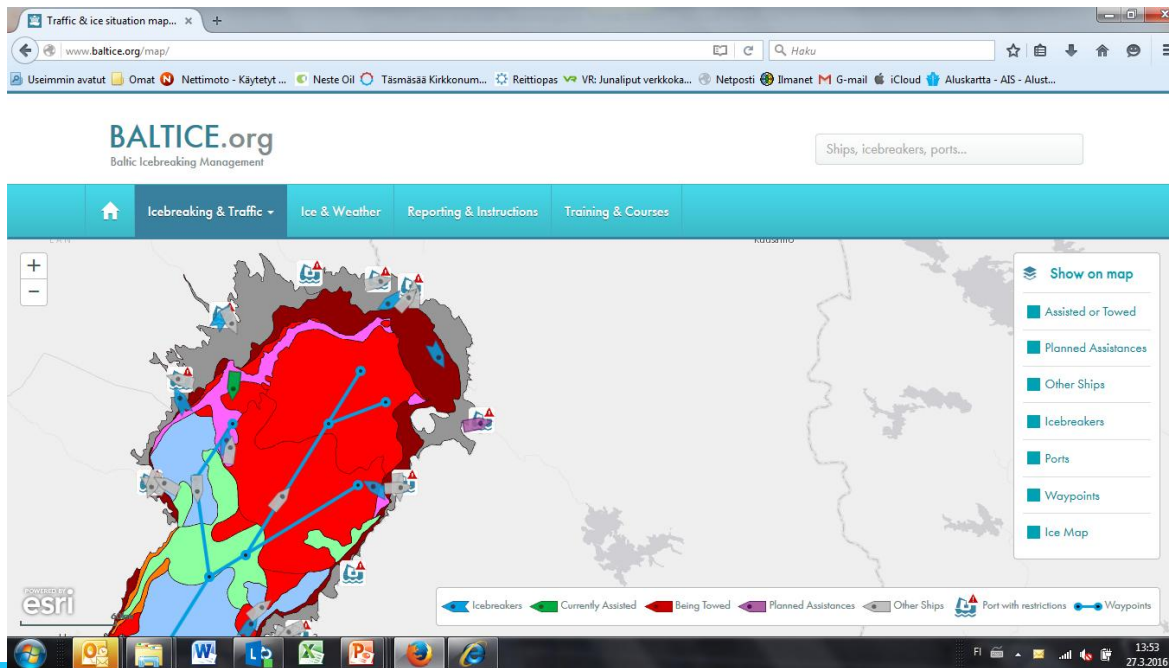
Components of winternavigation system



Baltic Icebreaker Management authorities BIM

Baltic states icebreaker management authorities organization for co-operation

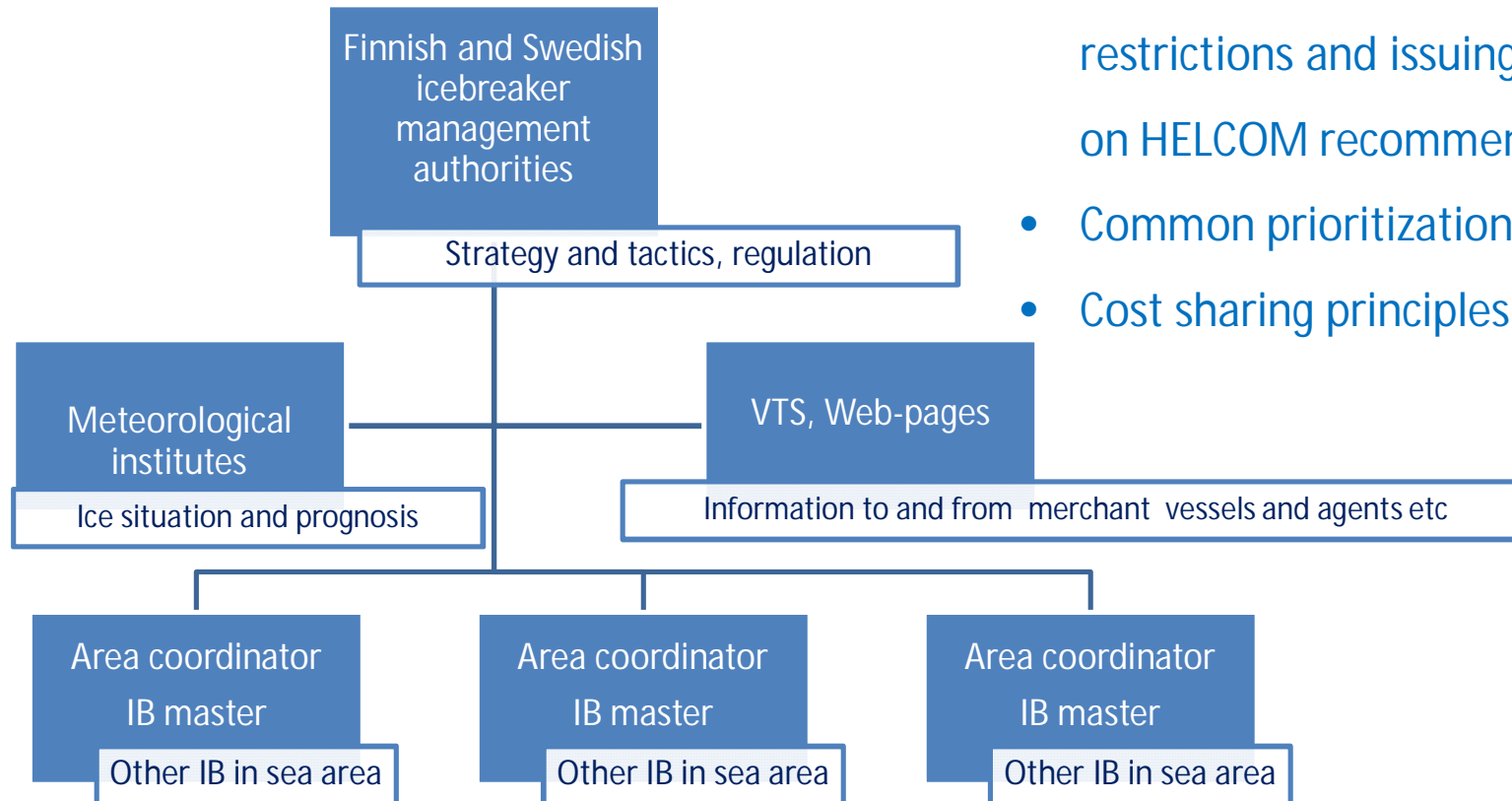
- Authorities experience available for chartering and even for long term system development decisions
- Long history of operations and performance of vessels in Baltic waters

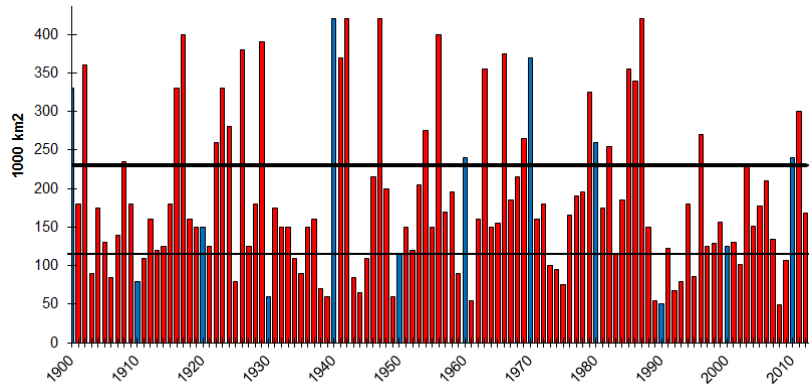


www.baltice.org
Primary information
source for operators
onshore and offshore

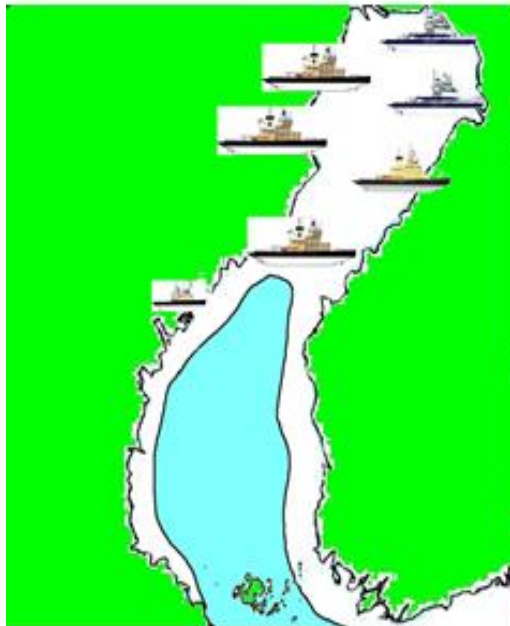
Principals of co-operation Management of icebreaking activities

- Both reserve required capacity
- Common management via IBnet
- Common principals of setting restrictions and issuing dispenses based on HELCOM recommendations
- Common prioritization
- Cost sharing principles





All winters are not
the same



Mild



Normal



Severe

Baltic Sea is often difficult even for icebreakers
"Keel" of an ice ridge is approximately 8-9 times the height of the "Sail"
Deepest measures ridges over 20m total height



In harsh ice conditions and under
ice pressure
Pure safety issue

WINMOS – Basic facts

- Impl. countries: Estonia, Finland and Sweden
- SMA Lead Partner
- Implementation Period: 2012-2015
- Budget: appr. 139 million Euro
- Contribution from EU 29,6 million Euro

The WINMOS partners

- Swedish Maritime Administration
- Finnish Transport Agency (in behalf of FMT)
- Estonian Maritime Administration
- Aker Arctic Inc (model testing)
- Image Soft OY
- Aalto University
- ILS (Naval architect)
- Finnish Metrological Institute
- Novia (Maritime Education)

Overall Objective

The main objectives of the Global Project are to develop the maritime winter navigation system and safeguard required icebreaking recourses to the future's requirement in EU's northernmost waters during winter time when large parts of the sea surface are covered by sea ice.

ACTIVITIES

1. Study on future demand for icebreaking capacity
2. Concept study on next generation icebreaker
3. Improvement of Environmental performance
4. Deployment of next generation IB-Net
5. Human element and training facilities
6. Upgrading and life extension of old icebreakers
7. Building a new icebreaker