

# ICT Services for Environment, Safety and Security of the Baltic Sea

Workshop in Helsinki 12<sup>th</sup> April 2010

## Findings & Next Steps



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# 1. ICT Research themes – Safety and Security

## 1. Proactive ICT maritime surveillance services

- Search and Rescue operations
- Oil spill prevention and management
- Countering terrorism and organized crime
- Cross border and cross sectoral exercises

## 2. System of systems

- Connecting existing systems
- Creating commercial services
- Multichannel routing for communication
- Data sharing platforms

## 3. Real-time maritime risk indication and forecasting

- Critical Infrastructure protection and societal resilience
- CBRN threats
- Anomaly detection
- Enhancing situational awareness

## 4. Enhanced transmission solutions

- Making the most of AIS and other transmission solutions
- Communication between passengers and/or crew within a ship and crew and authorities



## 2. ICT Research Themes - Environment

Promote the

### **”INTELLIGENT BALTIC SEA”**

initiative:

*creating a sustainable ICT-based system embracing the whole spectrum of activities from observations to presenting refined products, services and headline information, for a range of users including the management actions.*

Such a system would:

- integrate observations and models to covering relevant temporal and spatial scales;
- bridge observations and management providing reliable assessment and future scenarios;
- simplify and streamline the Baltic Sea information systems;
- provide automatic update of information;
- encourage the use of multi-platform approaches and combined strategies



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# The first crucial steps:

- ✓ Definition of the goals;
- ✓ Definition of “owners” of the system and potential users of data at various levels;
- ✓ Definition of data transfer/flows;
- ✓ Creating and ratification of routines securing free sharing of data, emergence of combined, open, and accessible data-bases;
- ✓ Strong support to cooperation between ICT, Environmental, Climate and Data Acquisition experts.

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# Examples of more specific R&D topics would include *e.g.*:

- Developing tools and protocols to secure that the system is conscious, scalable, failure-resistant and multipurpose.
- Developing methods to integrate data and analysis systems using ICT.
- Coordinating and integrating actions to improve remote sensing reliability and coverage of the Baltic area.
- Developing new and emerging technologies for in situ monitoring of the Baltic Sea,
- Creating affordable broadband satellite communication channels to R/Vs.
- Developing a 3-D image recognition software with learning capability (for automated treatment of biological samples).



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# 3. Funding roadmap – getting there..

## Aims of the funding cooperation

- Clarifying roadmap; a necessity for founding the cooperation
- Improving funding possibilities
- Get more resources, more focus and more results out of programs working in the field of ICT services for Baltic Sea region.

## Next steps; where are we now?

- Mapping of the funding organizations and programs
  - Where do you see your agency or program in the innovation chain: Basic research, applied research, R&D or venture capital?
  - Is the suggested theme interesting to your portfolio?
  - Are there any ongoing activities on the subject?



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# Funding roadmap – Possible improvements in innovation chain

- Building up a working cooperation between funding organizations by...
  - Launching a joint call
  - That the life span of the projects is seen from the beginning to the end so that all players can see their role in the game.
  
- For delivering this, we are introducing an idea of an “Utilization Tag”. It is a standard which is included to all proposals. The tag provides information of how the project results are planned to be used and further developed after the project has ended. At least following pieces of information are needed:
  1. Who is utilizing project results
  2. Who are the potential partners during the next step in innovation chain
  3. Which organization(s) would be potential funders
  
- The tag is used for coordination of the funding. With the help of a tag the project life cycle can be seen from a research idea to a commercial product or a service.



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# Funding cooperation – next steps

- Cooperation for harmonizing and focusing the funding in this topic.

## 1. Figuring out the funding roadmap together

- Partnering
- Building the pieces to the innovation chain

## 2. Organizing a joint call

## 3. Implementation of the utilization plans



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