BONUS

Joint Baltic Sea Research and Development Programme







BONUS Article 185



- Co-decision by the European Parliament and the Council in 2010
- Funding of EUR 100 million for the years 2011-2017
- EU funding 50 %,
 matching national funds
- 21 national funders involved
- Virtual common pot, common funding rules and rates





Funded by the eight EU member states and the EU; EUR 100 million for 2011-17

VISION

Economically and ecologically prosperous Baltic Sea region where resources and goods are used sustainably and where the long-term management of the region is based on sound knowledge derived from multidisciplinary research

MISSION

Integrating the Baltic Sea System research into a durable, cooperative, interdisciplinary and focused transnational programme in support of the region's sustainable development









On the background of BONUS

- EU focus on sustainable development of the seas and sustainable use of natural resources
- HELCOM Baltic Sea Action Plan and the EU Marine Strategy Framework Directive, other European, regional and national coastal and marine environmental and sustainability policies and plans
- Marine ecosystem management needs to be based on best knowledge and innovation – science ja technical solutions need to support protection action



2006



BONUS strategic research agenda process









Structure of the current research agenda

Five strategic objectives:

19 themes:

Ecosystem

- Biogeochemical processes
- Food webs
- Biodiversity
- Hazardous substances

Coast and catchment area

- Catchment land cover
- ICZM

- Coastal systems
- Eco-innovation

Sustainable use of goods and services

- Maritime risks
- Fish stock assessments
- Fisheries management
- Pollution by shipping
- Sustainable aqua culture

Societal responses

- Governance and policy
- Lifestyles and well-being
- · Maritime spatial planning

Observation and data management

- Integrated monitoring programmes
- Innovative measurement techniques
- ICT services





BONUS calls

2007: Ecosystem approach to management

16 projects, 2009-2011, EUR 22 million

2012: Viable ecosystem and Innovation

20 projects funded for 2014-2017, EUR 33 million

2014: Sustainable ecosystem services

8 projects funded for 2015-2017, EUR 17 million

2015: Call to be launched later in 2015





BONUS projects' coverage of SRA



RESEARCH THEMES (ABBREVIATED TITLES)	CURRENT STATUS OF THE KEY THEMES' COVERAGE
1.1 Dynamics of biogeochemical processes	
1.2 Changing biodiversity	BAMBI, BIO-C3
1.3 Food web structure and dynamics	
1.4 Impacts of hazardous substances	
2.1 Changes in catchment land cover patterns	SOILS2SEA
2.2 The role of the coastal systems	COCOA
2.3 Integrated coastal management	BALTCOAST
2.4 Eco-technological approaches	MICROALGAE, OPTITREAT, PROMISE, SWERA, ZEB
3.1 Maritime risk analysis and management	STORMWINDS
3.2 Effects of air and water pollution by shipping	SHEBA
3.3 Improving stock assessments, spatial heterogeneity of stocks	INSPIRE
3.4 Evaluation framework for fisheries management	
3.5 Sustainable aquaculture in the Baltic Sea	
4.1 Governance structures, performance and policy instruments	CHANGE, GO4BALTIC, GOHERR, MIRACLE
4.2 Linking ecosystem goods and services to human lifestyles and well-being	BALTICAPP
4.3 Maritime spatial planning	BALTSPACE
5.1 Integrated monitoring programmes	BLUEPRINT
5.2 Innovative measurement techniques	AFISMON, FERRYSCOPE, FISHVIEW, HARDCORE, PINBAL
5.3 User-driven ICT services	ANCHOR, ESABALT, GEOILWATCH







BONUS projects....



...boost sustainable fisheries...

- INSPIRE improves the knowledge basis for sustainable fisheries
- GOHERR looks for ways to bridge policy sectors in ecosystem based management of fisheries
- FISHVIEW improves migrations of fish in barraged rivers





BONUS projects....



...look for environmentally safer maritime activities...

- CHANGE seeks to alter the antifouling practices of leisure boats
- STORMWINDS improves safety of winter navigation
- SHEBA looks for ways to reduce reduce pressures from shipping sensu MSFD
- SWERA reduces environmental risks from sunken wrecks
- ZEB finds ways to clean oily waters onboard ships
- ESABALT improves maritime safety by efficient situational data handling
- ANCHOR helps captains to operate their ships safely in harbours





BONUS projects...



....develop methods and approaches to tradeoff between various sectors and interests....

- GO4BALTIC seeks coherence between national and international environmental and agricultural policies
- BaltCoast approaches coastal zone issues in a holistics way
- BaltSpace develops MSP as a policy integrator
- BalticApp clarifies sea's role for human wellbeing
- MIRACLE identifies new configurations for governance to reduce nutrient leaks and flood risks





Support to policies



- 16 BONUS+ projects 2009-2011 under theme *Ecosystem* approach to management
- Strong support to HELCOM's Baltic Sea Action Plan & MSFD
- Excellent research and active policy communications
 - Contributions to 37 consultations
 - Members in 570 stakeholder and scientific committees
 - 49 modifications to policy documents and action plans
 - 153 suggestions for designing, implementing and evaluating the efficacy of public policies and governance
- AMBIO Special issue 1/2014 summarises the outcome





8th VASAB Ministerial Conference, 26.9.2014



HELCOM's 40th Jubilee 14.3.2014



Forum of EU Strategy for the Baltic Sea Region & Baltic Deveploment Forum 3.6.2014











BONUS young scientist activities in context

Young scientist transferrable skills training





About the presenter:



Hugh Kearns (Flinders University, Australia) is recognised internationally as a public speaker, educator and researcher. He regularly lectures at universities across the world and has recently returned from a lecture tour of the UK and the US which included lectures at Oxford, Harvard and Stanford. His areas of expertise include self-management, positive psychology, work-life balance, learning and creativity. He draws on over twenty years of experience as a leading training and development professional within the corporate, financial, education and health sectors in Ireland, Scotland, New Zealand and Australia. He has coached individuals, teams and executives in a wide range of organisations in the public and private sectors. As a co-author with Maria Gardiner, he has published six books which are in high demand both in Australia and internationally. Ithinkwell.com.au





BONUS interim assessment



The report of the Independent BONUS Interim Evaluation Panel, 28 October 2014

"...Panel is **very impressed by BONUS's achievements** founded upon the development of transnational and trans-disciplinary cooperation, of human and institutional capacities, of information sharing and the trust in the integrity of all actors within the management of successive phases of the programme.

...Panel is confident that there will be further major advances in policies and management actions to enhance the sustainable use of the Baltic Sea ecosystem resulting from the outcomes of BONUS that would not have been achieved without this integrated approach."

....

...could be considered **appropriate** for addressing similar challenges **in other European regional seas...**





BONUS interim assessment



REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL: Interim Evaluation of the Joint Baltic Sea Research and Development Programme BONUS, 30 January 2015

"BONUS's macro-regional approach to the Baltic and its catchments has enabled stronger impact than a broader programme directed towards the EU as a whole could have achieved."...

"BONUS integrates research programming, supports establishment of a European Research Area and contributes to several key policies, notably: the EU Strategy for the Baltic Sea Region, the EU Marine Strategy Framework Directive, the EU Common Fisheries Policy and the HELCOM Baltic Sea Action Plan."...





"If BONUS would not exist, it would have to be invented."

The Finnish Baltic Sea Ambassador
Ms. Erja Tikka, responsible for Finland's overall
Baltic Sea policy and EUSBSR relations, BONUS
Interim Evaluation report, 28 October 2014







BONUS 2

vision for the future

Background: The Skagen lighthouse where the North Sea and the Baltic Sea meets.

Source: http://www.10ga.com/



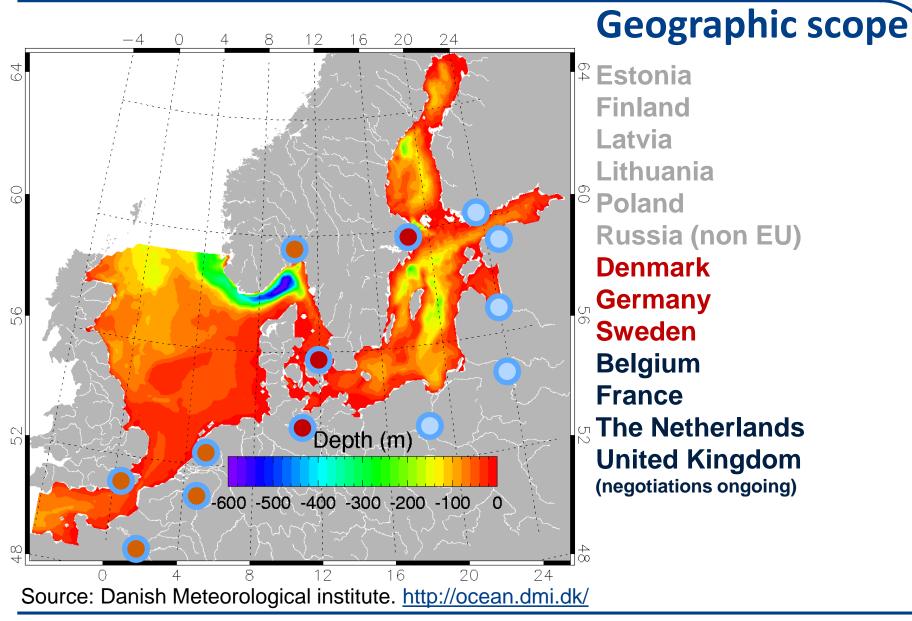


Blue Growth challenges

- How to combine expansion of blue economy with good environmental status?
- How to minimize trade-offs among different uses of marine ecosystem services?
- How to arrive to a truly knowledge-based governance and management?
- How to make the blue growth benefits accessible to all citizens disregarding of their occupation, place of living, age, gender?











Rationale for extension

Two northern European regional seas:

- similar challenges from climate and sea level change
- runoff from large, densely populated and heavily exploited catchment areas
- interconnected seas, similar weather patterns, impacts of water exchange with the North Atlantic
- homogeneous cultures and visions for exploiting marine resources
- similar policy frameworks:
 - 12 out of 14 coastal states are EU Member States
 - similar regional conventions, HELCOM and OSPARCOM





Thematic scope

- Overcoming fragmentation in research and innovation: to structure the marine and maritime research and innovation effort of the Baltic Sea and the North Sea EU member states, enable concerted and efficient response to the basin-wide challenges across national borders and sectors.
- Supporting ecosystem based management: interdisciplinary research and innovation enabling ecosystem-based management utilizing marine ecosystem services and achieving and maintaining of good environmental status (including observation, assessment and forecasting capacity)
- Fostering sustainability of blue growth: new knowledge base for appraising the socio-economic value of different ecosystem services and providing tools for comprehensive planning and management of maritime activities
- Transferring knowledge to practice: for devising 'fit-for-purpose' regulations, policies, management tools, practices, and incentives and innovative technology enabling sustainable blue growth
- Supporting human wellbeing: for supporting social sustainability of blue growth and human well-being including a fair distribution and inclusive access to the benefits of blue growth

























