

**Stakeholder workshop:
“Stakeholders as important actors in Marine
Strategy Framework Directive implementation:
From decision makers to general public”**

**15-16 November 2012
Tallinn, Estonia**

The role of ICES and activities in relation to the MSFD processes

Dr. Eero Aro

ICES

Finnish Game and Fisheries Research Institute



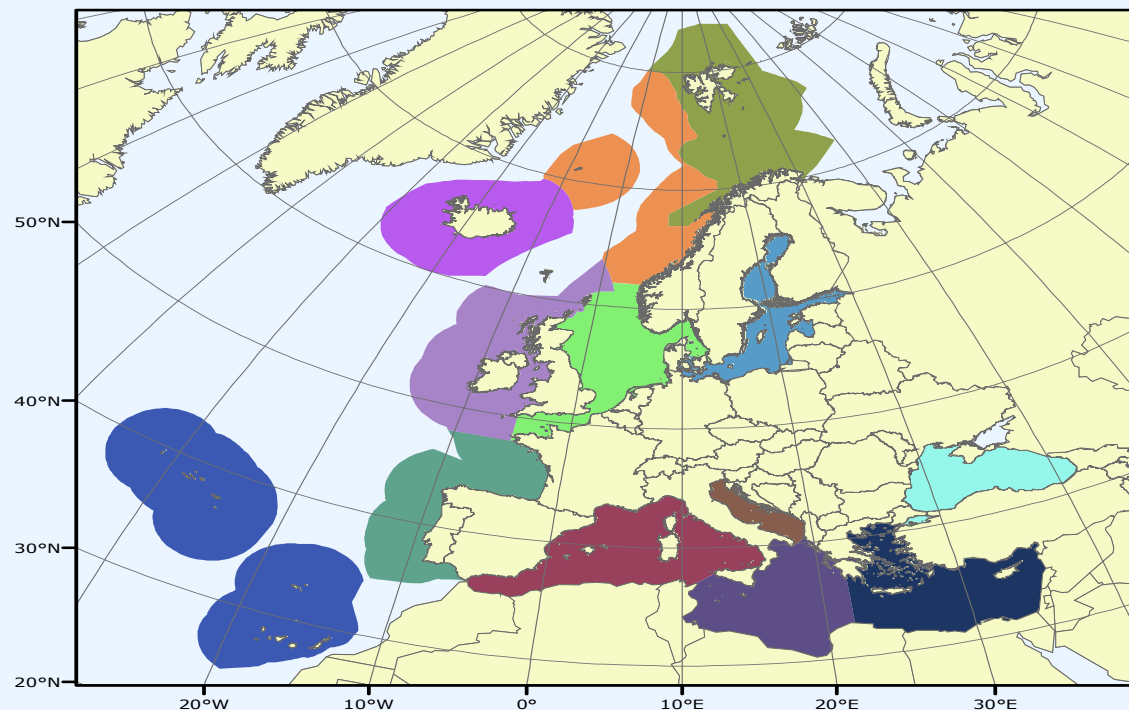
What have we done so far?

- **ICES has contributed throughout the MSFD development** and implementation process by creating and managing task groups in cooperation with the Joint Research Center (JRC) 2008-2009.
- Task groups **provided the background information for the Commission Decision on criteria and methodological standards** on good environmental status of marine waters (2010/477/EU).
- **ICES provided guidance to the implementation** of Descriptor 3+ (commercially exploited fish and shellfish) (2011)
- In 2011, **ICES Council established the Council Steering Group** on the Marine Strategy Framework Directive to consider:

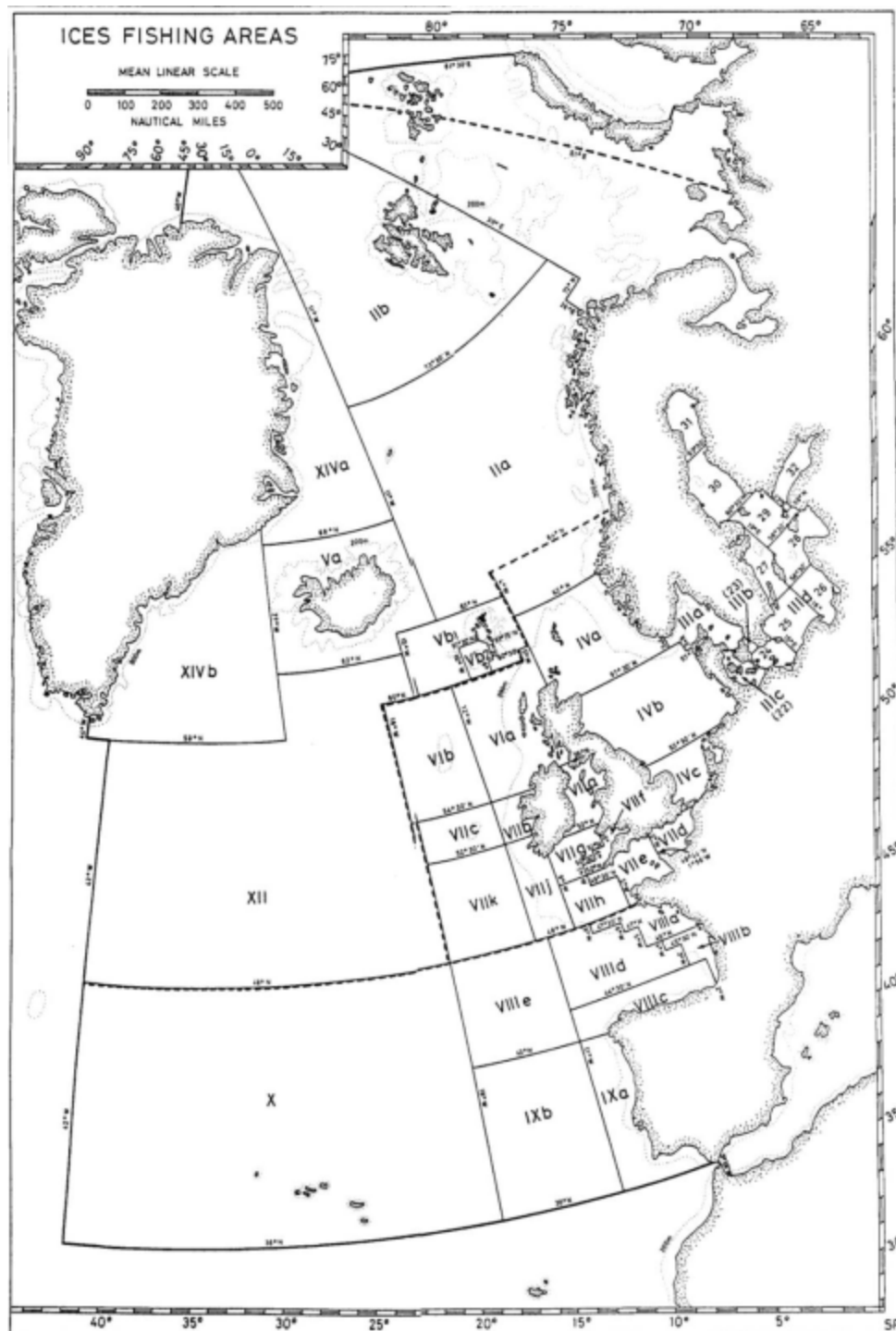
“How to help ICES member countries to implement MSFD?”

Descriptors:

1. Biological Diversity
2. Non-indigenous Species
3. Commercially Exploited Fish and Shellfish Populations
4. Food Webs
5. Eutrophication
6. Seafloor Integrity
7. Alterations of Hydrographical Conditions
8. Contaminants and Pollution Effects
9. Contaminants in Fish and other Seafood
10. Litter
11. Energy and Noise



ICES
CIEM



What next and what are our resources and vehicles?

- ICES has 20 member countries:
Belgium, Canada, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, United Kingdom, and the United States of America.
- ICES comprises a network of more than 4000 scientists from almost 300 institutes, with about 1600 scientists participating regularly in ICES working groups.

Council Steering Group on MSFD 2012

- | | |
|---|--------------------------|
| <ul style="list-style-type: none">• Gerd Kraus (Chair, ICES Delegate, Germany)• Bill Turrell (ICES Delegate, UK)• Carlos Vale (ICES Delegate, Portugal)• Pierre Petitgas (ICES Delegate, France) | ICES Delegates |
| <ul style="list-style-type: none">• Anne Christine Brusendorff (ICES General Secretary)• Claus Hagebro (ICES Secretariat) | ICES Secretariat |
| <ul style="list-style-type: none">• David Connor (EU-DG-ENV) | EU-COM DG ENV |
| <ul style="list-style-type: none">• Wera Leujak (German National Environmental Agency)• Eugene Nixon (ACOM/SCICOM MFSD SG)• Yvonne Walther (ACOM/SCICOM MFSD SG) | Expert scientists |
| <ul style="list-style-type: none">• Joachim Raben Levetzau (Danish Nature Agency)• Kim Raegaard (Danish Ministry of Food, Agriculture and Fisheries) | National
ICES Clients |

Output from Council Steering Group on MSFD

How to help member countries ?

EU Marine Strategy Framework Directive	ICES contribution and activity
1. Initial Assessment	Scientific development, benchmarking and operationalization of integrated ecosystem assessments (IEAs)
2. Good Environmental Status	Operational and concept review, including development and test of new assessment methodologies.
2.a Indicators	Review of existing indicators, and selection and development of new integrated CFP and MSFD indicators.
2.b Environmental targets	Development of methodologies to facilitate target setting and evaluation.
3. Monitoring programmes	Coordination of international monitoring programmes for fish stocks and ecosystems. Development of monitoring guidelines, programmes, and integrated ecosystem surveys.
4. Programmes of measures	Development of management strategy evaluation tools for simulation of management measures and review of proposed measures.

Output from Council Steering Group on MSFD

How to help member countries ?

EU Marine Strategy Framework Directive	ICES contribution and activity
5. Marine spatial planning, including marine protected areas	Contributions to the development of next generation ecosystem-based marine spatial planning. Identification and review of vulnerable marine ecosystems (VMEs), proposed Marine Protected Areas (MPAs and ecologically and biologically significant areas (EBSAs).
6. Interregional co-operation	Supporting compatibility and coherence between regions.
7. Data handling, dissemination, and display	Provision of databases and related services
8. Training	Provision of tailor made MSFD relevant training.
9. Networking	Sponsoring science symposia and conferences, and participation in external projects towards development, stimulation and synthesis of relevant science. Strengthening cooperative science approaches.

What has happened in 2012?

Overview of MSFD relevant activities in ICES during 2012

Symposia: Research and ecosystem-based management strategies supporting the implementation of the Marine Strategy Framework Directive (Marine Strategy 2012), 13-15 May 2012, Copenhagen, Denmark.

ASC 2012 Theme Session in Bergen Norway 17-

22.09.2012: Implementation of the European Union Marine Strategy Framework Directive (EU MSFD): Implications for science and policy.

1. National approaches and outcomes of the initial assessments
2. Targets and indicators developed to assess Good Environmental Status
3. Approaches to **integrate assessments across indicators and descriptors**
4. Coordination of approaches to implementation **across marine regions**
5. Progress on the development of **monitoring programmes** to assess GES
6. Assessments of the **costs and benefits** of implementation of the MSFD



What has happened in 2012?

Overview of MSFD relevant activities in ICES during 2012

Expert group under ACOM:

- 1. The Working Group on the Ecosystem Effects of Fishing Activities (WGECO), Copenhagen, Denmark, 11–18 April 2012.**
- 2. Stock assessment WGs (many) and SGs, integrated assessment WGs, multispecies assessment WGs, methods WGs etc. to evaluate the state of the stocks in ICES area**
(in total In 2012 ICES has so far provided fisheries advice on more than 240 stocks)

What has happened in 2012?

Expert groups under SCICOM:

1. **The Working Group on Biodiversity Science (WGBIODIV)**, Nantes, France, 30 January–3 February 2012.
2. **The Joint DFO, KnowSeas and ICES Workshop: Quality assurance of scientific and integrated management processes for use in marine planning and coastal zone management (WKQAMSP)**, Halifax, Canada, 28 February to 1 March 2012.
3. **The Working Group on Biological Effects of Contaminants (WGBEC)**, Porto, Portugal, 12–16 March 2012 **The Marine Chemistry Working Group (MCWG)**, Southampton, UK, 20–24 February 2012.
4. **The ICES-IOC Working Group on Harmful Algal Bloom Dynamics (WGHABD)** Oban, Scotland, UK, 24–27 April 2012.
5. **The International Bottom Trawl Survey Working Group (IBTSWG)**, Lorient, France, 27–30 March 2012.

What has happened in 2012?

Expert groups under SCICOM:

6. **The Working Group on Ecosystem Assessment of Western European Shelf Seas (WGEAWESS)** Lisbon, Portugal, 24–27 April 2012.
7. **The Working Group on Marine Habitat Mapping (WGMHM)**, Isle of Vilm, Germany, 22–25 May 2012.
8. **The Working Group on Oceanic Hydrography (WGOH)**, ICES Headquarters, Copenhagen, Denmark, 20–22 March 2012.
9. **The Working Group on Fisheries Acoustics, Science and Technology (WGFAST)**, Brest, France, 23–27 April 2012.
10. **The Working Group on Multispecies Assessment Methods (WGSAM)** Venice, Italy, 22–26 October 2012 .
11. **A joint SCICOM and ACOM Strategic Initiative on Biodiversity Science and Advice (SIBAS)** was established in order to ensure that ICES develops and promotes the linkage of marine biodiversity science and advice.



For 2013 and beyond

Action points:

1. DRAFT Overview of ICES work in relation to MSFD:
Report available soon (November-December 2012)

2. Monitoring – integrated surveys

- a) Develop a white paper on integration of fisheries and environmental surveys
- b) Stimulate a discussion in ICES leadership on a substantial review of coordinated surveys
- c) Develop concrete proposals for integrated surveys, e.g. IBTS, BITS to address an call by DG-ENV (New Knowledge for an integrated management of human activity in the sea)



For 2013 and beyond

Action points:

3. Data handling and model tools

- a) Develop an unsolicited offer to member states and make this part of the ICES communication and outreach strategy

4. Communication and outreach strategy

- a) Secretariat to elaborate communication and outreach material that highlights the ICES portfolio.
- b) Portfolio highlighted at meetings with recipients of ICES ADVICE
- c) Common symposium with RSC in 2013 ??

5. Training

TG was asked to develop and highlight MFSD relevant courses (e.g., design of monitoring programmes, indicator and risk assessments)



For 2013 and beyond

Action points:

5. ICES training courses in 2013

1. **Stock Assessment (Introduction)**, 27-31 May 2013, Centro Oceanográfico de Vigo, Spain. Read more. Registration deadline: 5 April 2013. Course with EU Marine Strategy Framework Directive relevance.
2. **Fisheries Management to meet Biodiversity Conservation needs**, 18–20 June 2013, ICES HQ, Copenhagen, Denmark. Read more. Registration deadline: 26 April 2013. Course with EU Marine Strategy Framework Directive relevance.
3. **Ecosystem Modelling for Fishery Management**, 26-30 August 2013, ICES HQ, Copenhagen, Denmark. Read more. Registration deadline: 7 June 2013. Course with EU Marine Strategy Framework Directive relevance.



For 2013 and beyond

Action points:

5. ICES training courses in 2013

4. **Trawl Survey Design and Evaluation** 4-8 November 2013, ICES HQ, Copenhagen, Denmark. Read more. Registration deadline: 12 September 2013. Course with EU Marine Strategy Framework Directive relevance.
5. **Analysing and visualization of VMS and EU logbook data using the VMStools R package**, 11-15 November 2013, ICES HQ, Copenhagen, Denmark. Read more. Registration deadline: 13 September 2013. Course with EU Marine Strategy Framework Directive relevance.
6. **Application of Geostatistics to analyse spatially explicit Survey data in an Ecosystem Approach**, 2-6 December 2013, Mines ParisTech, Geosciences Center/Geostatistics, Fontainebleau, France. Read more. Registration deadline: 11 October 2013. Course with EU Marine Strategy Framework Directive relevance.



For 2013 and beyond

Action points:

6. Strategic Focus areas (gap analyses)

For ecosystem assessments:

- a) Focus on the role and operation of indicators
- b) Focus on the roles of habitats in ecosystem functions
- c) Develop methods for assessing cumulative impacts
- d) Operationalize methods for ecosystem assessments using indicators and habitats

For integrated monitoring:

- a) Adapt current monitoring methods towards integrated monitoring of ecosystems
- b) Ensure that data collection and processing be coordinated, accessible and interoperable
- c) Facilitate the provision of harmonized data, suite of models and mapping tools as inputs to ecosystem assessments



For 2013 and beyond

Action points:

6. Strategic Focus areas (gap analyses)

For ecosystem management:

- a) Develop end-to-end modelling platforms to evaluate management scenarios of regional seas including trade-offs
- b) Develop tools for spatial design of human activities and conservation needs (MSP is one of the few tools capable of integrated management across sectors!)
- c) Facilitate adaptive and participatory approaches

Thank you for your attention

