

# European maritime transport and port activities: identifying policy gaps towards reducing environmental impacts of socio-economic activities

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European Topic Centre  
Inland, coastal, marine waters



# Who we are and what we do

- A private not-for-profit think tank for applied environmental research, policy analysis and consultancy
- Support the EEA in its mission to deliver information to policy-makers and the public for the development and implementation of sound environmental policies – 2012 State of the Coasts Report



# The importance of marine and coastal areas

- European maritime regions are valuable in terms of socio-economic activities.
- Increasing evidence points to significant environmental degradation in European coastal areas
- The health of marine and coastal ecosystems is highly dependent on human activities
- Government policies and regulations address environmental pressures which compromise ecosystem health



# Policy framework

- Integrated Maritime Policy
- Marine Strategy Framework Directive (MSFD) to protect and conserve the marine environment
  - ▶ Ecosystem based management
  - ▶ Eleven descriptors to determine GES
- International agreements under the International Maritime Organisation (IMO) regulate the environmental performance of ships



# MSFD descriptors to determine good environmental status (GES)

Biological diversity is maintained. The quality of and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.

Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.

Populations of all commercial exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.

All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.

Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters.

Sea-floor integrity is at a level that ensures that the structure of and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.

Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems.

Concentrations of contaminants are at levels not giving rise to pollution effects.

Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.

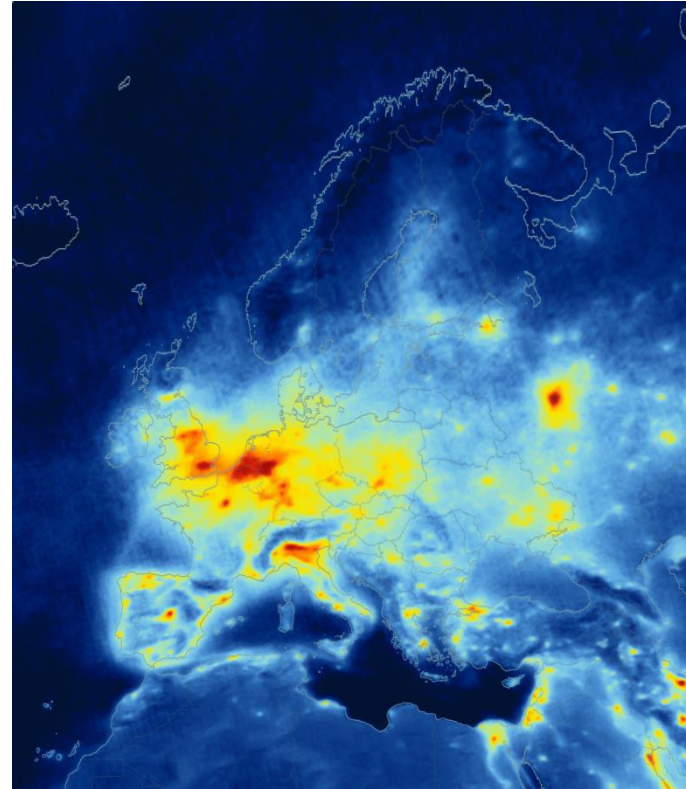
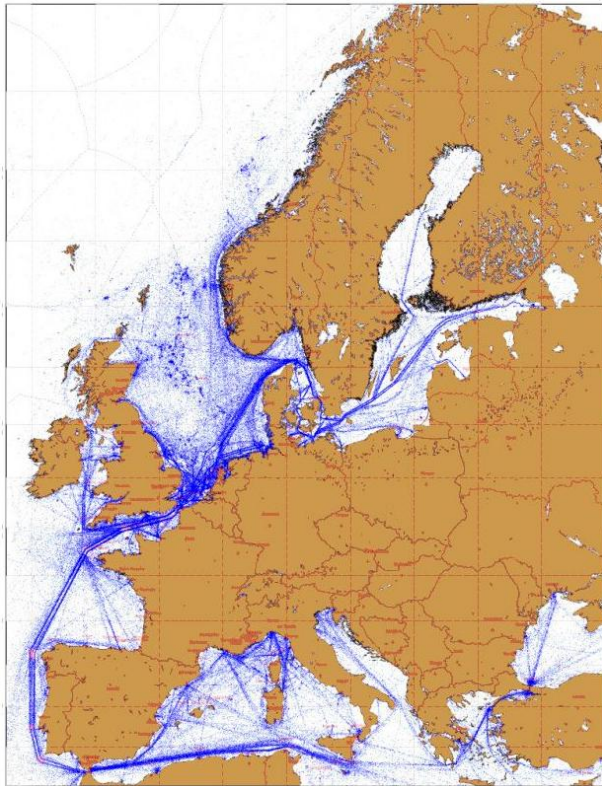
Properties and quantities of marine litter do not cause harm to the coastal and marine environment.

Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.

# Spatial considerations and cumulative pressures

- Cumulative environmental pressures are considered
  - ▶ Result from several activities and creates hotspots of environmental impact
  - ▶ Shift away from sector specific policy, consider activities in an integrated manner
- Examples
  - ▶ Areas of high traffic and marine animals
  - ▶ Proximity of shipping/port activities combined with other activities – i.e. Increased underwater noise
  - ▶ Emissions concentrated in shipping/port areas combined with other activities

# Cumulated NO2 from European shipping (2002 - 2009)



Source: European Space Agency, 2012



# What does this mean for shipping and ports?

- There is an increasing obligation from government to address environmental pressures on marine and coastal areas (MSFD)
- Previously unregulated pressures from shipping and ports are becoming more important because of new policies and because they are examined in combination with other activities
- Previously unsuccessful efforts to address environmental pressures from shipping and ports take on a new urgency





# Identifying policy gaps

- Underwater noise
- Ballast water
- Greenhouse gas emissions
- Anchoring and shading (abrasion)
- TBT removal from ships and port areas

# Addressing policy gaps

- Underwater noise → no mechanism to reduce pressure, international agreement or EU will take action
- Ballast water → BWM Convention has not yet been ratified, increasing urgency to do so

# Addressing policy gaps

- Anchoring and shading (abrasion) → not addressed but further scientific research is needed to understand the environmental pressures and impacts
- TBT removal from ships → guidance by IMO, but potential need for more advanced techniques to ensure reduced contamination in sediment when removing or dredging etc.
- Greenhouse gas emissions → IMO or EU mechanism (ETS?)

# Thank you

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