Commission Proposal for an EU Regulation on Monitoring, Reporting and Verification of CO₂ Emissions from Maritime Transport

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1. Why is the Commission proposing an EU MRV system for CO$_2$ emissions from maritime transport?

1. What is the Commission proposing?

1. Next Steps
Why is the EU acting on CO2 emissions from Maritime Transport?
Estimated growth of CO$_2$ emissions from international shipping (in million tons)

Data sources: 2$^{nd}$ IMO GHG study 2009 for emissions until 2007; MEPC 63/INF 2 for average scenario projections 2010-2050
Maritime GHG Emissions in EU

- $\approx 180$ Mt CO$_2$ in 2010 (precise amount unknown)
- Higher emissions than EU chemical industry, refineries or cement production
- Increased by 25% since 1990
- Significant further growth expected if no action
All other sectors covered by EU measures

GHG emissions by sector in EU (2010) and their coverage by policy instruments

- Energy production: 28%
- Industry: 18%
- Land transport: 19%
- Households/services: 15%
- Agriculture: 9%
- Waste: 3%
- International aviation/international shipping: 7%
- Others: 1%

Legend:
- Orange: covered by EU-ETS
- Green: covered by Effort Sharing Decision
- Blue: not covered by any EU measure

Climate Action
Availability of Abatement Technologies

- Abatement potential for shipping between 25-75% (cumulative potential)
- Significant part even with negative costs ('low-hanging fruits') due to high fuel costs
- Uptake of cost-effective measures hampered by so-called market barriers
- Regulatory action needed to overcome such market barriers
Obligation to Act Under EU Law

• Decision 1600/2002/EC (6th EAP): Commission to identify & undertake specific actions to reduce GHG emissions from shipping if no action is agreed within IMO by 2003
• PT Resolution of 21 October 2010 on Integrated Maritime Policy: reiterates call for action
• Neither IMO nor UNFCCC delivered
Preparatory Work
Stakeholder Consultation & Impact Assessment

- In 2011 and 2012 the European Commission:
  - Carried out extensive stakeholder consultations on possible options for EU action
  - Conducted an Impact Assessment on the different options
Findings of Impact Assessment on MRV (1)

- No reliable emission figures available
- Robust MRV required:
  - For definition of reduction targets
  - For any market based or regulatory measure
- Reliable data on fuel consumption support efficiency improvement & could provide evidence on progress made
Findings of Impact Assessment on MRV (2)

- Reduction of CO₂ emissions by 2% compared to baseline (more than 50 Mt CO₂ by 2030); assumption considered very conservative by some leading industrial stakeholders

- Net cost savings
Findings of Impact Assessment on MRV (3)

=> Need for implementation of MRV as first step
Commission Maritime Package
European package on maritime GHG emissions

Adopted in June 2013:

- Communication on Integrating maritime transport emissions in the EU's greenhouse gas reduction policies

- Proposal for a Regulation on the monitoring, reporting and verification of CO$_2$ emissions from maritime transport

- Impact Assessment
Communication
EU Strategy: Gradual EU approach

1. Implementing an EU MRV System
2. Definition of reduction targets for the maritime transport sector
3. Long-term application of a market-based measure (MBM)
   - Required to meet ambitious global climate goals
   - Robust MRV as foundation of any measure
   - MRV provides reliable information on ship efficiency
   - EU MRV proposal to contribute to international debate
MRV Proposal
Scope

• Ship voyages related to the EU
• Flag-neutrality
• Exclusion of small emitters below 5000 GT
• Exclusion of special ships (e.g. military, fishing)
• Focus on CO₂ as predominant GHG emitted by ships
• Ship efficiency (expressed by different indicators)
Entities involved

- **Ship owner ('company')** in charge of monitoring and reporting, delegation to ship manager, charterer, etc. possible; obligation to carry document of compliance on board

- **Verifier**: in charge of verification of monitoring plans and emission reports, issues document of compliance

- **Commission** (supported by EMSA): in charge of receiving and publishing emission reports

- **National Authorities**: in charge of inspections and enforcement
**Compliance Cycle**

1. **National competent authority**
   - Provide information on compliance
   - Appropriate follow-up measures

2. **EU central body**
   - Submit verified annual emissions report

3. **Ship**
   - Submit monitoring plan and emissions reports

4. **Verifier**
   - Issues a DoC document of compliance
Lean Approach Using Existing Documents & Tools
Monitoring

• OF:
  • Fuel consumption
  • Efficiency related information: distance, cargo carried, time spent at sea
• Calculation of CO$_2$ emissions:
  • Use of default or measured emission factors
  • Direct measurement as alternative method
• Per-voyage and annual monitoring

\[
\text{CO}_2 \text{ emissions} = \text{fuel consumption} \times \text{emission factor}
\]
Annual Reporting of:

- Ship identification
- Annual fuel consumption for EU-related voyages and in EU ports
- Annual CO$_2$ emissions of EU-related voyages and in EU ports
- Cargo carried, distance travelled, time spent at sea
- Annual average efficiency (e.g. EEOI, fuel consumption per distance)
- Information on verification
Verification

• Accreditation of independent verifier by national accreditation body

• Verifier's tasks:
  • Ensure the conformity of the monitoring plan
  • Ensure that the monitoring is done in accordance with the monitoring plan
  • Ensure the conformity of the reporting
  • Issue a document of compliance
Other provisions

- International cooperation
  - Review of the Regulation in the event of the adoption of an international agreement
  - Exchange with IMO & third countries on MRV

- Implementation:
  - Delegated acts to further specific rules for verification and accreditation and to amend Annex I & II
  - Implementing acts to provide templates
What the Proposal Aims For

- Generation of robust results
- Lean approach using already monitored data
- Balance between confidentiality & transparency
- Replicability in view of global MRV
- Reflection of international discussions (global MRV, efficiency standards)
- Maximising added value of MRV by addressing market barriers
Next Steps
Legislative Procedure

On-going co-decision procedure (PT & Council)

- Discussions in Council (experts & Ministers level)
- PT Report (April)

- Council common position ➔ TRIALOGUES

Adoption
EU PT Elections
Anticipated Adoption

June 2013  May 2014  Autumn 2014
Implementation of MRV Regulation

- Preparation and adoption of supporting technical legislation in 2015/2016 including stakeholder and expert involvement
- Accreditation of verifiers in 2017
- Verification of monitoring plan: 2nd half 2017
- Start of monitoring in 2018
- ...depends on introduction of global MRV by IMO
Thank you for your attention!

Please visit our website:
 Compatibility With Int. Law
Compatibility with Int. Law

• Distinction: MRV obligation & scope of MRV proposal
  • Obligation to hold compliance doc on board is only triggered when a ship enters an EU port (as port entry condition)
  • MRV is route based (beyond EU EEZ)

• UNCLOS, art. 211(3): Port States may adopt measures for the prevention, reduction and control of pollution of the marine environment as a port entry condition

• Precedents: Directive 2009/20/EC (insurance of ship owners for maritime claims), California Port Regulation (certain ships must either turn off auxiliary engines & connect the vessel to some other source of power or to use alternative control techniques that achieve equivalent emission reductions while berthing at California Port)
Enforcement
Breach of MRV Obligation

- Breach of MRV obligation in year X
- Enforcement: no document of compliance post 30/06/X+1
- Proposed Regulation foresees:
  - Art. 19(1): MS acting as Flag States for their flag ships
  - Art. 19(2): MS acting as Port States for ships not flying their flag as part of larger port state control inspection
    - Selection according to Directive 2009/16/EC Annex I criteria
    - Check for documents included in Directive 2009/20/EC Annex IV (document of compliance to be added)
  - Art. 19(3): MS acting as Port States for ships not flying their flag where no evidence of notification of document of compliance (database) → check at each port call
National Sanctions and Penalties

• Level of sanctions and penalties set at national level
• Sanctions as a second "step in cascade" if inspections and compliance checks remain unsuccessful:
  • letter of notice
  • Fines
  • Expulsion order as the last resource