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IMO

المنظمة البحرية الدولية
国际海事组织
МЕЖДУНАРОДНАЯ МОРСКАЯ ОРГАНИЗАЦИЯ

Note by the International Maritime Organization (IMO)

PROGRESS WITHIN IMO ON CONTROL OF GREENHOUSE GAS EMISSIONS FROM SHIPS ENGAGED IN INTERNATIONAL TRADE

Completion of IMO's GHG work plan – finalization of efficient and robust measures to enhance energy efficiency in shipping and to reduce emissions from ships

Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), intersessional informal consultations

10 to 14 August 2009 - Bonn, Germany

Background

1 Due to its close connection to global commerce, international shipping plays a vital role in the facilitation of world trade as the most cost and energy effective mode of transport. Shipping is probably also the most international of all industries and the global character of shipping requires global regulation. IMO, as the UN's Specialized Agency responsible for the global regulation of all facets pertaining to international shipping, has a key role in ensuring that lives at sea are not put at risk and that the environment is not polluted by ships' operations – as summed up in IMO's mission statement: **Safe, Secure and Efficient Shipping on Clean Oceans**.

2 IMO's Assembly resolution A.963(23) on IMO Policies and Practices Related to the Reduction of Greenhouse Gas Emissions from Ships, urges the Marine Environment Protection Committee (MEPC) to identify and develop the mechanisms needed to achieve limitation or reduction of Greenhouse Gas (GHG) emissions from international shipping.

3 The Assembly resolution also calls for MEPC to develop a GHG work plan with timetable to guide the identification and development of the needed mechanisms. This was adopted by the Committee in October 2006. A significant amount of work has been carried out in accordance with the plan and IMO has developed a set of robust and efficient technical and operational measures that will, when fully implemented, result in significant reductions of GHG emissions from ships.

Outcome of MEPC 59

4 More than 900 delegates from all over the world attended the fifty-ninth session of IMO's Marine Environment Protection Committee (MEPC 59), which was held in London from 13 to 17 July 2009. Control of greenhouse gases from international shipping was the paramount item on its agenda.

5 Leading up to MEPC 59, two intersessional meetings were held in addition to the three ordinary sessions, where hundreds of submissions by Member States and observer organizations, four reports by intersessional correspondence groups and a large number of scientific studies, facilitated the work and made the expeditious progress possible. This progress would not have been possible without the active involvement of the world's maritime nations and a strong environmental commitment by a united maritime industry.

6 The Committee noted that 2009 is a crucial year in the climate change negotiations, culminating at the UN Climate Change Conference in December. It is expected that the Conference will adopt a new and ambitious post-2012 treaty to combat climate change, a treaty that will be agreed by the 192 Parties to the UNFCCC of which 169 are IMO Members.

7 MEPC 59 agreed to a package of technical and operational measures to reduce GHG emissions from international shipping and also agreed on a work plan for further consideration and development of suitable and efficient market-based instruments to complement the technical and operational reduction measures and to provide economic incentives for the shipping industry.

8 MEPC 59 further agreed that any regulatory scheme to control GHG emissions from international shipping should be developed and enacted by IMO as the most competent international body.

9 The agreed measures are intended for voluntary application until the Committee's sixtieth session in March 2010, with a view to facilitating decisions on their scope of application and enactment and taking into account the outcome of the Copenhagen Conference.

Greenhouse gas study 2009

10 MEPC 59 was notably assisted in its work by the **Second IMO GHG Study 2009,** which is the most comprehensive and authoritative assessment of the level of greenhouse gas emitted by ships, as well as its potential for reduction. The Study also evaluates the different policy options for control of GHG emissions from ships currently under consideration within IMO and other organizations. The Second IMO GHG Study 2009 will be submitted to appropriate bodies of the UNFCCC and may be found at: http://www.imo.org/home.asp?topic_id=1823

11 The Study estimates that ships emitted 1046 million tonnes of CO_2 in 2007, which corresponds to 3.3% of the global total. International shipping is estimated to have emitted 870 million tonnes, or about 2.7% of the global anthropogenic emissions of CO_2 in 2007.

12 A significant potential for reduction of GHG through technical and operational measures has been identified. Together, if implemented, these measures could increase efficiency and reduce the emission rates by 25% to 75% below the current levels. Many of these measures appear to be cost-effective, although many barriers may discourage their full implementation. This includes both financial barriers, such as the need for additional investments up front and non-financial barriers in operation of individual ships, often outside the control of the shipowner but controlled by the charterer, the cargo owner or others.

13 In the absence of global policies to control greenhouse gas emissions from international shipping, the emissions may increase by between 150 and 250% by the year 2050 due to an expected continuous growth in both world population and international trade.

Technical and operational reduction measures

14 MEPC 59 finalized a package of technical and operational measures to reduce GHG emissions from international shipping, aimed at improving the energy efficiency for new ships through improved design and propulsion technologies and for all ships, new and existing, primarily through improved operational practices.

15 The measures are intended to be used for trial purposes on a voluntary basis until MEPC 60 in March 2010, when they will be refined, as necessary, with a view to facilitating decisions on their scope of application and enactment, taking into account the outcome of the Copenhagen Conference. The measures include:

.1 interim guidelines on the method of calculation and voluntary verification of the **Energy Efficiency Design Index** (EEDI) for new ships, which is intended to stimulate innovation and technical development of all elements influencing the energy efficiency of a ship from its design phase. The index would cover 87% of emissions from new ships – the reduction level is not yet agreed upon and will be considered in detail by MEPC 60, but a relative reduction of 15 to 30% is possible depending on ship type and size; and

.2 guidance on the development of a **Ship Energy Efficiency Management Plan** (SEEMP) for new and existing ships, which incorporates best practices for fuel-efficient ship operation, as well as guidelines for voluntary use of the **Energy Efficiency Operational Indicator** for new and existing ships. The indicator enables operators to measure the fuel efficiency of a ship in operation and to gauge the effect of any changes in operation, e.g. improved voyage planning or more frequent propeller cleaning, or introduction of technical measures such as waste heat recovery systems or a new propeller. The Study indicates that a 20% reduction on a tonne mile basis by mainly operational measures is possible and would be cost-effective even with the current fuel prices. The SEEMP will assist the shipping industry in achieving this potential.

16 The IMO Secretariat will undertake further work in the third quarter of 2009 and assess in more detail the reduction potential of the technical and operational measures finalized by MEPC 59, both in relative (tonne mile) and total terms. This information will assist the Committee in March 2010 when making a final decision on the reduction levels, and it will also be provided to COP 15 for information.

Market-based mechanisms

17 The package of the technical and operational measures is a very important step in ensuring that the shipping industry has the necessary mechanisms to reduce its GHG emissions. Moreover, the Committee recognized that these measures would not be sufficient to satisfactorily reduce the amount of GHG emissions from international shipping in view of the growth projections of world trade. Therefore, market-based mechanisms have been considered by the Committee in line with its GHG work plan. A market-based mechanism would serve two main purposes: off-setting of growing ship emissions in other sectors and providing a fiscal incentive for the maritime industry to invest in more fuel efficient ships and technologies and to operate ships in a more energy efficient manner.

18 The Committee agreed by overwhelming majority that a market-based instrument was needed as part of a comprehensive package of measures for regulation of GHG emissions from international shipping. The Committee further agreed that any regulatory GHG regime applied to international shipping should be developed and enacted by IMO as the sole competent international organization with a global mandate to regulate all aspects of international shipping. As shipping is a global industry and ships are competing in a single global market, it must be regulated at the global level to be environmentally effective and to maintain a level playing field for all ships, irrespective of flag or ownership.

19 An in-depth discussion on market-based measures was held and the Committee agreed on a work plan culminating in 2011 for its further consideration of the topic. It was agreed to fully take into account discussions and submissions to date, as well as relevant outcomes of the United Nations Climate Change Conference (COP 15) in December 2009.

20 The Committee noted that there was a general preference for the greater part of any funds generated by a market-based instrument under the auspices of IMO, to be used for climate change purposes in developing countries through existing or new funding mechanisms under the UNFCCC or other international organizations.

21 To facilitate further progress at MEPC 60, the IMO Secretariat will undertake further work in the third quarter of 2009 and assess the possible effects of a market-based instrument. The work will assess in detail the potential reduction levels, directly and through off-setting, resulting from a market-based instrument for shipping and the potential generation of funds that would be used for climate change purposes in developing countries. This information will also be submitted to COP 15 and will form a useful basis for future decisions in both fora.

The way ahead post-COP 15

22 A reoccurring debate within IMO has been how the wording of Article 2.2 of the Kyoto Protocol should be interpreted and if the UNFCCC principle of 'common but differentiated responsibility' should apply to a GHG regime for international shipping rather than IMO's basic principle of equal or non-discriminatory regulation of all ships in international trade, irrespective of flag or ownership. The Committee agreed to defer this debate until the outcome of COP 15 is known and will consider application issues, as well as the legal aspects, in March 2010.

23 Although no mandatory GHG regime for international shipping has been agreed, the technical and operational mechanisms needed are fully developed, well matured and ready for consideration as mandatory instruments, taking into account the outcome of COP 15. Further work is needed on market-based measures but the foundation is in place and a work plan, culminating in 2011, has been agreed. All the necessary mechanisms are thereby in place or well underway, an agreement on their application is the only aspect pending before a robust and efficient GHG regime, complementing IMO's regime of about 50 treaties regulating shipping, may be agreed to the benefit of the global environment and future generations.

24 The Committee agreed that any possible impacts on the shipping sector, including but not limited to, the overall impact of any of the mechanisms on the maritime sectors of developing countries, should be duly considered prior to making further decisions on the energy efficiency measures.

25 IMO will continue its endeavours to reduce any environmental impacts from international shipping, a transport industry that is vital to world trade and sustainable development. IMO is ready to take technical and regulatory action as soon as a decision at COP 15 is taken on a post-2012 regime to combat climate change. IMO will continue to keep UNFCCC and its subsidiary bodies updated on the progress made.

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