ROYAL INSTITUTION OF NAVAL ARCHITECTS

REPORT OF MEPC 71

SUMMARY

Members of the Institution's IMO Committee attended MEPC 71

Two items dominated the discussions; reducing GHG emissions from ships and the implementation of the Ballast Water Management (BWM) Convention which enters into force on the 8th of September this year. New updated versions of the BWM regulations exist that mean that it will take some time before the full regulations come into force for all ships. There was not much time spent discussing the data collection system, sharing an agenda item with the EEDI.

There was an inter sessional working group (ISWG) the week before the MEPC, which planned out the IMO work on a "roadmap" to reduce GHG emissions. The ISWG came up with a list of the methods and policy measures; among these list of measures is the data collection system, EEDI, technologies and calls for new studies. There was another working group on this during MEPC 71 and the output was as a outline for the IMO GHG "Road-map". The report still did not contain any mention of GHG emissions apart from the title, so there is still some challenges ahead.

FULL REPORT

Updating the Bunker Deliver Note (BDN)

The sulphur content specified by the supplier is to be added to the BDN. Although it was recognised that the ship's company will have better knowledge of the available SOx abatement methods, it is still the responsibility of fuel supplier to make suitable fuels available to meet sulphur limit.

Concerns of the future availability of fuel for future sulphur regulation have also been mentioned before - at MEPC 70 there was an independent IMO commissioned study that mentioned that this would not be an issue.

Ballast Water Management (BWM)

The Ballast Water Management (BWM) regulation is set to come into effect on 8th September 2017. 49 papers were submitted under this agenda item. Updates to the regulation at short notice have meant there three different versions of the regulation have been discussed.

The working group mainly discussed contingency measures and guidance to exceptions in the regulation. As well as establishing an experience building phase to further develop the BWM regulation based on feedback.

The latest version of the Ballast Water Management (BWM), D-2, will still come into force for

new ships on 8th September 2017 (vessels constructed/keel-laid on or after 8 September 2017). For existing ships a standard covering ballast water exchange and ballast water treatment, D-1, can be used until 8th Septermber 2019, by which time the latest version will come into force. The regulation will also take a few years to phase-in due to using the renewal of a vessel's International Oil Pollution Prevention (IOPP) certificate as the mechanism to bring the regulation into force. There is also an explanation at: http://www.hellenicshippingnews.com/ballast-water-management-are-you-ready-for-8-september-2017/.

Energy Efficiency Design Index (EEDI)

It was agreed to re-establish the EEDI working group to look at future reduction rates for new ships and earlier implementation of Phase 3 (and 4) of the EEDI.

It was proposed to adopt new regulation for RO-RO and RO-PAX ships at MEPC 72, which can find it hard to meet EEDI requirements because these ships are designed and operated in very particular conditions, such as in shallow water or between short-distances.

Denmark presented a paper on equivalent and alternative methodologies for calculating EEDI, which are relevant for early stage ship design. This paper was accepted for further discussion.

Future considerations for EEDI for Ice-class ships were also discussed. A paper by Russia also mentioned that, as well as needing a higher power requirement, some energy saving devices may not be applicable for ice-class ships.

There was concern from many industry NGOs that ships designed to meet EEDI requirements would not have enough minimum power to operate in all conditions. This argument has been used since 2011. One member state, noted that there are other ways to reduce EEDI, reducing engine power is not the only way to reduce EEDI. Another member state mentioned that designing slimmer ships is the way forward.

It was noted that finding a suitable way of measuring transport work for ships that do not carry cargo, such as OSV, rescue and salvage ships, can be challenging. Nothing is being excluded at this point.

IMO "Road-map" for reducing Greenhouse Gas (GHG) emissions (under agenda Reduction of GHG emissions from ships)

The "Road-map" is not strategy but a way to arrive at strategy. Due to the impact of shipping on trade and commerce reducing GHG emissions is still a highly sensitive issue.

The Pacific islands expressed concerns about rising sea-levels due to climate change. Some countries now have also have their own national plans for reducing GHG emissions. Some developing states did mention they were willing to make compromises to come to an agreement.

It was agreed that any action needs to be considered in relationship to cost and benefits on states.

The inter-sessional working group (a week before MEPC 71) considered which measures to include, although full agreement was not made on a timeline for when these items wold be discussed. The working group on Reduction of GHG emissions from ships came up with a list of headlines for a document, not defining content. It was also noted that GHG emissions was not mentioned anywhere in the report, apart from in the title.

Two further inter-sessional working group meetings are planned, the next one is in October 2017.

Update from UNFCCC

152 states have ratified the Paris agreement. United states have decided to withdraw from Paris agreement. There is a future side event with ICAO.

Any other business

There were some papers that recommended banning HFO from the arctic to ensure that HFO cannot be spilled in environmentally sensitive sea areas. This issue will be discussed at PPR and MEPC 72.

There was widespread support to add Cybutryne, also known as Irgarol, as a banned substance, to the Anti-Fouling Systems (AFS) Convention.

Tuvalu natural reefs were added as a Particularly Sensitive Sea Area (PSSA).

New MEPC Chair

Dr. Saito Japan is to be the next MEPC chair, current chair steps down after 4 years.

Current Working groups and Future Meetings

MEPC 72 will take place in Spring 2018.

There will be another Inter Sessional Working Group meeting on reducing GHG emissions in October 2017. Another meeting is also planned, but not yet scheduled.

There are currently correspondence groups on:

- Examining Phase 3 and 4 of the Energy Efficiency Design Index (EEDI)
- Establishing an experience building phase for Ballast Water Management (BWM)

ISWG-GHG

Summary

During the ISWG (Inter-Sessional Working Group) on GHG (Greenhouse Gas) emissions the working group drafted a document containing short, medium and long-term items that needs to be discussed at future meetings.

Generally, there were some ambitious suggestions for reduce GHG emissions in papers from industry, NGOs and member states.

Most member states agreed that:
- Technologies (or methods) of improving energy efficiency are not enough alone, alternative fuels should also be included.
- The need for additional research to provide information was also highlighted.
- Carbon dioxide emissions must peak and reduce rapidly in line with the Paris agreement.
- It is important to have input from Industry.
- A mandatory speed limit might be an option
- It was also mentioned that any future cost and benefit impacts on states need to be taken into account.

One member state also mentioned the also importance of including VOC and methane emissions.

A trade imbalance between counties was also mentioned, developing countries do pay more for their imports.

Common But Differentiated Responsibilities (CBDR) to support developing countries on decarbonising were also mentioned. It was also mentioned that such solutions need to be specific.

There was some concern that the Third GHG Study emission projections were no longer up-to-date. A study by CE Delft did partially address some of these concerns.

There was some talk of using updated Marginal Abatement Cost (MAC) Curves to help make policy decisions.

It was mentioned from two industry delegations that from their perspective on technologies to improve the efficiency of ships, all the "low-hanging fruit" has been taken-up. RINA made an intervention to point out that there are some energy efficiency technologies that are not being taken up by the industry. This has been highlighted in two joint RINA and IMarEST papers.

Although there was much discussion, no clear detail as to what future GHG regulation may look like was given.

Comments

A traditional Marginal Abatement Cost Curve assume that any technology (or method) used to reduce carbon dioxide emissions assumes that for the whole industry technologies are adopted and combined in a certain order, which means that they need to be treated with care.

The mention of having a mandatory speed limit was highly unexpected and has been discussed in previous meetings.

The Global Industry alliance to support low carbon shipping was announced

There are 13 companies in GLOMEEP:
ABB
Lloyds Register
Mediterranean Shipping Company
Royal Caribbean cruises
Silverstram Technologies
Total
DNV GL
MarineTraffic
Ricardo
Shell
Stena
Wartsila (Marko Vainikka)
WinGD - Winterthur Gas & Diesel Ltd.

1/2/10 Introduction to RINA/IMarEST paper

- Examines the co2 reductions from a list of different efficiency methods.
- The study was led by UCL developed with industry which has included feedback
danish shipowners
sustainable shipping initiative
and technology manufacturers
- engineering first principles model but based on published data
- goes beyond existing work on efficiency measures by presenting results for a range
of operating speeds
and by combining multiple measures.
- The main conclusion is that savings from current small change efficiency methods are limited and that larger steps are needed such as changing fuel or in some cases uses renewable energy.

Other papers that were discussed

MEPC 68 Inf. 3 collection data using several, showed significant variability of 5% due to different measures dips and flow devices. 10%.

A few options for proxies for measuring emissions were included in the papers. IMarEST commented that the EEOI is much more rational efficiency measure compared to the other four options that there were. There are more levers and they are more cost effective.

MEPC 69/6/6 is contains information on future measures.