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## Compliance with IMO DCS - New SEEMP Requirements

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## **IMO DCS**

According to Regulation 22A of MARPOL Annex VI which enters into force on 1 March 2018, all ships above 5000 GT will have to report their annual CO2 emissions from 1 January 2019 onwards. Owners will have to update their Ship Energy Efficiency Management Plans (SEEMP) and submit them to Flag or a Recognized Organization (RO) before that date.

Although this scheme is similar to the EU MRV Regulation, there are quite a few differences, especially regarding parameters to be monitored and annual reporting formats.



AMC developed more than 1,000 Monitoring Plans in accordance with EU MRV requirements within 2017. This was achieved through a systematic, structured, Company-specific and cost-effective approach to each project, building on AMC's significant experience on Ship Energy Efficiency gained through:

- Preparation of more than 2,000 SEEMPs in accordance with the 2012 IMO Guidelines.
- In cooperation with HELINTEC, development of software platform for GHG emissions / performance monitoring, installed onboard more than 1,000 ships.
- Development of Environmental / Energy Management Systems as per ISO 14001 / 50001 for more than 100 **Shipping Companies.**
- Conduct of more than 50 Energy Audits onboard ships.
- Participation in various EU-funded Research Projects related to Ship Energy Efficiency (such as TARGETS and REFRESH) and collaboration with major European Research Institutes, Ship Model Basins, Shipyards, etc.

AMC is therefore able to offer a turn-key solution for new SEEMP and reporting system development, aimed at minimizing disruption to existing procedures / onboard practices.

Notwithstanding the above, AMC can also customize the solution to meet any Client-specific needs, such as compliance with TMSA 3 Element 10 requirements for Tankers (e.g. performance assessment / trends, third party benchmarking, etc.), compliance with voluntary Industry schemes (e.g. WPCI ESI, CCWG), etc.

## Services Offered

AMC provides two distinct packages, addressing the needs of small and larger fleets respectively:

- 1. The Standard package consisting of a ship-specific SEEMP (in accordance with IMO DCS requirements) and a reporting form in simple Excel format, replacing the current Vessel Environmental Performance Report form in use onboard more than 2,000 vessels, upgraded to include all relevant data fields for IMO DCS but also EU MRV and EEOI, SOx, NOx and Particulate Matter (PM) emissions calculation; and
- 2. The MARVEL+ package, which includes our standard services (SEEMP, training modules, etc.) coupled with HELINTEC's Vessel Reporting System (VRS), an onboard software reporting tool with source data validation, automatic synchronization facility and a fleet monitoring interface in the office. EU MRV / IMO DCS Annual Emissions Reports & Environmental / Energy Performance Indices (KPIs) graphs / tables are automatically generated and benchmarked against a database of more than 1,000 vessels.



Through our long-standing cooperation with HELINTEC we are also able to enhance the MARVEL+ package with the performance monitoring modules of the SEMT system, as follows:

- 1. Hull & Propeller Performance module (optional), to assess a vessel's daily performance against reference (e.g. sea trials) data, compare voyages / periods between sister vessels, quantify the effect of hull / propeller cleaning, calculate expected consumptions based on user-defined conditions, etc. (based on actual physical modeling as per ISO 19030) - to also meet TMSA 3 Element 10 requirements.
- 2. Charter Party Performance module (optional), to evaluate each voyage and estimate any over / under-consumption and time gain loss based on given Charter Party restrictions / allowances. The performance during "bad weather days" may also be included after adjusting for weather effect.