Pilot Project

Trimming Optimization

MTCC - Asia
Philosophies

• Achieving harmonization through wide co-ordinations (with IMO, with maritime countries) and sharing and contributing

• Pursuing the professionalism and specialization

• Relying on modern technologies

• Using more stakeholders: Ministry of Transport of China, Cambodia, Thailand, DNV, BSM(Germany), COSCO-Shipping, CCS, SIPG, and Shanghai Governmental Commissions, etc.
**Step 1: Seminar.** To propagate the mandatory requirements on ship fuel oil consumption data collection, to formulate the guiding principles and to seek the support from the industry.

**Step 2: System development.** To develop a system able to automatically and/or manually collect, transmit and process ship fuel oil consumption data.

**Step 3: Data collection.** To obtain and store real ship fuel oil consumption data from on board to on shore after installing the system developed on board.

**Step 4: Data analysis.** To analyze the data collected for demonstrating the general situation of the given ship fuel consumption and verifying the availability and reliability of method used.

**Step 5: Guideline and video development.** To develop a guideline and a video which presents the know-what and know-how on ship fuel consumption data collection and distribute those to the ships.

**Step 6: E-reporting establishment.** To establish a voluntary E-reporting system on ship fuel consumption data collection for facilitating the industry to enforce the requirement.
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• Seminars for two pilot projects
Pilot project

• Ship visits.
**Data input and data storage:**
- To input the ship’s dynamic information regarding the ship fuel oil consumption data collection and reporting;
- To store the data collected on board;

**Data transmission:**
- To transmit data collected from on board to on shore in real time independent of the existing system used on board;

**Data processing and data storage:**
- To automatically aggregate data and produce the annual Table as required;
- To store the data collected on shore;
Expected achievements and outcomes (technical part)

- Workshops and Online Clean Shipping Air Forum
- Trimming optimization report and DC report (Pilot Projects)
- Guidelines for trimming optimization operations
- Guidelines for EE promotion operations
- Course materials for trimming optimization operations
- Course materials for EE promotion operations
- ......
Pilot project
The challenges

• Data retrieving
  – Individual sensors or integrated servers (Protocols)

• Data collection and
  – Quantity of data (Number and types of ships and time of operations) for an intelligent system
  – Not all vessels are equipped
Future work (MTCC-Asia)

• Getting more data!!! (generating and integrating)
• Further optimization
• Integrations with other technologies
• Practical applications
• Contributions to IMO standards and regulations, operational guidelines, etc.,
• Sustainable development ……
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- Ship Air Emission Monitoring System
  http://112.126.75.47/mtcc/
Thank you for your attention!
http://www.mtccasia.org/