WP3 – Eco-Responsibility and Eco-Design for existing and new Research Vessels

Task 3.4 – Guidelines towards future new buildings and innovative eco-design for Regional Vessels.

Task 3.4.1 – Description of current vessel performance

Task 3.4.2 – Current vessel eco-performance

Task 3.4.3 – Establishment of guidelines for Regional vessel eco-design

Eurofleets

Eco-Design for existing and new Research Vessels

Greener/cleaner vessel = tries to perform better than applying regulations

MARPOL ANNEX I OIL POLLUTION

don't discharge oily residues
use bio oils & lubes

MARPOL ANNEX IV SEWAGE

don't discharge sewage
install bioreactors, vacuum toilets

MARPOL ANNEX V GARBAGE

stow garbage onboard

Eurofleets

Eco-Design for existing and new Research Vessels

MARPOL ANNEX VI AIR POLLUTION

Slow Steaming
Hull, Propeller & Rudder Design
Hull ‘hygiene’
Heat Recuperation
Selective Catalytic Reduction
Sailing RV? See for ‘Oceania’, ‘Derek M. Bayliss’ & ‘Tara Oceans’

MARPOL Ballast Water & Anti-fouling conventions

Treatment Systems – Ballast free hull designs
Innovative paints & active systems

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Eco-Design for existing and new Research Vessels

Environmental MGMT Systems

ISM - ISO 14001
Training of crew & shore personnel is paramount
IRSO & ERVO code of conduct (XBT's? ARGOFLOATS?)

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Eco-Design for existing and new Research Vessels

RV Tsekoa II

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Eco-Design for existing and new Research Vessels

RV Princess Royal

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Eco-Design for existing and new Research Vessels
Examples

RV Simon Stevin & RV Ramon Margalef

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Eco-Design for existing and new Research Vessels
Examples

New Norwegian Polar RV

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Eco-Design for existing and new Research Vessels
Examples

Oceania, Tara Oceans & Derek M Baylis

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Eco-Design for existing and new Research Vessels

Design RV Rachel Carson

Oregon State UNIVERSITY OSU

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