European Research Fleet Developments

- Ocean research Fleets Working Group (OFWG)
- Ocean Facilities Exchange Group (OFEG)

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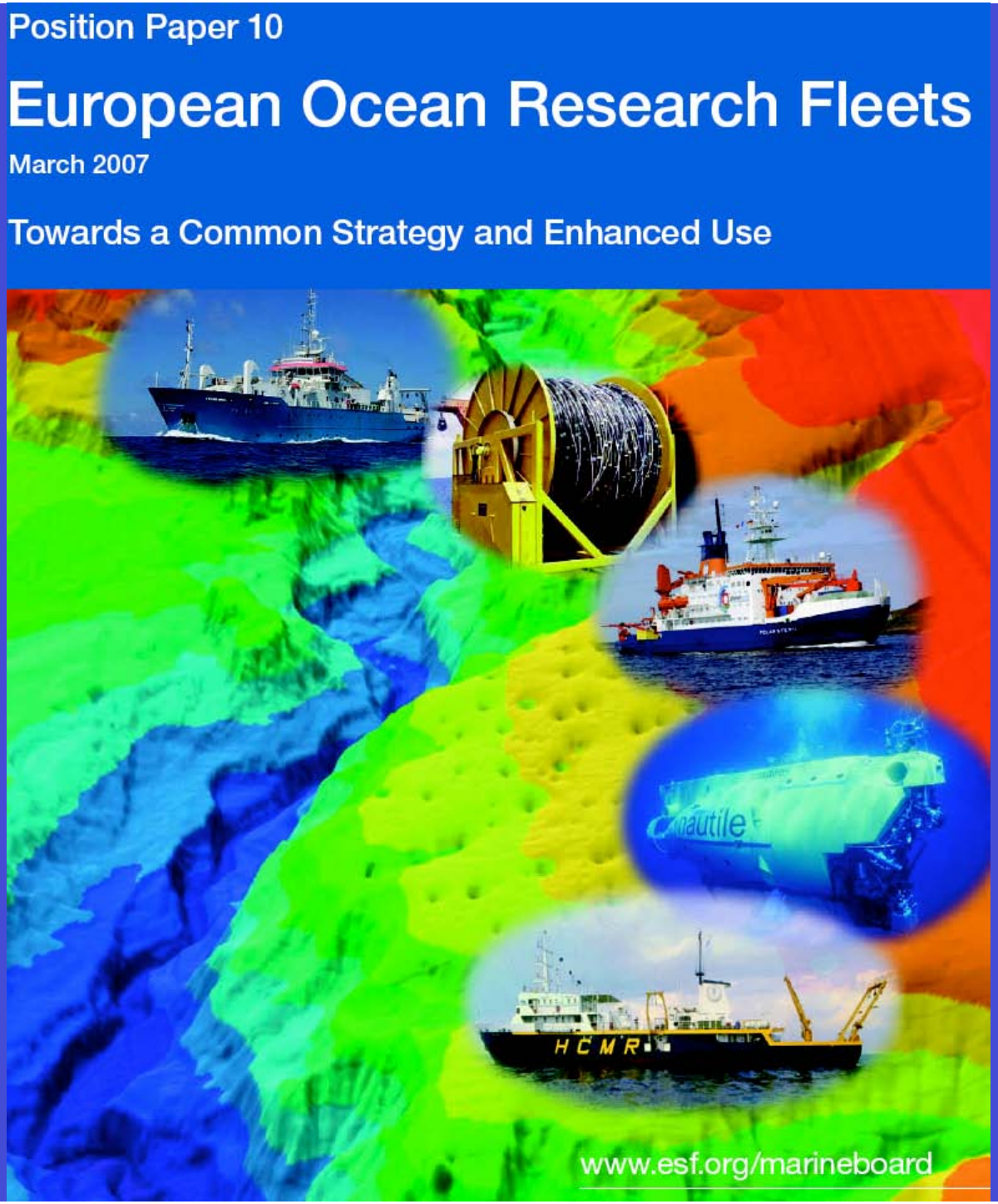
European Research Fleet Developments

Ocean research Fleets Working Group

The ESF Marine Board Working Group report in print



the report can be downloaded from
www.esf.org/marineboard

The OFWG Report:

- gives an inventory of the current RV fleet and major equipment and its evolution as a basis for decision making on future investments in marine infrastructure, including fleet renewal. (A.1, A.2)

- gives an overview on the existing management and funding processes as well as on the existing partnerships as a basis for improvement and possibilities of further collaboration. (A.3, A.4)

Present status of the European

Academic Research Fleet,

CLASS	Europe		US	
	Number of vessels	%	Number of vessels (from UNOLS)	%
GLOBAL	11	24%	10	38%
OCEAN	15	33%	8	31%
REGIONAL	20	43%	8	31%

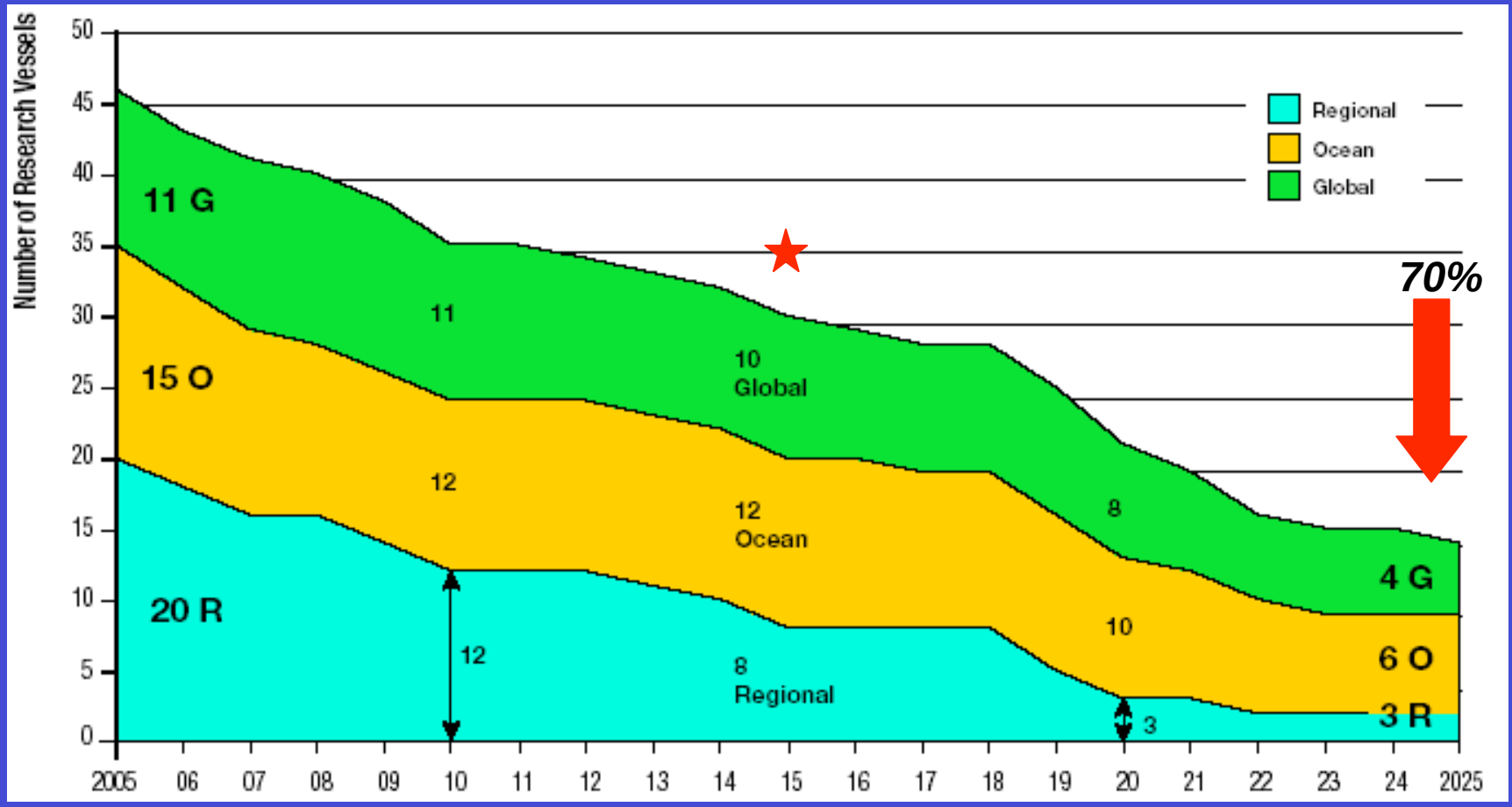
Table 1: European and US research class fleets

Coastline Europe versus US: 68,000 km vs 9,700 km

European Research Fleet Class & Length

BELGICA A962	51	Belgium
AKADEMIK	56	Bulgaria
ARANDA	60	Finland
L'ATALANTE	85	France
LE SUROIT	56	France
MARION DUFRESNE	121	France
POURQUOI PAS?	105	France
THALASSA	74	France
ALKOR	55	Germany
HEINCKE	55	Germany
M.S. MERIAN	95	Germany
METEOR	98	Germany
POLARSTERN	118	Germany
POSEIDON	61	Germany
SONNE	98	Germany
AEGAEO	62	Greece
BJARNI SæMUNDSSON	56	Iceland
ÁRNI FRIðRIKSSON	70	Iceland
CELTIC EXPLORER	65	Ireland
CELTIC VOYAGER	31	Ireland
EXPLORA	73	Italy
UNIVERSITATIS	45	Italy
URANIA	61	Italy
VEJAS	56	Lithuania
PELAGIA	66	Netherlands
DR FRIDTJOF NANSEN	57	Norway
G.O.SARS	77	Norway
HAKON MOSBY	47	Norway
JAN MAYEN	64	Norway
JOHAN HJORT	64	Norway
OCEANIA	48	Poland
DON CARLOS I	68	Portugal
CAPRICORNO	47	Portugal
NORUEGA	47	Portugal
MARE NIGRUM	82	Romania
CORNIDE DE SAAVEDRA	67	Spain
GARCIA DEL CID	37	Spain
HESPERIDES	83	Spain
SARMIENTO DE GAMBOA	70	Spain
VIZCONDE DE EZA	53	Spain
ARGOS	61	Sweden
BILIM	40	Turkey
CHARLES DARWIN	69	UK
DISCOVERY	90	UK
JAMES CLARK ROSS	99	UK
PRINCE MADOG	35	UK

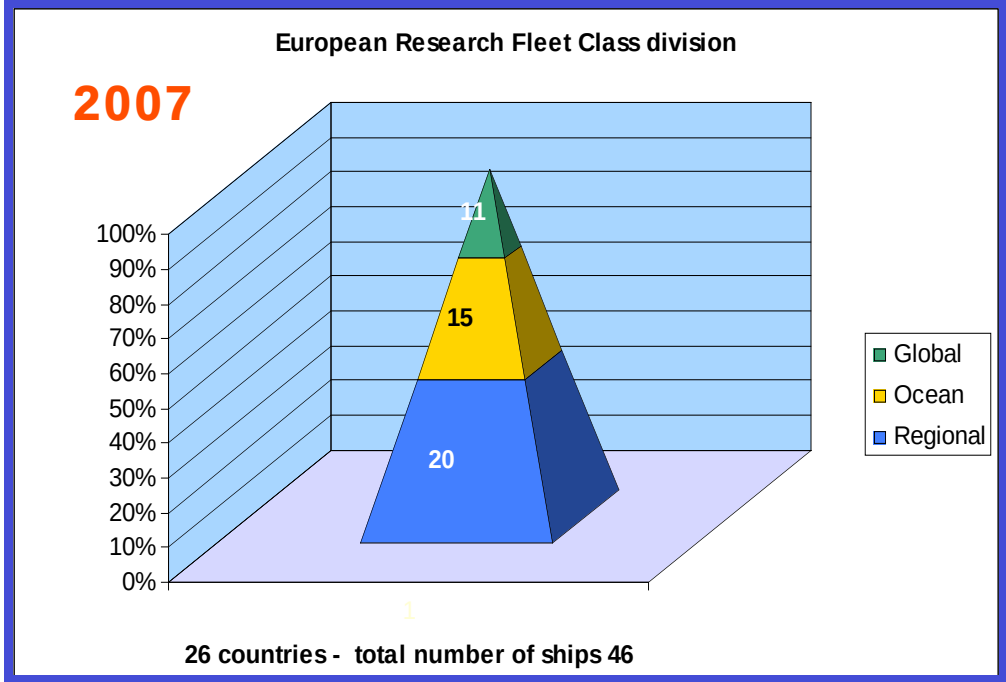
Evolution European Academic Research Fleet
2005 - 2025

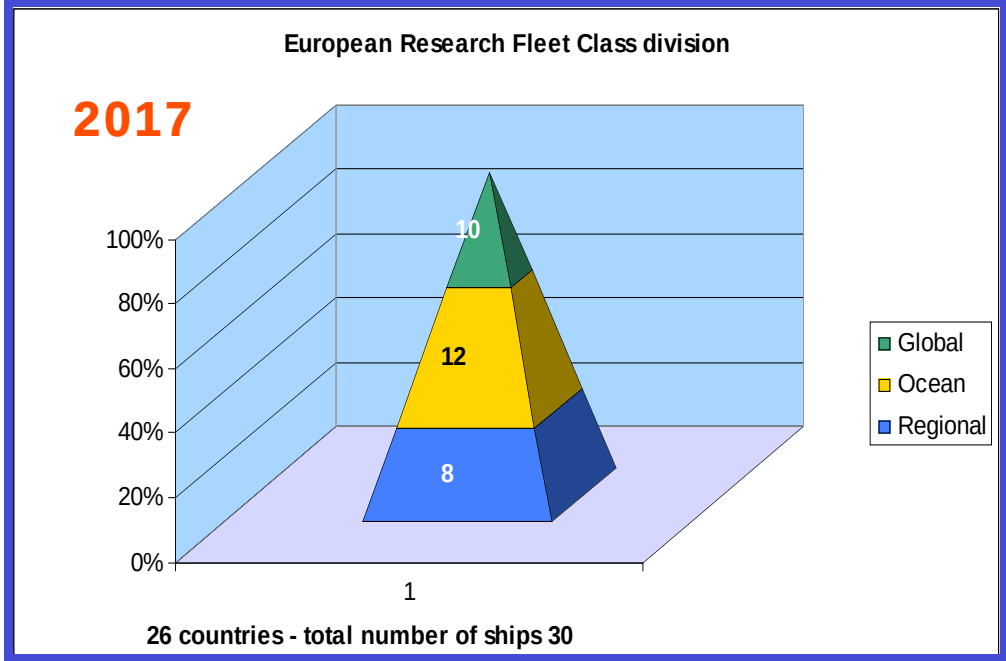


Without any yet planned new builds, within 20 years the fleet will be reduced by 70 %.

In 2006 James Cook (UK) replaces Charles Darwin (Ocean Class becomes Global Class)

Worrisome situation Regional fleet





Total RVs for academic research in Europe

(26 countries) :

2007: 46

operated by 19 coastal states

2017: 30

operated by 14 coastal states

Regional Class 60 % ⬇

Conclusions:

- The aged Regional Class fleet and its rapid decline may jeopardize the continuity of research that is of high societal relevance and public interest for European citizens, such as:
  - environmental issues
  - living resources
  - water quality
- The Global and Ocean Class fleet is up to date and constitute an essential means for proper acces to high quality marine data

Recommendations regarding vessels:

I. Renewal

• a replacement strategy within the next 10 years is needed with high priority to renew the quickly ageing Regional Class fleet

II. More efficient use by:

- Coordination of fleet scheduling
- Stimulating bartering arrangements, regional or thematic
- Encouraging chartering processes for non-funded shiptime
- Creation of a “scrap premium” to decommission old under-utilised ships

III. Long term investment strategy by:

- integrating strategies, stimulating partnerships and facilitate co-ownership

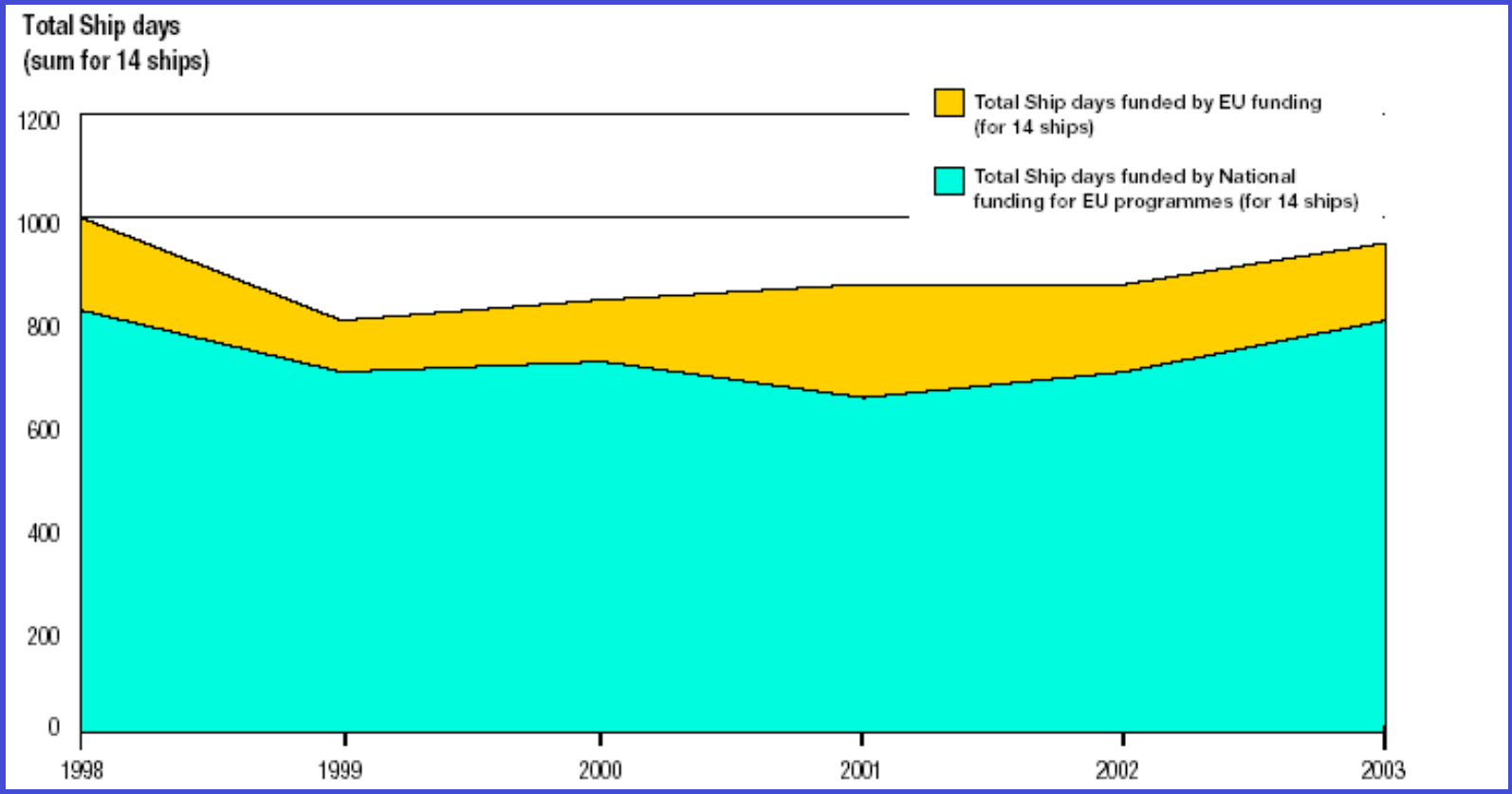
Conclusions regarding large exchangeable equipment:

The European set is state-of-the-art, performing excellently, and is more extensive than elsewhere in the world.

but

- **A limited number of nations own most of the large and exchangeable instruments**
- **The availability of the more sophisticated and most capable instruments is very limited**
- **Technical support, insurance and scheduling are crucial issues for exchange of instruments**

Influence of EU funded projects on national ship time



average 900 days/year of ship time for EU projects (14 ships)

> 80% of ship time for EU projects is funded by national bodies!

Conclusion:

The national funding bodies, not the EU, will have to generate European RV fleet integration

Existing partnerships, in particular OFEG, to take the lead for the Ocean and Global Class RV fleet

OFEG as a virtual European RV Fleet and Equipment Pool, to maintain the much-praised flexibility and exchange of know-how, and guarantee an optimal mix of large and medium sized vessels

together with a range of ROVs, and heavy exchangeable equipment.

Present OFEG fleet

L'ATALANTE	85	France	PELAGIA	66	Netherlands
LE SUROIT	56	France			
POURQUOI PAS?*	105	France	G.O. SARS*	77	Norway
THALASSA	74	France / Spain	JAN MAYEN	64	Norway
			JOHAN HJORT	64	Norway
ALKOR	55	Germany	GARCIA DEL CID	47	Spain
HEINCKE	55	Germany	HESPERIDES	82	Spain
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METEOR	98	Germany			
POLARSTERN	118	Germany	DISCOVERY	90	UK
POSEIDON	61	Germany	JAMES CLARK ROSS	99	UK
SONNE	98	Germany	JAMES COOK*	90	UK

OFEG fleet - 10 Global Class - 90% of European GC Fleet

21 RVs - 8 Ocean Class - 53% of European OC Fleet

6 countries - 3 Regional Class - 15% of European RC Fleet

* newly built < 3 years old

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OFEG (Ocean Facilities Exchange Group) recently increased with 2 new members, CSIC, Spain and IMR, Norway, bringing in 6 research ships

All OFEG members, except NIOZ run multiple fleets - totalling 22 of 26 Ocean and Global Class ships in Europe, including most heavy equipment

OFEG may be considered as a premature UNOLS,

but, with one important disparity: no central, European funding.

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Hopefully this might change in the near future

On the way to integration harmonization and interoperability are an essential first step

On 23 April an OFEG delegation had a first meeting with the European Commission in Brussels to discuss the possibility of EU funding for interoperability issues and trans-national operational teams.

L'Atalante

James Cook

Discovery

M.S. Merian

Pelagia

Pourquoi Pas?

Sonne

Alkor

G.O.Sars

Heincke

Meteor

Poseidon

Sarmiento de Gamboa

James Clark Ross

Hesperides

Le Suroit

Thalassa

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Thank you for your attention

Questions??