

## **Contribution of the Eurofleets Fleet Evolution Group to ERVO**



## Origine of the proposal

During Eurofleets 1, when trying to build a strategic vision concerning fleet replacement plans in Europe, the Eurocean database was used for identification . Some lacks were identified :

**MAIN ACTIVITY** is described without sufficient precision :

- Fisheries,
  - Oceanography,
  - Education,
  - Multipurpose activity,
  - Ice breaking
- => Difficulties to identify 'real' research vessels for several countries

**DEFINITION** of Global, Ocean, Regional, or Coastal vessels is insufficiently precise in order to have a good classification of the European fleet and benchmark with other countries, like US.



## 1 – Proposition of replacing « main activity » item by:

### a) Technical capacity

Icebreaking	
Fisheries	
Physical oceanography (ADCP, CTD Deployment, mooring capacity)	
Geosciences (multibeam, singlebeam echosounders, coring system,...)	
Deployment of towed or submarine equipment	
<1000m class Equipment	
>1000m class Equipment	
Multichannel seismic reflexion deployment	



## b) Type of activity

activity	% of activity (average over one year)
National public funded research	
Survey	
Charter or public/private cooperation	
Logistics	
Maintenance/transit/quayside	
Other (Education, non national public funded research, etc.)	

Y/N

Included in a barter or a scheduling cooperative agreement with other operators.

Name of the barter or agreement:



Access through an external (national or international) peer review process

Access through in-house peer review process

Status of the owner (Public/Non Public)



## Other information:

**RESEARCH ACTIVITY** needs ships carrying a broad array of scientific instrumentation, winches, wires, cranes, and articulating frames capable of supporting activities such as water-column and seafloor sampling, monitoring, and acoustic and bathymetric mapping. Laboratories equipped with sophisticated analytical equipment and computers allow preliminary data analysis and sample storage while underway.

**SURVEY ACTIVITY** concerns acquisition of a wide range of oceanographic, atmospheric, hydrographic, fisheries stock assessment, ecosystem, and habitat data in direct support of resource management and monitoring programs.

**LOGISTICS:** supply activity, transportation mostly in Antarctic, Arctic and Subantarctic islands and territories.

**CHARTER OR PRIVATE/PUBLIC COOPERATION:** activity conducted under a contract with a private company.



## 2 – Proposition of introducing vessels categories

Sources: NOCS description of UK Fleet (2013) ; Federal oceanographic Fleet Status report (2013).

Proposal of 4 categories:

ship performance / class	global	ocean/ intermediate	regional	coastal	local (mobile)
Areas	Minimum 2 areas	One area	///	///	///
Max. Distance from base	///	///	2000 nm	500 nm	50 nm
Length (m)	> 80 m	80 m ≥ L > 55 m	65 m ≥ L > 30 m	40 m ≥ L > 15 m	L < 15 m
Science berths (including scientists and non permanent technicians)	> 25	> 20	> 10	> 5	< 5



**GLOBAL CLASS:** With their extensive deck space, equipment, and a broad and diverse complement of laboratory space and outfitting, they are equipped to handle a wide array of instruments and to deploy suites of moorings, autonomous vehicles, large and complex sampling tools, and sophisticated acoustical equipment. Some vessels in this class support specialized services, including the operation of deep- submergence vehicles or multichannel seismic reflection equipment. Some are ice- strengthened (e .g ., ship's hull is reinforced with strengthening cross members and double planking) for operations in higher latitudes.

**OCEAN/INTERMEDIATE CLASS:** designed to support integrated, interdisciplinary research and survey missions with many of the same capabilities of the modern Global Class.

**REGIONAL CLASS:** these vessels operate on the continental shelf and in the open ocean of specific geographic regions. Regional Class vessels are designed to optimize unique regional conditions, such as the capability to work in shallower areas like estuaries and bays, or under seasonally harsh weather conditions.

**COASTAL CLASS:** these vessels serve a crucial role in supporting science throughout coastal zone where human impacts of development and resource use are greatest. The science missions are largely driven by local and regional needs. Can stay at sea by **night**.

**MOBILE OR LOCAL:** operated on a daily basis.



Operating areas:

Arctica
Antarctica
Pacific Ocean west
Pacific Ocean east
Indian Ocean north
Indian Ocean south
North Atlantic (including North Sea and Baltic Sea
South Atlantic
West Mediterranean Sea
Est Mediterranean Sea + Black Sea

