# OFEG

## What is the Ocean Facilities Exchange Group?

#### **History of OFEG**

In 1996 an agreement was signed between NERC, IFREMER and BMBF with the primary objective of bartering ship time and major marine equipment without the need to charter or exchange money.

In 2002, the NIOZ became a member with CSIC and IMR joining in 2006.

With these expansions, the group was re-named the Ocean Facilities Exchange Group (OFEG).





## Benefits of OFEG

#### Wider access for scientists

- OFEG provides scientists wider access to facilities and equipment than would otherwise be possible from within their home national capabilities.
- This includes **20** research ships and other facilities such as manned submersibles, remotely operated vehicles, towed arrays and shipboard surveying systems.
- Such "cutting edge" facilities are expensive and it makes little sense for each country to purchase additional facilities if they can be 'bartered', 'loaned' or 'hired' from OFEG partners.

#### Costs, time and opportunity

- By looking at the geographical location of OFEG ships as a whole, we can increase efficiency of fleet movements, reducing passage times, and therefore costs, allowing scientists access to a wider range of geographical areas in a given year.
- OFEG partners are moving towards a synchronized annual planning cycle for ships.
- In the spring and autumn of each year the Group meets to consider programming and bartering possibilities for each subsequent year.





### Is OFEG free?

- The underlying principal is that no money changes hands, but the arrangement does not provide "free" ship time.
- Ship time is bartered between the OFEG ship operators with all cruise operating costs covered by the ship owners.
- Each ship (or major item of equipment) is given an *agreed* number of points per day of barter to ensure like-for-like value between the members.
- For every cruise on an OFEG ship, the beneficiary country must mount an equivalent cruise on one of its own ships in return, to an equivalent points value.





### Does it work?

- OFEG is not a talking shop......it produces **operational** results every time the members meet.
- Decisions made by the OFEG members produce real scientific benefits for OFEG partner scientists.
- In recent years there has been an increase in the number of days exchanged each year by OFEG with *ca*.200-days a year exchanged since 2003.
- It is expected that OFEG exchange activity will continue at this level in the future with increasing emphasis being placed on the barter of major equipment items following the proved OFEG ship bartering concept.
- OFEG-TECH is an OFEG initiative to develop the equipment aspect of the OFEG, and is accountable to the OFEG members.





# What ships are involved?

#### **Dutch research ship**

PELAGIA

#### French research ships

- L'ATALANTE
- POURQUOI PAS?
- THALASSA
- LE SUROIT

#### German research ships

- ALKOR
- HEINCKE
- MERIAN
- METEOR
- POSEIDON
- SONNE

#### Norwegian research ships

- JAN MAYEN
- G.O. SARS
- JOHAN HJORT
- HAKON MOSBY

#### Spanish research ships

- HESPERIDES
- SARMIENTO DE GAMBOA

#### UK research ships

- DISCOVERY
- JAMES COOK
- JAMES CLARK ROSS





# How does the points system work?

| Points<br>Per<br>Day | IFREMER       | BMBF                            | NERC              | NIOZ     |  |  |  |
|----------------------|---------------|---------------------------------|-------------------|----------|--|--|--|
| RESEARCH VESSELS     |               |                                 |                   |          |  |  |  |
| 15                   |               | Polarstern*.                    | James Clark Ross. |          |  |  |  |
| 12                   | Pourquoi Pas? |                                 |                   |          |  |  |  |
| 11                   |               |                                 | James Cook.       |          |  |  |  |
| 10                   | L'Atalante.   | Maria S. Merian. Meteor. Sonne. | Discovery.        |          |  |  |  |
| 8                    | Thalassa.     |                                 |                   |          |  |  |  |
| 7                    |               |                                 |                   | Pelagia. |  |  |  |
| 6                    |               | Poseidon.                       |                   |          |  |  |  |
| 5                    | Le Suroit.    | Alkor. Heincke.                 |                   |          |  |  |  |

<sup>\*</sup> Currently available for joint cruises but not for exchange of ship time





# How does the points system work?

| OTHER MARINE SERVICES & FACILITIES |  |  |   |  |  |  |
|------------------------------------|--|--|---|--|--|--|
| Point                              | IFREMER                                | BMBF                                   | NERC                                      | NIOZ                                   |  |  |
| 9                                  | Nautile** ROV Victor**                 |  | ROV ISIS**                                |  |  |  |
| 4                                  |  | ROV QUEST**                            |   |  |  |  |
| 3                                  | Digital Multichannel seismics          |  | TOBI**                                    |  |  |  |
| 2                                  | Multibeam<br>SAR                       | Multibeam Multichannel Seismics        | Multibeam Multichannel Seismics           | Multichannel Seismics                  |  |  |
| 1                                  | Mobile Compressors Mobile Laboratories | Mobile Compressors Mobile Laboratories | Mobile Compressors<br>Mobile Laboratories | Mobile Compressors Mobile Laboratories |  |  |

\*\* Includes technician support





## Barter exchanging protocols for ship-time

- Programming of ship-time will remain the sole responsibility of the owner
- Ship-time barter costs cover all ship related costs (incl. victual, fuel and port charges)
- Barter cruises that take advantage of the ship's passage, will only incur barter costs for the days that are additional to passage
- Mobilisation and demobilisation time for barter cruises will be provided at an additional barter cost to the borrower
- Ship-time will be provided with support for all of the ship's fitted systems at no additional barter cost to the borrower with the exception of multibeam echo sounders
- All ship-time will, when required, be provided with the owner's CTD system and a technician to support it. This may be at an additional cost to the borrower





# Barter exchanging protocols for major marine equipment

- Programming of major marine equipment will remain the sole responsibility of the owner
- Major marine equipment identified with \*\* in the points table will be provided with technician support at no additional barter cost to the borrower
- All other marine equipment may be provided by the owner with technician support at the discretion of the owner, at an additional barter cost to the borrower
- Once a barter exchange of major marine equipment is agreed the owner will make best efforts to ensure that equipment is supplied to the borrower on time and in full working order
- All equipment (for which no technician support is provided by the owner) must be returned by the borrower in a state that is to the satisfaction of the owner
- The cost of loss replacement, and/or damage repair of exchanged marine facilities (for which no technician support is provided by the owner) is the responsibility of the borrower





# What are the objective's of OFEG-TECH?

- As the OFEG concept has matured and expanded, the opportunity for barter of major equipment has increased.
- To assist in the further development of major equipment barter within OFEG the right people at the right level in each organization need to be engaged.
- OFEG-TECH was set up to provide the forum for the required communication and networking to support the development of major equipment barters and to improve cooperation between the OFEG partners.
- Improving knowledge of each others organizations also allows each organization to benefit from new experience and knowledge which can be used to develop our own internal technical capabilities.





# Further key objectives of OFEG-TECH

- To develop an understanding of each others organization, structure and contacts.
- To identify and develop the opportunity for exchange of knowledge and experience.
- To investigate the potential for 'bilateral training' and technician exchange
- To identify common problems and elevate them to the OFEG/European level





## What is OFEG-TECH for?

'To aid the development of OFEG from a pure ship barter organisation to one that is also capable of delivering state of the art marine scientific facilities across all OFEG platforms, through interoperability of large equipment, adoption of common working practices, harmonised mechanisms, protocols and tools'.





### OFEG Virtual Pool of Major exchangeable Equipment:

- Trans national access of heavy equipment:
  - German DTS-1 on Dutch and UK RV's
  - French ROV VICTOR on German RV's
  - UK TOBI on Dutch, French and German RV's
  - Dutch Piston coring system on UK, German RV's
  - Dutch Ultra Clean CTD system with deep sea winch and cable on German and UK RV's
  - German ROV CHEROKEE on Dutch RV
  - NERC/CSIC full exchange agreement for seismic equipment
  - NERC/German barter of airguns on RV Sonne & RRS James Cook
  - Ship and equipment collaboration for coring and synthetic rope trials



