

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).



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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.



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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.



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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.



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

How does the points system work?

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

* Currently available for joint cruises but not for exchange of ship time



**National Oceanography
Centre, Southampton**
UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



**NATIONAL
MARINE FACILITIES
SEA SYSTEMS**

How does the points system work?

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

** Includes technician support



**National Oceanography
Centre, Southampton**
UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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 barter 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.



**National Oceanography
Centre, Southampton**
UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



**NATIONAL
MARINE FACILITIES
SEA SYSTEMS**

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



**National Oceanography
Centre, Southampton**
UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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'.



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS

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



**National Oceanography
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND
NATURAL ENVIRONMENT RESEARCH COUNCIL



NATIONAL
MARINE FACILITIES
SEA SYSTEMS