



NIOZ and OFEG

Update 2010

Report to RVOC

Erica Koning, NIOZ, The Netherlands

The main event for NIOZ for 2010: RV Pelagia's midlife refit



The 'old' Pelagia entering Durban harbor, mid 2009

Pelagia midlife refit

- Cost: M€4.5, including extras
- New Caterpillar engines, 12 and 8 cylinder
- Diesel electric drive, constant 1500 rpm
- Electronic fuel injection, 5500l per day
- New generator 800 kW instead of 620 kWh, ship can now run on the small engine alone
- New piping, cranes, nautical instruments, V-sat
- EDIS, no more paper charts
- Ballast water treatment unit installed
- Accommodation renovated and redecorated

the old components are removed and replaced







old



new



A 'new' ship





OCEAN FACILITIES EXCHANGE GROUP

update 2011

research fleet co-ordination & harmonisation

Report to RVOC

Erica Koning, NIOZ, The Netherlands

OFEG

OFEG members: Ifremer (France), BMBF (Germany), NIOZ (Netherlands), IMR-UoB (Norway), CSIC (Spain), NERC (UK).

The NSF is connected to OFEG via its bi-lateral agreement with NERC

Main objective: exchange of shiptime and major equipment based on 'bartering' > without money-exchange; joint cruises
Exchange based on **value points** according to scientific capacity of the ship as agreed between OFEG members

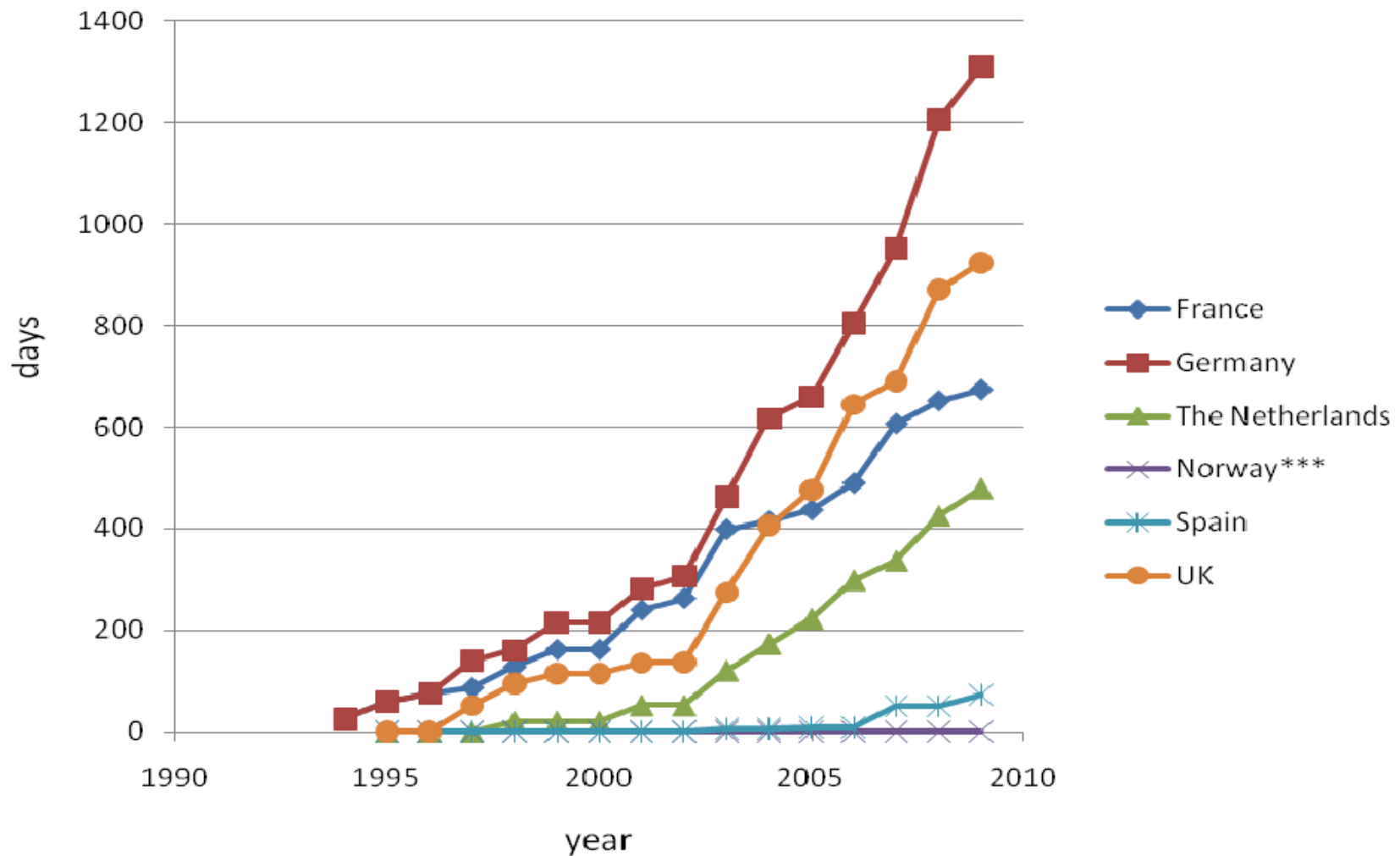
Significant advantage: access to wider range of facilities, and access to ocean areas that would be beyond reach otherwise.
At the same time more efficient use of ship time by reducing cost and time spend on long passages.

Other OFEG advantages:

Opportunistic interventions: mutual help when equipment get lost, recovery of drifting moorings, when within reach; en-route servicing and turn-around of partners' moorings, combined sampling and measurements for partners.

Joint scheduling of cruises: OFEG meets twice a year for cruise planning and scheduling and to discuss topics of mutual interest.

OFEG: days exchanged per country



Activity No.	Activity	Days transit saved (k€10)	Days saved on commercial charter (k€20)	Total savings (k€)
1, 2005	NL cruise on Discovery (UK)		19	380
2, 2006	NI cruise on Discovery (UK)		21	420
3, 2006	NERC intervention for NIOZ (Discovery)	20		150
4, 2007	NL cruise on Poseidon (D)		7	140
5, 2008	NERC intervention for NIOZ (James Clark Ross)	20		200
6, 2008	NL cruise on METEOR (D)		16	320
7, 2008	NERC intervention for NIOZ (Discovery)	20		200
8, 2010	SCIC intervention for NIOZ near Mallorca		3	60
9, 2010-2011	4 NL science teams on Meteor (D)	15		165
10, 2011	NL cruise on James Cook (UK)	50		500
total				k€2,585

Recent highlights :

- German cruise on Viking Explorer (Svalbard), the first Norwegian barter
- 4 Dutch science teams on METEOR (Mediterranean Sea)
- Dutch cruise on J. Cook (Punta Arenas to Las Palmas)
- French cruise on Sonne (near Tahiti)
- French use of NERC's TOBI on Marion Dufresne
- NIOZ intervention on Spanish Sarmiento de Gamboa

Synchronizing capital investment plans: the NERC- CSIC seismic agreement

Background:

- NERC needed a new streamer system but didn't have the money to buy it, whereas CSIC have had significant capital investment to purchase a 6000m digital Multi Channel Seismic Streamer, recording system, air guns etc.
- Through OFEG, NERC and CSIC are engaged in a bi-lateral collaboration to enhance seismic capabilities in the areas of training and exchange of technicians and equipment.
- NERC and CSIC plan to support future NERC and CSIC seismic cruises jointly, programming both their technical staff and equipment on each others ships.

With new builds and refits it makes sense to invest in equipment that can be operated from all OFEG ships

OFEG-TECH: objectives

- OFEG-TECH was set up as an OFEG spin-off to provide a forum where marine technicians meet and exchange knowledge and experience, with the ultimate goal to support the development of major equipment barterers and to improve technical cooperation between the OFEG partners.
- To develop the potential for interoperability of equipment between organizations.
- To identify and develop the opportunity for exchange of knowledge and experience, bilateral training and technician exchange.
- To identify common problems and elevate them to the OFEG/European level

OFEG-TECH

The following topics have been identified as key items for future meetings:

- interoperability (all equipment)
- Coring technology and development
- ROV interoperability and exchange of technicians
- Ship software and data systems; networking, data acquisition, post processing
- Deep sea cable technology
- Cross compatibility of equipment pools
- Equipment loss, lessons learned, reasons, solutions & consequences

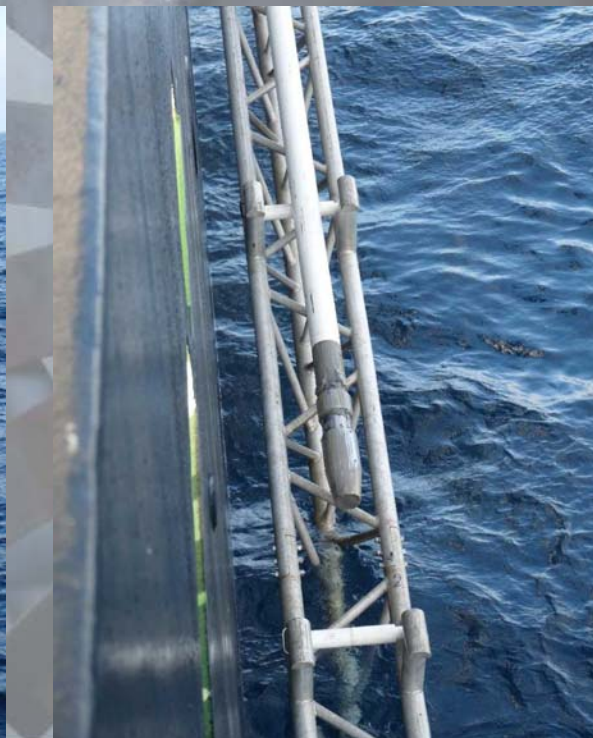
OFEG-TECH: key activities in 2009 -2010

Supporting the Seismic Agreement NERC – CSIC

- Trans-national team of technicians for the seismic equipment
- NERC and CSIC plan to support future NERC and CSIC seismic cruises jointly, programming both their technical staff and equipment on each others ships.
- In 2010: there trials cruise on Sarmiento the Gamboa, 2 science cruises on Sarmiento de Gamboa and access to the equipment on James Cook.
- This year: long seismic cruise on Sonne (Pacific) with equipment from UK and Spain and air guns from Sonne, with a mixed technical group from all three participating countries.

OFEG-TECH: key activities in 2009 -2010

- Piston core trials cruises: this has been a very important activity because it has changed the way NIOZ and NERC look at piston coring, with invaluable help from the IFREMER compaction measurement sensors system.
- Trials cruises on James Cook in 2009 and on Pourquoi Pas? and Pelagia in 2010



OFEG-TECH

Overall, the benefits of this type of collaboration are beyond the initial expectations.

In future, use of each others equipment will be extended to smaller equipment, because the size doesn't make any difference for the concept to work.

