

VESSELS AND LOGISTICS

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NIOZ owns and operates several marine research facilities, not only to accommodate its own scientific programme but also for the oceanographic community in the Netherlands. As a consequence of its position as a national institute and in relation to its mission NIOZ co-ordinates and takes care of the execution of sea-going research programmes funded by NWO in the framework of the national programme for sea-going research. A report on these MRF activities is given previously.

Research Vessel PELAGIA

The largest sea-going facility is RV Pelagia, a 66 m multipurpose research vessel developed for oceanographic research in coastal seas, on continental shelves and in the blue ocean. R/V Pelagia (built 1991, ISM Certified) is specially designed as a multipurpose research vessel. It is a very stable platform and has most favourable nautical properties. Since 1991 she has experience in CTD-deployment, biological sampling methods, seismic surveys, coring activities (box-, multi-, piston, gravity, vibro-, CPT) as well as in deployment and recovery of deep-sea moorings and bottom landers.

In April 2006 a Swath KONGSBERG EM 300 1 x 2 degree multi-beam echosounder for shallow and deep water was installed. By using new chirped ping technology the system is capable of producing a swath of 4000 m at 5 km depth. After installation the system was successfully tested. More details on the cruise programme below.



Committee Future Pelagia Report

Following the CNTZ recommendation on outsourcing of RV Pelagia, the Committee Future PELAGIA¹ studied the running cost efficiency and management of the Royal NIOZ research vessel Pelagia.

An analysis was made on the operational performance during the past six years, and the operational costs according to the format of the Businessplan 2000, as agreed with NWO/ALW.

Also an assessment was done on the position of NIOZ within the Ocean Facilities Exchange Group (OFEG).

A comparison was made of the operating system and daily cost rate with other OFEG members in Europe and UNOLS (USA). The figures mentioned were checked by the OFEG partners.

The Committee organised an external consultation with a commercial ship operator. The former P&O Nedlloyd (now Maersk) ship management organisation Blue Star Ship Management took up the assignment to review the current fleet management of RV Pelagia.

Blue Star reviewed and analysed the present fleet management of RV Pelagia, and generated recommendations to optimize and

¹ The CFP has the following members: Drs. Marieke J. Rietveld (MRF – Chair), Theo C.J. Buisman (Fleet manager & Logistics), Dr. Herman Ridderinkhof (FYS/Committe Marine Facilities-CMF), Jack Schilling (MTM), Ir. Marck G. Smit (MTc), Prof.dr. Tjeerd C.E. van Weering (MCG/CMF), as off March 2006 John Ellen (Master RV Pelagia)

streamline the NIOZ fleet management organisation.

These recommendations also specified suggestions for better efficiency and cost savings.

Advice was given on the benefits and disadvantages of possible outsourcing of (parts of) the ship management.

Based on the presented evaluation and the Blue Star advice the Committee came to the following main recommendations:

Recommendations Committee Future Pelagia (CFP)

1. The daily management of RV PELAGIA should be kept within NIOZ.
2. Royal NIOZ should implement suggestions given by the Blue Star review to divide and delineate the management responsibilities in order to improve the management capabilities
 - Put the right responsibilities on the right level
 - Realize the right level of competence
 - Improve the communication between shore organisation and ship's master and officers
3. Royal NIOZ should pursue to find a way to bring its seagoing personnel under a more appropriate Collective Labour Agreement.
4. The high quality of the service of RV PELAGIA to the science community and the high standard of maintenance of the ship should be maintained.
5. The present position and high profile of Royal NIOZ within the OFEG should be maintained.
6. Royal NIOZ should pursue to bring the number of operational days of RV PELAGIA per year to the average of 275 (Full Operational Year), as it had during the past six years.

With the approval of the Royal NIOZ board activities have started to implement the CFP recommendations.

Smaller research vessels

Research Vessel *Navicula*: NIOZ has a 25 m research ship specially designed for working in the shallow Wadden Sea. She has been built in 1980, and elongated in 1999, with a major upgrade in 2004. RV *Navicula* sailed for 178 days and

worked also in the German and Danish part of the Wadden Sea.

For the new build RV *Nereis* (20m) that was planned for delivery early 2004, and after serious delay did not meet the contract requirements, law procedures before the Court in The Hague are still ongoing.

NEREIS was designed to be a small fast (22 kn) aluminum twin hull RV with waterjet propulsion for

the shallow Wadden Sea (draught: 0.80 m) and nearby coastal work. A shared ship with the Netherlands Organisation for Applied Technology (TNO)

Ocean Facilities Exchange Group

The OFEG's primary objective is bartering shiptime and exchange of major marine equipment without the need to exchange money. This arrangement has significant advantages. It allows scientists access to

a wider range of facilities and equipment than would otherwise be possible, and also it reduces wasted time, and therefore wasted costs on long transit passages. In 2006 Dutch scientists sailed on UK ships under this arrangement, and a team sailed on RV *Pelagia* for a three week research cruise in the Celtic Sea.

Another favourable development evolving from the partnership is the impulse to international co-operation and exchange of marine technicians for training and support on board.

In 2006 the OFEG was extended with two new members: Spain and Norway.

Cruise programme 2006

After maintenance, RV PELAGIA sailed for 256 operational days, including 1 barter cruise of 24 days. In August a survey was done in the outer North Sea on a 22 day commercial charter.

Science projects were funded by the Netherlands Research Council NWO (also funding 67 days shiptime), the European Union (no shiptime funds), and NIOZ (165 days of which 67 days for the NWO national programme and 98 matching EU/IGBP projects). A 6 day test cruise was performed for the new multi beam system.

Deployment of LOCO/IW mooring in the North Atlantic Canary Basin

To accommodate these cruises diplomatic clearance has been

requested from Ireland, Portugal, Spain and UK.

Besides calling at homeport Texel, port calls for change of crew and scientific party as well as (un)loading scientific equipment took place in Tenerife (Canary Islands – Spain), Funchal (Madeira – Portugal), Lisbon and Faro (Portugal), Galway (Ireland), Oban and Aberdeen (Scotland - UK) and Las Palmas (Canary Islands – Spain)



Deployment of LOCO/IW mooring in the North Atlantic Canayr Basin.

CRUISE LIST PELAGIA

64PE246	13/03/2006 Texel	04/05/06 Texel	RANAMOX	Joanna Nicholls
64PE247	05/04/06 Texel	17/05/2006 Tenerife	TEST MULTIBEAM	Henk de Haas
64PE248	18/05/2006 Tenerife	06/12/06 Funchal	LOCO	Hans van Haren
64PE249	21/06/2006 Galway	07/06/06 Oban	HERMES	Gerard Duineveld
64PE250	07/08/06 Oban	23/07/2006 Oban	BIOSYS	Conny Maier
64PE259	29/07/2006	22/08/2006	GEOTEK CHARTER	-
64PE252	31/08/2006 Lisbon	22/09/2006 Lisbon	CANYONS	Stigter, Henko de
64PE253	23/09/2006 Lisbon	19/10/2006 Faro	MICROSYSTEMS	Henk de Haas
64PE245	21/10/2006 Faro	11/09/06 Faro	ESONET/MOVE	Tjeerd v Weering
64PE251	15/11/2006 Las Palmas	13/12/2006 Las Palmas	ARCHIMEDES	Gerhard Herndl