

Cruise Programme Review Group Terms of Reference

1. The NERC Cruise Programme Review Group

The NERC Cruise Programme Review Group will report to the NERC Director of Science & Innovation (the ‘customer’ for NERC science programmes) and the Directors of the National Oceanography Centre (NOC, for National Marine Facilities) and the British Antarctic Survey (BAS), as the ‘providers’ of the facilities that deliver the NERC Marine Facilities Programme comprised of:

- a. Science cruises onboard the NERC research ships operated by National Marine Facilities (NMF) and BAS;
- b. Technical seagoing support provided by NMF and BAS; and
- c. Marine facilities that are provided through NERC’s barter arrangements with other operators.

2. Remit

The NERC Cruise Programme Review Group exists to provide objective advice to NERC on all delivery aspects of the operations that make up the NERC Marine Facilities Programme and monitor outputs from these marine services & facilities (eg. Post Cruise Assessment forms).

NERC Directors will in turn provide advice to the NERC Cruise Programme Executive Board, as appropriate.

3. Terms of Reference

The terms of reference of the NERC Cruise Programme Review Group are to:

- a. Conduct an annual review of the operations carried out as part of the NERC Marine Facilities Programme, and to provide a report on this to NERC.
- b. Examine issues associated with all aspects of the operations carried out within the NERC Marine Facilities Programme, and to provide advice on these issues to NERC as and when appropriate.
- c. Monitor the level of performance of the services and facilities that are provided via the NERC Marine Facilities Programme, through user satisfaction and other measures, including Benefits Realisation Plans for the NMF-operated vessels and equipment (Annex A).
- d. Receive and discuss annual reports from NMF, BAS and NERC Marine Planning in order to provide advice and guidance on these reports to NERC.
- e. Give advice to NMF and BAS on service functions (both ships and technical support).
- f. Monitor the procedures and processes used by NMF, BAS and NERC Marine Planning in the provision of ships and facilities, to provide assurance to NERC that an effective, efficient and coordinated service is being provided to the marine science community.
- g. Advise NERC on resource requirements for provision of NERC Marine Facilities, and especially highlighting issues of critical shortfall.

The NERC Cruise Programme Review Group will maintain processes to ensure it meets these terms of reference.

4. Membership

- a. *Full* membership of the NERC Cruise Programme Review Group will include a Chairman and a minimum of four persons drawn from the marine science community. The membership must include:
 - i. at least one representative from a UK higher education institution;
 - ii. at least one representative from a NERC research and collaborative centre; and
 - iii. at least two representatives with appropriate operational expertise (e.g. NERC's barter partners);
 - iv. the Chair must have been a member before being invited as Chair, and after serving as Chair cannot revert to being an ordinary member.
- b. *Full* members will be invited by NERC to serve for a term of up to three years with a maximum extension of a further two years. The Chairman will serve for a maximum of three years.
- c. *Ex officio* members will represent different levels of NERC as follows:
 - i. Directorate:
 - NOC Associated Director, NMF
 - BAS Head of Operations and Logistics
 - NERC Head of Research, Marine
 - ii. Operational:
 - NOC Programme Manager, NMF
 - BAS Ship Programme and Operations Manager
 - NERC Senior Programme Officer, Marine Planning
- d. Specialist officers from NERC, NMF and BAS may be invited to attend meetings for particular agenda items.
- e. The Cruise Programme Review Group Secretariat will be provided by NERC Head Office.

5. Mode of operation of meetings

The Group will meet annually for a two-day annual review meeting and will focus primarily on reviewing the previous year's Marine Facilities Programme. Typically, the format will be:

- i. Minutes and matters arising;
- ii. Annual review reports and presentations;
- iii. Post cruise assessment forms;
- iv. Future programme;
- v. Specific issues;
- vi. Finalise content of the group's annual report (*ex officio* members only as required).

All agenda items are required to be supported by written papers submitted in sufficient time for them to be distributed two weeks prior to the meeting. The following procedure will be used to elicit specific input from the user community:

- a. A calling notice will be circulated two months in advance of each meeting asking for any additional agenda items regarding specific user issues.
- b. These must be supported by a written paper that has been submitted to the NERC Cruise Programme Review Group Secretariat in sufficient time for the Chair and Secretariat to review and agree which will be included in the agenda and distributed in the Group's papers.
- c. Where necessary the Chair and Secretariat will invite authors as visitors to speak on their paper(s) at the meeting.

- d. The Group's papers will be circulated by the Secretariat to arrive with members at least two weeks before meetings.

Should there be a business requirement to do so the Group may, on exception, hold a second meeting in any year.

ANNEX A – SHIP’S BENEFITS REALISATION PLAN (BRP)

Ship’s Benefits Realisation Plan (BRP)				
Ref:	Benefit:	Action:	Ref:	Measure(s):
1	Strength of UK marine & earth science groups using the ship including training;	~ Ability to support NMEP to keep a broad science base able to use ships.	(a)	Discipline coverage of cruise proposals supported;
		~ Ability to support training of the next generation of the UK Marine and Earth Science community	(b)	Numbers of PhD students, Post Doctorate and Fellowships participating in cruises;
2	Impact on the delivery of national strategy & international collaborations;	~ Support participation in national and international strategic research programmes	(a)	National and international research programmes that have been supported by cruises. programmes (MFP to capture number and name of international programme...SME question required for PI to add this detail)
		~ Maintain and develop participation in international ship barter arrangements.	(b)	Number of barter exchanges
			(c)	International participants on cruises; (institute that participants are affiliated to, not residency)
3	Operational performance of the ships in relation to programmed science requirements;	~ Optimise Marine Facilities programme to deliver the science requirements	(a)	Do the ships handling, station keeping and survey line keeping capabilities meet science requirements
			(b)	Number of science and technician berths occupied per ship;
			(c)	Number of different NMEP systems (capabilities), and individual items (equipment) used on each cruise;
			(d)	Total number of NMEP deployments by equipment type per annum
			(e)	Number of containers to/from each cruise and number of individual item transported per ship, per year;

Ship's Benefits Realisation Plan (BRP)			
Ref:	Benefit:	Action:	Ref: Measure(s):
			(f) Percentage time operating in each geographical areas e.g. Atlantic, Atlantic, Polar.
4	Value for money of ship operations	~ Optimise ship operations to improve value for money	(a) Unit cost of scientist per day
			(b) Actual total fuel usage of each ship per day at sea relative to the SoR
			(c) Annual ship operating cost adjusted for inflation excluding fuel
5	Leverage of investment, and delivery of wider national and international	~ Leverage of NCLRI and science funding that aligned to NERC strategic priorities	(a) In-kind financial contributions of research partners for each cruise (MPO)
			(b) Financial contribution of non-NERC peer reviewed source (e.g. EU, NFF, DEFRA) of the science objectives of each cruise
			(c) Commercial funding for ship activity
		~ Investigate opportunities for the ship to use for wider UK benefits during port calls.	(d) Outreach events (annual measure)
6	Improved service delivery	~ Continuous improvement of operational service delivery.	(a) To be developed by NMF and MPO
7	Data management;	~ Strengthen the links between NMF and BODC to ensure timely archive of key data sets in appropriate data centres, and consistent with NERC data policy.	(a) Speed of ship data delivery to British Oceanographic Data Centre from ship (with data embargoes where needed) in line with NERC data policy.

Ship's Benefits Realisation Plan (BRP)			
Ref:	Benefit:	Action:	Ref: Measure(s):
			(b) Speed of delivery of sediment cores to British Ocean Sediment Core Research Facility (BOSCORF).
8	Benefits to end users (NGO, industry, government)	~ Ship operations to support the pathways to impact plans of funded science	(a) End user beneficiaries of each cruise
			(b) Contribution to UK international diplomacy (e.g. utilisation of port visits).
9	Knowledge Exchange;	~ Pro-actively explore ways to maximise the opportunities to use the ship and shipborne science as a means for engaging science in society.	(a) Cruise "blogs" (e.g. "classroom@sea").
	Including science into policy and science in society;		(b) Port call and other "events".

ANNEX B - MARS BENEFITS REALISATION PLAN (BRP)

Reference:	Benefit:	Action:	Measure(s):
A.4.4	13 Increase use of MAS Platforms	~ Grow experience of using MAS platforms to obtain scientific data	Number of research institutes/HEIs using MARS assets
A.4.5			International participants on MARS projects
A.5.1			PhD students participating in MARS supported projects;
A.5.2			External training/consultancy given by MARS staff (i.e. RN courses, proposed AAIB consultancy)
B.1.1	14 Realising a step change in use of MAS to transform how sustained ocean observations are made.	~ To increase the usage of MARS assets (including those operated by partners)	Days in use by funding stream (NC-LTS, DS, External)
B.1.2			Number and type of MAS platforms held within the NMEP
B.1.3			Number of external (government [DEFRA/DSTL and commercial] partners using MARS assets
B.2.1		~ To improve the cost effectiveness of sustained observations	USER cost per day of glider
B.2.2			USER cost per day of long-range AUVs
B.2.3		~ To increase Observational Capability	Type of sensor deployed by MAS platforms