Prioritisation criteria for bids for NERC ship-time 'free at the point of use'.

Background:

Since 2001 NERC has operated a 'free at the point of use' funding model for its three research ships (*RRS James Cook, RRS Discovery,* and *RRS James Clark Ross*) that is underpinned by National Capability budgets that NERC approves annually for its ship operations at the National Oceanography Centre (NOC) and the British Antarctic Survey (BAS). These National Capability budgets pay for the ship operation costs (for example, fuel, crew) associated with the 'free at the point of use' cruises that UK scientists can bid for when they have secured funding from a peer-reviewed source (for example, from the European Research Council) for science that is within NERC's remit.

The number of 'free at the point of use' cruises that are programmed each year by NERC is though limited by the affordability of the associated ship operation costs. Importantly, NERC proactively uses its international ship barter arrangements to develop more cost-effective cruise programmes for its ships (for example, by taking advantage of the deployment of barter partners' research ships into more geographically remote regions to avoid the costly passage legs associated with using NERC ships), thereby maximising the number of 'free at the point of use' cruises that can be programmed each year.

An important consideration for NERC in developing annual cruise programmes is to ensure, where possible, that NERC's research ships are fully utilised. The two main limiting factors when it comes to achieving this are the limited numbers of NOC and BAS seagoing technicians and engineers that are available to support cruises, and the National Capability budgets that are available to pay for the ship operations costs of NOC and BAS. As a consequence of this, NERC may:

- Optimise the deployment of the available NOC and BAS technicians and engineers so that more 'free at the point of use' cruises can be supported each year, even if this means limiting the numbers of 'heavy' cruises (in terms of technical support) that can be programmed.
- ii) Treat as a high priority the programming of science cruises that contribute additional funding to support ship-operation costs (for example, an EU-funded cruise that pays for fuel) and commissioned research and charter cruises that pay the day rate charge for the ships, as the additional 'income' to cover NOC and BAS ship operations costs will ultimately allow for more science cruises to be programmed.

The Prioritisation criteria:

To ensure that bids for 'free at the point of use' NERC ship-time are programmed in a fair and transparent manner, and to avoid discriminating between bids by having to (re)assess science quality or consider NERC funding type, a number of primary and secondary prioritisation criteria have been used since 2001 to prioritise bids – these are outlined below. In using these criteria NERC will also seek to use the specialist capabilities of its ships in the most effective way to support NERC

science programmes – for example, the *RRS James Clark Ross* will be programmed to utilise its polar capabilities.

In the first instance the primary criteria will be used but in the event that these do not discriminate sufficiently between competing bids (for example, two NERC-funded science cruises bidding for the same period of time) then secondary criteria will be used.

In the rare event that the secondary criteria cannot be used to determine the relative priority of competing bids to the satisfaction of the Principal Scientists concerned, the decision on the prioritisation of competing cruise bids for 'free at the point of use' ship-time will be taken by the NERC Director of Science.

Primary criteria (in priority order):

- 1. NERC funded science and logistics
- 2. Non-NERC funded (including Europe or USA) peer reviewed science that is within NERC's remit

Secondary criteria (in priority order):

- 1. **Opportunity**: where it can clearly be demonstrated that the opportunity to run a cruise is only in the year of programming. Examples of cruise bids in the category include:
 - Antarctic logistics where the opportunity to deliver Antarctic logistics is timelimited, these bids will, by necessity, be a higher priority than any science cruise bids;
 - Recovery of marine equipment (for example, moorings and landers) where the opportunity to recover equipment and data from long-standing deployments is clearly time-limited;
 - Temporal sequence of cruises (for example, a series of NERC large grant cruises) –
 where a cruise bid is part of a temporal sequence of cruises that has already started.
- 2. **Time efficiency**: where there is an opportunity to programme cruises in a way that maximises the number of NERC science days at sea. For example, a cruise that requires a considerable number of passage days may be of lower priority if there are other science cruises (with little, or no, passage time) bidding for the available time slot.
- 3. **Cost-effectiveness**: where it is clearly more cost-effective for NERC to programme a cruise. For example, a bid for a geophysics or Remotely Operated Vehicle (ROV) cruise may be of higher priority if it can be programmed back-to-back with another geophysics or ROV cruise because there are considerable cost savings for NERC's science budget in only having to pay once for the large costs associated with the set-up and mobilisation of these cruises.

In using these secondary criteria, priority will be given to (in priority order):

- 1. Bids for cruises that have previously been postponed by NERC;
- 2. Bids from NERC's international barter partners;
- 3. Bids that were carried-over from a previous year;
- 4. Bids for long-term time series, where as a minimum NERC will aim to deliver four out of five cruises.