

## RRS Discovery Replacement Project - Status as of April 2011

The Discovery Replacement Project (D4RP) was initiated in 2007 and following development of a Statement of Requirements (SoR) this went out to tender during 2008. This (2008) procurement failed and a second procurement was started in August 2009 which resulted in a successful contract award for the design and build of the vessel to Construcciones Navales P. Freire, S.A., Vigo, Spain on the 29<sup>th</sup> March 2010.

The project represents NERC's highest value Capital Investment at £75m with a capital allocation of £48m from the Science Budget via the Large Facilities Capital Fund administered by the Department for Business, Innovation & Skills (BIS).



### Shipyard Progress

One of the first tasks completed by the shipyard was the formal appointment of Skipsteknisk AS (designer of the James Cook) as the lead for the vessel design; the shipyard has its own design capability and is utilising this for the detailed areas of design with Skipsteknisk concentrating on providing preliminary designs and elements of the project which need statutory approval.

All the main sub-contractors / suppliers have been appointed by the shipyard:

- Classification Society (Lloyd's Register) & Regulator (MCA).
- Arcelor Mittal: Structural Steel.
- DnV: Acoustics and Vibration consultant.
- Applica: EMC consultant.
- Skipsteknisk: Vessel Design.
- Kongsberg: Navigation, DP and Swath Bathymetry systems.
- Wärtsilä: Integrated, power generation/propulsion package.
- Rolls Royce (Odim): Winch and overside handling suite.
- Air Conditioning: Aeron
- Electrical Installation: Emenasa

Refinement of the hull lines, the development of the transducer blister and inclusion of the aft azimuth thrusters have been completed and confirmed using extensive model tests at Marin in the Netherlands.

The design of steel structures are reviewed by Lloyd's Register and NERC followed by the construction of the steel blocks which has been ongoing with the first steel being cut in November 2010.



Since February 2011 the frequency of visits to the shipyard has increased to provide oversight for quality and progress monitoring. The on-site attendance will increase further as pipework and other structures are implemented. Technical design reviews will continue and soon there will be attendance at some of the manufacturers' premises to witness Factory Acceptance Tests of major items or systems.

#### Future Timetable/Events

Milestone 3 – 1200 tonnes steel cut – 15<sup>th</sup> June 2011

Ready for Launch – 15<sup>th</sup> January 2012

Outfitting, Plant Commissioning and Trials

Delivery to NERC 3<sup>rd</sup> June 2013

Ready for Science Q1 2014

#### Other Topics

As part of the contract with the shipyard a Portable Metal Free CTD System was included as an option. The system comprises a winch and cable suitable for metal free sampling equipment deployment. The shipyard has now been instructed to include this item which will be integrated with the main winch suite and overboarding positions.

Three Laboratory Containers are included within the remit and budget for the project, based on previous experience it was decided early on in the project to purchase these items outside of the main ship build and design contract. Part of the reasoning for the exclusion was to have some flexibility in budget but principally to control the quality of the final product. Since July 2010 an OJEU competitive procurement exercise has been run by the project, this has concluded in a contract award for the three units with expected deliveries into the NMEP as follows:

Radionuclide Laboratory Container - mid September 2011

Ultra Clean Chemistry Laboratory Container - end October 2011

Constant Temperature Laboratory Container – end January 2012

Please see the D4RP website for more details and updates:

**[http://www.noc.soton.ac.uk/nmf/discovery\\_replacement\\_project/d4rpintroduction.html](http://www.noc.soton.ac.uk/nmf/discovery_replacement_project/d4rpintroduction.html)**