



British Antarctic Survey

A New Polar Vessel for UK science and logistics

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Current BAS ship operations

- BAS operates two vessels, RRS *James Clark Ross* and RRS *Ernest Shackleton*, both built in the first half of the 1990s
- Outstanding science and logistics platforms, giving BAS the flexibility to respond to rapidly changing situations for polar operations
- With the coming Polar code and rising cost of operating two aging vessels, a decision was made by the UK government to fund the construction of a new polar research vessel
- This is part of a bigger investment in large research infrastructure for the United Kingdom



RRS James Clark Ross: Science and logistics

- Built by Swan Hunter in Scotland
- Launched 1990
- World class polar science and logistics platform
- Completed more than 300 science cruises



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RRS *Ernest Shackleton*: Polar logistics research vessel



- Built by G.C. Rieber of Bergen, Norway in 1990
- On long term bareboat charter through 2019



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Remit of the British Antarctic Survey

- Supporting UK ocean and terrestrial research in both the Antarctic and Arctic
- Supporting the British presence in the British Antarctic territory and reinforcing the UK position in the Antarctic treaty community
- Maintaining a none military presence in the South Atlantic/Falkland Islands



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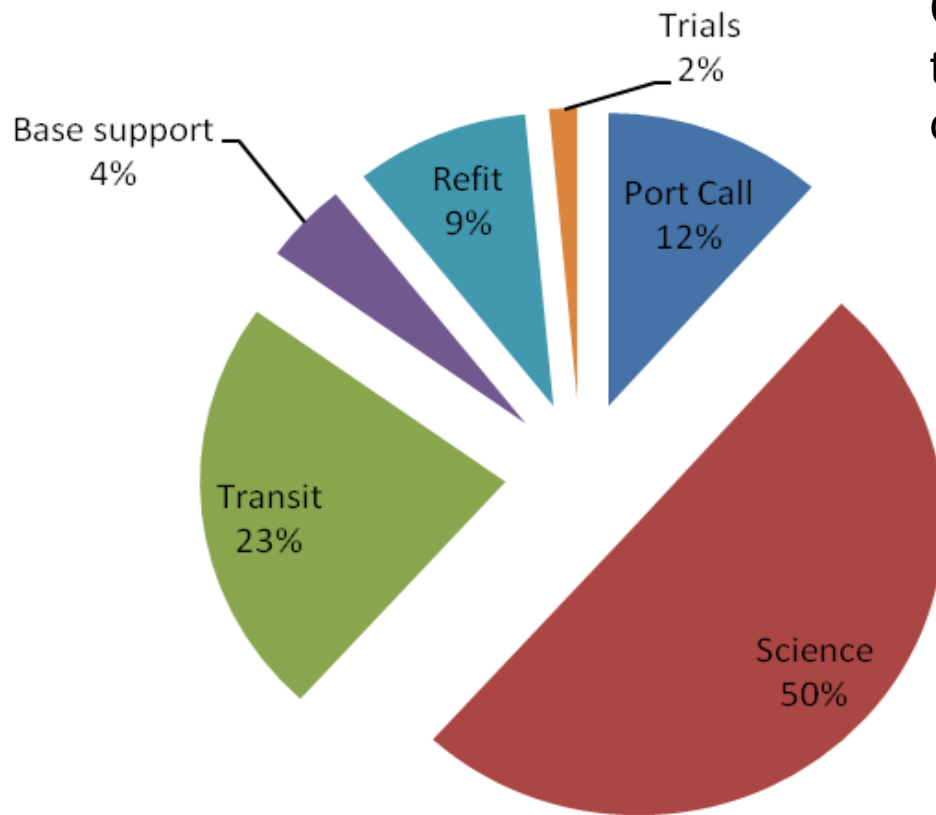
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Meeting the challenge

- Moving from two to one vessel
- Modernization of our logistics chain shore-side: in the UK, the Falklands and the 5 Antarctic bases
- Modernization of shipboard cargo handling, moving from lots of break bulk to containerized cargo handling
- Modernization of the infrastructure on the five bases, enabling the NPRV to focus on science with less base support than in the past
- Meeting our commitments whilst retaining the maximum number of science days



Current utilization of the RRS JCR 2014/15 season



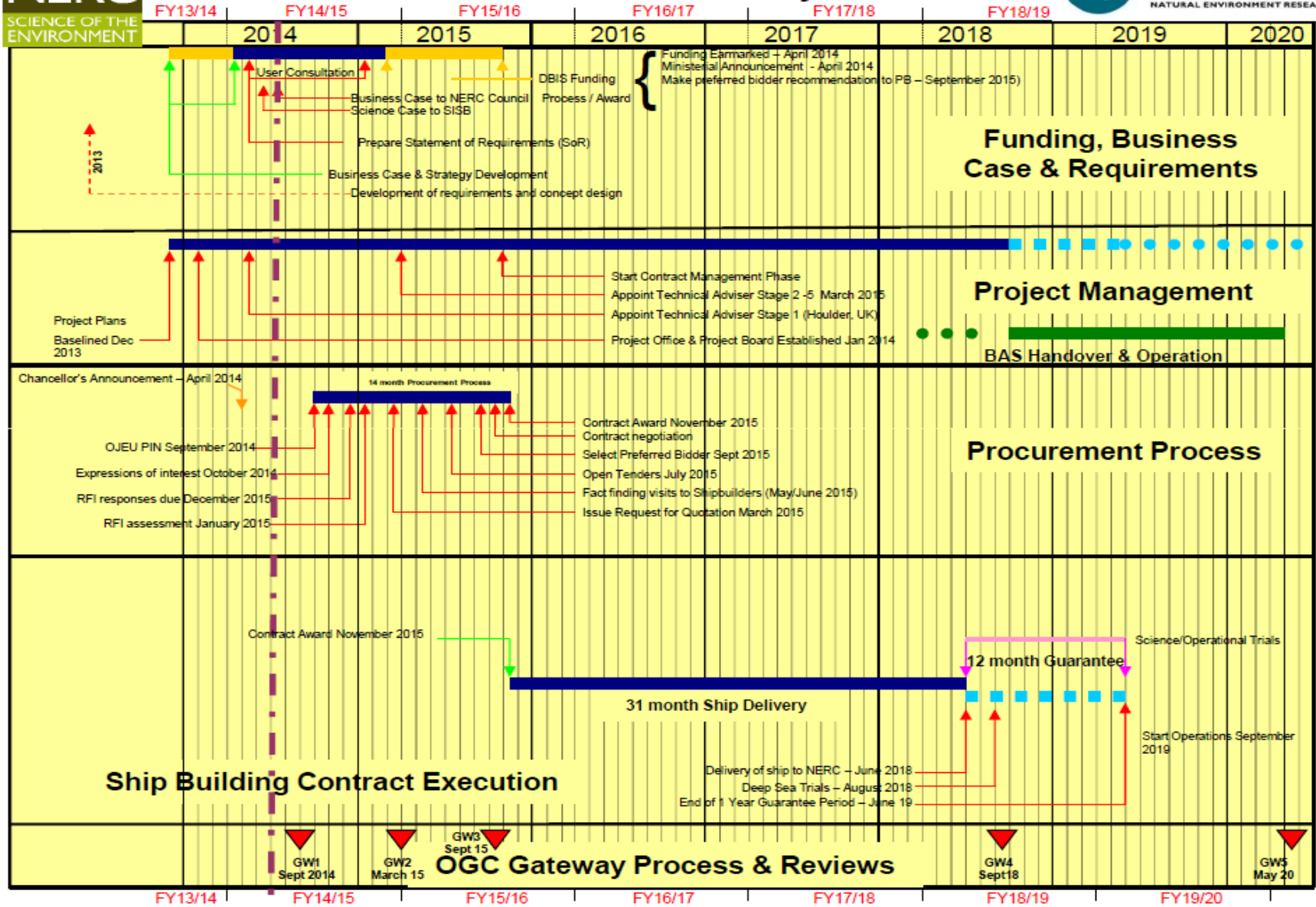
Current dedicated science time on JCR is ca. 180 days (transits not included)



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Spend to save

- Current operating cost is ca. £ 16'500,000
- Estimated operating cost for NPRV and part time chartered ship ca. 12'600,000.
- Potential annual savings ca. £ 3'900,000 from current operational model.



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Summary of potential scenarios

		Sum of Dedicated science time (days)	Sum of Port call (days)	Sum of Base support (days)	Sum of Maintenance (days)	Sum of Estimated days in ice<5/10 (ice =<1m)	Sum of Estimated days in ice>5/10 (ice => 1m)
Scenario A	Total	140	52	26	30	18	44
Scenario B	Total	140	51	21	30	33	54
Scenario C	Total	135	80	22	30	31	65
Scenario D	Total	170	60	9	30	22	40
Scenario E	Total	109	52	32	30	25	13
Scenario F	Total	154	47	20	30	9	6
	Data						
Scenario G	Total	109	55	32	30	41	39



Thanks you for your time.



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