

**Economics Legislation Committee**  
**ANSWERS TO QUESTIONS ON NOTICE**  
Industry, Innovation and Science Portfolio  
2016 - 2017 Additional Estimates  
2 March 2017

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**AGENCY:** GEOSCIENCE AUSTRALIA

**TOPIC:** Aurora Australis

**REFERENCE:** Question on Notice (Hansard, 2 March 2017, page 114)

**QUESTION No.:** AI-44

Senator XENOPHON: In the past you have used the icebreaker *Aurora Australis* for collection work, is that right?

Dr Johnson: I would have to take that on notice.

Senator XENOPHON: Will the icebreaker that is currently being built in Romania be used to do that work as well? Could you take that on notice?

Dr Johnson: Certainly. Madam Chair, may I provide a clarification to my previous answer to Senator Xenophon specifically around the bathymetry component of his question earlier? I will pass to my colleague.

**ANSWER**

The Research and Supply Vessel (RSV) *Aurora Australis* is owned by P&O and chartered to the Australian Government during summer months for Antarctic and Macquarie Island station resupply and marine science operations.

Geoscience Australia has directly participated in two marine science research voyages on the *Aurora Australis* in the last 10 years, in 2007-8 and 2010-11. Both voyages were led by the Australian Antarctic Division (AAD) of the Department of Environment and Energy.

The *Aurora Australis* routinely collects bathymetry data when conducting research activities and on transit to/from Antarctica. Although Geoscience Australia is not directly engaged in the collection of such data, the data is delivered to Geoscience Australia by the AAD for final processing, archiving and public release.

Information acquired during these marine surveys, together with the routine bathymetry data, permits Geoscience Australia to contribute to a better understanding of the biodiversity and physical seafloor environment of the East Antarctic continental shelf. This, in turn, supports development of evidence-based marine environmental management protocols and ongoing efforts by the Australian Government, in collaboration with other nations active in the Antarctic, to develop a system of Antarctic Marine Protected Areas.

Geoscience Australia conducts a number of onshore and station-based activities in the Australian Antarctic Territory, including environmental geoscience programs and geophysical and geodetic monitoring. The *Aurora Australis* is used to transport the cargo associated with these activities to and from Antarctic to support these operations.

Geoscience Australia has been comprehensively engaged in the development of the marine geoscience capabilities and functional design of the Replacement Icebreaker. The Replacement Icebreaker will fulfil the same functional role for Geoscience Australia as the *Aurora Australis*,

however the modern marine geoscience capability, particularly the sonar mapping capability, will enable Geoscience Australia to greatly expand seafloor mapping efforts in Australia's Antarctic marine jurisdiction. I draw your attention to the findings of a recent Senate Foreign Affairs, Defence and Trade Reference committee report on *Australia's future Activities and responsibilities in the Southern Ocean and Antarctic waters* (Oct 2014; recommendation 12) that states that '*...resources be dedicated to the development and implementation of a southern ocean mapping program, as a whole-of-government initiative, under the guidance and coordination of Geoscience Australia, and that such a strategy be including in future decisions about allocation for funding and vessel time*'.

The capability of the Replacement Icebreaker will enable the implementation of any such program to be realised.