In 2021, RRS Sir David Attenborough will be ready for service. Commissioned by NERC, built by Cammell Laird and operated by the British Antarctic Survey, the new ship is a next-generation polar marine science platform for UK research in both Antarctica and the Arctic.

State-of-the-art onboard facilities and future-proof containerised laboratories on this world-leading science platform will offer new research opportunities for the UK's polar scientists who strive to make sense of our changing world for the benefit of society.

The new ship will ensure Britain’s continued position as a world leader in polar science.

**Polar Science for Planet Earth**

**UK science in Antarctica**

RRS Sir David Attenborough plays an important diplomatic role for the UK, providing a continuing presence in British Antarctic Territory, South Georgia and the South Sandwich Islands, and the South Atlantic.

**Operational capability**

RRS Sir David Attenborough can spend up to 60 days at sea unsupported. Her ice-strengthened hull is designed to break through ice up to 1m thick. Operating year-round, the ship will be deployed to the Arctic during the northern summer and to the Antarctic during the austral summer.

**Science in polar environments**

RRS Sir David Attenborough, with its wide range of specialist laboratories, facilities and instruments, will be capable of supporting scientists from many different areas of expertise. These multi-disciplinary research cruises will generate new knowledge and understanding about the societal implications of environmental change from the atmosphere to the sea bed.

**Understanding our world**

New technologies and techniques are revolutionising ship-based research. Remotely-operated vehicles go under the polar ice to capture data that sheds new light on possible implications of rapid and sudden ice mass loss. Sophisticated instruments and equipment capture important data to reveal the impact of environmental change on marine biodiversity.

**Clean air and aerosol sampling technology**

**Biological sampling nets for ecosystems and biodiversity research**

**Echo-sounding equipment for biological and geophysical investigations**

**Multi-corer seabed sediment sampler with onboard multi-sensor analysis**
Minimising our environmental impact

RRS Sir David Attenborough will conform to stringent environmental regulations in the International Maritime Organisation’s Polar Code. With greater fuel efficiency and its ability to deploy remotely operated and robotic technologies, the ship is expected to reduce the environmental impact of ship-borne science and save in operating costs over its 25-year lifespan.

Programme timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2015</td>
<td>Contract signed</td>
</tr>
<tr>
<td>October 2016</td>
<td>Keel laid</td>
</tr>
<tr>
<td>March, 2017</td>
<td>Stern Thrusters fitted</td>
</tr>
<tr>
<td>June, 2017</td>
<td>Rolls Royce propulsion motors fitted</td>
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<tr>
<td>July, 2018</td>
<td>Hull in the water ceremony</td>
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<tr>
<td>Autumn 2019</td>
<td>Ceremonial naming</td>
</tr>
<tr>
<td>Autumn 2020</td>
<td>Sea trials (including engineering and science trials)</td>
</tr>
<tr>
<td>Spring 2021</td>
<td>Sea trials (including engineering and science trials)</td>
</tr>
<tr>
<td>Autumn 2021</td>
<td>Ship into service</td>
</tr>
</tbody>
</table>

Fast facts

- **Length:** 128 metres; **beam:** 24 metres; **weight:** 15,000 gross tonnes; **draft:** 7 metres
- Scientific cargo volume: approximately 900m³
- **Endurance:** up to 60 days (Polar Regions)
- **Range:** 19,000 nautical miles at 13 knots (24km/h) cruising speed
- Ice breaking capability: up to 1m thick at 3 knots (1.6km/h)

Handling systems will cover a wide range of tasks, including sub-sea acoustic surveys and towing of scientific equipment with up to 12,000m of wire

Launch and recovery of aerial and marine robotic systems

Remotely piloted science instruments for deep-ocean and under-ice data capture

**Crew (approx)**

- **OPERATION:** 30
- **SCIENCE:** 60

**CONSTRUCTION**

- Cammell Laird engineers and apprentices 220

www.bas.ac.uk/attenborough