

# NewRV



## A NEW MULTIDISCIPLINARY RESEARCH VESSEL TO REPLACE THE RV A962 BELGICA

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Belgian Science Policy Office

### REPLACEMENT PROCESS

- 2005 Council of Ministers agrees with the start of the feasibility study on the replacement or modernization of the RV Belgica
- 2013 Council of Ministers agrees with the feasibility study and with the start of the finance study on the replacement or the modernization of the RV Belgica
- 2014 Council of Ministers agrees with the finance study: the build of a new research vessel is the best solution
- 2016 Council of Ministers principally agrees with the replacement of the RV Belgica and with the preparation of the public tender and the development of the further collaboration between Federal Sciences Policy and Defence for the exploitation of the new research vessel
- 2017 Council of Ministers agrees with the launch of the public tender and the replacement of the RV Belgica by providing the necessary budget (54.45 M€ incl. VAT)

**SILENT RESEARCH SHIP**  
 Diesel-Electric propulsion  
 DNV-GL Silent-R or equivalent  
 –  
 Limited influence on environment &  
 Optimal acoustic platform

**FULL OCEAN RESEARCH VESSEL**  
 >65 m length, >15 m beam, max. 4.8 draft  
 11 kn operational speed (max. 13 kn)  
 North Sea, Atlantic Ocean, Mediterranean Sea  
 Instrumentation adapted to water depths of 5000 m  
 Minimum Ice Class for summer operations in Arctic areas

**GREEN SHIP**  
 Waste-heat recovery  
 MARPOL TIER III  
 –  
 Energy efficient &  
 Low emission

**NEW CAPABILITIES**  
 Dynamic Positioning Class 2 (DP-2)  
 Active stabilization System  
 12 crew – 28 scientists & marine technicians  
 30 day autonomy  
 300 days at sea  
 –  
 Suitable for offshore research, survey &  
 exploration

**HEAVY DUTY**  
 3 Cranes (fwd, mid, aft)  
 2 CTD Winches (stbd)  
 Multifunctional Winch (stbd)  
 Hydrographic Winch (aft/stbd)  
 2 Trawl Winches  
 Net Drum Winch  
 Split Net Drum Winch  
 Net Sonde Winch  
 2 Gilson Winches  
 CTD Gantry & LARS (stbd)  
 2 stbd Gantries  
 Aft Gantry  
 Gilson Gantry  
 LARS incl. gravity corer  
 Work Boat  
 –  
 Able to deploy wide range of  
 scientific gear up to 5000 m  
 water depth



**MORE SPACE**  
 400 m<sup>2</sup> of lab space  
 Wet Lab  
 3 Dry Labs  
 Wet and Dry Fish Lab  
 AUMS Lab  
 Aerosol Lab  
 Diver Store  
 Seismic Room  
 Scientific Lab  
 Operational Center  
 CTD hangar  
 Hangar  
 Crow's Nest  
 Cold & Freeze Rooms  
 Large aft & stbd decks  
 –  
 Adapted to the scientific  
 needs for the coming 30 years

**FULL ACOUSTIC UNDERWATER INSTRUMENTATION SUITE**  
 Shallow and deep-water bathymetric multibeam echosounders (>300 m & >5000 m)  
 Parametric subbottom profiler (>5000 m)  
 Scientific multibeam & split-beam wideband echosounder (>5000 m)  
 Omnidirectional fish sonar (>4000 m)  
 net- and catch monitoring system  
 Underwater position-reference system (USBL) (<5000 m)  
 Acoustic Doppler Current Profilers (>700 m & <50 m)  
 –  
 Mapping and analyses of full water column (incl. fauna), sea floor and subsurface

**ADAPTED TO EXISTING LARGE EUROPEAN MARINE RESEARCH INFRASTRUCTURE**  
 Autonomous Underway Vehicles (AUVs)  
 Remotely Operated Vehicles (ROVs)  
 3D seismic systems  
 Scientific sediment coring and rock drill devices  
 Storage space of 7 ISO 20' containers  
 2 integrated drop keels  
 –  
 A platform for European cooperation through which Belgian researchers get (free) access to  
 large (and expensive) European marine research infrastructure

### TIMELINE

- 2016: Specifications NewRV discussed with 10 ship yards (ESP, FR, NED, UK)
- March 2017: Final agreement on replacement including budget (CoM)
- June 2017: Launch of tender
- End 2017: Agreement on selection (CoM) & signed contract
- 2018-2020: Design & build NewRV
- 2018-2019: New convention and business plan (CoM)
- **Mid 2020: Delivery NewRV**

### NEW POTENTIAL & END USERS

- Complete support of Belgian Marine Science community
- Ship time exchange with European Research institutes to:  
 Enhance research capacity and study areas based on shared cost
- Strengthening the Belgian role in the Blue economy via its researchers, training centers &  
 maritime industry
- Financial return by deploying NewRV as an exploration- & test platform, research- &  
 monitoring ship, education- & training platform

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