NewRV: A new multidisciplinary research vessel to replace the RV A962 Belgica

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For 34 years, the RV A962 Belgica has been the marine research infrastructure for Belgian marine scientists working on the Belgian Part of the North Sea and in the marine realm stretching from Norway, over Ireland to Morocco. Even if the ship is still performing research activities, the increasing number of technical breakdowns and the rising maintenance cost associated with the age of the ship makes her replacement by a new research vessel a necessity for the Belgian marine science community to be able to continue performing the needed monitoring-, research and educational activities.

The replacement process was initiated in 2005 with the startup of a feasibility study and was followed by a finance study in 2014. During all these years the question, and the uncertainty, remained if the best option was to modernize the current RV A962 Belgica or to foresee a replacement. In 2016, after a.o. the flooding of the engine room in 2015, the decision was finally made to replace the ship with a brand-new highly-capable multidisciplinary research vessel.

Based on a cooperation agreement between Belgian Defence, BELSPO & RBINS-OD Nature the scientific needs of the Belgian scientific community, as were defined in 2008 & 2016, were translated into a tender document containing all specifications for the NewRV (= current project name). These specifications were discussed with 10 ship yards and were then finally published in June 2017 to start the procurement process for the new research vessel. A total of 7 offers were received, examined and evaluated. On the 22nd of December 2017, the Council of Minister agreed with the selection of the best offer from Freire Shipyard (& Rolls-Royce).

The NewRV will be a multipurpose, silent, green, ice-strengthened and full ocean research vessel being able to work in water depths up to 5000 m and being able to deploy a large variety of European marine infrastructure (incl. AUVs, ROVs, 3D seismic systems, sediment coring & rock drill devices, etc.). The ship will have 13 labs with a total lab space of more than 400 m^2. There will even be deck space for seven gear and lab containers. The ship will be equipped with a full acoustic underwater instrumentation suite which will allow the scientists to map and analyze the full water column (incl. fauna), the seafloor and the subsurface.

The NewRV will be equipped with new capabilities like dynamic positioning (DP-2), two integrated drop keels allowing ad hoc instalment of subsea sensors and a roll stabilization system. All these systems will allow the 28 scientists and marine technicians to perform their work as comfortable and as safe as possible and this for the coming 30 years. The new ship will be at sea for 300 days per year and this with a 30-day autonomy.

Based on these capabilities the NewRV can support the complete Belgian marine science community and will also strengthen the Belgian role in the Blue Economy via its researchers, training centers and maritime industry. Ship time exchange with European research institutes will allow us to enhance the research capacity and to enlarge the study areas based on shared costs. We also foresee a financial return by deploying the NewRV as an exploration- & test platform, a research- & monitoring ship and an education- & training platform.

The delivery of the new Belgian research vessel is foreseen in spring 2020.

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