

Smart Survey Platform



ROVLATIS joins a new generation of 'Smart ROVs' and serves as a host platform for the testing and commercial spin-out of new ROV and mission support technologies within the international marine sector. Designed and developed by the Mobile & Marine Robotics Research Centre at the University of Limerick, Ireland, ROVLATIS differs from other survey class ROVs of its size in a number of key areas.

For open water surveys, large areas can be covered quickly when the vehicle is operated under tow. For confined spaces, such as in harbours, the vehicle can be self-propelled and precisely steered using its own thrusters. With the quick-release of buoyancy, the vehicle has full six degree of freedom motion with 8 thrusters to descend and collect high resolution survey data (survey, video, etc) on or near the seabed. One of the new

technologies it hosts is a new intelligent vehicle navigation guidance and control system that offers fault-tolerant thruster control and steering assist to compensate for marine disturbances and to optimise the performance of the vehicle during survey operations.

The design and construction of ROVLATIS was undertaken in parallel with the development of new offshore mission support augmented reality tools, sonar simulators for training, and multi-sonar controller technologies. This has resulted in many benefits to the overall system design, optimisation, inter-operability and integration and the open-architecture approach affords a high degree of flexibility for future vehicle configurations and payload expansion. ROVLATIS commences sea trials aboard the R.V. *Celtic Explorer* at the end of February 2009. Further details about the vehicle and these new technologies can be downloaded from the following web page or by contacting [Simon Marr](#).

Video: [Rehearsal of a mission](#)

Video: [Complex Manoeuvre with ROVLATIS](#)

<https://www.hydro-international.com/content/article/smart-survey-platform>
