16 August 2022

**Rheinmetall supplies AI-powered navigation system for UK MoD’s Project Theseus 2.2 – automated supply delivery to soldiers in hostile environments**

Rheinmetall has secured a contract with the United Kingdom Ministry of Defence’s Project Theseus 2.2, an initiative to automate supply delivery to soldiers in hostile environments. First systems have already been delivered. Rheinmetall Canada, the Canadian branch of the Rheinmetall Group, is working with Polaris Government and Defense to augment the Polaris MRZR D4 ultra-light tactical vehicle with the Rheinmetall PATH Autonomy Kit (A-kit), an Artificial Intelligence (AI)-powered navigation system. The project marks the first installation of the PATH A-kit on an MRZR D4. This requires Rheinmetall to meet a new set of technical demands, further proving the PATH’s total adaptability.

The contract was awarded on February 21, 2022, following an invitation to tender. Rheinmetall is serving as the prime contractor, in collaboration with Polaris Government and Defense, a leading American manufacturer of ultra-light tactical vehicles, and Rheinmetall Pro vectus, its Ottawa-based robotics branch. Polaris Defence United Kingdom will provide in-country support.

The contract scope includes installation, training, spare parts, and technical support for the PATH A-kit, as well as platform support on 11 Polaris MRZR D4 vehicles. Once equipped with the A-kit, the MRZR D4 will be ready for crewed and teleoperated use cases, as well as autonomous execution of resupply missions in complex terrain, adverse weather conditions, day and night.

The Rheinmetall PATH A-kit transforms crewed vehicles into optionally crewed ground vehicles (OOGVs). PATH-equipped vehicles can then safely and reliably navigate complex terrains under hostile weather conditions, reducing troops’ exposure to hazardous situations. Leading-edge AI allows PATH to navigate autonomously using sensor fusion and environment mapping. The system’s standardized, open architecture allows it to be continually upgraded and to integrate new innovations to meet customer demands.

The Polaris MRZR D4, already used by the British Royal Marines, is a four-person, diesel-powered ultra-light tactical vehicle developed for international special...
operations, and off-road and expeditionary missions. It can carry a 680 kg payload and tow 680 kg, making it a practical and reliable choice for last-mile resupply missions.

The collaboration between Rheinmetall and Polaris represents a key opportunity for two major players in the defence industry to jointly support allies of Canada and the US. It further cements the Canadian branch of the Rheinmetall Group’s position as a global leader in the autonomous ground vehicle sector. Already involved in the British Army’s Robotic Platoon Vehicles Programme, Rheinmetall Canada looks forward to supporting its Expeditionary Robotic Centre of Expertise in Project Theseus and beyond.