Rolls-Royce commences series production of Hybrid-ready MTU PowerPacks for Irish Rail

- Irish national railway operator orders 41 Hybrid-ready PowerPacks
- Delivery scheduled to commence next summer, with option for future hybrid conversion

Rolls-Royce is to supply its very first series production MTU PowerPacks which are prepared for future use as hybrid traction units: Iarnród Éireann Irish Rail, the national railway operator of the Republic of Ireland, has ordered 41 of these MTU Hybrid-ready PowerPacks. Fitted with MTU 6H 1800 R86 engines, the PowerPacks comply with the EU Stage V emissions directives and each delivers 375 kW from the diesel engine as well as 150 kW from the electrical machine. Delivery is to commence in 2021, and the PowerPacks are to power Class 22000 trains on scheduled services from late 2022. At a later, yet to be decided stage Rolls-Royce could equip these PowerPacks with batteries, turning them into fully-fledged MTU Hybrid PowerPacks. The order is a further milestone in the partnership between Rolls-Royce and Iarnród Éireann Irish Rail. This currently includes refurbishing the fleet with new transmissions and testing both conventional EU Stage V and hybrid traction systems from 2021. Iarnród Éireann Irish Rail also plans to introduce into service further MTU Hybrid PowerPacks in the years to come.

Peter Smyth, Chief Mechanical Engineer at Iarnród Éireann Irish Rail, said: “Reducing the exhaust emissions of our trains is a key part of our commitment to sustainability and to the strategic ‘Ireland 2040’ project, and with Rolls-Royce we have the right traction partner on board to help us do that.”

Jürgen Blassmann, Head of Rail Business at Rolls-Royce business unit Power Systems, said: “We are delighted to be playing this pioneering role with our strategic partner Iarnród Éireann Irish Rail in shaping the future of environmentally friendly rail transport: The series production MTU
traction systems we are now supplying set new standards for cleanliness, reliability and fuel economy. Following conversion to MTU Hybrid PowerPacks, Iarnród Éireann Irish Rail will use these drive systems to make fuel savings of over 30%, depending on the route, also reducing CO2 emissions by the same amount."

This new order is a new milestone of the close partnership between Rolls-Royce and Iarnród Éireann Irish Rail in recent years: A total of 234 MTU PowerPacks have been powering the Class 22000 trains for many years. In 2018, the partners agreed to refurbish MTU PowerPacks with new transmissions to achieve fuel savings of almost 20%. That same year, Iarnród Éireann Irish Rail announced its intention to trial MTU PowerPacks for the EU Stage V emissions standard. In a second step, these are now to be converted to Hybrid PowerPacks starting next year. Trials of the EU Stage V PowerPacks are scheduled to get underway this August, following which all nine PowerPacks will be converted to Hybrid PowerPacks and commence operation at the end of 2021. Iarnród Éireann Irish Rail will also explore options to convert its fleet to hybrid operation at a later stage once the test runs have been successfully completed.


About Rolls-Royce Holdings plc

1. Rolls-Royce pioneers cutting-edge technologies that deliver clean, safe and competitive solutions to meet our planet's vital power needs.

2. Rolls-Royce Power Systems is headquartered in Friedrichshafen in southern Germany and employs more than 10,000 people. The product portfolio includes MTU-brand high-speed engines and propulsion systems for ships, power generation, heavy land, rail and defence vehicles and for the oil and gas industry as well as diesel and gas systems and battery containers for mission critical, standby and continuous power, combined generation of heat and power, and microgrids. Medium-speed engines from Bergen power ships and power generation applications.
3. Rolls-Royce has customers in more than 150 countries, comprising more than 400 airlines and leasing customers, 160 armed forces, 70 navies, and more than 5,000 power and nuclear customers.

4. Annual underlying revenue was £15.3 billion in 2019, around half of which came from the provision of aftermarket services.

5. In 2019, Rolls-Royce invested £1.45 billion on research and development. We also support a global network of 29 University Technology Centres, which position Rolls-Royce engineers at the forefront of scientific research.

For further information, please contact:

Rolf Behrens
Rolls-Royce Power Systems AG
Phone: +49 7541 90-3461
E-mail: rolf.behrens@ps.rolls-royce.com