

## Stadler and Rail Operations (UK) Limited sign a contract for the new Class 93 tri-mode locomotives

January 15, 2021



Stadler and Rail Operations (UK) Limited have signed a framework agreement for the supply of thirty Class 93 tri-mode locomotives.

The advanced locomotives will significantly reduce CO2 emissions for both rail freight as well as potential passenger transport services, underscoring Stadler's green credentials and demonstrating its commitment to decarbonisation.

Deliveries are expected to start in early 2023. Class 93 is a Bo'Bo' mixed-traffic locomotive based on Stadler's Class 68 and Class 88 locomotives that have been operating successfully in the UK for some years. It is capable of reaching higher speed than the previous ones; i.e. 110 mph instead of 100mph.

Stadler's first tri -mode locomotive has three different power sources. In electric mode, it is able to run on 25kV AC overhead lines with a power of 4,000 kW. In addition, the locomotive features a CATERPILLAR C32 engine and Lithium Titanate Oxide (LTO) traction battery packs, allowing it to operate over non-electrified lines.

The diesel engine has a nominal power of 900kW and meets EU 97/68 Stage V emission requirements. The



two LTO battery packs provide 400kW extra power to supplement the engine when the locomotive is running in diesel/battery hybrid mode as well as last mile carbon free shunting operation.

Commenting on the contract, Karl Watts, Chief Executive Officer, Rail Operations (UK) Limited, said: "The rail industry has acted very positively in understanding its role in reducing carbon emissions and improving inner city air quality.

"The class 93 fleet with its array of green credentials, will allow us to lead the way in supporting the rail industry deliver its decarbonisation targets.

"Furthermore, with its impressive state-of-the-art specification, the class 93s also allow us to develop new markets and modernise many aspects of UK train operations."

Iñigo Parra, CEO Stadler Valencia added: "The innovative and cost-effective solution will provide environmentally-friendly rail transport services, supporting national decarbonisation strategies and promoting modal shift to rail."

Photo credit: Stadler