Network Rail partners with Thales to advance their digital ambitions in the UK

- Thales will develop and implement a new signaling communications system, known as an Online Key Management System (OKMS), on the East Coast Main Line of Network Rail.
- This system should go live in 2023. It will then be rolled out across the UK as part of Network Rail’s long-term programme to transform the UK’s rail system.

Network Rail have entrusted Thales to develop and implement a new signaling communications system on the East Coast Main Line. The new system, known as an Online Key Management System (OKMS), will be trialed in late 2022, before it goes live in 2023. It will then be rolled out across the UK as part of Network Rail’s long-term programme to transform the UK’s rail system.

This advanced data security solution will play a key role in the safe and smooth running of a modernised rail network, by securing critical data exchange between trackside equipment and in-cab European Train Control Systems (ETCS) equipment. ETCS communicates safety critical information, such as train positioning between track and train, meaning that the trust and integrity of the transferred information is paramount.

The new Thales OKMS will build on proven offline key management technology that has been developed by Thales in the UK and Germany and deployed in both Poland and Israel.
However, this version will incorporate new innovative online connectivity, adding a greater level of automation. This will enable control keys and instructions to be issued more effectively than on current networks, which rely on a human interface.

“We have a long established relationship with Network Rail and we are delighted to be collaborating with them to deliver this innovative solution for such a strategic and important project.” - Thales’s Customer Account Manager, Guy Cleall

“The online element of this solution is truly innovative, having not yet been implemented elsewhere in the world, meaning Network Rail will be leading the market in the new generation of systems. The Thales solution will be developed in both our cyber security development centres in Germany and closer to home in Thales’s worldwide Digital Competence Centre (DCC), located in Manchester in the UK”. - Andy Bell, VP for Thales Ground Transportation Systems in the UK

Thales will collaborate with Network Rail to deploy its extensive global cyber security experience from across multiple industries, such as energy, banking and aerospace to deliver a world leading OKMS for public key infrastructure.

About Thales
Thales (Euronext Paris: HO) is a global high technology leader investing in digital and “deep tech” innovations — connectivity, big data, artificial intelligence, cybersecurity and quantum technology — to build a future we can all trust, which is vital to the development of our societies. The company provides solutions, services and products that help its customers — businesses, organisations and states — in the defence, aeronautics, space, transportation and digital identity and security markets to fulfil their critical missions, by placing humans at the heart of the decision-making process.

Thales has 81,000 employees in 68 countries. In 2020, the Group generated sales of €17 billion.