

Leonardo and O2 team up to demonstrate the advantages of 5G private networks to the defence and security industry

- **The two companies will show how 5G private network technology can improve industrial connectivity, flexibility, productivity, and security in manufacturing and service provision**
- **Potential applications of the secure 5G technology include facilitating next-generation ‘future factory’ manufacturing capabilities, which will be needed to deliver high-pace programmes such as Tempest, which is seeing the UK, Italy and Sweden collaborating to develop future combat air capabilities**
- **The partnership is the first initiative to be announced by Leonardo’s newly established Innovation and Technology Incubator Centre which has opened in Scotland**

Edinburgh, 8th February 2021 – Leonardo’s Edinburgh, Scotland-based Innovation and Technology Incubator Centre has announced that it will partner with O2 (Telefónica UK) to investigate several innovative applications of private 5G technology in the defence and security industry. Proposed uses of secure, high-bandwidth mobile data include facilitating next-generation ‘future factory’ manufacturing capabilities and providing high speed and secure information services, both of which will be needed to deliver high-pace programmes such as Tempest, which is seeing the UK, Italy and Sweden collaborating to develop future combat air capabilities.

O2 will provide a secure 5G private network and a range of Industry 4.0 applications in order to evaluate how they could be used in the digital transformation of business and the end-to-end manufacturing process.

Founded with the mission of ‘bringing ideas to reality’, Leonardo’s Innovation and Technology Incubator Centre offers those with alternative business ideas and disruptive technology an opportunity to partner with one of Britain’s biggest technology and engineering firms and one of the principal suppliers of equipment to the UK Ministry of Defence.

Leonardo and O2 believe there is huge potential for 5G technology which can meet the high security standards demanded by the defence sector and provide security assurance within companies’ digital infrastructure.

Norman Bone, Chair and Managing Director of Leonardo UK said “5G will be an important tool for the UK’s aerospace, defence and security industry as we look to stay competitive in the global market and continue to export products and services from the UK. This partnership with O2 will inform the roll-out of this technology within Leonardo and study its wider potential across our industry and customer base.”

Leonardo, a global high-technology company, is among the top ten world players in Aerospace, Defence and Security and Italy’s main industrial company. Organized into five business divisions, Leonardo has a significant industrial presence in Italy, the United Kingdom, Poland and the USA, where it also operates through subsidiaries such as Leonardo DRS (defense electronics), and joint ventures and partnerships: ATR, MBDA, Telespazio, Thales Alenia Space and Avio. Leonardo competes in the most important international markets by leveraging its areas of technological and product leadership (Helicopters, Aircraft, Aerostructures, Electronics, Cyber Security and Space). Listed on the Milan Stock Exchange (LDO), in 2019 Leonardo recorded consolidated revenues of €13.8 billion and invested €1.5 billion in Research and Development. The Group has been part of the Dow Jones Sustainability Index (DJSI) since 2010 and is named as sustainability global leader in the Aerospace & Defence sector for the second year in a row of DJSI in 2020.

One such initiative will trial the potential for wirelessly delivering mission, support and maintenance data updates to aircraft, such as the Leonardo AW159 Wildcat helicopter. This could speed up turnaround times between missions and improve platform reliability whilst meeting the stringent security requirements necessary for front line military systems.

Another joint project will investigate how Leonardo's manufacturing facilities could use 5G-enabled technology to support 'future factory' techniques such as digital manufacturing and intelligent infrastructure. By using a private, highly-secure 5G network, Leonardo can adopt such game-changing Industry 4.0 approaches while continuing to meet the security obligations expected by its government and military customers. This will be critical in delivering programmes such as Tempest, the next-generation combat air system, which is being designed to be manufactured significantly faster and at lower cost than previous generation combat aircraft.

As well as understanding the possibilities of 5G in the delivery of Leonardo's manufacturing and service provision, the project will also consider the potential benefits Leonardo could offer to its own customers by delivering 5G private networks as a capability.

Jo Bertram, MD of Business at O2, said, "The partnership will explore how we can use 5G private networks in the wider defence sector, demonstrating their capability to help digitally transform a business and leveraging our ability to draw from a deep and rich application ecosystem. It's great to be working on such an exciting programme, to leverage the technical capabilities of both businesses that'll have real positive impacts on network solutions, mobility and security."

Other use cases of the technology from O2 include: enabling 'Remote Expert' training and Health & Safety solutions; Asset Tracking to ensure complete control of distribution and logistics; remote camera solutions via drones for increased security purposes; and high level security of data.

The rollout of new 5G technologies is especially important to Leonardo because it touches on all three of our **Be Tomorrow - Leonardo 2030** pathways to change. New 5G applications will **strengthen our core**, by improving our operations and allowing us to compete more successfully. 5G will help **transform our ways of working**, in order to make our organisation more connected, modern and flexible. Moving early to investigate the potential applications of private 5G technology is also in line with our drive to **master the new**, leading the way in innovation and addressing new high tech markets. By doing all of the above, Leonardo will be able to continue to deliver value and act as a strategic asset in the countries in which we work.