Thales launches its new digital secondary radar **RSM NG** – an innovative meta-sensor for safer air traffic management

- Thales unveils a new digital secondary surveillance radar with increased performance and reliability for safer air traffic management – up to 2,000 flight tracks and 64 simultaneous data outputs to air traffic centres.
- More than a radar - a 2-in-1 meta-sensor, with fully integrated EnHanced Mode S and ADS-B\(^1\) sensors, offering faster track initialisation and detection, with the latest in cybersecurity protection.
- The **RSM NG** radar is ready for today and tomorrow's environment, with reduced radio frequency pollution, capacity for future digital software upgrades and predictive maintenance - optimising total cost of ownership, with 30% reduction in the design weight and volume.

With more than 900 Air Traffic Control radars installed in over 100 countries, Thales is a trusted leader in the global market and now unveils the RSM NG. Thales’ new digital secondary radar – an innovative meta-sensor for safer skies. The radar leverages the latest digital technologies to bring airports outstanding performances, cyber protection and optimised life-cycle costs.

A meta-sensor approach makes the radar unique. This 2 in 1 sensor ensures the quality, integrity and availability of data provided to Air Traffic Controllers, contributing to the aircraft’s 3 NM separation standards. The RSM NG combines ADS-B and radar (Mode S) data for faster track initialisation providing higher-quality information with reliability. The radar can track up to 2,000 flight tracks and share 64 data outputs simultaneously to different air traffic centres.

\(^1\) ADS-B (Automatic Dependent Surveillance-Broadcast) is a cooperative surveillance system for real-time air traffic control.
Based on international NIST (National Institute of Standards and Technology) framework, the RSM NG is Cyber Secured by design, with a single interface for controlling cybersecurity functions while maintaining the radar's operational behaviour.

Minimising re-interrogation rates, the RSM NG reduces radio frequency pollution and provides an interference map to facilitate its integration in the environment.

A future ready radar. All of these technological enhancements integrate seamlessly into the constant evolving ATC environment; in particular, the advanced digital architecture of the RSM NG supports software-defined upgrades to accommodate future technical requirements.

More compact and easy to deploy, the RSM NG incorporates HUMS capabilities (Health Usage and Monitoring System) for optimised maintenance. Re-engineered to limit life-cycle costs, the radar has a very compact design with 30 % reduction in weight and volume, with now only two electronic cabinets instead of three.

"With more than 50 years of experience in secondary surveillance radars, Thales is constantly investing to lead the latest innovations in the market for air traffic control radars for safer skies. The RSM NG represents no less than 10 patents". Marie Gayrel, Director of ATC radar activities, Thales

About Thales

Thales (Euronext Paris: HO) is a global leader in advanced technologies, investing in digital and “deep tech” innovations – connectivity, big data, artificial intelligence, cybersecurity and quantum computing – to build a confident future crucial for the development of our societies. The Group provides its customers – businesses, organisations and governments – in the defence, aeronautics, space, transport, and digital identity and security domains with solutions, services and products that help them fulfil their critical role, consideration for the individual being the driving force behind all decisions.

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