

PRESS RELEASE

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Paris La Défense

Thales and CS GROUP partner to offer navies a cybersecure, jam-resistant navigation system inspired by civil aviation

- Thales, with over 40 years of experience in the design and manufacture of inertial navigation systems, and CS GROUP, a specialist in smart cyberprotected mission-critical systems, have partnered to offer a complete navigation system for Navies surface ships.
- At the heart of this system is the Thales TopAxyz inertial navigation unit, which is integrated with CS GROUP's real-time computer in a disruptive approach to maritime navigation that combines high-level performance and resilience in an electronic warfare environment.
- The new compact, high-performance maritime inertial navigation system has already demonstrated its maturity in an operational setting during its first sea trial on a military vessel.



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Thales and CS GROUP have combined their complementary expertise to offer a high-performance, resilient and cybersecure navigation system. The system comprises Thales's TopAxyz inertial navigation unit, which has delivered outstanding performance in the

especially rigorous conditions of civil aviation, clocking up over 20 million hours of operation. The naval version of the unit was integrated on a Navy vessel in less than a day by CS GROUP and has already proven its operational value for maritime navigation.

In today's constantly changing naval environment, crews need to contend with the threat of cyberattacks, electronic warfare activity and the high risk of jamming and spoofing of GPS-based radionavigation solutions. Accurate navigation data, real-time data distribution and resistance to external threats are crucial for every mission conducted by a naval vessel today.

Thales and CS GROUP have worked together for over 20 years to address these issues. Drawing on their combined expertise across all the key navigation system technologies, the two companies are now proposing a new approach to maritime navigation based on more trustworthy and reliable navigation data.

The TopAxyz inertial unit uses accurate, reliable navigation information that is independent of sea state and vessel location, combined with a function that detects attempts to spoof GPS signals. The navigation data calculated by TopAxyz is distributed in real time by CS GROUP's onboard computer, which incorporates the latest technological advances in cybersecurity to guarantee the highest level of resilience to attacks.

The new compact, high-performance maritime inertial navigation system has already demonstrated its maturity in an operational setting during its first sea trial on a military vessel. No calibration is required during the service life of the system, thereby reducing the total cost of ownership.

The system provides high-precision pointing, gyrocompass, location and navigation functionality for all types of naval platforms, from surface combatants and submarines to autonomous vehicles.

Combining complementary cutting-edge technologies from Thales and CS GROUP, this new maritime navigation system will leverage the unique capabilities of the two companies at their respective production and integration facilities in Châtelleraut and Aix-en-Provence in France.

*“After proving their value on board aircraft, space launchers and French Army land vehicles, Thales inertial navigation systems are now available for naval platforms,” said **Tristan Grivel, Vice President Business Development and Sales for Thales’s flight avionics business.** “Thales and CS Group have combined their complementary expertise to offer a navigation system that delivers the highest levels of trust, performance and security to ensure the success of naval missions.”*

*“CS Group is an expert in the design and integration of secure navigation systems, and has supplied real-time navigation computers, military-grade GPS receivers and other solutions to the French Navy and Naval Group for many years. This partnership with Thales allows us to offer an innovative, robust and resilient maritime inertial navigation system for surface ships,” said **Gilles Rigal, Director of CS GROUP’s naval systems business line.***

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 process.

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

About CS GROUP

CS GROUP is the trusted partner of leading French and international groups for the digitalization of operational systems and is a major player in the design, integration, and operation of mission-critical systems. CS GROUP offers sovereign solutions to its customers operating in the strategic sectors of defense, security, space, aeronautics and nuclear. In the data intelligence and cybersecurity field, CS GROUP is particularly involved in national and European initiatives and works with its major customers to help guarantee European digital sovereignty.

CS GROUP is listed on the Euronext Paris - Compartment C market (Shares: Euroclear 7896 / ISIN FR 0007317813). For more information visit www.csgroup.eu

PRESS CONTACTS

Thales, Media Relations Land & Naval Defence

Camille Heck

+33 (0)6 73 78 33 63

camille.heck@thalesgroup.com

CS GROUP

Barbara Goarant

+33 (0)6 80 35 28 11

<mailto:Barbara.goarant@csgroup.eu>

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