At the end of June the defence and security company Saab announced that the company’s advanced fifth-generation R5 family of AIS products were now commercially available.

Said Stefan Karlsson, Vice President Sales and Marketing, Saab TransponderTech., “The new R5 AIS products from Saab are the first to incorporate software-defined radio (SDR) transceivers together with newly developed high-speed analog-to-digital converters in a type approved Class A system. The result is a dramatic improvement in receiver sensitivity, stability and signal processing compared to our already exceptional R4 platform.”

Designed on platforms built to grow with new requirements, the new R5 products feature quick and easy installation of additional units with support for truly redundant/multiple Control and Display Units (CDUs), USB keyboards and flash drives. Sensor information available to R5 transponders can be relayed on the Ethernet interface, and additional CDUs can be used to display and monitor any sensor data available on the network.

Karlsson added, “The SDR technology in the R5 products provides unlimited flexibility in adding new radio channels with software upgrades in the future. In addition to VHF ship-to-ship and shore-to-ship AIS messages, the R5 could also process other signals and future additional AIS messages and e-navigation radio channels.”

Saab is rolling out the new R5 technology in different configurations to meet various market requirements, including inland waterways, coastal fishing, deep-sea shipping, military and coastal surveillance.

The easily installed, water-resistant, single-box R5 SOLID AIS provides a minimal AIS solution for SOLAS compliance, primarily for the coastal fishing market and inland waterways.

At the high end of the market, the R5 SUPREME AIS is a two-unit system with a separate CDU and transponder. The IMO-compliant shipborne AIS transponder is a type-approved AIS Class A
Transponder system for SOLAS-class vessels, providing unlimited flexibility for incorporating with a ship’s integrated bridge system.

The new R5 GPS and DGPS navigation systems are type approved for carriage by SOLAS-class ships. To conclude, Karlsson commented, “The new navigation systems feature additional R5 CDUs for redundant or slave navigation display configuration using Ethernet. One common control and display unit for all AIS and navigation systems simplifies operations, and the redundancy provides a larger measure of safety.”

Saab TransponderTech AB, a company in the Saab Group, provides products and systems related to maritime security, covering the whole range from small individual port solutions to national coastal surveillance networks. The company was an early pioneer in maritime AIS technology and is a leading supplier of AIS products around the world.