Developments open VSAT to tugs and workboats

Satellite communications are developing fast and now is the time for tugs and workboats to take advantage of the benefits connectivity brings. The increasing availability of smaller antennas will boost demand for connectivity among mid-size vessels, including tugs, opening more applications at a time when the communications industry is evolving at a fast pace.

According to satcoms provider IEC Telecom, smaller antennas mean workboats can gain the types of connectivity previously reserved for larger VSAT-enabled vessels.

These developments will offer new opportunities for workboats and tugs by opening up access to VSAT services without the need for bulky hardware and higher costs, says IEC Telecom chief executive for Asia, Middle East and CIS, Nabil Ben Soussia.

New applications optimised for low-bandwidth environments have also enabled better communications on board tugboats and work vessels, transforming the level of always-on connectivity which can be installed and operated on small and medium-sized vessels.

"Maritime technological advancement is currently being driven by the user experience," says Mr Ben Soussia.

"The lightweight hardware enables all sizes of workboats to connect to levels of communication and connectivity previously beyond their reach. And it is transforming the way they operate."

Increased availability of small-range antennas in the 35-45 cm range is generating demand for Ku-band VSAT for workboats and tugboats, particularly those operating outside coastal waters.

Looking to the future, the focus is shifting from hardware to customised software in the form of smart applications and digital services.

Mr Ben Soussia predicts airtime will become the most important commodity with vessel operators selecting their communications provider, followed by what added-value services they can provide.

For L-band communications, Iridium Certus is challenging Inmarsat FleetBroadband for coverage and speed. Inmarsat is introducing Elera from its next generation I6 satellites. Thuraya is also introducing a fourth satellite (T4) to provide more connectivity to vessels.

"Now is the right time to jump on the connectivity train," says Mr Ben Soussia. "Developments such as Thuraya's 4-NGS herald a transformational programme to build a new and comprehensive communications ecosystem by upgrading all three segments – space, ground structure and product ranges," he explains.

"Looking further ahead, upgrades to Iridium Certus look set to enable throughputs of up to 1.4 Mbps. Once installed, systems can be upgraded remotely meaning vessel operators can easily keep pace with developments."

IEC Telecom has developed OneAssist, which facilitates multi-party video calls over a head-mounted device.

It provides voice services through Thuraya's MarineStar and E-lite terminals, while encrypted email provision comes via the OneMailLite application. ■

▲ A seafarer on a workboat uses Thuraya MarineStar and IEC apps (source: IEC)

New AIS transponder unveiled

Saab TransponderTech introduced its R6 Supreme class-A vessel positioning transponder in March. It combines automatic identification system (AIS) and VHF digital exchange system (VDES) technologies for vessel navigation.

This comes with a new touchscreen display unit with a GUI to show AIS information. VDES provides two-way authentication of data eliminating the potential for spoofing and jamming. It has VHF channels dedicated for specific communications with 32 times more bandwidth for data transmissions than AIS.

VDES also has a greater range than AIS and is seen as an enabler of e-navigation green routeing applications.