Connect anytime, anywhere

SkyDec is a renowned developer and supplier of innovative military hardware and software, with a special focus on navigation and communication solutions for defence organisations. Maurice Meinster, commercial director, explains how the company's products meet the needs of military end-users.

Could you tell us a bit about SkyDec and the type of products the company supplies?

Maurice Meinster: What truly distinguishes SkyDec's products is the ability to customise and interface military GPS and communication systems into existing application configurations in modern military vessels, vehicles and bases. In short, our company is a real one-stop shop for military organisations. SkyDec consists of four departments: military naval navigation, small boats integrated navigation, remote area communications and special projects.

Our navigation department specialises in integrating military selective availability anti-spoofing module (SAASM) GPS receivers into a data distribution unit designed, developed and manufactured by SkyDec. The navies of the UK, Germany, Spain and Turkey are among those that use this data distribution unit as the core source of GPS data for other onboard systems. Our design criteria are based on military specifications for shock, vibration, climate and electromagnetic compatibility.

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We are the market leader when it comes to installations on naval assets, with more than 150 systems operational around the world. Our systems are used on vessels ranging from fast patrol craft to aircraft carriers and landing platform docks. Recently, we also released a system suitable for ground vehicles: small and extremely rugged, it gives users the reliability they need from a GPS system.

Our integrated navigation department develops custom-made navigation suites for the small boats used by special forces and government agencies. In addition to outfitting vessels with this equipment, we have also started developing classroom simulators in order to provide training in a semi real-life environment. Our Tactiplot product is used by several special forces and police units.

This relatively young department within SkyDec uses an expanding circle principle when it comes to marketing and sales: the centre is in Vlaardingen in the Netherlands. Our customers include army, navy, government and rescue organisations from the Netherlands, Belgium and Germany.

SkyDec's integrated navigation suites have been installed on naval vessels of all kinds, from fast patrol craft to massive aircraft carriers.

Our communication department specialises in welfare communications: we can connect soldiers to their loved ones anywhere, anytime. Within the welfare package we are able to deliver phone, internet, email and Skype, a wide range of television and radio channels, and even video on demand.

Within the special projects department we develop custom systems to user specifications. Our latest projects include a naval system that keeps track of minesweeping gear as it is being towed and a vehicle-mounted scanning device that can detect IEDs at a range of 140m.

What kind of communication-related products do you provide, and how do these meet the demands of your end users?

We currently supply our full welfare package to five compounds in Afghanistan: this includes internet, email, phone, TV and radio. Our customers are mainly US and Australian soldiers, although troops from other nations use our services as well: they are available to anyone that has been granted access by the base commander.

When it comes to delivering the service, our intellectual property lies in the techniques that we use to compress data. This allows us to maximise the use of satellite bandwidth and deliver the fastest internet connection possible, even when other services – such as TV, radio or phone – are being used simultaneously on the same bandwidth.

What are the principal considerations that you take into account when developing navigation solutions for use in such challenging locales?

Our design criteria have always been focused on military specifications. Whenever we ask our R&D team to develop

a new product, they know what the minimum standard requirements of that product need to be with regards to shock, vibration, climate and electromagnetic compatibility.

The fact that we have personnel working in our company with military backgrounds – ranging from the navy to special forces – contributes tremendously to the development of new products, not only with regards to the technical requirements, but also in terms of the human-machine interface. This way, we ensure that military users get all the information they need without having to filter out irrelevant data.

What projects do you have in development?

One of the most promising new products that we have just finished developing is a man-packable mobile phone network case for out-of-area operations. This portable device allows soldiers to carry their own GSM network with them at all times, giving them the option of using mobile phones, PDAs and even laptops to make calls over a private network as if it were an intercom system.

Besides the private network option, you can also call external numbers as you would during everyday life. The case is equipped with hardware that can connect through an existing GSM or internet network, or over a satellite. We can also deliver a satellite dish that will assure a connection even when the user is moving. This means that when the application is installed in a car, the driver will have access to a mobile phone network – even in the remotest parts of Afghanistan. I am proud to say there has been lot of interest in this product, not only from the defence industry, but also from government agencies and large civilian industries.

How do you envisage the industry evolving over the next few years?

We expect an increase in critical equipment that demands a GPS input, whether that is in terms of position or time. It is therefore important to outfit military units with a reliable military SAASM GPS system. Navigation warfare will also grow in importance, as a higher proportion of mission critical equipment comes to demand GPS data.

With regards to communications we expect to see an increase in mobile phone usage, not only for welfare, but also within the operational domain. SkyDec has already taken the first step to facilitate this with the man-packable mobile phone network case. We will ensure that no matter what hardware a client uses, they will always be able to connect, anytime and anywhere. ■

Further information
SkyDec
www.skydec.nl