

STRATOS LAUNCHES FLEETBROADBAND

How internet by satellite can save money



On 6 March 2008, Stratos presented their new broadband service to the press. The first application had been running successfully for three months onboard the MOV Van Kinsbergen, a training vessel of the Royal Netherlands Navy. After proper verification that no land connections were in use, the system was put to the test. During this test, the numerous possibilities broadband at sea can provide to shipowners and crew alike were demonstrated. Stratos, the service provider, makes use of the Inmarsat infrastructure. Right now, coverage

extends throughout the Indian and Atlantic Oceans. With the launch of a third Inmarsat I-4 satellite during 2008, the coverage will soon (Q12009) be worldwide, except for the polar regions.

Chart updates

One application of broadband at sea is the swift and easy updating of nautical charts. This was demonstrated by Datema. Chart updates are commonly done by courier service. Not only is this costly, it also causes a significant delay in the updates. Some

ships, such as bulk carriers and tankers, are often rerouted during the voyage, depending on the freight rates offered for the cargo at different ports. With FleetBroadband, these vessels can easily request and receive an update for the necessary charts during the trip.

Streaming video

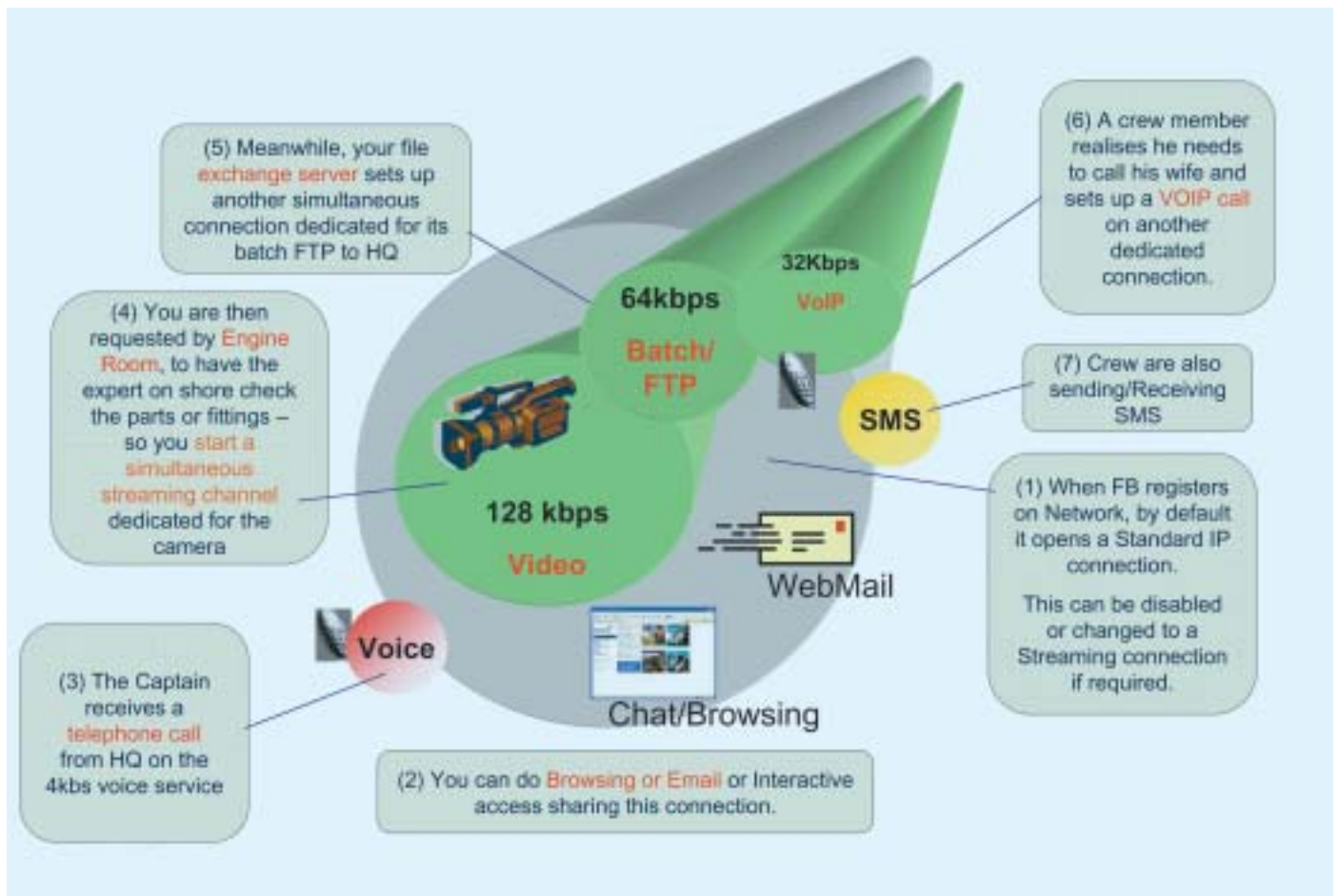
An interesting add-on was demonstrated, whereby an engineer can wear a wireless camera on a head support and communicate through voice and video with shore support to solve a technical problem on the spot. The same technology can be used for remote diagnosis of an injured crewmember. Indeed, one of the integrated service providers is Telemedicine. A step further than video streaming, which is essentially one-way traffic, is video-conferencing. This requires a stable and high-quality video stream in two directions. Video-conferencing will certainly find its way into the large yacht sector, where owners wish to spend more time onboard their vessels, while staying on top their business interests.

Crew well-being

Given the current shortages of qualified crew in the shipping world, finding and keeping good crew has become increasingly important. An onboard broadband connection combined with Stratos' messaging service AmosConnect, allows the crew to stay in touch with their home base, through e-mail, chatting, phone (voice over IP) and even through text messaging. Popular sites, such as BBC news, now have "light" versions to minimise download costs, which are paid by the Megabyte. Cost is of course a concern, but the value-added services of Stratos allow the shipowner to allocate a certain traffic usage to individual users. Both prepaid and postpaid billing schemes are possible.

FleetBroadband from Stratos Features the Stratos Advantage

The value-added services comprising the Stratos Advantage provide users with cost and traffic control, firewall management, data optimization, high



security options, easy VPN access, messaging services and full IP range. More than 4,000 mobile users in 180 countries already utilize the Stratos Advantage for BGAN. In addition to offering the Stratos Advantage, Stratos will cooperate with application partners to deliver broadband business solutions in key maritime business areas. These solutions include voyage management, remote management, IT management and cargo management, which help reduce fuel and operations costs and improve crew and customer satisfaction.



Landline

For optimal and safe connectivity, Stratos recommends a dedicated landline between the on-shore company network and the Stratos hub. This avoids the vessel-office communication being subject to the humps and bumps of the internet. Onboard, a physical barrier is recommended as a firewall between the communications PC and the navigation and communication computers. Downloaded chart updates, for example, can be easily transferred from one to the other by USB key.

Data compression

Browsing the world wide web can be a stressful experience if you know the counter is ticking for every Mb transferred. When using a satellite link, it is a lot more cost-effective to transmit compressed data than original data. For e-mail, this can be done automatically with the free AmosConnect software. For FTP and web browsing, Stratos has launched a similar application called StratosNet, resulting in a 40-45 % reduction rate in data transfer. A very useful portal for shipboard usage is www.thedigital-ship.com/webguide, which lists a number of popular websites with low-res versions.

Hardware

In spite of its increased data transmission capacity, up to 432 kbps, FleetBroadband uses a small diameter satellite receiver. The 18 kg dish is only 50 cm wide and fits into a 55 cm radome. An even smaller version is the FleetBroadband 250 which fits in a 25

cm radome. The FB250 has a maximum transmission rate of 284 kbps. The installation is relatively simple. The system is comparable to a plug-in-wall DSL connection combined with a router.

Multi-tasking

One of the unique capabilities of FleetBroadband is that a number of different satellite communications can take place at the same time. While the captain has a very clear and stable telephone conversation with the headquarters, the engineer can show video of an opened anchor winch to the tech support at the supplier, other crew can send text messages or receive e-mail and the electric contractor can work on an update in the alarm and monitoring system.

Cost control

FleetBroadband has low investment costs due to a low-cost installation and low monthly fees. The bulk of the costs is in time-based invoicing for streaming applications and volume-based invoicing for data packet transfer. The client has a clear overview of the costs at all time and can even predetermine certain limits. An always-on broadband connection, which is the VSAT approach, has not been announced for FleetBroadband.

Stratos has both FleetBroadband and Maritime VSAT in its portfolio, allowing clients to make a calculated decision based on expected usage, coverage, required data speed and total cost of ownership.

Further information: www.stratosglobal.com