

## Reducing VoIP & Video Call Data Consumption

Designed for mobility customers, and theoretically offering connectivity at speeds close to land based broadband, a new generation of high throughput satellites is presenting more opportunities to maritime, energy and offshore users. Could such satellites finally usher in the era of the always on, connected ship?



*"Maritime communications have come a long way in a short space of time. In the near future we will see them go even further at a faster pace," says Martin Killian, VSAT product manager at Globecomm Maritime.*

Demand for VoIP and video chat onboard is growing strongly. For instance, our ship visits often start with the crew asking if they will be getting video chat or instant messaging "this time". But even though demand is increasing, no-one should imagine that the available applications are designed for use over satellite.

It's Globecomm's contention that maritime users will to some extent continue to be subject to limits on bandwidth compared with shore side users. Therefore, to deliver anything like a shore side experience, ships will need to work smarter with their bandwidth, using optimised products that keep bills at reasonable levels while providing a better service.

Two new Globecomm Maritime products, Access Chat and Access Chat Plus have been specifically designed to address this need, offering a very high quality VoIP and video chat experience specifically designed for shipboard use.

*"Airtime vendors and service providers are raising expectations beyond what can be delivered onboard ship in a cost effective and practical manner."*

Access Chat provides instant messaging and VoIP calling/conferencing while Access Chat Plus provides the same with the addition of video calling/conferencing.

Both are very light products in terms of set up and data usage ~ no more than 1Mb in size ~ and can be installed easily on any Windows or Android device (an iOS version is due later this year) or even a USB stick.

In our tests, a two-person, voice-only, three minute conversation over a typical VoIP application used 4.14MB of data. Over Access Chat, just 575KB was used. A six-minute video and voice chat between two

people over Access Chat Plus generated data traffic of just 2.9MB. Over standard VoIP, the same call would use 8.2MB.

Finally, a 30 minute video chat session between four people, three of them using video, one using voice only, would run to about 900Mb using commercially available video conferencing products. Access Chat reduced the data load to 11.7Mb.

Bandwidth usage over Access Chat is configurable per user or customer and can be adjusted on the fly. VoIP calls can be made over data pipes as low as 8kbps and video calls with throughput rates as low as 40kbps. Typically, a user will get the same quality as a typical land-based call but will use 10 percent of the bandwidth.

Use of Access Chat or Chat Plus requires a licence key and the software is available in a range of pricing options for corporate and crew use, with customised pricing available when the service is bundled with Globecomm Maritime airtime service contracts.

