September 2021 / No 573

ELNAVI

MONTHLY SHIPPING REVIEW

ΕΝΤΥΠΟ ΚΛΕΙΣΤΟ ΑΡ. ΑΔ. 1215/28-2-2000

SPECIAL REPORTS
Cyprus Shipping Cluster
Shipmanagement
Maritime Communications

15 ΑΥΓΟΥΣΤΟΣ ΣΤΗ ΚΑΣΟ
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ΓΥΝΑΙΚΕΣ ΣΤΗ ΡΟΤΑ ΤΗΣ ΝΑΥΤΙΛΙΑΣ
Έλενα Θανοπούλου

CYPRUS SHIPPING IS EMBRACING CHANGE

The future is arriving - in fact, it's already here

Tore Morten Olsen, Marlink

Many shipowners are looking forward with interest to the potential benefits promised by a new generation of communications satellites. The reason for the interest is simple; the providers have encouraged end users to believe that bandwidth will be both much more plentiful and much cheaper than that currently available.
Shipowners with crew unable to come ashore and charterers demanding more data on vessel operations and ever greater efficiency are keen to understand what these new services will mean for them.
These new systems represent a continued evolution in the satellite communications space, allowing for improved capabilities for some applications and services beneficial to the maritime community.
As the largest independent provider of VSAT in maritime we welcome new services that can make life better for owners and their crews. We're actively engaged with some of the 'non-Geostationary' (nGEO) providers investigating how their services integrate with the systems onboard merchant ships.
Our view is that greater choice of bandwidth is good news – we already provide terrestrial connections where it makes more sense than satellite capacity for that very reason. The question we think shipowners should be asking is what they want to achieve and how far new LEO services fit their strategy.
In order to sustainably develop their digitalisation strategy, it is important to understand the current and future status of nGEO services, how they will work and how far they will integrate into existing networks.
First, most nGEO constellations are some way from commercial availability in the maritime satellite market. Test services are increasing and some already offer a limited service based on a first generation antenna and service levels that reflects that the constellation is not yet fully available commercially
Next, consider that the cluster of nGEO satellite providers include some with constellations that are partly funded but only a few that have full funding. While the money may be available to launch an nGEO constellation, it should be remembered that such systems typically have shorter lifespan than GEO satellites and thus will require more frequent funding rounds to provide replacement capacity.
In terms of performance, in certain locations, nGEO throughput could be significantly improved but this will not be the case all the time for all users. The degree of latency will be dictated by two factors, the applications being used and the signal's full round-trip including satellite, user terminal, gateway and point of presence.
Shipowners should keep in mind that the experience they will receive is going to vary depending on their location in relation to the gateway.
The next key factor to consider is that nGEO services are designed to work on proprietary platforms. nGEO services will provide a signal just like other satellite systems and users should be able to route that signal into their onboard IT networks and use their operational applications just as they do now. A consideration is that using an nGEO constellation will require a second set of hardware and software alongside those used by VSAT or L-Band.
We are already closely discussing how the new nGEO constellations fit into our smart hybrid network. Early indications are that nGEO will form an interesting offer alongside the GEO, LEO, MEO and terrestrial services we already provide. We are particularly keen to understand how far nGEO services can be integrated into existing service networks so they can fully take a place in our managed services. We also have partnerships with key antenna manufacturers to maximise compatibility where possible.
With so much yet to be finalised, one thing is clear. Delivery of consistent coverage designed for the challenges of digitalisation does not come from a single satellite provider alone. It requires a combination of satellite and terrestrial carriers across multiple frequencies and beams, a service provider with an extensive ground-based backbone, a network optimised for use with hardware and software to provide certainty and quality that the shipping industry needs.

Learning from air cargo

Lars Fischer, Managing Director, Softship Data Processing Ltd, Singapore

The air waybill is the most important document needed to move goods by air. It is a non-negotiable document that covers the transport of cargo from one airport to another. Information is written in a standard format and completed and exchanged electronically. Governed by the International Air Transport Association (IATA), a multi-lateral agreement means that the e-Air Waybill (e-AWB) is now accepted the world-over and the need for paper documents has all but disappeared.
Air freight moves a fraction of the goods that are transported by sea, and shipping is a much more established industry. So why can't shipping standardise its documentation?
The most obvious place to start is with the container lines where standardisation in shipping was invented. Unlike air freight, moving goods in containers tends to involve a more complex supply chain and all participations need to be kept informed. A single cargo can require up to 36 original documents and 240 copies to be exchanged between almost 30 different parties. Arguably, like the air waybill, the ocean bill of lading is probably the most important of these documents and more than 90% are still being exchanged in hard copy. That's hundreds of thousands of bills of lading being printed and passed by hand every day of the year.
That said, many shipping documents are being created and exchanged electronically. In the 1980s, shipping adopted the UN Electronic Data Interchange (EDI) and ANSI X12 protocol and supply chain partners across the world use this standard to streamline electronic data interchange.
Sadly, EDI enhancements and new iterations have allowed a range of different interpretations to creep in. Like any spoken language, EDI now has its own local and regional dialects which makes it harder for data to flow, unimpeded, across the global supply chain. The other problem with EDI is its lack of real-time operation. Technology has moved on since EDI was created and innovations such as smart containers and the Internet of Things require data to be sent and received immediately.
The answer possibly lies in API – Application Programming Interface. Where EDI facilitates the exchange of documents between IT systems, API allows individual software applications to talk to one another more comprehensively. APIs tend to be more flexible than EDI, they exchange data in real-time and errors can be tracked and addressed. They can, however, be more expensive to implement and to be widely useful they need an acceptable body to set the standard.
Looking again at bills of lading, the first attempt at creating an electronic version began in 1999 with the Bolero project and a number of similar projects quickly followed. Although successful in part, the industry has been slow to adopt these initiatives mainly due to regional differences and the fact that there is more than one standard to choose from. Shipping needs a single global standard to which all players can subscribe. API could be the answer if the world agrees on a common protocol.
The relatively newly created Digital Container Shipping Association (DCSA) is actively publishing API standards with the patronage of the major container lines. This is good news as it will take a global body with a solid industry partnership to develop and implement a standard.