eng.understanding_vessel_it

Alexandr Kirilov (https://github.com/alexandrkirilov)

Understanding vessel IT

Any vessel at sea looking like world in the world that is living in following theirs own codes, rules and traditions and the main point - vessels living remote. They are guests at ports.

For someone who has no any connection to sea-life might be looking very strange, for example one day onboard might be 25 hours another might be 23. For someone who is living onboard this things is normal. The length of the day onboard depend on direction where you are sailing and timezone changing.

Like any world the vessel's world living in following theirs own codes. For understanding the IT technology you have to make clear the huge list of this codes. Most of them is under IMO regulations:

- SOLAS
- MARPOL 73/78
- International Ship and Port Facility Security Code (ISPS)
- International Maritime Dangerous Goods Code (IMDG)
- etc

On the IMO official site you might find the whole list of codes, protocols and conventions. Besides all of it, huge list of national or regional, huge list of port authority defined and company defined too. And etc. Every move should be "in following".

If you will read all of them carefully, especially noticed the time of creating, original sources and the history of changes - you will find that most of them created more then 50 years ago and you find nothing about IT or even informational security! This is the key problem that is creating by itself bunch of other problems for onboard IT. All of this conventions, rules and codes been developing when the term "vessel" wasn't perceived like source of information, it was "vessel" like vessel - the transport that is carrying goods or passengers. This point is the source of other problems related to onboard IT improving or even onboard Cyber Security.

All points that is described in previous paragraph - have huge importance in understanding of the problems of organising IT infrastructure on any vessel and shipping company that will allow to use it in comfort but be covered by enough level

of Cyber Security. If there will be nothing about of solving this problem - very soon it became HIGHLY CRITICAL especially for the unmanned vessels that is already in test use.

The problem of gap in maritime legislative - the start point for solving any kind of troubles related to the IT on vessels. For any kind of modern technology from our regular live might be blocked by maritime regulations. From one point of view, the conservatism of maritime law - isn't bad, it's ensuring safety at sea. But the problem is that shipping itself changing, but law - not.

For now we have to start maritime codes, rules and conventions making adopted to the technology that we are using in real live. We have to start using term "vessel" in meaning "informational carrier" or "source of information". We have to adopt current tech (Navtex, AIS and etc) for the meaning of informational security. We have define the term "vessel informational or cyber security" first in some king of convention or at least to start prototyping the solution.

Follow author updates on **Linkedin**

Follow AR|BO|RE|US updates on **Twitter** and **Linkedin**