Title Abstract: Cyber-security in VTS

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Martin Ebben is Cyber Security and Risk officer, working (here) in the Port of Rotterdam. He is part of a team of Security Officers that all have a specific business focus and Martin's is the mission-critical infrastructure like Radar, VHF and sensors. He is responsible for policy, enforcement and implementation of the cyber security strategy and is involved in all projects and day-to-day operational management of the VTS systems. Martin has a background in system and security engineering and networking and has been working in the port for four years after holding several positions in a network security service company. He is also a contributing member in several IALA committees.

Abstract:

Cybercrime is a growing issue in today's world and it's getting more advanced by the day. This applies as much to systems used in the maritime community as it does for IT systems. VTS systems and vessels are more and more connected to utilize Maritime Services in the Context of e-Navigation. This causes major cyber security risks as many of these systems were never designed to be connected to external services and to the internet.

One of today's greatest risks is awareness. Users often don't realize that a ship can be hacked as well and that VTS systems are not intended to browse the internet with. On the other hand, VTS systems have always been designed for functionality, not for cyber resiliency. This has only started to change in the recent years.
What if a VTS is compromised or held ransom for bitcoins? What does this mean for the maritime safety and the continuity of the dependent logistics chains?

Which technical measures can be applied and how can your users help in preventing cyber incidents? I hope to increase cyber security awareness and resiliency in the maritime world and especially VTS systems with a presentation on this matter during the 14th IALA Conference, as a VTS Security Officer in the Port of Rotterdam and as a contributing IALA E-navigation member.