

MANTAWARE™ MESH

Coordinating Naval Communication

Communications systems among different naval vessels function separately, leading to ineffective and inefficient communication outcomes. These issues are becoming more pronounced with ongoing increases in the complexity of communications technology and doctrines.

BACKGROUND

Currently, Communications Configuration and Management Systems (CCMS) across different naval vessels and platforms operate in silos with different software, protocols and technologies. As a result, communication coordination across platforms is a manual process, relying on direct operator interaction, usually verbally.

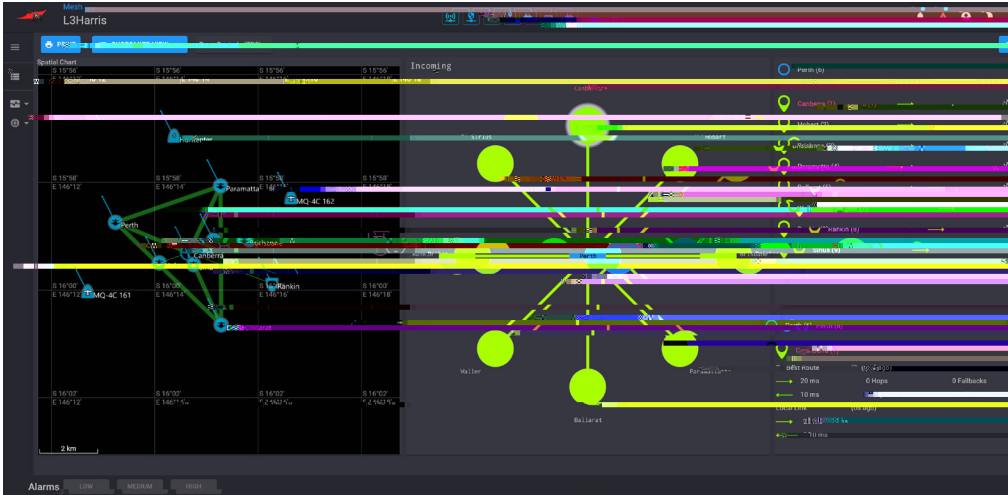
HIGH-LEVEL SOLUTION

Navies require solutions that integrate communication systems across platforms.

A communications system with direct knowledge of the related platform's configuration and status would be able to recognize mismatches that would result in communications failure. The system could then coordinate a response (with varying levels of autonomy) to mitigate issues and optimize communications reliability, as illustrated below:

There are a number of key functions required of this new component:

- > **CCMS integration:** CCMS is responsible for the configuration of devices to meet various communications capabilities



MantaWARE Mesh dashboard

The following illustration serves as a visual representation that effectively demonstrates this concept:

- > **Improved situational awareness:** Sharing communication system configuration and status information between naval platforms can help improve situational awareness, providing a greater understanding of the environment and allowing for more informed decision-making
- > **Simplified coordination:** Correlating and visualising communication system configuration and status information of other naval platforms allows for a simpler means of coordination and, therefore less operator burden
- > **Rapid response:** Augmenting operator decisions with machine speed suggestions or even optionally automated decisions allows for faster response times than can be achieved using legacy manual interventions