

Leonardo to provide Information Management software for Royal Australian Navy Collins-class submarines

- **The company's SmartIDMS™ (Smart Information Dissemination & Management Services) is an off-the-shelf software application that will manage the transfer of data to and from Royal Australian Navy submarines**
- **Reducing the amount of time a submarine spends at 'periscope depth' by providing more effective data downloads reduces its exposure time and subsequently its potential exposure to detection by hostile forces**
- **As well as submarines, SmartIDMS™ is suitable and available for other military and commercial users whose missions require effective Information Management (IM) and bandwidth optimisation**

Sydney, 5th October 2017 – Leonardo has been awarded a contract by the Commonwealth of Australia's Department of Defence to deliver Information Management software to six Collins-class submarines operated by the Royal Australian Navy (RAN). The contract, called 'Submarine Communication Information Exchange Management' (SCIEM), is part of Australia's Project SEA1439 Phase 5B2 upgrade programme. Leonardo will be providing its SmartIDMS™ software application, that is designed and manufactured in the UK and will allow RAN crews to upload and download data in a sophisticated, managed way when the submarine connects to a network.

Like most military vessels, submarines share information over computer networks. However, because they spend a great deal of time deep underwater, they are cut off from their networks for long periods. To stay in touch, a submarine must rise to just below the sea surface ('periscope depth') in order to join the network and exchange data with the outside world. Traditionally, the data would be uploaded and downloaded in the order that it was stored, which has led to important information getting stuck in a queue behind bulky, low-priority files. Leonardo's SmartIDMS™ system optimises this process by intelligently choosing which information to send and receive first and which can wait, for example prioritising operating orders over personal emails. Different rules can be pre-set for different missions, so that during peacetime, for instance, improving crewmember morale can be easily achieved by raising the priority of welfare communications with their friends and families.

SmartIDMS™ provides significant improvements in the capabilities of any communications network. The most obvious, for submarines, are the effective management of information dissemination and the bandwidth optimisation, resulting in time and cost savings of typically over 80%. Another key advantage of the system is that other network users will see a virtual submarine that is always present on the network, even when it is disconnected, allowing them to seamlessly move data onto the submarine which will then be synchronised when the real submarine re-connects to the network.

SmartIDMS™ is applicable anywhere there is a risk of 'data deluge/information overload' swamping busy users, even on permanently-established high capacity networks, with SmartIDMS™ ensuring that the right information gets to the right people in the fastest time possible.

Leonardo's SmartIDMS™ application brings together a number of the company's information management capabilities that have been used by the UK Royal Navy on its surface fleet and submarines since 2007. Encompassing elements of bearer management, network management and data management, the system is focused on the optimisation of information delivery rather than simple maximisation of bandwidth. Designed to be bearer and operating system agnostic, it has wide application across the full digital communications spectrum, delivering order of magnitude efficiencies in both military and commercial communications networks.