

Fixed High Frequency Radio Refresh (FHFRR)



Delivering world leading HF Comms capability for New Zealand

Program name	Fixed High Frequency Radio Refresh
Customer	New Zealand Ministry of Defence
Contract start date	February 2020
Contract term	Oct 2026 (Acquisition), Through Life Support (TLS) is 2031+

The New Zealand Defence Force (NZDF) communicates from New Zealand to its deployed ships, land forces and aircraft using satellites and High Frequency (HF) radio communication systems. High frequency radio strength provides a point-to-point strategic communications capability without any reliance on equipment in the middle. HF Communications systems can provide coverage in places that satellites cannot reach and where ordinary radio communications will not work. It is also a back-up system if satellite communications fail, are disrupted or are unavailable.

Babcock Australasia was contracted in February 2020 to deliver critical equipment enhancements and upgrades to the NZDF's High Frequency communications infrastructure and then support this through the service life. Babcock are replacing the existing radio system, which is at the end of its economic and operating life, with upgrades that will create a world leading HF capability for New Zealand.

Babcock is upgrading multiple operations centres, transmission and receive stations as well as decommissioning sites that are no longer required by the NZDF. We will then maintain the system in an operational state on behalf of the NZDF for up to 20 years.



Maintaining communications in times of crisis

High Frequency radio enables communication with military and other platforms where typical communication lines are difficult or unavailable including the back-up service to New Zealand's Scott Base in Antarctica. The upgraded HF capability will improve and modernise NZDF's aging HF capability and enhance the system's reliability and interoperability. The current HF radio infrastructure was installed in the 1980's and has reached the end of its life.

This is also an investment in our communities. Along with aiding the NZDF to conduct standard operational missions, the upgraded radio system will support humanitarian and disaster relief operations enabling enhanced communications during crises.

Contract in Numbers

Fixed High Frequency Radio Refresh program is upgrading:

- › 2 Operations centres
- › 2 Transmit sites
- › 2 Receive sites
- › Decommissioning multiple sites

At a glance:

- › System Design, Development and Production
- › Systems and Communications Engineering
- › Installation, Set to Work and Commissioning
- › Advanced product upgrades
- › Revolutionary system control, including:
 - › Introduction of a frequency management and prediction system;
 - › Introduction of Automatic Link Establishment/ Management;
- › Maintenance planning and conduct