

# Tokelau Ship to Shore Project: Onshore Infrastructure Options and Environmental Impact Assessment



**Client:** New Zealand Ministry for Foreign Affairs & Trade

**Location:** Tokelau

**Duration:** 2014

**Services:** Coastal process assessment, EIA, Coastal extreme analysis, climate change and sea-level rise, development of design conditions, community engagement & stakeholder consultation

A key objective of the current Tokelau National Strategic Plan is improved standard of living through reliable, adequate and efficient infrastructure. A critical part of this objective is the provision of a shipping service that meets the social and economic needs of Tokelau including the establishment and maintenance of ship-to-shore infrastructure, facilities, equipment and processes.

Under Phase Two of the Ship to Shore programme, NZ is supporting Tokelau with the wharf and channel infrastructure works required to ensure safe and efficient ship to shore operations. The activity is being conducted in two stages. Stage one assesses potential onshore infrastructure options, develops preliminary designs and assesses the potential environmental impacts of the proposed wharf and channel infrastructure.

NIWA supported Spiire New Zealand Ltd carry out the option assessment and environmental impact assessment. This included:

- Community discussions on each atoll on issues related to ship to shore operations, potential options, coastal processes and environmental concerns

- Assessment of coastal processes operating in and around each channel and wharf facility
- Assessment of the impact of further channel and associated onshore wharf development would have on coastal processes and surrounding ecosystems.
- Assessment of potential options to improve ship to shore activities and development of preferred solutions.
- Assessment of coastal extremes, development of coastal design conditions, including the effects of climate change and sea-level rise, and potential impact of extreme events both on the infrastructure and identification of any exacerbation of potential damage to the village caused by the proposed works.

The stage one activities has enabled the development of the second stage to proceed to complete the full design and construction tender documentation and to enable the Government of Tokelau procure and contract a construction company to supervise the construction of the proposed works.