

TORCH Decision Support Tool



Background

TORCH is a decision support tool that has been informing UK MoD capability readiness assessments for the last 10 years. In New Zealand the same (but more advanced) solution has been informing readiness and preparedness assessments for the NZ Defence Chief over the last 8 years – the NZDF proactively recruited Agilient to provide this software as a service, in Wellington.



Challenge

TORCH was created from the need for a single tool to understand the state of the joint force (delivered from single services) and its readiness (and risks) to conduct operations, over time. The tool is fed by Units, from a web interface detailing Defence Force Elements and their Personal, Equipment, Training and Sustainability (PETS) attributes at Readiness.

This raw data and single version of the truth is entered once and then cascaded upwards through the chain of command and concurrently through the J3 Ops and J5 planning lens. Risks are identified and in turn mitigated or sanctioned as necessary. Reports are refined and collated. All data is recorded against a rolling epoch of time (quarterly) and therefore a credible audit and history of the data is available. As reporting time progresses quartiles are rolled, thus making it simpler for the reporter to only amend any delta.



Solution

TORCH is based on the licenced Mood software and configured to operate on a web based platform, with a DB back end – currently on the S networks. The core out of the box software is provided by CACI in the UK. As an aside CACI already provides complimentary defence solution support to the UK MoD and GCHQ, amongst others <https://www.caci.co.uk>

The solutions can be managed in real-time through the Mood content management software which operates through an almost natural English and WYSIWYG developer interface.



Some of the issues addressed by TORCH

- Incoherent and distributed reporting by separate services/entities.
- Lack of a common taxonomy.
- Differing reporting measures/metrics.
- Vanity reporting – Red at units appearing green at command level without any reasonable mitigation/justification.
- Outdated reporting.
- Lack of comprehensive reporting – some units not reporting.
- Lack of contextual reporting.
- No single version of the agreed truth.
- No feedback loop to reporters.
- No trust in reporting accuracy.
- No history or audit trail.
- Lack of operational and strategic risk recording for delivery of defence capability at readiness.
- Inability of a tool to maintain pace with changes to policy, language or the needs of the force/commanders.
- No link between reporting and current Ops/Plans.



Results

- Readiness reporting by Commands in accordance with their defined output requirements.
- Executive reporting summaries by the chain of command.
- The ability to dynamically drill down through the reporting chain of command.
- Representation of Army Units, Aircraft Platform Task Lines, Ships as platforms of differing capabilities.
- Representation of the joint force.
- Contextual analysis of capabilities with a contingency plan or standing tasks.
- Readiness alignment modelling.
- Hollowness modelling against operational sustainment over time.
- P, E, T and S reports.
- Capability Gap analysis.
- Matching Defence capability Demand to Supply.
- *Can also link to a Lessons Database.
- *Can also link to Task Based training events.