

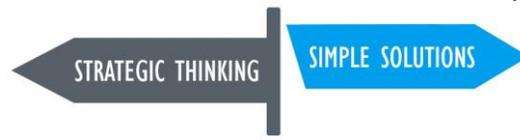
NATIONAL INFORMATION INFRASTRUCTURE FRAMEWORK

Sprint 3: Close-out Report
11 June 2018

Report created for:



by:



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Executive Summary

Project Aim: To materially lift Emergency Managers' ability to answer location based questions with authoritative and repeatable data supply.

This directly underpins location based intelligence initiatives at a local, regional and national levels. Examples of this might include common operating picture type GIS capabilities and the various regional GIS viewer projects such as the [Southland Information and Emergency Situation Map](#). Emergency Response agencies and sector groups such as MPI, FENZ, DoC, GIS4EM, and Commercial partners (i.e. Telecoms industry) will equally benefit by securing access to the same authoritative data supply to expedite their own response actions.

StratSim started from the premise that information is the currency of resilience. While there have been many helpful initiatives over the years by individuals and groups, these have tended to be tactically focused, often on the technology or software and for the most part, uncoordinated. This Information Management Framework (IMF) created a governance structure and assessment framework to utilise existing capability across Government, Industry and the EM-Sector while providing strategic prioritisation and direction in delivering capability that can support on-demand discovery, interpretation and use of targeted authoritative information by the Emergency Manager.

Sprint 3 Summary

This report presents the final deliverable for 2017-2018 resilience fund project "National Information Infrastructure Framework"

Sprint 1 developed a high-level information framework centred around standing-information-needs (SINS) and essential-elements of Information (EEI) across the sector and captured the high-level information flows around those using the LINQ tool.

The stage 2 of the project began a systematic investigation into geospatial information requirements using a tsunami scenario as a representative metaphor to demonstrate how the framework would operate in practice. That is supported by a Governance Framework and Communications Strategy which, along with a Data Maturity Model for the key deliverables for this sprint.

This final report wraps up the first tranche of funding and sets the scene for the second part of this project, which has successfully been funded to change the data supply situation and will apply the frameworks generated in the 2017-2018 project.

Project Background

The Ministry of Civil Defence & Emergency Management (MCDEM) is the New Zealand Government department responsible for providing leadership and support to national, local and regional emergencies.

The CDEM Resilience Fund objective is to enhance resilience to civil defence emergencies through the development of local and regional civil defence emergency management capability. Funding is provided to undertake specific projects that will improve civil defence emergency management capability and contribute towards resilience, focussing investment on the areas of greatest benefit and enabling a collaborative approach to be undertaken across the sector¹

An emerging realisation based upon the common thread in investigation reports into recent large scale incidents is that *“The [emergency] sector should never under-estimate the hunger for information”*². A fundamental requirement for management of any incident and an essential element of any multi-agency response must be a well-considered, pre-planned system of authoritative data delivered in a timely fashion and in a usable format³

In particular, the application of a “single source of truth” model will be instrumental to ameliorate confusion, duplication and ambiguity when clear and repeatable answers are sought to inform fundamental operational decision making.

Clarification and formalising of information sources has the potential to feed other initiatives within and related to the sector, the Red Cross hazards app being one example. Reuse of government data is one key way of delivering value and relevance to the taxpayer and showing tangible support for the principle of open and transparent government.

Project Objectives

In conjunction with the Project sponsor, and with the knowledge and support of the MCDEM project team, the following objectives/aims/scope have been agreed

1. Identify the forecasting needs, data requirements and current source of emergency management data, whether it currently exists or not.
2. Map the overlaps, interrelationships and inconsistencies of data supply and practices.

¹ <http://www.civildefence.govt.nz/cdem-sector/cdem-resilience-fund/>

² AFAC Port hills Fire report

³ CIMS Green Book edition 2

3. Consider the viability of existing models and practices to incorporate these requirements.
4. Provide a framework within which emergency management sector information sources can be measured and considered “authoritative”
5. identify and prioritize possible solutions for prototyping, and where feasible driven to permanent solutions for agency data supply

Deliverables:

Funding Tranche 1: 2017-2018

1. Information Management Framework comprising:
 - a. **Data Maturity Model:** A set of criteria that must be met before a data source/ data set can be marked “safe to use” -**supplied**
 - b. **Communications Strategy and Plan** for approval - **supplied**
 - c. **Governance framework** - **supplied**
 - d. **Governance Terms of Reference** for approval – **supplied**
2. **LINQ sketch** of information flows focussed on Geospatial information supporting a Common Operating Picture (COP) Portal (Tsunami Theme), validated with MCDEM staff – **supplied**
3. **Tsunami scenario** implementation plan – **supplied**
4. **ArcGIS online** content recommendations - **supplied**
5. A specification for an online situational awareness GIS viewer illustrating Tsunami data example for ministry staff to discuss and build when approved, including data sources and the authoring agency – **supplied**
6. Tranche 1 close-out report – **this document**

Approach

During this final sprint 3 period StratSim have worked with the Ministry’s nominated staff to:

- Using the standing information needs (SIN’s) and Essential Elements of Information (EEI’s) artefacts developed in Sprint 1, develop further detail for the tsunami scenario
- Refined the “information supply chain” map for SIN’s for tsunami scenario using LINQ
- Published the Data Maturity Model
- Met with the product owner of data.govt.nz to discuss the finer detail of listing and grouping geospatial data holdings
- Met with LINZ and MPI to discuss shared aspirations and relevant project alignment
- Welcomed and briefed and the incoming Ministry GIS specialist
- Scoped out and provide advice regarding ArcGIS Online public content
- Made recommendations as to how a proof of concept geospatial viewer for 24/7 situational awareness could be articulated
- Engaged with Statistics NZ to begin work on the formulation and publication of an API to support on-the-fly (OTF) population queries for the Tsunami Scenario

At the Sprint 2 acceptance meeting we agreed the MCDEM would incorporate Data Governance into existing governance structures within The Ministry to drive priorities in a coordinated way with wider Ministry strategy.

Communications were also to be coordinated with The Ministry comms team, however we are advised that pending public announcements from the TAG review it would be prudent to carry comms over to tranche 2 in the 2018-2019 financial year.

The Data Maturity Model and Tsunami Scenario are tactically-focused, principally designed to demonstrate how the various framework elements support implementation in the real world. At the commencement of Tranche 2 (ie sprint 4) we will begin to apply those frameworks to actual tactical datasets, prioritised in conjunction with Ministry staff. We anticipate monthly sprints with tangible outcomes that will directly support The Ministry's operational data requirements.