



# NZDF Estate Planning **OBJECTIVES**

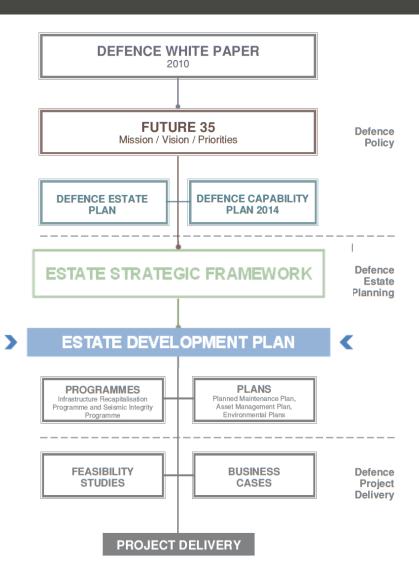


#### What EP Provides:

Responsible for the planning of the Defence Estate to meet future needs and demands through an enduring vision.

In 2013, Defence Property Group (DPG) identified the requirement for:

- 1. A series of master planning documents
- A process that sequences the identified projects for delivery across the NZDF estate



# NZDF Estate Planning **OBJECTIVES**



The objectives EP are required to meet are:

- 1. Consolidation of existing assets
- 2. Cultural change
- 3. Disposal of recapitalised assets
- 4. Robust planning and governance

#### Approach:

- 1. sS engagement
- 2. External specialists
- 3. Proven, industry standard, approach
- 4. NZDF internal governance









## NZDF Estate Planning ESTATE STRATEGIC FRAMEWORK



The NZDF estate demonstrates a wide variety of planning, design and build responses through its built assets. Much of the estate was built from WWII through 1960s, is degraded, and has increasing compliance challenges.

The Estate Strategic Framework has an enduring future vision: "to provide 'fit for purpose', responsive infrastructure aligned to assist the 'agile force' to meet its required outputs".

The ESFs provide the answer to the 'where' and 'what' communicating:

- i. Planning principals
- ii. Site functionality and outputs
- iii. Precinct planning





Uses industry standard tools to bring together all available asset information and known project criteria to determine inter-relationships of projects across the NZDF estate.

The EDP follows the ESF and determines the 'how' and 'when' for project delivery.

#### The EDP:

- i. Objectively ranks
- ii. Incorporates strategic intent
- iii. Produces an optimised project sequence

The NZDF EDP will provide individual site EDPs and communicate project priority and demolition sequence, in a time-bound Gantt chart.





Projects were previously prioritised per site, allowing site-politics and personalbias to direct decisions; preventing coherent inter-site development across the whole-of-NZDF estate.

#### **Requirement:**

Amalgamate data (from ESF, AMP and site)

Nothing available on market

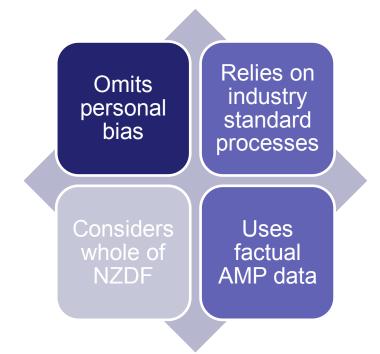
Reliable and replicable process

#### Capability:

Compatible across the whole of NZDF estate

Quick and replicable calculation

Optimised and 'real' outputs





### **MCDA**

Multiple Criteria Decision Analysis
[or Multiple Criteria Decision Making (MCDM)]

Standard Process

Many different approaches

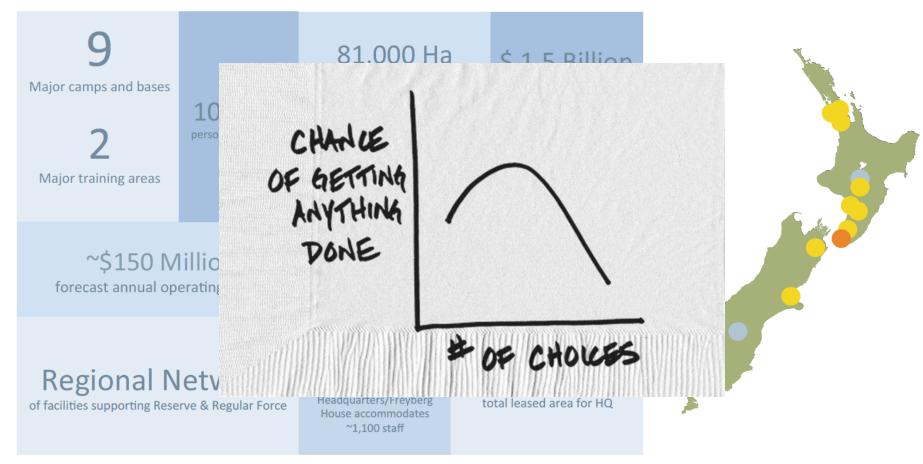
But first...







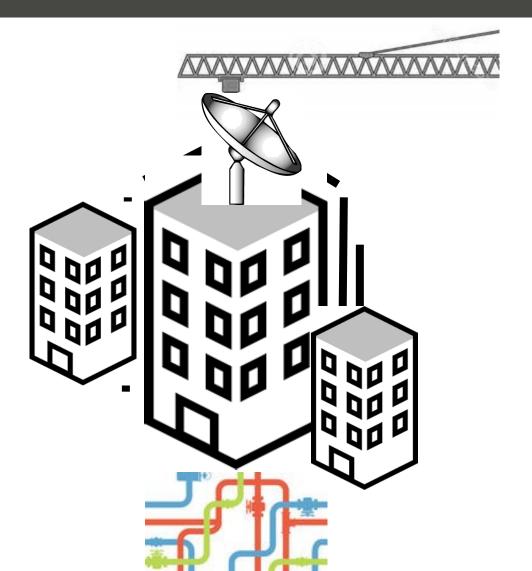
#### **NZDF** Estate





### **Data Driven**

Asset Acquisition Date
Asset Services
Asset Construction Type
Asset Size
Asset Location
Asset Dependencies
Asset Criticality
Personnel Impact
Estimated Project Cost
Estimated Project Duration
Condition Assessments
Seismic Assessments



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### **Criteria Assessment**

Choosing the criteria

Determining the metrics

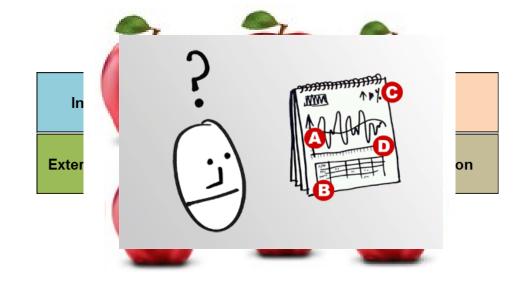
**Ensuring inter-operability** 

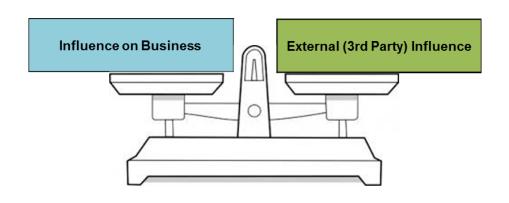
### **Criteria Decisions**

Deciding calculation

Pair-wise assessment

Assessment and Analysis







#### **MCDA Decisions**

Many options available;

Some require significant human input (and time)

Some are costly to run (per iteration)

Some are too "basic" or limited

#### Chosen Approach:

In-house development

Decision was made to use two *numeric-based* MCDA 'theorems' and tailor them



### **Analysis**

Process Analysis:

SME review

Workshops and governance

processes

Data Analysis:

Documentation, testing and reporting





### **Outcome**

Complete process

Includes Governance processes

Developed programme identifying Defence Infrastructure spending

# NZDF Estate Planning **SUMMARY**



#### What is the result?

NZDF has a robust planning tool which:

Removes bias

Provides a rigorous platform to deliver results

Caters for NZDF and its' infrastructure

Sequences 'known' infrastructure projects

beyond 10 years

Time and cost efficient process

NZDF is able to:

Exceed/Meet central Government direction

Plan to meet \$1.7Bn Infrastructure Capital

Construction across the Estate

Continue to deliver v.f.m. to the NZ taxpayer

Omits personal bias

Relies on industry standard processes

Considers whole of NZDF

Uses factual AMP data

## DEFEN FORCE TE OPE KÄLUA O AOLEATOR DEFENCE PROPERTY GROUP



