NZDF Estate Asset Management
- A Govt Organisation's Perspective

Presentation Outline

- Defence Estate

- Government Drivers

- Performance Metrics

- Asset Mgnt Goals

- Asset Mgnt Systems

- Conclusion

Defence Estate

- \> 5,000 buildings – nation wide
- 860,000m2 of buildings
- 76,000 ha land
- Replacement value (infrastructure) $2.8Bn

- No. of sub-assets e.g. plant ??
- Value of Infrastructure/ utilities ??
- Accuracy of 'as-built' data - poor
- Energy expenditure $13M

- Opex - $96.9M

Management Model

- Hub and 9 spokes

- In-house strategic and operational decision making

- Outsourced operational delivery e.g. FM Svc providers and construction contractors.
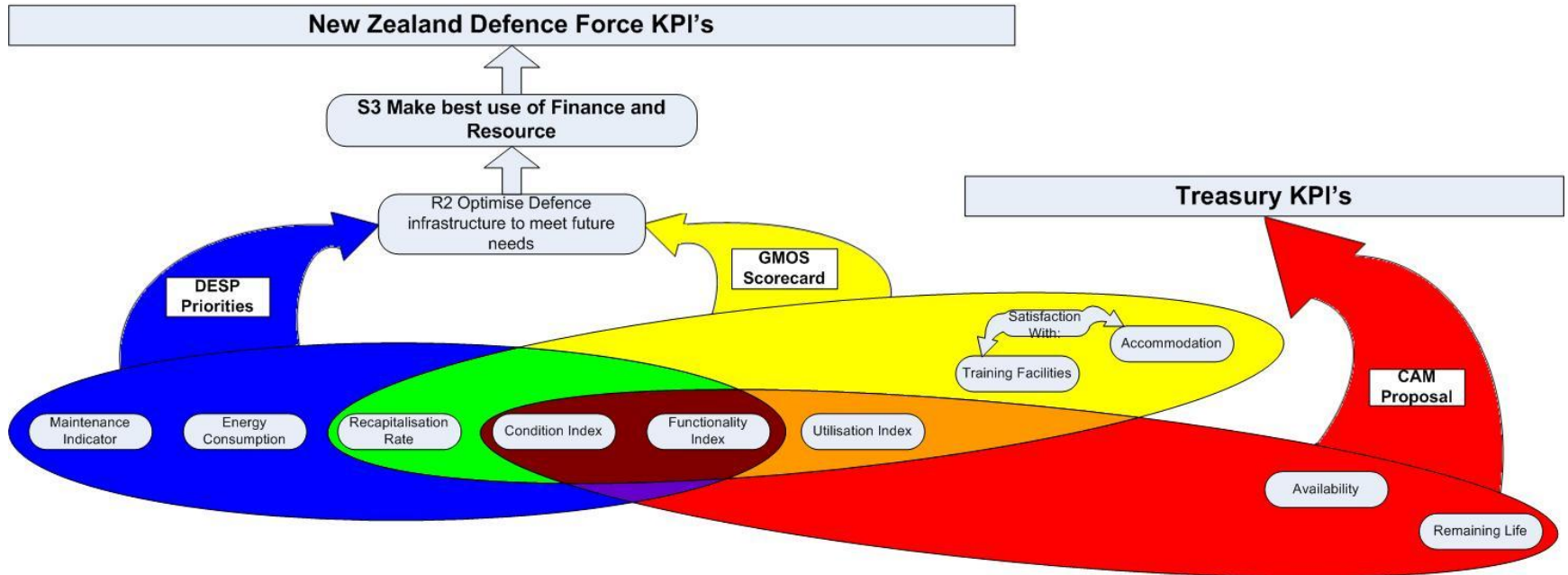
- Main contractors

Government Drivers

- Capital Asset Management (CAM) – Treasury set up Infrastructure Division to drive better CAM. Auditing large portfolio holders.
- CAM Performance Metrics and Reporting to Govt
  - Condition
  - Utilisation
  - Remaining Life
  - Functionality
- NZDF metrics also include
  - Recapitalisation Rate
  - Energy Consumption

Performance Metrics

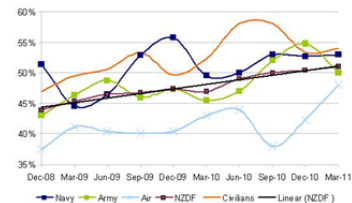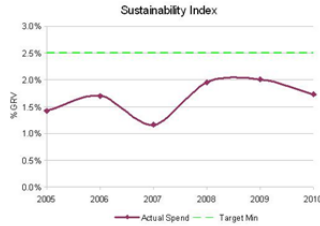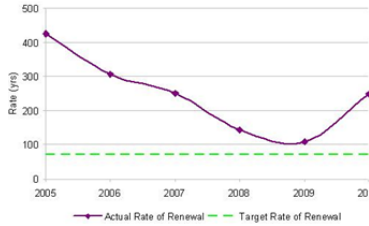Processes Directly Influencing Key Performance Indicator (KPI) Selection

Measurement Detail **Overall Measure** **Objective**

Category No	Category Description	Overall KPI	% Rated	Average Condition
1	Houses		31	4.9
2	Barracks		98	4.9
3	Training Facilities		82	4.4
4	Workshops		95	4.8
5	Specialist Facilities		94	6.1
6	Offices		86	4.6
7	Recreation Facilities		100	4.8
8	Other Buildings		90	5.2

Functionality KPI

KPI Cat. No	Category	Functionality Rating	Functionality Indicator	% Rated
1	Houses	2.8		49%
2	Barracks	2.5		78%
3	Training Facilities	2.4		72%
4	Workshops	2.3		48%
5	Specialist Facilities	3.0		62%
6	Offices	2.4		59%
7	Recreation Facilities	2.4		64%
8	Other Buildings	2.4		59%
9	Undergound Infrastructure	2.3		62%
10	Other Infrastructure	2.3		47%
	Overall	2.6		55%

Utilisation KPI

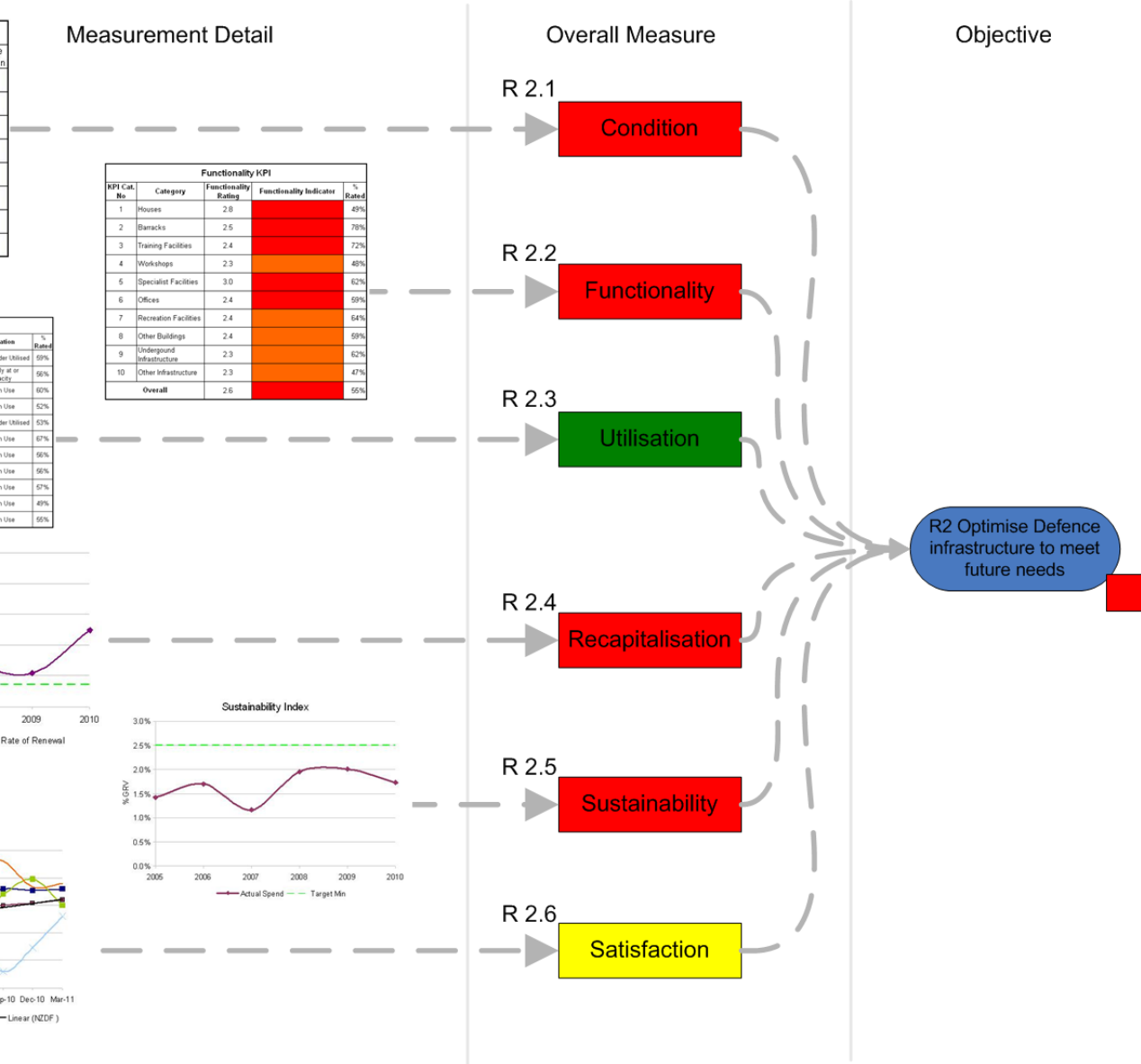| KPI Cat. No	Category	Utilisation Rating	Utilisation Indicator	Utilisation	% Rated
1	Houses	2.9		Slightly Under Utilised	59%
2	Barracks	4.9		Occasionally at or Above Capacity	56%
3	Training Facilities	4.4		At Optimum Use	60%
4	Workshops	4.1		At Optimum Use	52%
5	Specialist Facilities	3.1		Slightly Under Utilised	53%
6	Offices	4.5		At Optimum Use	67%
7	Recreation Facilities	4.2		At Optimum Use	56%
8	Other Buildings	4.0		At Optimum Use	56%
9	Undergound Infrastructure	4.3		At Optimum Use	57%
10	Other Infrastructure	4.0		At Optimum Use	49%
	Overall	3.7		At Optimum Use	55%

R 2.1 **Condition**

R 2.2 **Functionality**

R 2.3 **Utilisation**

R 2.4 **Recapitalisation**

R 2.5 **Sustainability**

R 2.6 **Satisfaction**

R2 Optimise Defence infrastructure to meet future needs

Rate of Renewal chart — Rate (yrs) vs years 2005–2010. Actual Rate of Renewal / Target Rate of Renewal.

Sustainability Index chart — % GRV vs years 2005–2010. Actual Spend / Target Min.

Satisfaction chart — % vs Dec-08 to Mar-11. Navy, Army, Air, NZDF, Civilians, Linear (NZDF).

DEFENCE SHARED SERVICES

New Zealand DEFENCE FORCE — Te Ope Kātua O Aotearoa — NAVY · NZ ARMY · AIR FORCE

Asset Management Goals in NZDF (Two Levels)

1. Strategic

- Satisfy Govt requirements for Public Estate Mgnt

- Reflect NZDF strategic direction as it applies to the NZDF estate

Asset Mgnt Plan

"Asset Management involves the balancing of desired levels of service and asset standards with asset performance, costs and risk, incorporating current and future demand for the facilities and services they provide. The goal of Asset Management is to meet a specified level of service in the most cost effective way."

- Justify funding programmes to senior mgnt

- Produce Planned Maintenance Programmes for operational delivery

Asset Management in NZDF (Two Levels)

2. Operational

- Optimise life of assets within allocated funding levels

- Design asset tailored scheduled maintenance plans

- Conduct condition appraisals of assets for AM database

- Scenario testing and modelling of maintenance strategies to understand impact of operational decisions

- Minimise Unscheduled/failures/repairs

    - 3-7 times more expensive than scheduled maint

    - achieve best practice maint ratios (20% of contractor time spent on Unscheduled maint to 80% on Scheduled maint - KPI)

- Provide input/costings into Planned Maintenance Programmes (mid life upgrades/ replacements)

ASSET NOT ASSESSED: ☐ (Enter reasons why asset not be assessed within the Comments)

ASSET APPRAISAL TEMPLATE

Current FLoc: PAP:BLDGS:NA189   **Date Inspected:** 19/05/2010   **Inspected By:** Stuart Fieldes

New FLoc: **Date Entered:** 14/04/2010 11:52:58 a.m.   **Entered By:** Stuart Fieldes

New Desc: **New TOT:** Office/Work Area   **New Date Constructed:** 1/01/1939

New Site: Papakura   **New Sup. FLoc:**   **New Date Acquired:** 1/01/1939

Status Update

Updated Status: (tick as many as required)	HERI ☐	RLEA ☐	XLEA ☐	SURP ☐
	DISP ☐	HAZ ☐	CONT ☐	

Functionality

Rating	1	2	3	4	5	Total
%	80	20				100

NOTE: Any rating of 3 or over should have a non-cyclic works project.

Contribution

Current: 4
New:
Contribution Comment

Condition

Infrastructure	Old	New	N/A
Non-Building Overall			☑
Building			
Roof Cladding	5	6	☐
Roof Finish	5	6	☐
Ext Wall Cladding	8	9	☐
Ext Wall Finish	5	7	☐
Int Finish	4	4	☐
Int Flooring	4	4	☐
Fixtures, Furnishings, and Fittings	5	5	☐

Utilisation

3

Non-Cyclic Works

Project No	Project Description	Category	Condition	Stage	Cost	Year
1	Rear entrance	Refurbishments	9	1	$1,000	2010
2	Replace cladding and joinery	Exterior Wall Cla		1	$50,000	2011
▶ 3	Replace cladding and joinery	Exterior Wall Cla		2	$100,000	2012
4	Minor Structural Repairs	Structural Eleme		1	$20,000	2012
5	Final Stage Recladding and joinery	Exterior Wall Cla		3	$100,000	2013

Record: 3 of 6

Comments

Refer Covekinlock Report Dated 2010.
Pjt 6 - HSC2 reloc into ARH and PAP NA189 both pjt values contribute to total value.

Original FLoc Information

FLoc: PAP:BLDGS:NA189
FLoc Desc: NPMS/CMT
Site: Papakura
Current Status:
Superior Floc:
TOT: Office/Work Area
Date Aquired: 1/01/1945   **Date Constructed:** 1/01/1945

Asset Mgnt Systems

- **Strategic** – SAP, Plant Maintenance Module (Integrated Land and Facilities Management System (ILFMS))

  - Tracks asset level management e.g. a building

- **Operational** – outsourced to FM Svc provider.

  - must be compatible to ILFMS for data upload

  - covers down to plant/ sub asset/ component level

  - Examples: SPM, MAXIMO, SAP

Conclusion

Govt wants better management

Shrinking operational budget

Aging estate and assets

Low recapitalisation

What's our future?

Asset Management