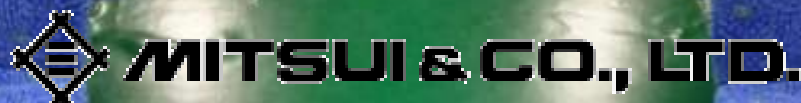


CCG: 28 July 2010 Wellington Regional Rail Upgrade: Matangi EMU

Angus Gabara

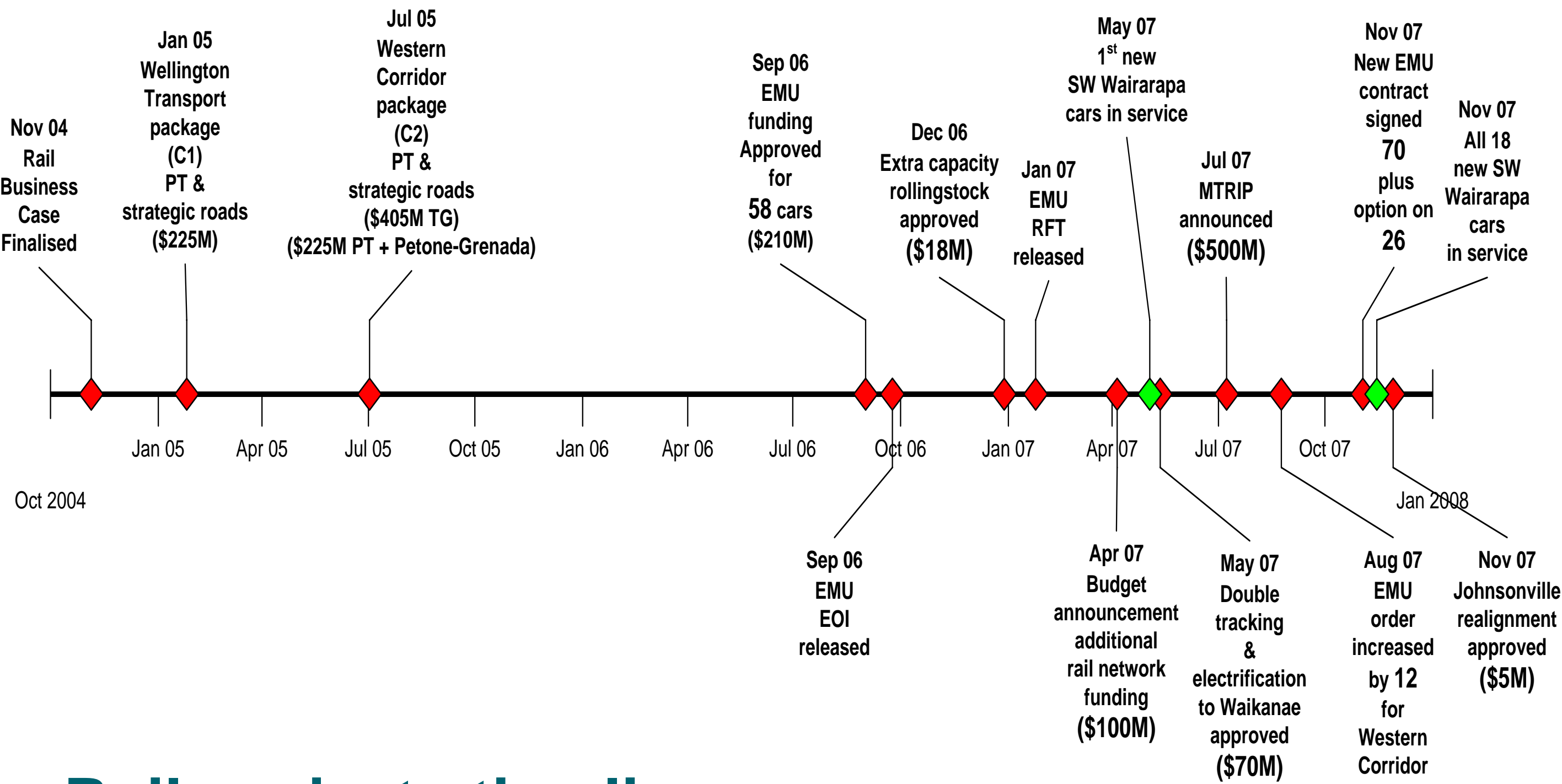
Manager Rail Projects
Greater Wellington Regional Council

Business Owner Matangi Projects
Greater Wellington Rail Limited



Contents

- Context & timeline
- Procurement Approach
- Learnings
- Progress



Rail projects timeline

2004 - 2008

Hyundai-Rotem / Mitsui EMUs + rail upgrade

Consists of two major components:

- EMU Supply \$236m
(GWRL – Hyundai-Rotem/Mitsui)
- EMU Enabling Works + other \$276
(GWRL – ONTRACK)

Wellington Rail Projects

NEW EMU PROJECTS

Supply 2010

Depot

Johnsonville
Line Tunnels

Station
Upgrades

EMU
ENABLING
WORKS

WESTERN CORRIDOR PROJECTS

Double tracking and
electrification Waikanae

Alignment improvements
between North and South
Junction

New and upgraded Kapiti
Railway Stations

KCDC Western Link Rd

Transit NZ Kapiti State
Highway Strategy

OTHER RAIL CORRIDOR PROJECTS

SW Wairarapa
cars
COMPLETE

SE Train w/
EO Locos

DM216
English Electric

Ferrymead
English Electric

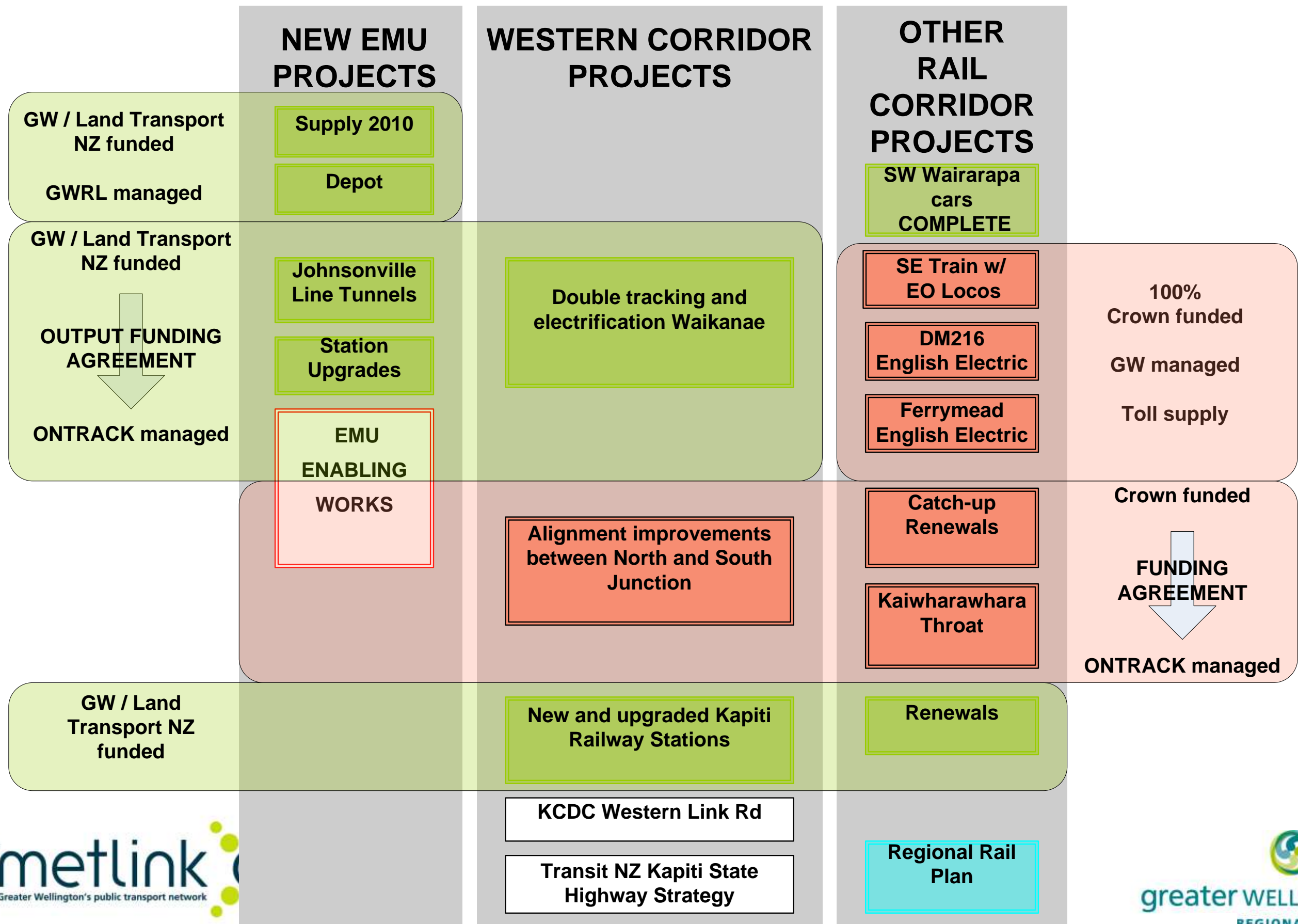
Catch-up
Renewals

Kaiwharawhara
Throat

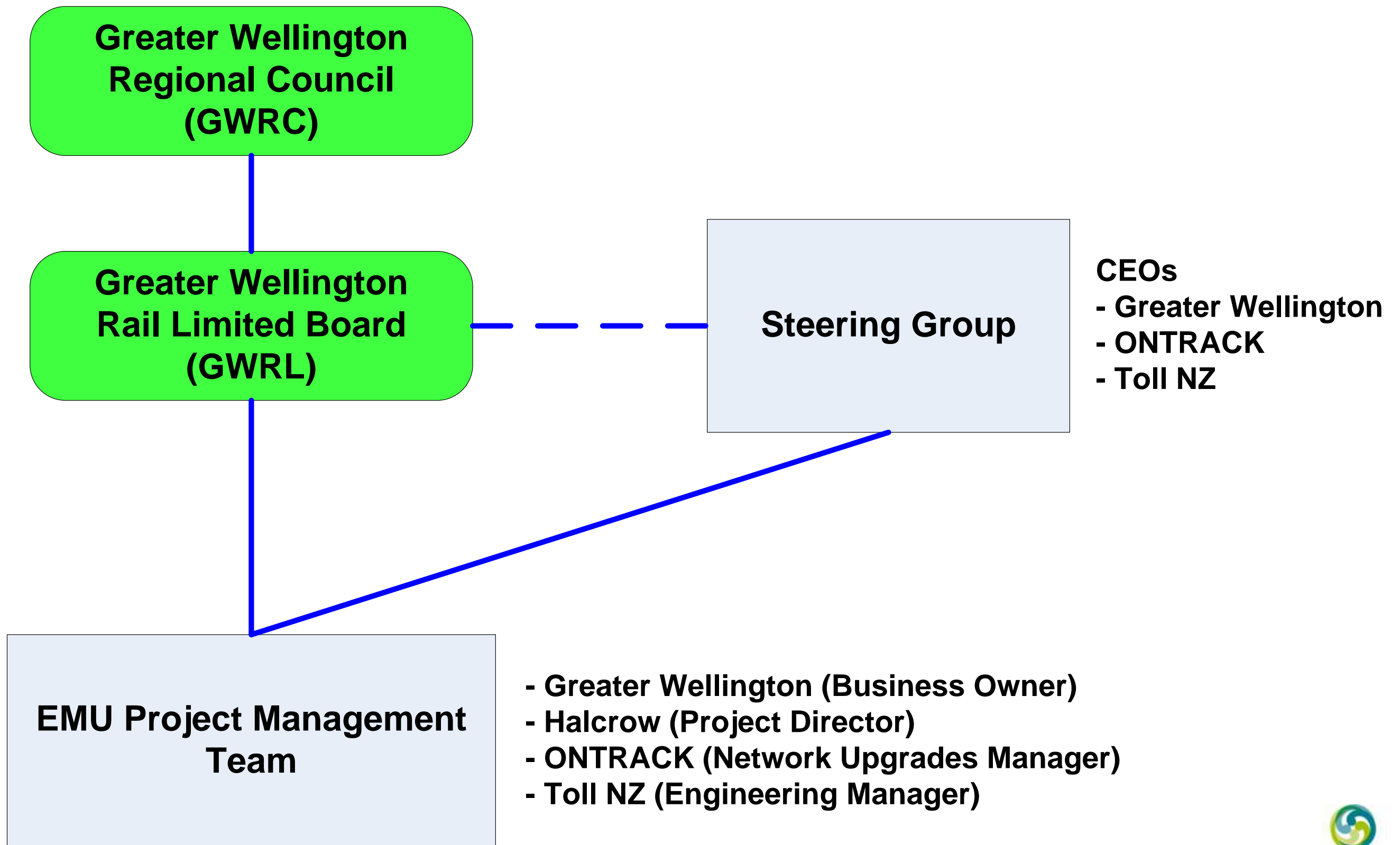
Renewals

Regional Rail
Plan

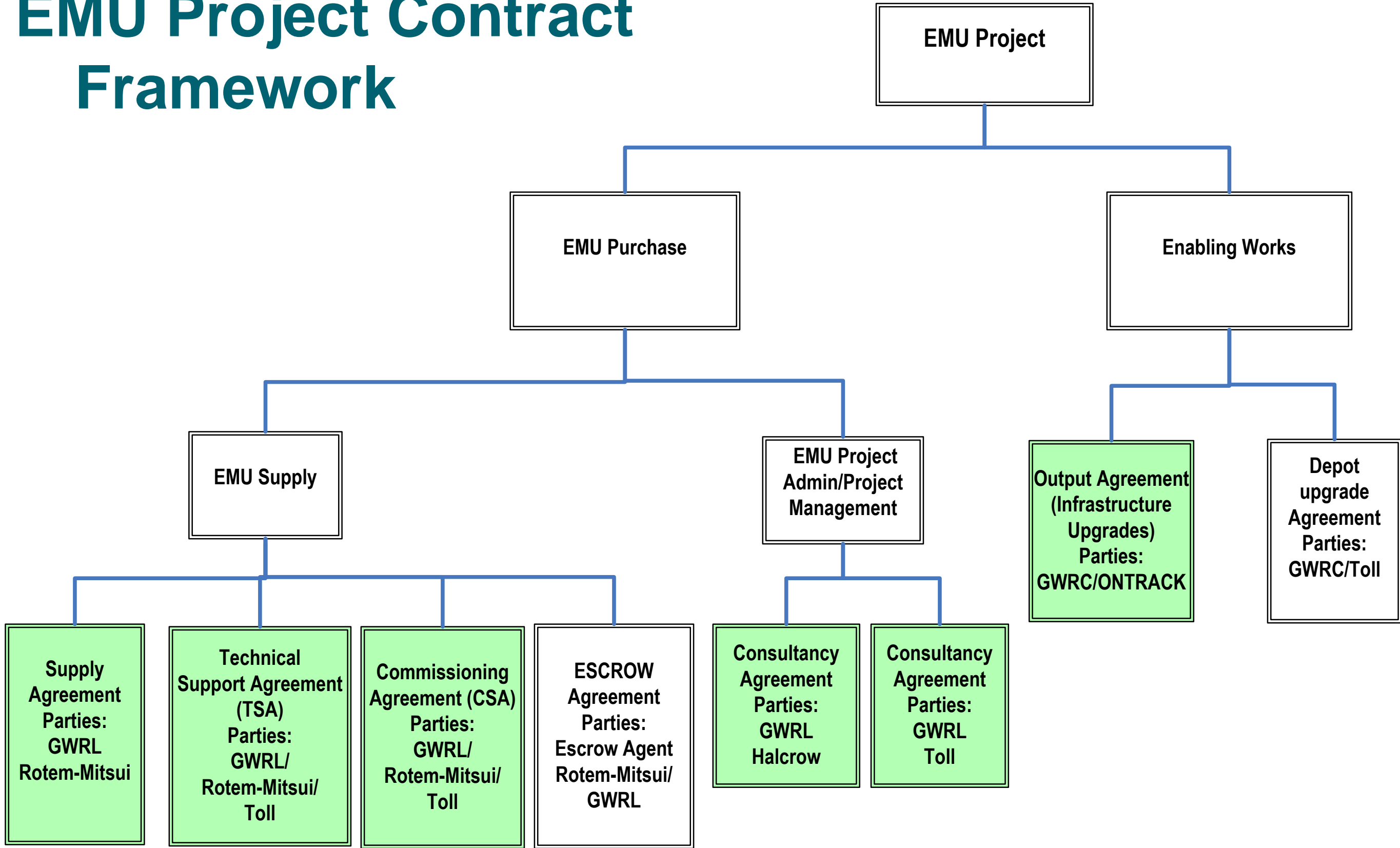
Wellington Rail Projects



EMU Project Structure

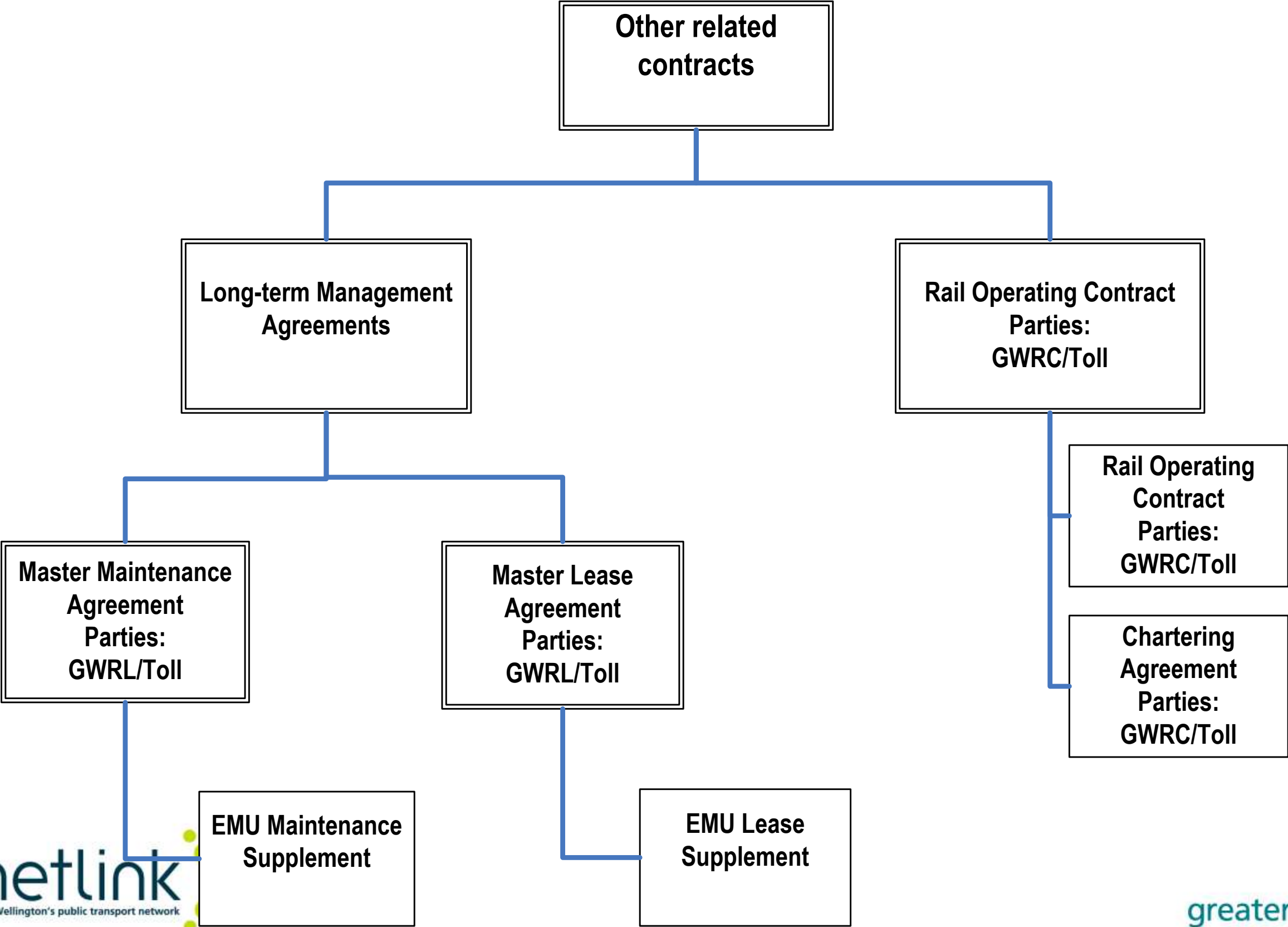


EMU Project Contract Framework



EMU Project Contract Framework

- other related contracts



Hyundai-Rotem / Mitsui EMUs

EMU supply has 4 key phases:

- Project Mobilisation – Mar 2008
- Design Phase – Apr 2008 to...Jan 2010
- Procurement – Apr 2008 to Jun 2010
- Manufacture, Testing & Delivery – Jun 2009 to Dec 2011

Matangi vs. Network

Nice modern train



J'ville tunnels too small

Stations shoddy / platforms too random

Not enough overhead power

One third of track circuits allergic

Depot too old

EMU Enabling Works

- Rundown network is a key risk for current services
- Significant works to improve reliability, frequency and ensure smooth introduction and operation of new trains
- GW & Crown jointly funding enabling works \$129m

EMU Enabling Works

- Management of Enabling Works and associated risks are highest priority for joint stakeholder team
- Key mitigation is the focus on project issues where decisions by one stakeholder significantly impact others
- Risk process ensures joint stakeholder resources are focused as required

McKays to Waikanae

- May/June disproportionate amount of heavy rain – has slowed progress
- Target remains post Wellington Anniversary weekend 2011
- Stations will be ready in time for double track opening

Station Entry

- All physical work – track, OHLS etc complete
- Remaining task to cut across new signalling around A Box (just north of platforms) and
- Complete switchover last weekend
- More gradual implementation of operational advantages

Transition-In

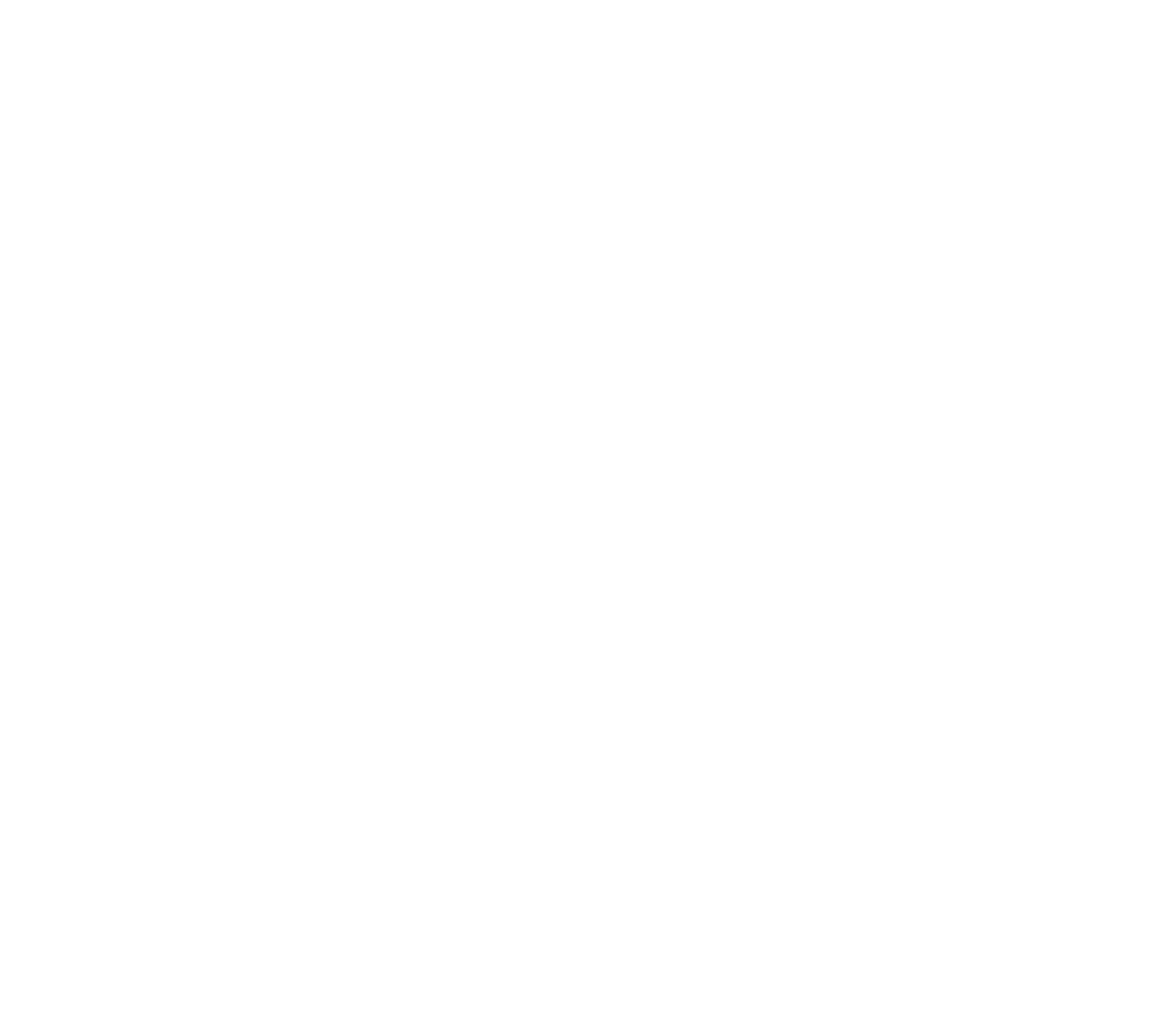
- Steering Group
- Depot Group
- Vehicle Group
- Communications Group
- Infrastructure Group
- Operations Group
 - Timetable Group

Lessons so far.....

- Robust tender
- Performance Output
- Strong contract...
- Make change
- PD experience
- Single point accountability
- Onsite mgmt
- Cultural PM
- PM focus in contract
- User groups early







Accessibility



Saloon Layouts (Bicycles)



Type Testing



Type Testing



New Zealand Wellington EMU Matangi
TYPE TEST OF VVVF INVERTER
Visual Inspection

