

# JOINT RESILIENCE FRAMEWORK



Presentation to the  
RCA Forum

29 November 2013



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# WHY A RESILIENCE FRAMEWORK

## → Customers expectations

- Sufficient system flexibility to maintain services when things go wrong
- Network/infrastructure providers to be prepared and coordinated

## → Political

- National and international disasters (Christchurch; Japan) have galvanised the political will to address infrastructure resilience
- Japan's 'lessons learned' challenge the parameters of traditional approaches

## → Governance

- Mechanism for defining appetite for risk and financial implications so residual risks for customers and assets are visible and accepted
- Consistency in resilience approach at governance level

## → Interdependencies

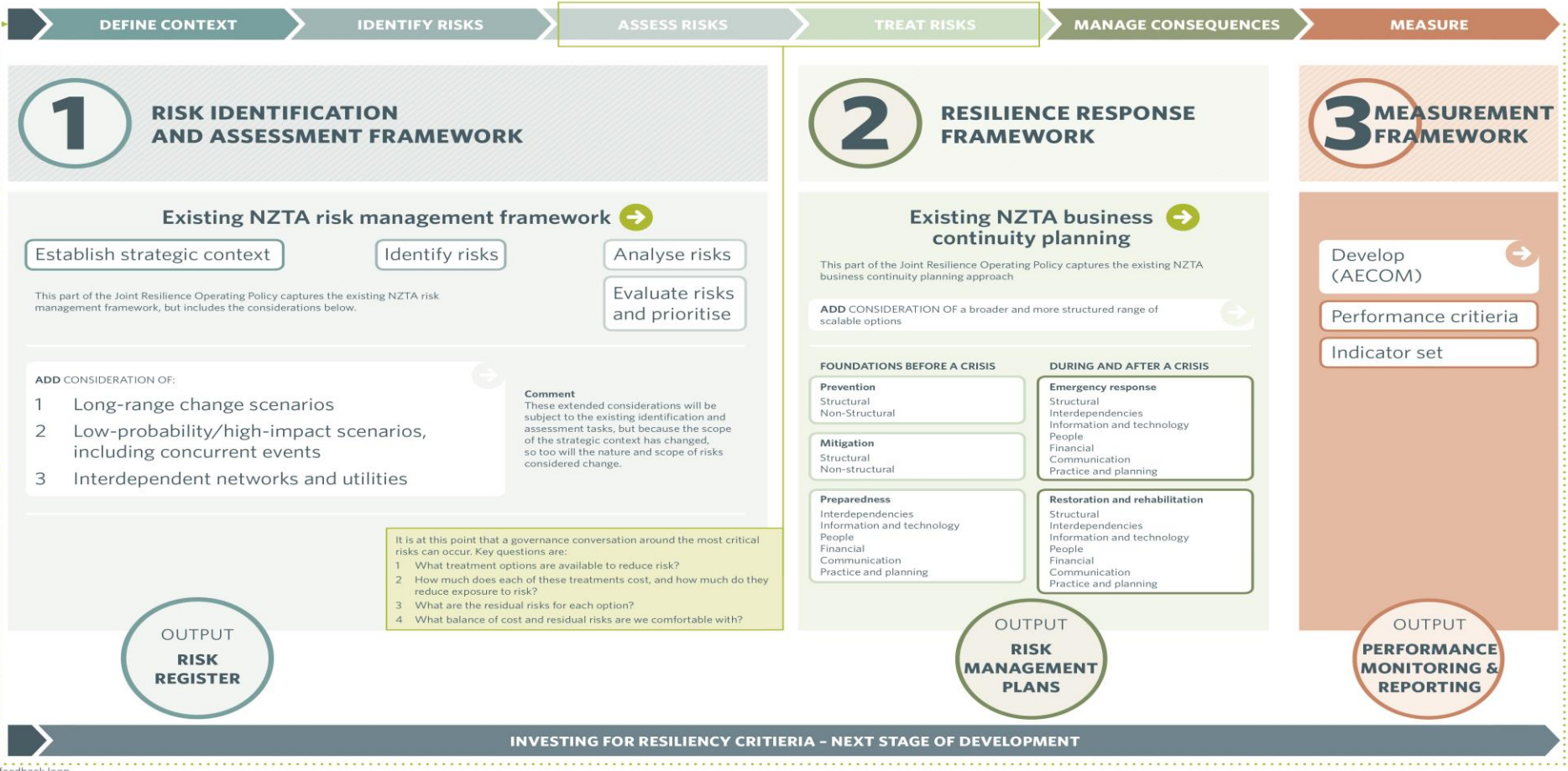
- Improved coordination between lifeline utilities required – facilitates 'whole of infrastructure' systems approach – opportunities for joint action, surfacing assumptions, and understanding upstream and downstream impacts of failure





# FOUR COMPONENTS TO THE POLICY

## JOINT RESILIENCE OPERATING POLICY



# USING THE FRAMEWORK

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### RESILIENCE RESPONSE FRAMEWORK

#### Existing NZTA business continuity planning →

This part of the Joint Resilience Operating Policy captures the existing NZTA business continuity planning approach

ADD CONSIDERATION OF a broader and more structured range of scalable options →

#### FOUNDATIONS BEFORE A CRISIS

##### Prevention

Structural  
Non-Structural

##### Mitigation

Structural  
Non-structural

##### Preparedness

Interdependencies  
Information and technology  
People  
Financial  
Communication  
Practice and planning

#### DURING AND AFTER A CRISIS

##### Emergency response

Structural  
Interdependencies  
Information and technology  
People  
Financial  
Communication  
Practice and planning

##### Restoration and rehabilitation

Structural  
Interdependencies  
Information and technology  
People  
Financial  
Communication  
Practice and planning

OUTPUT  
**RISK  
MANAGEMENT  
PLANS**

# WHAT THE TRANSPORT AGENCY IS DOING



- Working with Transpower and KiwiRail to
  - Provide a nationally consistent lifeline approach to resilience
  - Share planning assumptions, data, information and practice
- Implementing the framework
  - GIS mapping known risks on the State Highway network
  - Developing a clear national overview of critical infrastructure
  - Increasing visibility of low probability/high impact events
  - Defining aspirational resilience levels of service
- Fine tuning our investment tools for resilience
  - Resilience of critical infrastructure is planned for and staged in an organised way
  - Investment in maintenance, renewal and improvement balance longer term resilience needed with shorter term needs
- Developing appropriate resilience measures both at whole of network and route levels



# HOW DO YOU GET READY FOR IT?

- The framework is available on the Highway Information Portal for use now. It has been designed for infrastructure but can be applied wider
- The One Network Road Classification will include resilience customer levels of service
  - These describe what customers can expect in terms of the availability and restoration of each road category when there is a weather or emergency event
  - The resilience framework can be used to assess whether there are gaps between the current LOS and what activities will reduce the gap
  - The levels of service will be linked to the National Land Transport Programme
- The Transport Agency Business case approach is being encouraged for use now
- By 2019, the One Network Road Classification, the resilience framework and the Business case approach will form a suite of tools that will shape investment choices

