



Half-Day  
Seminar

# Natural Disaster **Insurance Review** – Discussion of Options

Wednesday, 6 July 2011 • 8.30am – 12.30pm Westin Hotel Sydney

## **Institute of Actuaries of Australia** **NDIR - Discussion of Options**

**John Trowbridge – Chairman of the Panel**

**SMS Questions**  
**0402 293 251**



## Government objectives

To ensure:

- ability to recover and rebuild quickly after disasters
  - people to choose where they live in an informed way
  - people are aware of risks, can insure against them and can benefit from mitigation
- ‘... to foster more complete sharing of risk and equitable sharing of the cost of damage and loss resulting from floods and other natural disasters throughout the nation’



## Guiding principles

- Government intervention only if insurance not **available and affordable**
- Risk mitigation a key objective
- Individuals and businesses encouraged to insure

## Theme: availability and affordability of insurance

### Perils

- Flood
- Bushfire, cyclone, earthquake
- Other – landslide, actions of the sea

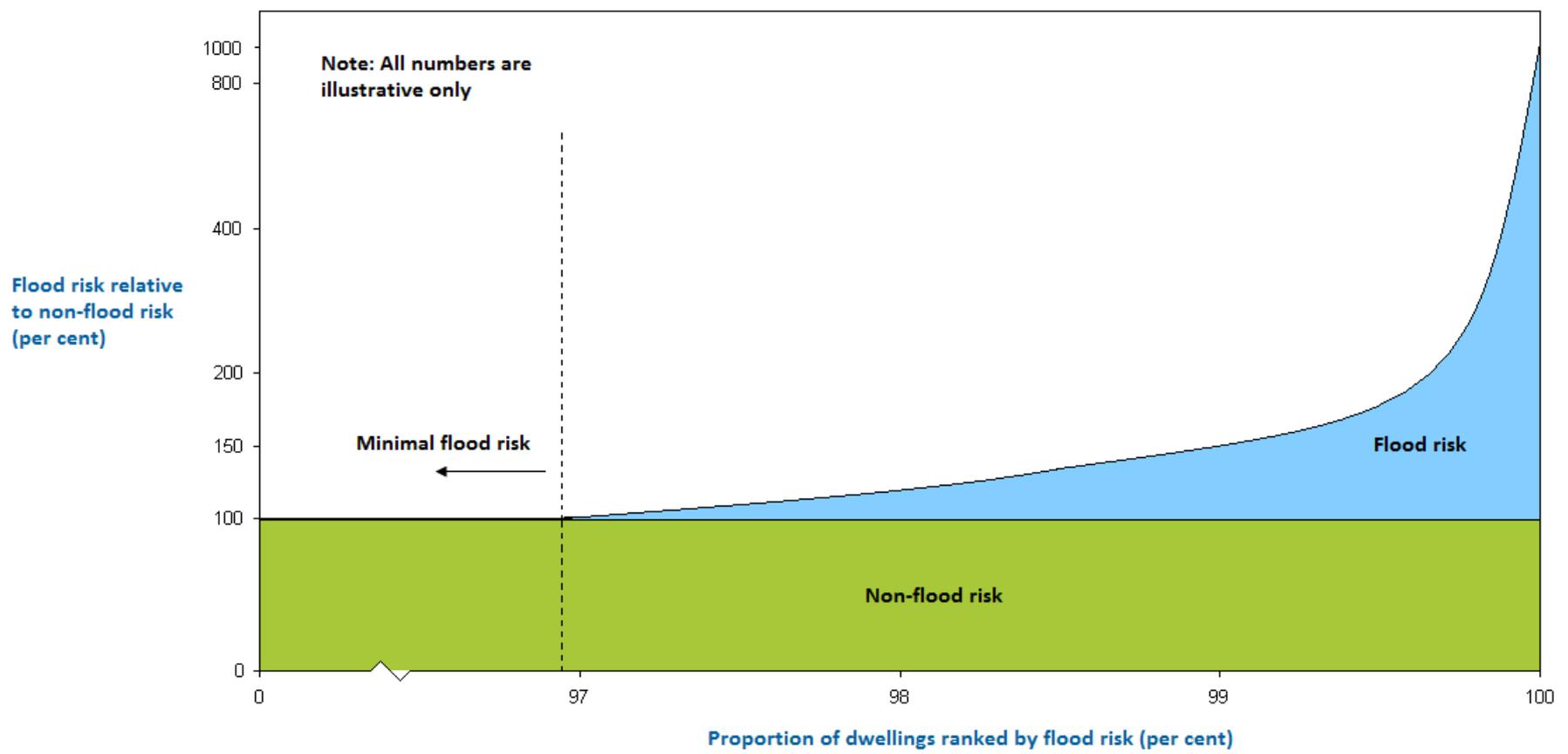
### Assets

- Residential homes
- Contents
- Other residential property (strata properties)
- Small business

### Attributes

- Non-insurance
- Under-insurance
- Insurance market – effectiveness, limitations
- Role of lenders
- Consumer understanding
- Claims resolution
- Measuring flood risk
- Mitigation

# What is the flood insurance problem?

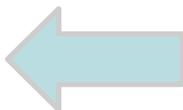




# Alternative flood cover models

## Automatic Flood

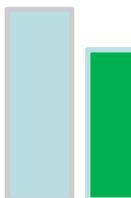
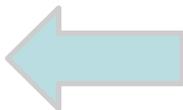
All insurers obliged to offer automatic flood cover



All insured properties covered for flood

## Opt Out

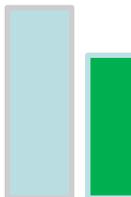
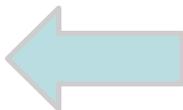
All insurers obliged to offer automatic flood cover



Owners free to insure with or without flood cover

## Status Quo

Insurers free to offer or not offer flood cover



Owners free to insure with or without flood cover

# Implications of flood cover models

Model	Availability	+ Affordability	= Access	→ Coverage*
Automatic Flood Cover	Yes	With intervention	With intervention	All
Automatic Flood Cover with Opt Out	Yes	With intervention	With intervention	Many
The Status Quo	Maybe	No	Some	Some

# Implications of Automatic Flood Cover

## Primary benefits:

- all insured properties automatically covered for flood
- disputes over cause of water damage eliminated
- may generate -
  - more confidence in the insurance system
  - brand protection for insurers

## *but requires mechanisms to -*

1. identify the higher flood risk properties
2. give discounts on higher flood risk properties
3. fund the discounts

## *while also avoiding moral hazard –*

- flood risk mitigation needs to be encouraged and funded
- owners, developers and councils need the right incentives

## Implications of Opt Out of Flood Cover

### Primary benefit:

- all policyholders obliged to accept flood cover or to decline it explicitly
  - ... responsibility for having flood cover is clearer

### *but*

- take-up of flood cover will remain limited
- disputes over cause of water damage will continue to occur

### *and* requires same mechanisms as Automatic Flood Cover to –

1. identify the higher flood risk properties
2. give discounts on higher flood risk properties
3. fund the discounts

### *while also avoiding moral hazard* –

- flood risk mitigation needs to be encouraged and funded
- owners, developers and councils need the right incentives

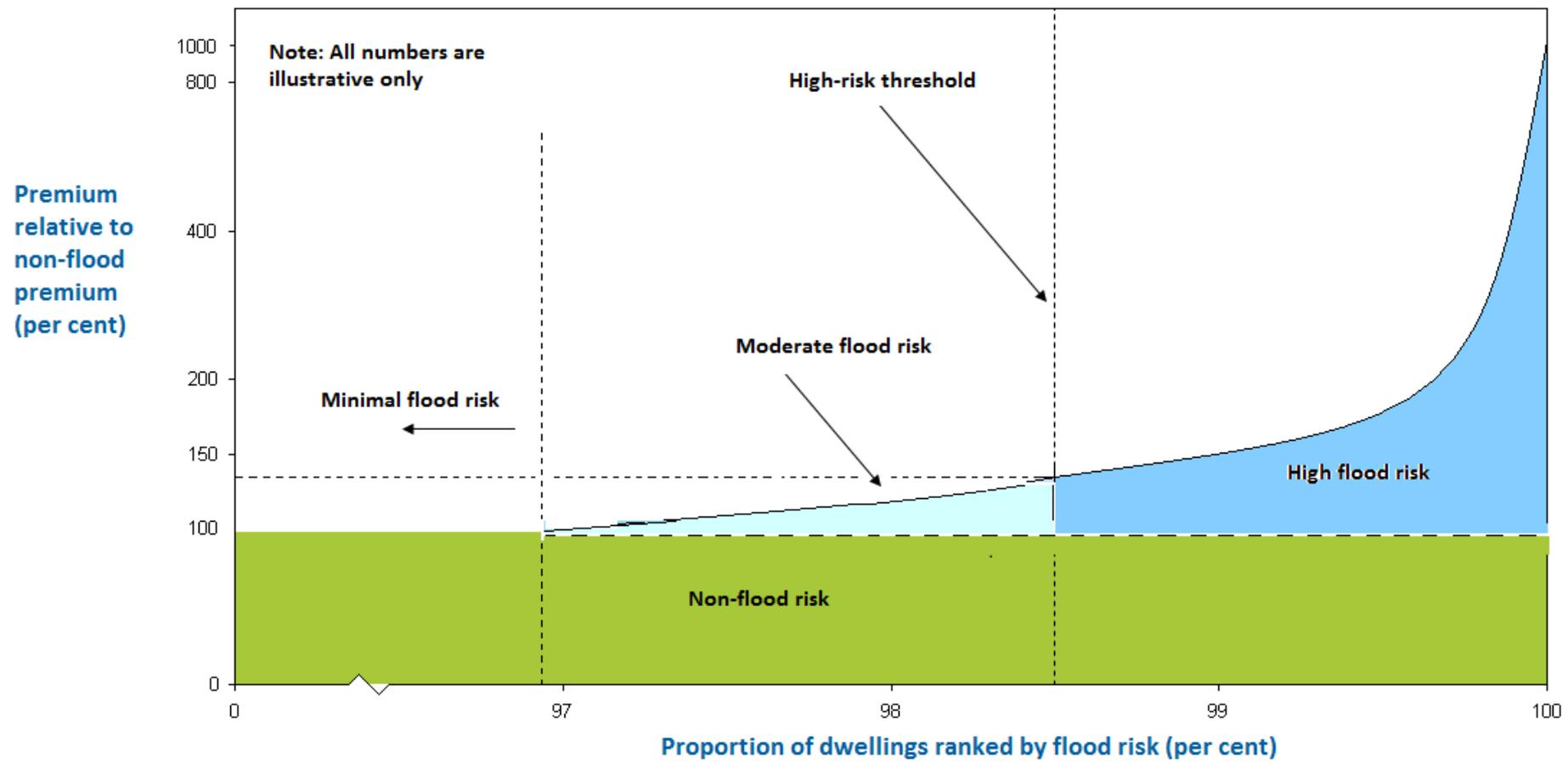


## Affordable flood insurance for high risk homes?

### A Flood Insurance Pool requires the means to -

1. identify the higher flood risk properties
  - a critical exercise
2. give discounts on higher flood risk properties –
  - establish full prices and discounted prices
  - measure the discounts
  - maintain access to flood risk data
3. fund the discounts
  - receive subsidies – sources?
  - undertake financial management of the Pool
4. manage the risks including moral hazard –
  - flood risk mitigation
  - owners, developers, councils and governments

# How do we identify the higher risk properties?





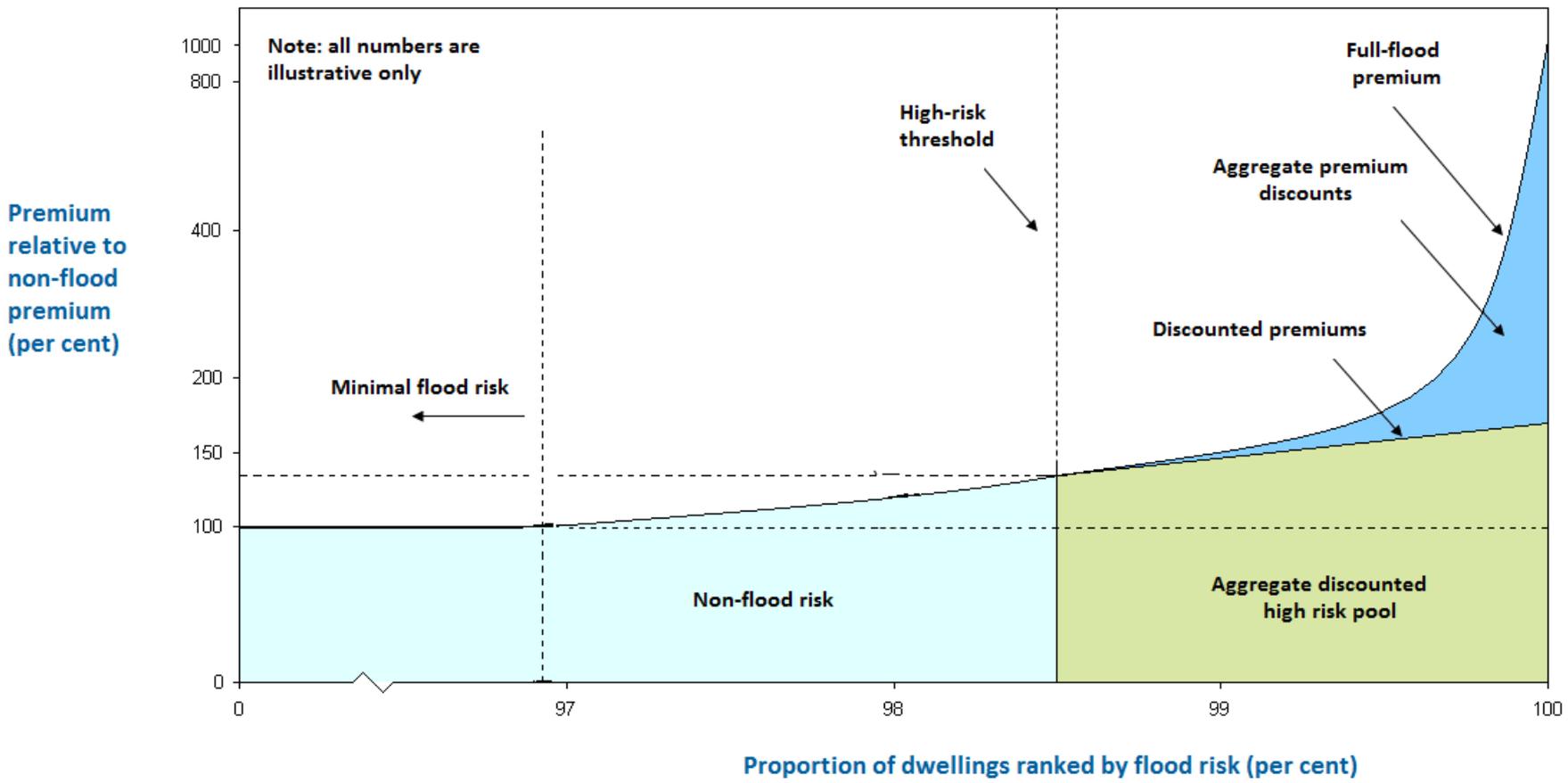
## Identifying the high flood risk properties?

How do we determine a high flood risk threshold?

For example –

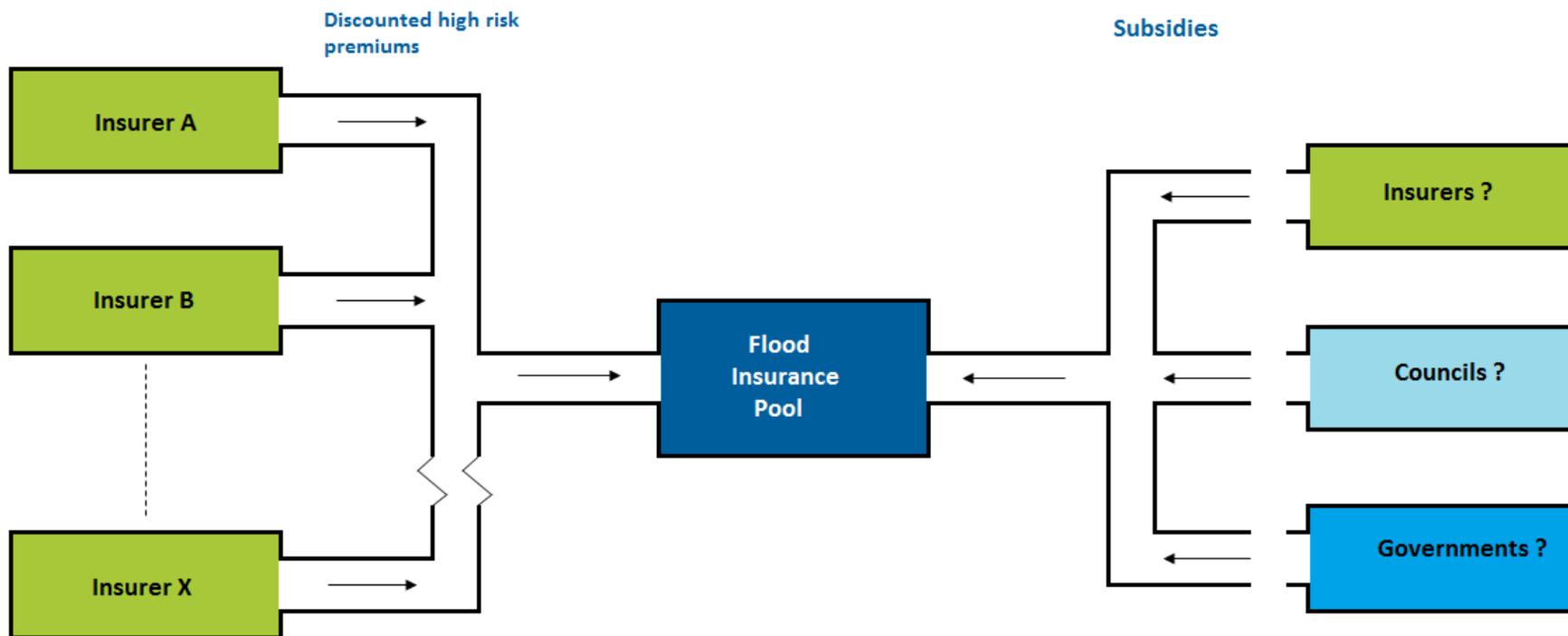
- **Method A: use engineering techniques**
  - flood mapping – boundaries at say 1 in 100 ARI?
  - can we account for individual building features?
- **Method B: use insurance market mechanisms**
  - designed around risk-based pricing
  - Boundary set at highest price where market is competitive and price reasonable
- **Other techniques?**

# Giving premium discounts on higher risks properties?





# General Schema for Flood Insurance Pool



## Some other topics (A)

### 1. Flood cover for other classes of assets

Should any new arrangements for flood cover for homes also apply to

- contents?
- strata properties?
- small business?

### 2. Under-insurance

Bushfire experience reveals material under-insurance for total losses

- should replacement cover be standard?
- is sum insured plus buffer (for example, 25 per cent) an effective substitute?

### 3. Non-insurance and compulsory vs voluntary insurance

Non-insurance for homes is low (< 5 per cent?)

Non-insurance for contents is high (> 25 per cent?)

- is there a case for any form of compulsory insurance?

## Some other topics (B)

### 1. Role of lending institutions

**What level of responsibility do lending institutions have towards themselves and towards their home mortgage customers for insurance cover, including flood?**

### 2. Measuring flood risk

**The existence, quality, scope and consistency of flood maps are variable**

- **Is a nationally consistent approach needed?**
- **If so, who should undertake and fund the work required?**

### 3. Mitigating flood risk

**Have past flood mitigation projects affected the underwriting and pricing practices of insurers and reinsurers?**



## Some other topics (C)

### 1. Consumer understanding

- What measures could improve consumers' understanding of risks and insurance cover?
- Would homeowners benefit from accessing personal advice that takes account of their risks?

### 2. Resolution of claims disputes

- How can the dispute resolution process be improved and made more transparent?
- Should there be a time limit for insurers to respond to a dispute following a natural disaster?

### 3. Other Natural Disasters

- Is there a case for extending the scope of insurance to cover landslide and actions of the sea? and to cyclones?



Half-Day  
Seminar

# Natural Disaster **Insurance Review** – Discussion of Options

Wednesday, 6 July 2011 • 8.30am – 12.30pm Westin Hotel Sydney

## **Institute of Actuaries of Australia** **NDIR - Discussion of Options**

**John Trowbridge – Chairman of the Panel**

**SMS Questions**  
**0402 293 251**