



Australian Government  
Productivity Commission

Natural Disaster  
Funding Arrangements

Productivity Commission  
Issues Paper

May 2014

## **The Issues Paper**

The Commission has released this issues paper to assist individuals and organisations to prepare submissions to the inquiry. It contains and outlines:

- the scope of the inquiry
- the Commission's procedures
- matters about which the Commission is seeking comment and information, and
- how to make a submission.

Participants should not feel that they are restricted to comment only on matters raised in the issues paper. The Commission wishes to receive information and comment on issues which participants consider relevant to the inquiry's terms of reference.

### **Key inquiry dates**

Receipt of terms of reference	28 April 2014
Due date for submissions	6 June 2014
Release of draft report	September 2014
Draft report public hearings	October/November 2014
Final report to Government	End December 2014

### **Submissions can be made:**

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## ***The Productivity Commission***

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website ([www.pc.gov.au](http://www.pc.gov.au)) or by contacting Media and Publications on (03) 9653 2244 or email: [maps@pc.gov.au](mailto:maps@pc.gov.au).

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## 1 What this inquiry is about

This inquiry is about the effectiveness and sustainability of Australia's natural disaster funding arrangements. The Commission has been asked to assess the full scope of current Commonwealth, state and territory expenditure on natural disaster mitigation, resilience and recovery and to identify reforms which achieve an effective and sustainable balance between natural disaster recovery and mitigation funding to help communities better prepare for disasters (box 1).

### Box 1 Some definitions

**Natural disaster** — Naturally occurring rapid onset events that cause a serious disruption to a community or region, such as flood, bushfire, earthquake, storm, cyclone, storm surge, tornado, landslide or tsunami. This is consistent with the definition included in the Natural Disaster Relief and Recovery Arrangements *Determination*. Under this definition used in the terms of reference droughts and heatwaves are not considered natural disasters.

**Mitigation** — Measures taken in advance of (or after) a disaster aimed at minimising the impact of future disasters on communities.

**Resilience** — The capability to prevent, mitigate, prepare for, respond to and recover from the impacts of natural disasters.

**Recovery** — Actions taken after a hazard has occurred to support affected communities in the reconstruction of damaged property and economic activity, as well as the restoration of physical, social, emotional and psychological health.

Sources: COAG (2014), Inquiry terms of reference.

The Commission has been asked to develop findings on the following:

- the sustainability and effectiveness of current arrangements for funding natural disaster mitigation, resilience and recovery initiatives
- the risk management measures available to and being taken by asset owners
- the interaction between natural disaster funding and federal financial arrangements
- options to achieve an effective and sustainable balance of expenditure on natural disaster mitigation and recovery
- how stakeholders can most effectively fund natural disaster recovery and mitigation initiatives

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- how to ensure the right incentives are in place to support cost-effective decision making
  - mechanisms and models to prioritise and evaluate mitigation opportunities
  - the role of urban planning, land-use policy and infrastructure investment in supporting cost-effective risk management
  - options to fund identified natural disaster recovery and mitigation needs.

The terms of reference also request the Commission to investigate the medium and long-term impacts of reform options on the Australian economy and costs to governments, and to consider the transitional and implementation issues of proposed reforms.

The Commission will take into account evidence from previous reports and from the report of the National Commission of Audit that was released on 1 May (box 2). It will take into account infrastructure and asset management policy (including the Commission's current inquiry into public infrastructure) and will consider natural disaster risk management and funding best practices from Australia and overseas.

## **An imperative for reform**

Natural disaster risks pose a threat to community living standards, and better managing those risks is essential to increasing overall wellbeing. The natural disaster funding arrangements are a key driver of the incentive framework that influences the way governments and the community manage those risks. They influence the level and mix of mitigation, resilience and recovery activities, and ultimately the costs of natural disasters.

This inquiry follows a concentrated spate of destructive natural disasters resulting in loss of life, injury, psychological trauma and widespread damage across large parts of Australia. Through these impacts, disasters impose a range of costs, including direct financial costs, indirect costs arising from disruptions to business and also non-market costs. One proxy measure of the strong upward trend in disaster costs in recent years is the value of insured losses caused by natural disasters (box 3).

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## Box 2 **Previous reviews of natural disaster management and funding**

Several reports have made recommendations for changes to Australia's natural disaster funding arrangements.

- A report to COAG by a high-level officials' group recommended a package of reforms to natural disaster funding (COAG 2002). These included Commonwealth funding of around \$100 million each year to the states and territories for disaster mitigation; reform of Natural Disaster Relief and Recovery Arrangements (NDRRA) assistance to individuals, businesses and communities; and the introduction of 'betterment' provisions in the NDRRA.
- A review of state and territory governments' asset insurance arrangements found that Tasmania and the Northern Territory do not have adequate insurance for non-road assets, and that all states except the ACT and Victoria lack insurance for road assets (Department of Finance and Deregulation 2012). It recommended that all jurisdictions adopt a common framework for identifying cost-effective insurance options, along with further investigation of models to fund the cost of road damage.
- The Productivity Commission's report *Barriers to Effective Climate Change Adaptation* outlined features of the current NDRRA that may be inconsistent with effective risk management (PC 2013). It found that the NDRRA may lower the incentives of state and territory governments to adequately maintain or insure their infrastructure, that betterment provisions may be underutilised due to unclear administrative and funding arrangements, and that local governments sometimes lack the capacity to undertake effective mitigation. The Commission recommended a review of natural disaster relief and recovery arrangements.
- Deloitte Access Economics (2013) estimated that the annual economic cost of natural disasters would rise from \$6 billion in 2012 to \$12 billion by 2030 and \$23 billion by 2050. It also estimated that increased Australian Government expenditure on pre-disaster resilience (of around \$250 million per year) would reduce these costs by more than 50 per cent by 2050. It recommended increased identification and prioritisation of mitigation activities.
- Two reports by the Australian National Audit Office found that the Australian Government Reconstruction Inspectorate's assessment of rebuilding projects under the NDRRA had generally provided assurance of value for money in Queensland, but had yet to undertake any value for money reviews in Victoria (ANAO 2013a, 2013b). It recommended improvements in how the Inspectorate collects information from state and local governments and scrutinises projects.
- The National Commission of Audit (2014b) recommended that the Disaster Recovery Allowance be abolished and the NDRRA replaced with a grant provided after each major natural disaster. Under this model, the Australian Government would provide the relevant state or territory government funding equivalent to 25 to 33 per cent of estimated reconstruction costs.

The recent series of natural disasters has also had significant fiscal impacts on the Australian, state and territory governments, and some local governments. These are risks to government budgets which add to other long-term fiscal pressures (such as those identified in the *Intergenerational Reports*). The risks to government finances were noted by the recent report of the National Commission of Audit, which stated:

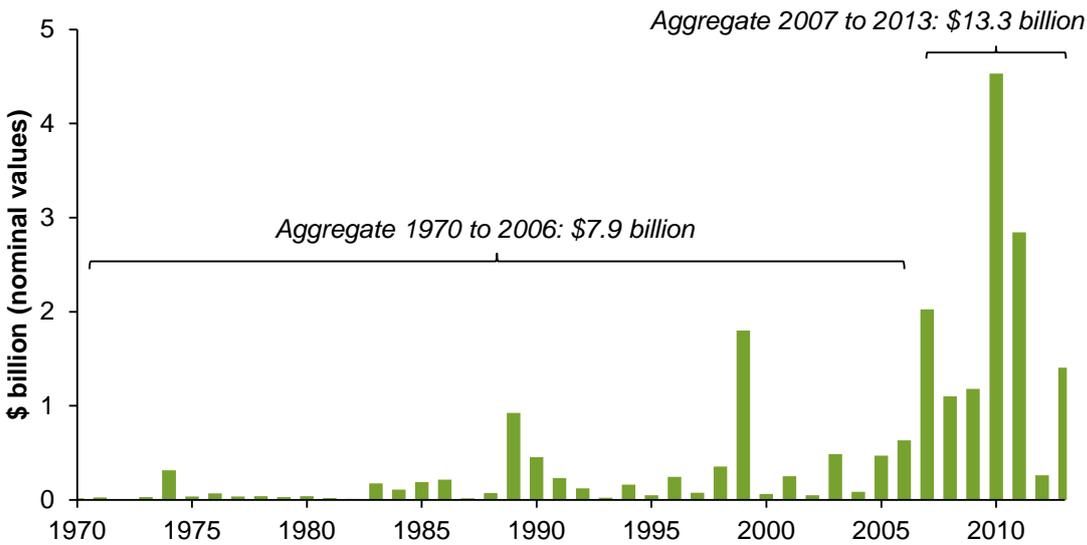
The very large and unforeseen state payments that can arise under the NDRRA pose considerable risks for managing the Commonwealth’s Budget and its fiscal strategies. (National Commission of Audit 2014a, p. 94)

The combination of settlement and increasing real values of homes, businesses, infrastructure and other property in areas more susceptible to natural disaster elevate disaster impacts and fiscal risk. These impacts would become even more severe if climate variability and climate change increase the frequency and/or intensity of natural disasters.

**Box 3 The insurance costs of natural disasters**

The Insurance Council of Australia collates disaster insurance cost data. These data give an indication of one element of the costs of natural disasters, namely the insured value of damage to property. It shows that the costs of natural disasters are highly variable from year to year. It also shows that in recent years Australia has experienced several natural disaster events that have imposed significant costs on the Australian community. It is important to note that these are nominal costs which understate the real costs of past disaster events.

**Insurance costs of natural disasters, 1970–2013**



Source: Insurance Council of Australia (2014)

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*What are the costs of natural disasters in Australia? What are the main factors driving the elevation in natural disaster impacts and what is the outlook for these drivers?*

*What issues arise when attempting to measure the costs of natural disasters? What methodologies exist to measure these costs?*

*Are there reliable projections of future natural disaster incidence and impacts in Australia?*

The national arrangements for natural disaster funding have not been reviewed since 2002, when COAG commissioned a report on natural disaster relief and mitigation arrangements. The report included 66 recommendations covering the full range of natural disaster mitigation, relief and recovery arrangements, including funding. Many of the features of the current arrangements are based on recommendations in the 2002 report.

## **The Commission's approach**

The Commission will largely take a principles-based approach to the assessment of current Commonwealth, state and territory expenditures on natural disaster mitigation, resilience and recovery and their funding arrangements and will consider all options to improve their coherence, effectiveness and sustainability.

The Commission's approach to the task is guided by the *Productivity Commission Act 1998*, which requires it to have regard to the need to achieve higher living standards for all members of the Australian community.

Effective natural disaster risk management involves a combination of mitigation, resilience and recovery activities and insurance (including self-insurance) for residual risks. These measures all have benefits and costs, and there is, in principle, an 'optimal' level of expenditure on each. At this optimum, there will still be some residual level of damage from natural disasters (because the costs of preventing or avoiding all damage would exceed the benefits). Likewise, the optimal level of disaster recovery would not necessarily be to rebuild all damaged assets to their pre-disaster state. In some cases it would be better to rebuild to a higher standard, while in others it might be better to rebuild to a lower standard, build elsewhere or not rebuild at all.

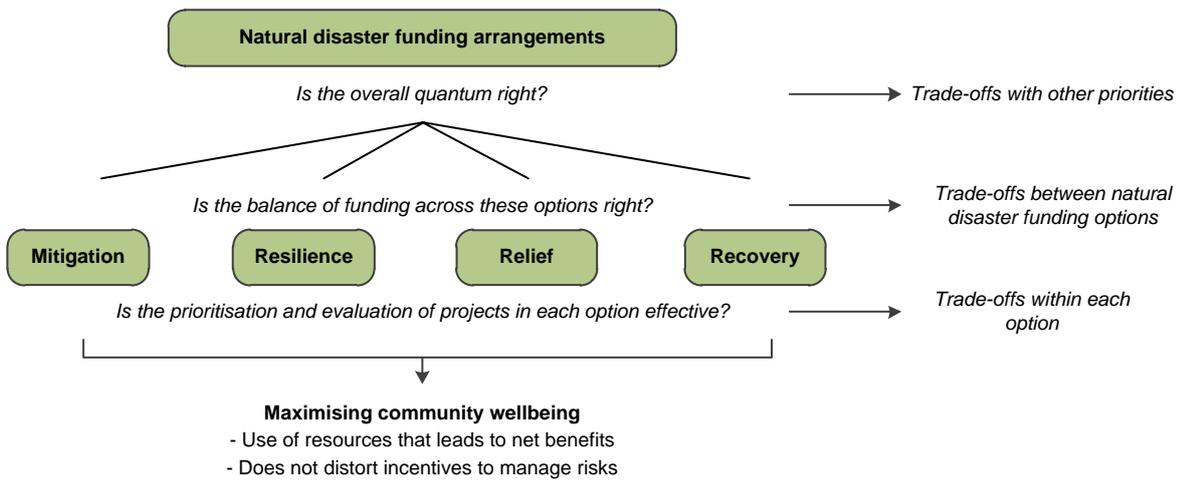
Identifying the optimal level of disaster mitigation, resilience and recovery at an aggregate level is arguably elusive — the number of individual risk management assessments does not allow a 'top-down' judgment. However, it is possible and

perhaps more meaningful to identify reforms to governance, institutional arrangements and decision-making processes that make it more likely that decision makers will face the appropriate incentives and make appropriate risk management decisions. Cost-benefit assessment is integral to such decision making and will inform actions that will tend to lead to outcomes that are closer to the optimum.

When deciding on which risk management options to pursue, governments, businesses and households need to consider the benefits and costs of each option and make trade-offs. There are at least three levels of trade-offs (figure 1):

- efficiency in allocating resources to natural disaster risk management compared with other priorities (how much of the community’s resources should be allocated to natural disaster mitigation, resilience and recovery compared with other priorities?)
- efficiency in allocating resources to different risk management options (are the resources efficiently allocated among mitigation, resilience and recovery and insurance?)
- efficiency in allocating resources within each of the risk management options (given the resources that are available for each option — mitigation, resilience and recovery — are resources allocated to the projects that deliver the largest net benefit to the community).

**Figure 1 Trade-offs in the allocation of natural disaster funding**



Inefficiencies in any of these dimensions diminish effective risk management and community wellbeing. The way these trade-offs are made — and the possibility of inefficiencies — will be influenced by the natural disaster funding arrangements, including the way roles and responsibilities are allocated and the incentives provided by the arrangements.

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## **How you can contribute**

The Australian Government has asked the Commission to release a draft report by September 2014, and to provide a final report by the end of December 2014. The Commission is seeking submissions from interested parties by 6 June 2014, and will hold public hearings before the release of the final report. It may also hold roundtable meetings.

Because of their roles in relation to natural disaster management and funding arrangements, the Commission is interested in receiving submissions from the Australian Government, each state and territory government, and local governments. The Commission is also interested in the experiences and views of property and insurance peak bodies, insurers, infrastructure companies, businesses, community groups, academics, and other interested parties.

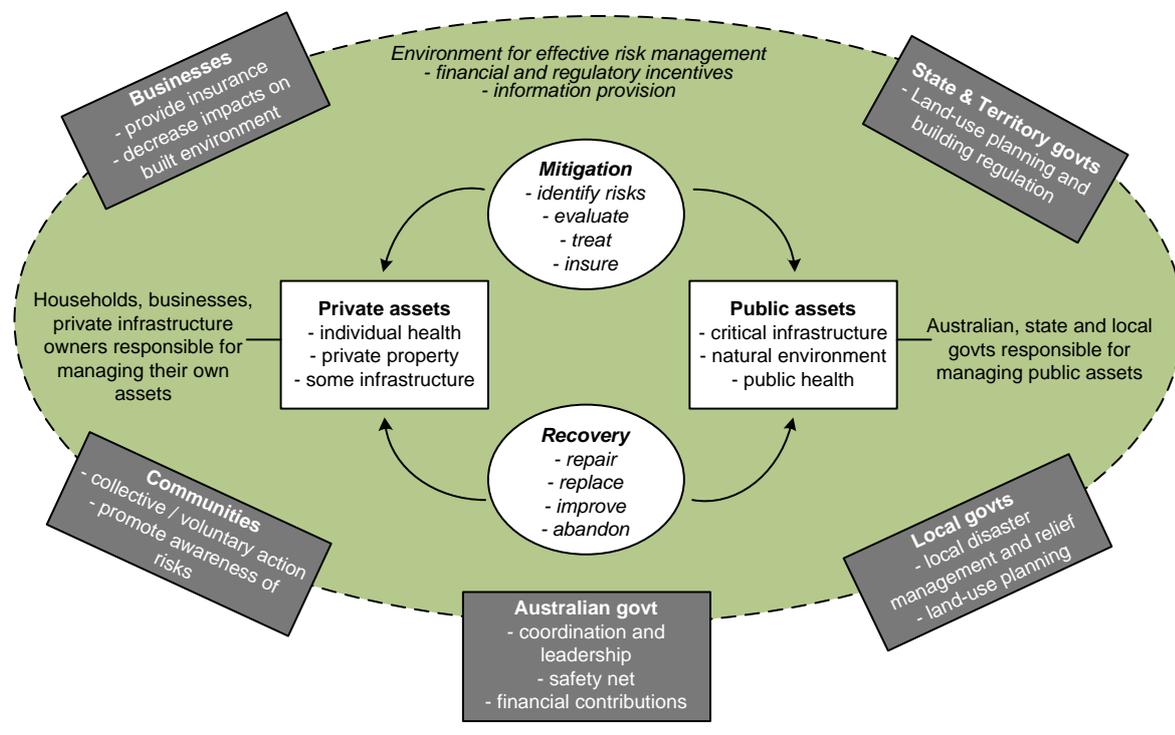
The following sections of this paper set out some of the issues and questions the Commission has identified as relevant at this early stage of the inquiry. The Commission is also seeking data on state, territory and local government natural disaster expenditure (further detail of the data request is set out in section 2). Participants are not necessarily expected to address all of the issues raised, and are welcome to provide information on other relevant issues.

## **2 Current natural disaster funding arrangements**

Under the Australian Constitution most natural disaster mitigation, resilience and recovery activities are the responsibility of state and territory governments (figure 2). In turn, these governments have devolved some responsibilities to local governments. The Australian Government has limited natural disaster management responsibilities, which include:

- coordinating responses when interstate management is required, and supporting the development, through state and territory governments, of a national emergency management capability
- regulating the insurance industry, other than State insurance.

**Figure 2 Roles and responsibilities in natural disaster management**

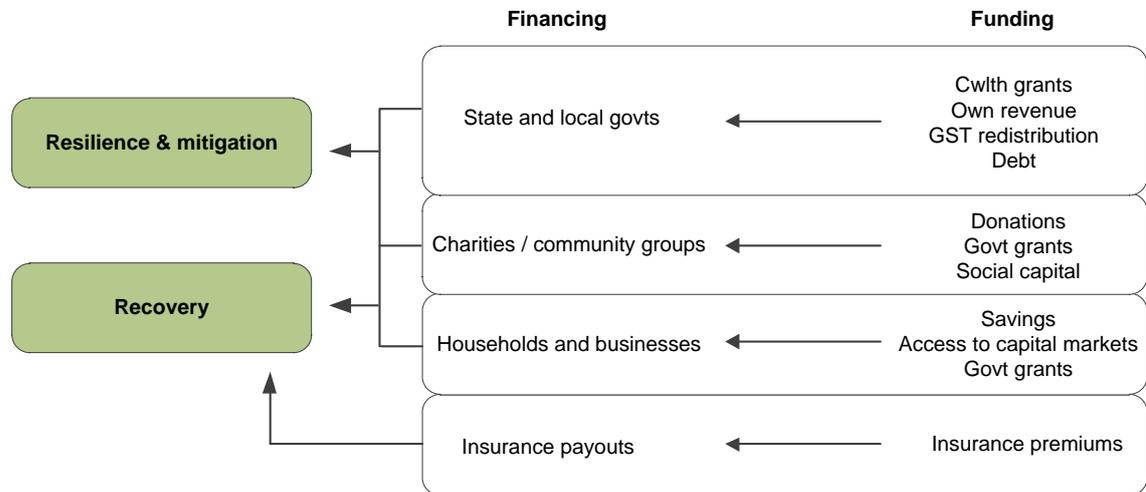


Responsibilities for financing and funding natural disaster management are split across households, businesses, all levels of government, and the broader community (figure 3):

- financing refers to supplying the capital to pay the upfront investment costs of natural disaster management
- funding refers to revenue sources to pay for the financing costs of natural disaster management.

The Australian Government’s greater revenue raising capacity (vertical fiscal imbalance), has seen it assume the role of funding certain natural disaster management activities. The Australian Government provides some funding for recovery (mainly through the NDRRA) and resilience and mitigation (mainly through the NPANDR). Hence, although state, territory and local governments have formal responsibility for most disaster management activities and provide a significant proportion of the funding (either individually or collectively through the GST redistribution), the funding that the Australian Government provides inevitably influences the way lower levels of government manage natural disaster risks.

Figure 3 Responsibilities for funding and financing natural disaster management



## Natural Disaster Relief and Recovery Arrangements

The Natural Disaster Relief and Recovery Arrangements (NDRRA) are the primary mechanism through which the Australian Government funds disaster relief and recovery activities by state and territory governments, and over time have constituted the majority of Australian Government spending on natural disasters.

The arrangements were established in 1974 and are intended to assist state and territory governments with the fiscal burden of large-scale expenditure on disaster relief and recovery payments and infrastructure restoration. The Australian Government sets the terms and conditions for payment of financial assistance in the NDRRA *Determination* (Attorney-General's Department 2012b). The NDRRA operate by reimbursing states and territories for a portion of their expenditure on eligible disaster recovery activities and measures, once particular thresholds have been exceeded (box 4).

Data on expenditure by category are not readily available for every jurisdiction. However, as an example of how payments have been allocated between the four categories, figures for Queensland indicate that in 2010-11:

- around 90 per cent of eligible expenditure was on category B measures
- around 4 per cent was on category A
- 5 per cent was on category C
- 1 per cent was on category D.

Over the decade from 2000-01, around 87 per cent of all Queensland’s expenditure on restoring essential public assets was spent on roads (Finity Consulting 2012).

#### Box 4 NDRRA categories and thresholds

There are four categories of assistance.

- Category A — emergency assistance to individuals.
- Category B — restoration of essential public assets; financial assistance to small businesses, primary producers, voluntary nonprofit bodies and individuals; and ‘counter disaster operations’ for public health and safety.
- Category C — community recovery packages and recovery grants to small businesses and primary producers.
- Category D — acts of relief or recovery carried out in circumstances deemed to be exceptional by the relevant Commonwealth Minister.

The level of reimbursement for these categories is determined by two thresholds for eligible<sup>a</sup> state expenditure on natural disasters in a financial year.

- First threshold: 0.225 per cent of total state government revenue and grants in the financial year two years prior.
- Second threshold: 1.75 times the first threshold.

#### State and territory government NDRRA thresholds, 2013-14

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
First threshold	140	107	103	56	36	11	11	9
Second threshold	246	187	180	99	62	18	19	16

Expenditure below the first threshold is reimbursed at 50 per cent for category A and C measures (no reimbursement is provided for category B measures below this threshold). Any portion of expenditure between the first and second thresholds is reimbursed at 50 per cent, and any expenditure that exceeds the second threshold at 75 per cent (for categories A, B and C). Commonwealth assistance for category D (exceptional circumstances) measures is generally determined separately on a case-by-case basis.

<sup>a</sup> A natural disaster must meet the ‘small disaster criterion’, namely generate state expenditure of over \$240 000, to be included as eligible expenditure.

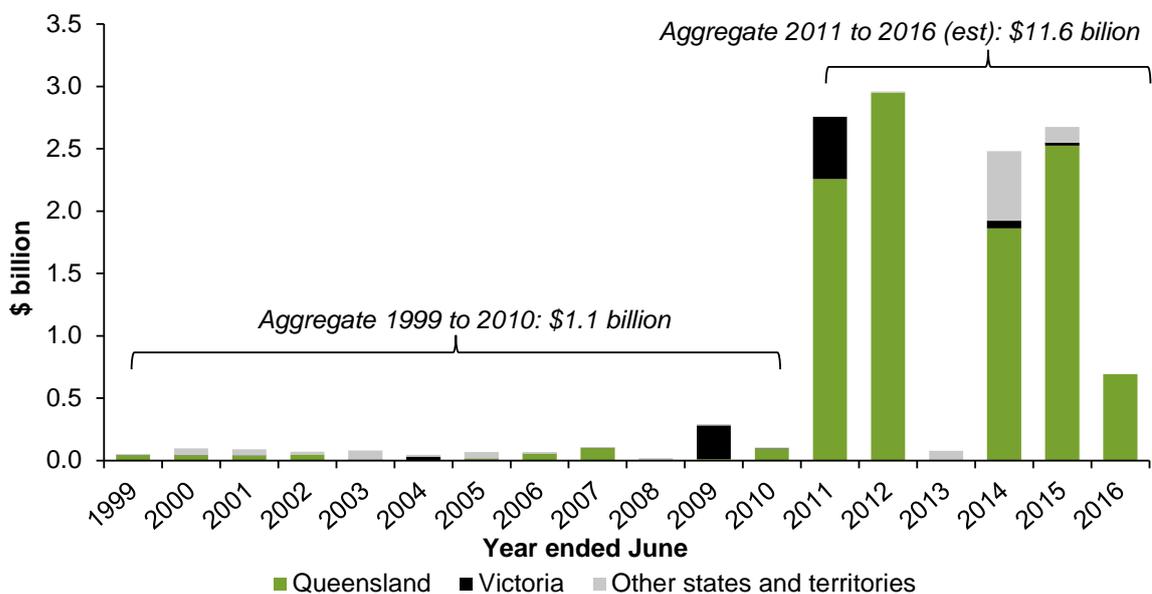
State and territory governments are also required to meet certain eligibility criteria. These include adequate access to capital to fund infrastructure losses (such as insurance), to submit independent assessments of their insurance arrangements to the Australian Government, and to develop and implement disaster-mitigation strategies. Further, the financial assistance provided under the NDRRA ‘is intended

to be directed to state measures that complement other strategies in relation to natural disasters, such as insurance and disaster mitigation planning and implementation’ (Attorney-General’s Department 2012b, p. 1).

The NDRRA are currently treated as a contingent liability for the Australian Government. Budget forward estimates include payments to states and territories in response to recent and past natural disasters (on a cash and accrual basis). No provision is made in Australian Government budget forward estimates for potential future natural disasters.

In recent years the costs of the Arrangements have been at historically high levels. For example, over \$5 billion has been reimbursed to Queensland (up to 2012-13) since the major floods and cyclones in 2010-11, and around \$775 million to Victoria following the 2009 bushfires and 2011 floods (figure 4). The majority of this expenditure has been for the restoration or replacement of essential public assets, especially damaged roads.

**Figure 4 Australian Government NDRRA payments, 1999–2016<sup>a</sup>**



<sup>a</sup> Actual cash payments to the states and territories. Some payments may relate to natural disasters that occurred in previous years. Figures for 2014–2016 are forward estimates from the 2013-14 Mid-Year Economic and Fiscal Outlook.

Sources: Attorney-General’s Department (2012a); Commonwealth of Australia (2013); Treasury (various years).

The conditions of the NDRRA also mean that Australian Government reimbursement is only available for restoring or replacing an essential public asset to its pre-disaster standard (in accordance with current building and engineering standards), regardless of the costs or benefits of doing so. However, a ‘betterment’

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clause in the determination allows for additional funding for the ‘restoration or replacement of the asset to a more disaster-resilient standard than its pre-disaster standard’ (Attorney-General’s Department 2012b, p. 4).

There have been concerns raised in recent years about whether the NDRRA are meeting their objectives effectively, including:

- the size of the contingent liability for the Australian Government (Deloitte Access Economics 2013; National Commission of Audit 2014a)
- state and territory governments are not required to assess the costs and benefits of restoring an essential public asset to its pre-disaster standard (PC 2013)
- the betterment provisions have rarely been used (PC 2013; Suncorp Group 2013)
- the NDRRA reduce the incentives of state and territory governments to provision for and adequately invest in disaster mitigation or take out insurance for essential public assets, since these governments do not bear the full cost of rebuilding following a natural disaster (Department of Finance and Deregulation 2012; PC 2013).

*What are the policy objectives of the NDRRA? Have these changed over time? Are current arrangements consistent with the achievement of these objectives?*

*How effective are the eligibility criteria for NDRRA reimbursement in facilitating effective and sustainable natural disaster risk management, including mitigation of possible future disasters? How rigorously have these criteria been enforced? What level of oversight is provided?*

*Are the thresholds for NDRRA reimbursement set at an appropriate level?*

*Is the approach of providing assistance under four categories the most appropriate way of administering Australian Government grants? Is the way the categories are defined sensible? Is the assistance provided under each of the four NDRRA categories set at an appropriate level?*

*Are the ‘betterment’ provisions in the NDRRA effective in encouraging recovery that develops resilience and reduces the costs of future disasters?*

*Are the payments to farmers and small businesses through NDRRA categories B and C justified? Are they set at appropriate levels?*

*How frequently has Category D (‘exceptional circumstances’) assistance been used? What is this assistance used for and how have decisions been made?*

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*Is the treatment of NDRRA expenditure in the Australian Government budget appropriate? Does it lead to effective risk management and efficient allocation of resources?*

## **National Partnership Agreement on Natural Disaster Resilience**

Under the National Partnership Agreement on Natural Disaster Resilience (NPANDR), the Australian Government provides funding for disaster resilience activities by the states and territories. The focus of this funding is on mitigation and resilience activities. Projects funded under the NPANDR are required to contribute to the community's resilience to natural disasters, including by reducing the impact of disasters, improving emergency management capability and supporting volunteers.

The NPANDR was signed by the Australian, state and territory governments in December 2009, with initial funding from the Commonwealth of \$100 million spread over four years (COAG 2009). It replaced several existing programs that provided funding for natural disaster mitigation and resilience. The agreement expired on 30 June 2013, and a new two-year Agreement was signed on 5 March 2014 with Australian Government funding of up to \$52.2 million for the 2013-14 and 2014-15 financial years.

The current and previous NPANDR require each state or territory to publish a natural disaster risk assessment and agree an implementation plan with the Australian Government. The Australian Government commits funding equal to 50 per cent of the estimated costs of activities specified in the implementation plans, up to a cap. The cap is set for each state and is based on the state's population, cost of disasters and relative disadvantage. The annual caps under the current agreement range from \$1.3 million for Tasmania and the Territories to \$6.8 million for New South Wales.

Australian Government spending on the NPANDR is small relative to natural disaster recovery expenditure. Under the 2009 Agreement, many of the funds were spent on projects relating to emergency services capability and risk assessment rather than physical mitigation infrastructure. Some jurisdictions also capped the amount of funds distributed to individual projects (for example, grants generally did not exceed \$250 000 in Victoria (Victorian Government 2013)).

Aside from the NPANDR, the Australian Government has also funded some natural disaster mitigation projects (undertaken by local governments, community groups and others) through other infrastructure schemes. These include National Emergency Management Project grants, the Regional Development Australia Fund,

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the Building Better Regional Cities Program and the Local Government Reform Fund.

*How effective have NPANDR funded projects been at promoting resilient communities and reducing the impacts and costs of natural disasters? Is the focus appropriate? Have evaluations been undertaken of these projects and are these publicly available?*

*What limits have been placed on grant amounts by individual state or territory governments? What is the rationale for setting individual grant limits? What have been their consequences (e.g. have projects with large net benefits not received funding)?*

*What is the most efficient way of allocating funding — between states and within states — under this national partnership?*

*Is the amount of funding under the NPANDR adequate? How should the Australian Government determine how much it contributes to disaster mitigation and resilience activities?*

*Is the balance of Australian Government funding on mitigation and resilience activities relative to recovery activities appropriate? How should this assessment be made?*

*How effectively does the National Emergency Management Projects program contribute to sustainable natural disaster mitigation and resilience?*

## **Australian Government assistance to individuals**

The Australian Government provides financial assistance to households through the Australian Government Disaster Recovery Payment (AGDRP) and the Disaster Recovery Allowance (DRA).

The AGDRP is a one-off, non means-tested payment of \$1000 for eligible adults and \$400 for eligible children who are adversely affected by a major disaster. Governments have applied different definitions of ‘adversely affected’ for particular disasters, leading to variations in the eligibility criteria for AGDRP assistance. Expenditure on the payment has varied significantly in recent years (table 1).

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**Table 1 Expenditure on the AGDRP, 2007-08 to 2012-13**

<i>Year</i>	<i>Number of events</i>	<i>Number of claimants</i>	<i>Expenditure</i>
			\$m
2007-08	4	41 000	47
2008-09	5	114 000	131
2009-10	At least 6	35 071	42
2010-11	6	715 000	823
2011-12	4	64 000	78
2012-13	4	142 000	170

*Sources:* Attorney-General's Department Annual Report (various years); FaHCSIA Annual Report (various years).

The DRA is an ex-gratia payment to individuals including employees, small business people and farmers who can demonstrate loss of income as a direct result of a disaster. DRA payments are made for up to 13 weeks at a rate equivalent to the maximum rate of Newstart Allowance or Youth Allowance.

To date, the DRA has only been offered to individuals affected by the NSW bushfires of October 2013 (NSW Ministry for Police & Emergency Services 2013). Government expenditure on the DRA has not yet been published. (The DRA replaced the Disaster Income Recovery Subsidy. The terms of the programs were essentially the same).

*What is the objective of the AGDRP? Does the scheme in its current form achieve those objectives? If not, what changes do you consider are needed?*

*Are there any unintended consequences from the AGDRP?*

*Does the AGDRP overlap with state and territory government assistance to individuals?*

*What expenditure was made under the Disaster Income Recovery Subsidy over the past decade?*

## **State, territory and local governments**

The governance and institutional arrangements for managing natural disaster risks vary by jurisdiction, with roles and responsibilities for natural disaster mitigation, resilience and recovery dispersed through multiple agencies.

- All state and territory governments have a designated department or agency with primary responsibility for natural disaster response and emergency management.

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- Natural disaster mitigation and resilience activities are undertaken as part of the normal operations in a range of policy areas such as land-use planning, infrastructure provision, road maintenance, health care, social assistance and environmental management.
  - In some states, bodies have been established to oversee recovery from major natural disasters — such as the Queensland Reconstruction Authority and the Victorian Bushfire Reconstruction and Recovery Authority (now closed).

To assess the effectiveness and sustainability of the national natural disaster funding arrangements the Commission is requesting detailed information on the activities that state and territory governments undertake and fund (box 5).

*What are the governance and institutional arrangements relating to natural disaster mitigation, resilience and recovery in each state and territory? What are your views on how these arrangements could be improved?*

*Which state, territory and local government policies cover natural disaster mitigation, resilience and recovery? What processes are used to manage natural disaster risks in government activities?*

*Have states and territories made any changes to the ways in which they fund natural disaster mitigation, resilience and recovery activities?*

*How do respective states and territories undertake analysis and decision making when allocating funding across mitigation, resilience and recovery of natural disaster risks?*

*Do state and territory governments have the capacity to fund natural disaster risk management?*

*What influence does Australian Government funding (such as through the NDRRA and NPANDR) have on state, territory and local government prioritisation and funding of infrastructure projects? How does this funding affect the mix of projects funded through other means?*

*Do the collective requirements of the Australian Government under the NDRRA and the NPANDR provide incentives to the states and territories to effectively manage natural disaster risk that would exist in the absence of federal funding coupled with Commonwealth Grants Commission equalisation payments?*

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**Box 5      The Commission's information request for state and territory governments**

The Commission requests the following information from state and territory governments for the period 2002-03 to 2012-13 (on a financial year cash basis), and budget forward estimates where available.

- All expenditure on natural disaster mitigation and resilience (covering both structural and non-structural measures), including:
  - expenditure funded through the National Partnership Agreement on Natural Disaster Resilience, including where possible a list of projects indicating the type of project and amount of funding provided
  - expenditure funded through other state/territory schemes or grant programs (such as general infrastructure budgets)
  - any other expenditure that contributes to natural disaster mitigation and resilience (for example flood mapping or early warning systems).
- All expenditure on natural disaster recovery, including:
  - expenditure funded through the Natural Disaster Relief and Recovery Arrangements (NDRRA), disaggregated by NDRRA category
  - recovery expenditure on essential public assets, categorised by infrastructure class (road and non-road assets)
  - expenditure on projects funded through the betterment provision of the NDRRA
  - NDRRA reimbursements received from the Commonwealth
  - expenditure funded through other state/territory schemes or grant programs
  - any other natural disaster recovery expenditure.
- Data on the cost of damage to the state/territory from natural disasters over the past 10 years (or longer if available), categorised by type of disaster event.
- The total value of state/territory and local government assets that are insured and uninsured, categorised by road and non-road assets.
- Insurance claims by government agencies, triggered by natural disasters.
- Premiums paid to external insurers and reinsurers.
- Any other general expenditure that is not explicitly directed at, but is likely to have a significant impact on natural disaster mitigation, resilience or recovery.

All types of expenses should be included in the above data. These include capital costs, employee expenses, administration costs, depreciation and amortisation costs, interest expenses, and other on-costs or overheads.

*How effective are each state and territory's natural disaster relief and recovery measures relating to individuals, businesses, primary producers and voluntary organisations (including those part-funded by the NDRRA)? Are these arrangements targeted sufficiently closely to those in the greatest need?*

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*How well are natural disaster mitigation and recovery coordinated across governments and agencies at the Commonwealth, state/territory and local levels? Is there evidence of duplication or overlaps?*

*What progress have state and territory governments made in implementing the recommendations of past inquiries relating to natural disasters? Do any of the recommendations relate to funding arrangements? Are there major recommendations that remain to be implemented?*

### **Interactions with broader Commonwealth–state financial arrangements**

Expenditure on natural disasters has implications for the distribution of GST revenues between jurisdictions. The Commonwealth Grants Commission (CGC) distributes these revenues to ensure that each state and territory has the same capacity to provide government services (a process termed horizontal fiscal equalisation (HFE)). In doing so, it assumes that all states and territories adhere to the same spending policies on natural disaster relief, and that differences in expenditure only reflect differences in the severity and incidence of natural disasters (CGC 2013).

Commonwealth payments through the NDRRA have no effect on the GST distribution. Residual expenses incurred by the states and territories do affect the GST distribution. Namely, state spending on natural disasters that exceeds the average of all states is partly funded by a reduction in other states' GST shares (ERC 2011). The extent will depend on the level of natural disaster expenditure in each state within the financial year. In essence, the CGC treatment distributes natural disaster costs across all jurisdictions on a per capita basis, regardless of where the natural disaster occurs.

*How do Australian, state and territory government expenditures on natural disaster mitigation, resilience and recovery spending interact with other Commonwealth–state financial arrangements?*

*Do current horizontal fiscal equalisation arrangements have implications for incentives for natural disaster risk management by state and territory governments?*

*Do all states adhere to the same policy on natural disaster risk management?*

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### 3 Assessing the current arrangements

The following sections set out some of the issues that the Commission will consider when making its assessment of whether the current natural disaster funding arrangements are effective, sustainable and coherent, and contribute to effective risk management and therefore increasing the wellbeing of the Australian community.

*What should be the objectives of the natural disaster funding arrangements?*

*What do ‘coherent’, ‘effective’ and ‘sustainable’ mean in the context of natural disaster funding arrangements?*

#### **Roles and responsibilities for risk management**

A prerequisite for effective risk management is that the responsibility for managing risks should be allocated to the party that is best able to deal with them, and as a general rule, this corresponds to the parties that own an asset. In practice, effective and sustainable natural disaster risk management is more likely when there is alignment between:

- the incidence of risk
- the responsibility for financing risk management and taking actions
- the responsibility for funding risk management.

The NDRRA *Determination* states that the general principles of the Arrangements are that:

... its assistance is not to supplant, or operate as a disincentive for, self-help by way of either access to capital or appropriate strategies of disaster mitigation; and as far as practicable, its assistance is to be designed to achieve an efficient allocation of resources. (Attorney-General’s Department 2012b)

These conditions attempt to replicate, through prescription, incentives for state and territory governments to behave in a way that is consistent with roles and responsibilities for risk management being allocated to the owners of assets. The current funding arrangements also pose a further issue to the extent there is scope for state and territory governments to transfer the costs of core risk management activities to the Australian Government and other states (‘cost-shifting’).

*Under current institutional arrangements, are roles and responsibilities for natural disaster risk management allocated appropriately?*

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*What should be the role of the Australian Government in natural disaster risk management?*

*How can individuals, businesses, the community and different levels of government most effectively fund natural disaster risk management?*

*What is the best way to ensure effective risk management when risk funding and financing are not fully aligned (due to vertical or horizontal fiscal inequity)?*

*Are the prescriptive arrangements in the NDRRA Determination consistent with effective risk management? Do they impose a justified compliance burden on states and territories?*

*Are the provisions in the NDRRA Determination adequately enforced? Are there material consequences for governments that do not behave in a manner that is consistent with the provisions?*

*Do state and territory governments shift the costs of their own core asset and liability management activities to the Australian Government and other state and territory governments through the natural disaster funding arrangements coupled with HFE arrangements?*

## **Providing incentives for effective risk management**

Governments — as policy setters — have a role in providing the framework for effective risk management by private individuals, businesses and themselves. The natural disaster funding arrangements influence the incentives for governments, households and businesses to manage natural disaster risks to their assets.

One issue with the current arrangements is ‘moral hazard’ — a situation that can arise when a party has insurance, and because the insurer is not able to monitor their behaviour or sanction them for inadequate risk management the party opts to under-invest in risk reduction. There is some evidence that it has affected the implementation of risk management measures by governments, households and businesses. For example, research shows that private individuals tend to underinvest in disaster prevention and mitigation or underinsure, due to the expectation of public transfers after disaster — sometimes called ‘charity hazard’ (Kelly and Kleffner 2003, Neumeyer, Plumper and Barthel 2013). This is further exacerbated by the asset prices for these ‘at risk’ assets not capturing the cost of managing these risks.

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*Do governments provide the right framework for effective risk management by private individuals and businesses? What could governments do differently?*

*Is there evidence that natural disaster funding arrangements induce 'moral hazard' behaviour by governments, households and businesses?*

*Does the fact that the states and territories do not bear the full costs of natural disaster reconstruction diminish their incentives for investment in risk management, including mitigation and insurance?*

*To what extent is moral hazard a significant problem at the household and business level in Australia? Does it result in inefficient and ineffective natural disaster risk management?*

## **Providing incentives to use insurance**

The role of well-functioning insurance markets is important, as insurance provides households, businesses and governments with financial protection from some of the financial impacts of natural disasters. (Insurance payouts provide finance for disaster recovery. Insurance premiums provide the funding.) By pooling risks, insurance enables policy holders to spread the risks of natural disasters across the community.

Premiums are charged based on the level of risk, and the size of premiums is an integral mechanism for signalling to property owners the level of risk they face and embedding the pricing of that risk in the asset price over time. Any impediments that prevent asset owners, be they governments, businesses or households, from taking out insurance or distort the level of premiums would distort asset prices and reduces the incentive for and the ability of parties to effectively manage these risks.

There appears to be some *prima facie* evidence that the current arrangements reduce the incentives for governments to take out insurance. The NDRRA effectively provide a form of default insurance at low cost to state and territory governments for damage to some assets. These provisions significantly reduce or eliminate the net benefits to state and territory governments of taking out insurance.

The Australian Government has attempted to counter these disincentives through administrative provisions aimed to replicate risk management behaviour that would arise if asset ownership, risk incidence and risk funding were aligned. Specifically, under the NDRRA *Determination* state and territory governments are required to have adequate access to capital to fund infrastructure losses, such as through insurance and must submit independent assessments of their insurance arrangements

to the Commonwealth and respond appropriately to recommended changes (otherwise funds may be reduced).

A recent review of state and territory governments' insurance arrangements found a significant disparity in their levels of insurance (table 2). Given the proportion of NDRRA expenditure that goes to road reconstruction, it is particularly significant that most state and territory governments do not have adequate insurance for roads. Part of the explanation for this is that commercial insurance for roads is not available.

**Table 2 State and territory government insurance coverage, 2011**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Total asset value (\$b)	351	170	173	124	102	19	21	15
Roads (% of total value)	28	39	47	17	28	44	16	27
Insured (% of total value)	67	82	54	50	72	8	100	32
Adequate insurance arrangements according to the Department of Finance								
Roads	x	✓	x	x	x	x	✓	x
Other assets	✓	✓	✓	✓	✓	x	✓	x

Sources: Department of Finance and Deregulation (2012), KPMG Actuarial (2012).

The availability of commercial insurance for households and businesses has also been raised as an issue that is relevant for natural disaster management and funding. In recent years some property owners have been unable to find insurers that are willing to offer insurance, or will provide it only for very high premiums.

Concerns about the level of insurance cover in the community and behaviour of insurers have regularly arisen after major natural disasters. For example, following the Queensland floods some households found they did not have cover for riverine flooding (leading to disputes between policyholders and insurers), and many households and businesses lacked property insurance altogether.

The Australian Government commissioned the Natural Disaster Insurance Review (NDIR 2011) after the Queensland floods to investigate options to improve the extent and affordability of flood insurance. While its main recommendations were not adopted, several regulatory and market changes did occur. Regulations now require insurers to use a standard definition of 'flood' and provide consumers with a one page summary of their insurance policy. Insurers have also sought to better understand flood risks and offer flood cover to more households.

Government funding arrangements may also potentially impact the take up of insurance (and therefore natural disaster provisioning) by households and business.

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*What are the current arrangements for insurance of essential public assets owned or managed by state and territory governments?*

*What explains the disparities in natural disaster insurance coverage by state and territory governments?*

*What impacts do the structure and design of the NDRRA have on the incentives of state and territory governments to insure essential public assets?*

*What impacts do the structure and design of the NDRRA have on the incentives of households and business to insure their property?*

*Do problems exist in insurance markets that prevent households and businesses from taking out insurance for natural disaster risks? What are the causes and consequences of these problems? What possible solutions might be available?*

*Is non-insurance and underinsurance by households and businesses against natural disaster risks a significant problem?*

*Are high insurance premiums for households in some areas reflective of the risk in those areas, or are they reflective of information asymmetries or other problems in the insurance market?*

*What impact is mitigation activity likely to have on insurance premiums? What evidence is available to assess this?*

## **Allocating resources to natural disaster risk management**

Natural disaster funding arrangements influence the amount of resources that governments allocate to mitigation, resilience and recovery activities. One issue is the treatment of contingent liabilities in government budgets. In treating natural disaster recovery as a contingent liability, governments do not necessarily make provision for the future costs of natural disaster recovery in budgets. By contrast, natural disaster mitigation and resilience expenditure is accounted for in budget forward estimates, and as such is traded off against other spending priorities. Betterment activities (under the NDRRA) receive no budget allocation, and must be funded by savings elsewhere in the Attorney-General's portfolio. These budget accounting conventions could lead to inadequate asset and liability management arrangements (box 6).

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## Box 6 **Asset and liability management**

Asset and liability management (ALM) is an approach used by organisations to jointly manage risks to their assets and liabilities in order to achieve their financial objectives. The approach was originally developed by banks to identify and manage the risks that changes in interest rates would present to their balance sheets. Over time ALM has been adopted by other organisations (including governments and superannuation funds) and the range of risks that are considered as part of the approach has been broadened, such as environmental, social and governance risks.

The IMF stated that the role of asset and liability management by governments is focused on:

... managing and containing the financial risk exposure of the public sector as a whole, so as to preserve a sound balance sheet needed to support a sustainable policy path and economic growth. (Das et al. 2012, p. 3)

ALM is a part of overall risk management and is a tool for achieving other economic and wellbeing objectives. Effective ALM can assist governments to achieve a strong sovereign financial position and sustainable policy making, and to better prepare for future uncertainties (Romanyuk 2010) and intergenerational challenges.

The ability to apply natural disaster risk to ALM is complicated by measurement issues. Natural disasters are an implicit contingent liability for governments. Their existence and budgetary impact are dependent on future events that may or may not occur and that are not under the control of the government. Hence, while they can represent a significant risk to a government's fiscal position, the uncertainty surrounding estimates of contingent liabilities means these estimates are not included in official financial statements. Effective asset and liability management would at a minimum require sensitivity analysis for such risk factors in the absence of probability weighted provisioning.

This gives rise to an important trade-off for policymakers. If these risks are not explicitly accounted for, policy makers will not necessarily provision for them, and this could lead to a systemic misrepresentation of the underlying budget position (OECD 2013). However, the quality of information about the risks needs to be high enough to enable informed and effective decision-making.

The level and composition of resources allocated to natural disaster risks is also inevitably influenced by political economy realities. For example, research suggests that the political incentives for mitigation funding are not strong. Governments gain more 'political capital' from spending on disaster relief, which is immediate, observable and provides private benefits to individuals. Healy and Malhorta (2009) analysed United States voter responses to spending on disaster preparedness and disaster relief. They found that voters reward incumbent politicians for disaster relief spending, but not for spending on preparedness.

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This finding, coupled with a misalignment of risk incidence and funding and the treatment of contingent liabilities compared with mitigation and resilience expenditure, suggests that governments have incentives to under-invest in disaster mitigation, and potentially to over-invest in disaster recovery.

*Are current natural disaster funding arrangements consistent with effective and sustainable allocation of resources to natural disaster mitigation, resilience and recovery?*

*What are the effects on risk management and resource allocation of treating natural disaster recovery as a contingent liability? Should the budget treatment of natural disaster funding be changed?*

*What information and skill sets are required for more effective budget management of natural disaster risk, at both the Commonwealth and state level?*

*Do current funding arrangements exacerbate the political economy incentive for governments to under-invest in natural disaster mitigation and/or over-invest in natural disaster recovery?*

## **Getting the balance right between mitigation, resilience and recovery**

An important consideration for the inquiry is whether the current arrangements achieve a balance of expenditure on mitigation, resilience, recovery and insurance that is consistent with effective risk management and therefore maximising community wellbeing.

Several parties have previously expressed concern that the balance of mitigation and recovery expenditure is not appropriate, pointing to the high potential net benefits of mitigation activities. For example, in 2002 a group of high-level officials reported to COAG that a weakness of the natural disaster management arrangements that were in place at the time was:

... a focus on response and reaction at the expense of prevention, mitigation and recovery of affected communities. (COAG 2002, p. 9)

More recently in its report *Barriers to Effective Climate Change Adaptation*, the Productivity Commission stated:

... the low levels of expenditure on mitigation, and the potential for disaster-mitigation expenditure to reduce very high levels of recovery expenditure, suggest that a greater emphasis on prevention would increase the wellbeing of the community (PC 2013, p. 256)

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It is difficult to identify the optimal level of expenditure on natural disaster mitigation and resilience (either in absolute terms or relative to recovery expenditure). The number of actions involved, the uncertainty about future benefits and the need to discount future benefits and costs all complicate the analysis. However, it is important to bear in mind that there is, in principle, an ‘optimal’ level. This means that the community could be devoting too few resources to mitigation and resilience, or it could be devoting too many.

*How should the Commission assess the appropriateness of the level of mitigation, resilience and recovery expenditure?*

*Is there evidence on the cost-effectiveness of mitigation expenditure (in terms of reducing future disaster costs)?*

*Are the current governance and institutional arrangements capable of achieving an effective and sustainable balance of mitigation, resilience and recovery expenditure?*

*Are the level and balance of natural disaster mitigation, resilience and recovery activities appropriate? Is there a case for changing them, either in absolute or relative terms?*

*In the absence of an alignment of asset ownership, risk incidence and risk funding, is it possible for parties to move towards optimal risk management?*

## **Allocating resources to the right mitigation, resilience and recovery options**

Mitigation, resilience and recovery projects have benefits and costs, and arrangements should provide incentives and lead governments to identify and implement the options that have the largest benefit–cost ratios. Relevant issues for consideration in this area include:

- the way state and territory governments prioritise mitigation expenditure (including expenditure supported by the NPANDR)
- whether state and territory governments make adequate use of cost–benefit analysis when allocating funds for natural disaster mitigation and reconstruction
- the effects of the ‘betterment’ provisions in the NDRRA on the allocation of resources for reconstruction.

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*What mechanisms and models are governments using to evaluate and prioritise natural disaster mitigation options? What mechanisms are used in other federations, such as the United States and Canada?*

*What other approaches could be used to prioritise mitigation options?*

*Do local governments in particular have appropriate capabilities to undertake cost–benefit analysis of mitigation activities?*

*Do the current arrangements provide an incentive for excessive rebuilding?*

*Does the requirement for governments to show that ‘betterment’ options are ‘cost-effective’ reduce the likelihood of betterment projects being implemented?*

*What mechanisms are available for businesses and communities to contribute to the costs of mitigation and recovery, where appropriate (for example, through the use of property-specific charges to fund some mitigation works)?*

### **Are land-use planning and infrastructure policies consistent with effective natural disaster risk management?**

The terms of reference ask the Commission to consider ‘options for urban planning, land use policy and infrastructure investment that support cost-effective risk management’. These policy areas are part of the broader framework for effective risk management and affect the way assets are priced, located, constructed and managed over time. Each of these factors influences the level of risk that natural disasters pose to assets, and as such they are an important component of effective and sustainable risk management.

Previously the Commission has identified some potential weaknesses in land-use planning systems, including that they are not always sufficiently flexible to enable a risk management approach and that some local governments may not have the resources to administer more sophisticated risk-based planning systems (PC 2013). Others have pointed to possible information asymmetries, and whether governments have or are willing to disclose the full extent of natural disaster risk when undertaking planning and land-release activities.

The Commission is seeking input from participants on the effects that current regulations regarding land-use planning and infrastructure investment have on natural disaster risk management.

*What impacts do policies regarding land-use planning and infrastructure have for natural disaster risk management at the state and local government levels?*

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*Is there a need for greater information provision and disclosure in planning decisions?*

*What impact do the current natural disaster funding arrangements have on land-use planning, risk reflective asset pricing and infrastructure investment decisions at the state and local levels?*

*What reforms to land-use planning and infrastructure investment would best support cost-effective risk management and understanding of the changes to the risk profile?*

## **4 What reform options are available?**

The terms of reference invite the Commission to consider a full range of options for reforms to the natural disaster funding arrangements, including:

- enhancements and modifications to the current arrangements
- fundamental changes to the design and operation of the natural disaster funding arrangements.

The recently-released report of the National Commission of Audit recommended substantial change to the natural disaster funding arrangements, and proposed an alternative option of retaining the NDRRA, but changing some aspects of the arrangements (box 7). It recommended that changes to mitigation funding should be considered following, and informed by, the findings of the Productivity Commission inquiry.

The Commission is seeking submissions on possible funding reform options.

### **Box 7 Reform options proposed by the Commission of Audit**

#### **Option 1 — Substantially reduce Commonwealth involvement in disaster recovery funding (preferred by the National Commission of Audit)**

- Retain the AGDRP, but with payments only to ‘individuals severely affected by natural disasters’
- Replace the NDRRA with a grant — paid upfront or in instalments — to the states and territories in the event of a significant natural disaster. Grant levels to vary depending on the size of the disaster and the capacity of the Commonwealth but could be set at between 25 and 33 per cent of the estimated cost of reconstruction.

(Continued next page)

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**Box 7** (continued)

**Option 2 — Retain the basic structure of the NDRRA but amend thresholds and contribution rates**

- Lower Commonwealth contributions for infrastructure funding (Category B) to either 25 or 33 per cent of government contributions. State and local governments to share the remaining reconstruction costs.
- Significantly increase the threshold for eligibility for each disaster (say, \$50 million for the larger three States, \$20 million for South Australia and Western Australia and \$5 million for Tasmania and the two Territories).
- Increase the threshold for state expenditure from 0.225 per cent of state revenue to 0.5 per cent.
- Assets that are capable of being commercially insured would be excluded.

*Source:* National Commission of Audit (2014a)

## **Modifications to the current arrangements**

The design of the current funding arrangements provide scope for changes to specifics and policy parameters. Options include, but are not limited to:

- changing the NDRRA thresholds, eligibility criteria and reimbursement levels
- having separate arrangements for roads reconstruction relative to other natural disaster recovery
- providing increased funding for mitigation through the NPANDR and state and territory expenditure
- making Commonwealth natural disaster funding conditional on state and territory governments implementing asset and liability management and governance arrangements for natural disaster risk management, such as:
  - making provision for natural disaster contingent liabilities in budget frameworks
  - increased adoption of external insurance or self-insurance to manage these contingent liabilities
  - requiring a proportion or higher level of expenditure on mitigation and resilience (in addition to expenditure that would have occurred anyway)
  - expanding the use of cost–benefit analysis in mitigation and resilience program selection

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- requiring changes to land-use planning frameworks to facilitate effective and sustainable risk management
  - simplifying claim processes
  - increasing the monitoring and enforcement of the conditions of the NDRRA *Determination*.

## **Substantial changes to the system**

If the Commission’s analysis indicates that the quantum, coherence, effectiveness and sustainability of the current funding arrangements cannot be made consistent with effective risk management the Commission may recommend a significant overhaul to the system. This could include consideration of:

- whether the Commonwealth should provide any direct funding to the states for natural disaster mitigation, resilience and recovery, and whether such funding should be tied to specific purposes or provided as block funding
- whether the current CGC treatment of natural disaster payments and expenditure in the GST allocation should be changed to provide incentives for asset and liability management (in state budgets) and thereby more effective risk management at the state level
- whether state and territory governments should pay a premium to the Commonwealth for the insurance that it provides through the NDRRA
- eliminating some Commonwealth natural disaster assistance programs if there is evidence that they overlap with other Commonwealth, state or territory programs
- changes to urban planning, land use policy and policies relating to investment in and management of infrastructure.

*Do you have proposals for substantial reform options to natural disaster funding arrangements for the Australian and state and territory governments?*

*What impact would each option have on the incentives of each level of government to make good risk management decisions?*

*What impact would each option have on the costs and incentives of individuals, businesses and non-government organisations to manage natural disaster risks?*

*How would they impact on the Australian economy and each level of government, relative to current arrangements?*

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*Should conditions be attached to Australian Government financial assistance to other levels of government? Should funding be linked to particular reforms by state or territory governments?*

*What would be the advantages and disadvantages of making substantial changes to the natural disaster recovery funding arrangements (such as recommended by the National Commission of Audit)?*

*What would be the advantages and disadvantages of retaining the current NDRRA, but with reforms to the thresholds and contribution levels?*

*What lessons have been learnt in other countries that may be applicable for Australia? Are there natural disaster funding or governance models used elsewhere that may be suitable for Australia?*

## **5 Implementing reforms**

Reforms to natural disaster funding arrangements could have material effects on some members of the community, notably on asset values. Given these potential effects, governments need to consider implementation options, such as phased implementation or transitional arrangements.

The Commission is seeking comment on the impact and timing of reforms and on transitional arrangements. For example, the National Commission of Audit considered that the proposed reforms could be implemented in the near term. It stated that either of its proposed reforms to the NDRRA ‘could be implemented before the 2014-15 disaster season’(National Commission of Audit 2014a, p. 98).

*What transitional arrangements should be considered to assist with the implementation of reforms?*

*Over what timeframe should reforms be implemented?*

*How should reforms be sequenced?*

*Who should be responsible for implementing the reforms?*

*Are transitional financial arrangements required?*

*When should the reforms be reviewed and evaluated?*

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## Attachment A

### Terms of reference

Productivity Commission Inquiry into Natural Disaster Funding Arrangements  
*Productivity Commission Act 1998*

I, Joseph Benedict Hockey, Treasurer, pursuant to Parts 2 and 3 of the Productivity Commission Act 1998, hereby request that the Productivity Commission (the Commission) undertake an inquiry into the efficacy of current national natural disaster funding arrangements. The inquiry should take into account the priority of effective mitigation to reduce the impact of disasters on communities.

### Background

In the last five years, natural disasters around the country have claimed more than 200 lives and impacted hundreds of thousands of people. Natural disasters also have significant financial and economic costs. The impacts and costs of extreme weather events can be expected to increase in the future with population growth and the expanding urbanisation of coast lines and mountain districts near our cities.

Many communities experience repeated disruptions from flood, cyclone and fire events. Some of these events are unforeseen and the damage is unavoidable, but in many cases the consequences of natural disasters could be mitigated.

The National Strategy for Disaster Resilience underpins a coordinated and cooperative effort to enhance our ability to prepare for, withstand and recover from natural disasters. The benefits associated with building the resilience of our communities and investing in disaster mitigation include: improved community safety and resilience, a reduction in damage to property, speedier recovery, and a reduction in overall costs to the national economy. The range of mitigation options are diverse and span both structural and non-structural measures.

However, current Commonwealth funding arrangements are heavily weighted towards disaster recovery, which reduces the economic incentive for state, territory and local governments to mitigate disaster risk.

Disaster management is the responsibility of the state, territory and local governments, which largely determine the type and level of relief and recovery measures to be adopted following a disaster, and manage the administration of assistance measures. In accordance with this responsibility, state and territory

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governments bear a significant level of disaster relief and recovery expenditure. State, territory and local governments also have responsibility for land use planning.

Notwithstanding this, the Commonwealth has played a major role in providing financial and other assistance to help alleviate the burden on states and territories and to support the provision of urgent assistance to disaster affected communities. Under the Natural Disaster Relief and Recovery Arrangements (NDRRA), the Commonwealth currently reimburses up to 75 per cent of the state and territory recovery bill after certain thresholds are met, at a cost to the Commonwealth of approximately \$12 billion for events since 2009. The majority of this expenditure is used to provide partial reimbursement to states and territories for rebuilding essential public assets, in particular roads and road infrastructure.

### **Scope of the Inquiry**

The Commission will analyse the full scope (incorporating the quantum, coherence, effectiveness and sustainability) of current Commonwealth, state and territory expenditure on natural disaster mitigation, resilience and recovery, and develop findings on the following:

1. The sustainability and effectiveness of current arrangements for funding natural disaster mitigation, resilience and recovery initiatives, including – where directly relevant to an improved funding model – the management of disaster relief and recovery;
2. Risk management measures available to and being taken by asset owners – including the purchase of insurance by individuals, business and state, territory and local governments, as well as self-insurance options;
3. The interaction between Commonwealth natural disaster funding arrangements and relevant Commonwealth/state financial arrangements;
4. Options to achieve an effective and sustainable balance of natural disaster recovery and mitigation expenditure to build the resilience of communities, including through improved risk assessments. The options should assess the relationship between improved mitigation and the cost of general insurance. In doing this, the Commission should consider:
  - (a) How business, the community, Commonwealth, state, territory and local governments can most effectively fund natural disaster recovery and mitigation initiatives;
  - (b) How to ensure the right incentives are in place to support cost-effective decision making within and across all levels of government, business, non-government organisations and private individuals;

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- (c) Mechanisms and models to prioritise mitigation opportunities and evaluate the costs and benefits of a range of mitigation options;
  - (d) Options for urban planning, land use policy and infrastructure investment that support cost-effective risk management and understanding of the changes to the risk profile;
  - (e) Options to fund identified natural disaster recovery and mitigation needs, including thresholds for triggering Commonwealth assistance to the states and territories;
5. Projected medium and long term impacts of identified options on the Australian economy and costs for governments as compared to impacts of the current funding arrangements; and
  6. Options for transitioning to and implementing any proposed reforms to national natural disaster funding arrangements.

In undertaking the inquiry, the Commission is to take into account the roles and responsibilities of Commonwealth, state, territory and local governments, communities, insurers, business (including private providers of essential infrastructure), non-government organisations and private individuals. The Commission should consider funding for disaster response only where directly relevant to mitigation, relief and recovery and existing Commonwealth/state joint funding arrangements.

The Commission should also take into account evidence from previous reports, reviews and inquiries, including best practice, from overseas and in Australia. It should also take into account relevant recommendations of the Commission of Audit and developments in federal financial relations, noting that the Commonwealth is developing a White Paper on Reform of the Federation.

Further, since much disaster spending is directed towards infrastructure, the Commission should take into account evolving infrastructure and asset management policy and practice at the national, state and local levels.

The scope of the inquiry will be focussed on naturally occurring rapid onset events that cause a serious disruption to a community or region, such as flood, bushfire, earthquake, storm, cyclone, storm surge, tornado, landslide or tsunami. This is consistent with the definition included in the Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination.

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## **Process**

The Commission is to undertake an appropriate public consultation process including holding hearings, inviting public submissions and releasing a draft report to the public by September 2014.

It will consult with Commonwealth, state and territory, and local governments in undertaking this inquiry.

The final report should be provided to the Government by the end of December 2014. The reports will be published.

**J. B. HOCKEY**

Treasurer

28 April 2014

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## Attachment B

### HOW TO MAKE A SUBMISSION

This is a public inquiry and the Commission invites interested people and organisations to make a written submission.

Each submission, except for any information supplied in confidence (see below), will be published on the Commission's website shortly after receipt, and will remain there indefinitely as a public document. Copyright in submissions sent to the Commission resides with the author(s), not with the Commission.

#### *How to prepare a submission*

Submissions may range from a short letter outlining your views on a particular topic to a much more substantial document covering a range of issues. Where possible, you should provide evidence, such as relevant data and documentation, to support your views.

This is a public review and all submissions should be provided as public documents that can be placed on the Commission's website for others to read and comment on. However, under certain circumstances the Commission can accept sensitive material in confidence, for example, if it was of a personal or commercial nature, and publishing the material would be potentially damaging. You are encouraged to contact the Commission for further information and advice before submitting such material. Material supplied in confidence should be provided under separate cover and clearly marked 'IN CONFIDENCE'.

#### *How to submit a submission*

Each submission should be accompanied by a submission cover sheet. The submission cover sheet is available on the inquiry webpage and a copy is included with this issues paper (Attachment C). For submissions received from individuals, all personal details (eg home and email address, phone and fax number) will be removed before it is published on the website for privacy reasons.

The Commission prefers to receive submissions as a Word (.doc) file attachment to an email (see address below). PDF files are acceptable. To ensure your PDF is as electronically readable as possible, the Commission recommends that it is derived from word processing software (eg Microsoft Word or Lotus notes) and not from a scanner, fax or photocopying machine.

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Track changes, editing marks, hidden text and internal links should be removed from submissions before sending to the Commission. To ensure hyperlinks work in your submission, the Commission recommends that you type the full web address (eg <http://www.referred-website.com/folder/file-name.html>).

Submissions can also be accepted by post (see address below).

By email\*: **disaster.funding@pc.gov.au**

By post: Natural Disaster Funding Arrangements

Productivity Commission

LB2 Collins Street East

Melbourne Vic 8003

\* If you do not receive notification of receipt of an email message you have sent to the Commission within two working days of sending, please contact the Administrative Officer.

*Due date for submissions*

Please send submissions to the Commission by Friday 6 June 2014.

## Attachment C

# Productivity Commission SUBMISSION COVER SHEET (not for publication)



Australian Government  
Productivity Commission

Please complete and submit this form with your submission:

By email (preferred): [disaster.funding@pc.gov.au](mailto:disaster.funding@pc.gov.au) OR

By mail:

Natural Disaster Funding  
Productivity Commission  
LB2 Collins Street East  
Melbourne Vic 8003

Follow us on Twitter @ozprodcom

Name (first name and surname): \_\_\_\_\_

If submitting on behalf of a company or organisation:

Name of organisation: \_\_\_\_\_

Position in organisation: \_\_\_\_\_

Phone: \_\_\_\_\_

Mobile: \_\_\_\_\_

Email address: \_\_\_\_\_

Street address: \_\_\_\_\_

Suburb/City: \_\_\_\_\_

State: \_\_\_\_\_

P'code: \_\_\_\_\_

Postal address: \_\_\_\_\_

Suburb/City: \_\_\_\_\_

State: \_\_\_\_\_

P'code: \_\_\_\_\_

### Please note:

- Copyright in submissions resides with the author(s), not with the Productivity Commission.
- Following processing, public submissions will be placed on the Commission's website. **Submissions will remain on the Commission's website as public documents indefinitely.**
- As this is a public inquiry, 'in confidence' material can be accepted only under special circumstances. **You should contact the Commission before submitting this material.**
- For submissions made by individuals, only your name and the state or territory in which you reside will be published on the Commission's website. All other contact details will be removed from your submission.

### Please indicate if your submission:

- Is a public submission, it does NOT contain 'in confidence' material and can be placed on the Commission's website.
- Contains SOME material supplied 'in confidence' (provided under separate cover and clearly marked IN CONFIDENCE).