# Natural Disaster Funding Arrangements, Volume 2, Productivity Commission Inquiry Report, No. 84, 17 December 2014

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| The Productivity Commission |
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The Hon Joe Hockey MP

Treasurer

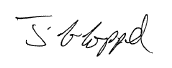
Parliament House

CANBERRA ACT 2600

Dear Treasurer

In accordance with Section 11 of the *Productivity Commission Act 1998*, we have pleasure in submitting to you the Commission’s final report into *Natural Disaster Funding Arrangements.*

Yours sincerely



|  |  |
| --- | --- |
| Jonathan Coppel  Commissioner | Karen Chester  Commissioner |

# Terms of reference

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

**Terms of Reference**

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 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:
5. How business, the community, Commonwealth, state, territory and local governments can most effectively fund natural disaster recovery and mitigation initiatives;
6. 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;
7. Mechanisms and models to prioritise mitigation opportunities and evaluate the costs and benefits of a range of mitigation options;
8. 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;
9. Options to fund identified natural disaster recovery and mitigation needs, including thresholds for triggering Commonwealth assistance to the states and territories;
10. 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
11. 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 focused 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.

**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

[Received 28 April 2014]

Contents

The Commission’s report is in two volumes. **This volume contains supplementary papers 1 to 8 and volume 2 references.** Volume 1 contains the overview; recommendations and findings; chapters 1 to 5; appendix A and volume 1 references. Below is the table of contents for both volumes.

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# Abbreviations

ABCB Australian Building Codes Board

ABS Australian Bureau of Statistics

AEMA Australian Emergency Management Arrangements

AEMC Australian Emergency Management Committee

AEMI Australian Emergency Management Institute

AGDRP Australian Government Disaster Recovery Payment

ALM Asset and liability management

ANZEMC Australia–New Zealand Emergency Management Committee

ARIMA Autoregressive integrated moving average (model)

BCA Building Code of Australia

BCR Benefit–cost ratio

BOM Bureau of Meteorology

BRRT Building Resilience Rating Tool

CBA Cost–benefit analysis

CGC Commonwealth Grants Commission

COAG Council of Australian Governments

CRC Cooperative Research Centre

CSIRO Commonwealth Scientific and Industrial Research Organisation

DIRS Disaster Income Recovery Subsidy

DRA Disaster Recovery Allowance

EQC Earthquake Commission (New Zealand)

EMA Emergency Management Australia

FEMA Federal Emergency Management Agency (United States)

GDP Gross domestic product

GST Goods and services tax

HFE Horizontal fiscal equalisation

ILR Insurance loss ratio

IPART Independent Pricing and Regulatory Tribunal (NSW)

MCA Multi‑criteria analysis

NBMP National Bushfire Management Plan

NCC National Construction Code

NDO Natural Disasters Organisation

NDRF National Disaster Resilience Framework

NDRP National Disaster Resilience Program

NDRRA Natural Disaster Relief and Recovery Arrangements

NEMC National Emergency Management Committee

NEMP National Emergency Management Projects

NERAG National Emergency Risk Assessment Guidelines

NFID National Flood Information Database

NFIP National Flood Insurance Program (United States)

NFRIP National Flood Risk Information Portal

NIAM National Impact Assessment Model

NPV Net present value

NPANDR National Partnership Agreement on Natural Disaster Resilience

NSDR National Strategy for Disaster Resilience

OECD Organisation for Economic Co‑operation and Development

PC Productivity Commission

PPRR Prevention, preparedness, response and recovery

QRA Queensland Reconstruction Authority

REPA Restoration of Essential Public Assets

TISN Trusted Information Sharing Network

VBRC 2009 Victorian Bushfires Royal Commission

VMIA Victorian Managed Insurance Authority

VFI Vertical fiscal imbalance

VPPs Victorian Planning Provisions

# Glossary

|  |  |
| --- | --- |
| Asset and liability management | Used by organisations to jointly manage specific risks to their assets and liabilities in order to achieve their financial objectives. |
| Asset management plans | Plans that define current levels of service and the processes used to manage and maintain assets, such as infrastructure. |
| Asset register | A list of an organisation’s assets and financial and non‑financial information about the assets. |
| betterment | An increase in the resilience of an asset to natural disasters. |
| Betterment | A provision in the Natural Disaster Relief and Recovery Arrangements that allows reimbursement of a portion of the cost to restore an essential public asset damaged by an eligible disaster event to a more disaster‑resilient state. |
| Contingent liability | Something that could create an obligation for government funding but is uncertain and not wholly under the control of the government. |
| Exposure | People, property or other elements present in hazard zones that are subject to potential losses. |
| Fiscal risks | The risk that fiscal outcomes vary from what was expected at the time of the budget or other forecast. |
| Hazard | A source of potential harm or a situation with a potential to cause loss. |
| Horizontal fiscal equalisation | The process whereby the Australian Government distributes goods and services tax revenues so that each state and territory has the fiscal capacity to provide services and infrastructure to the same standard (assuming they each make the same effort to raise revenue and operate at the same level of efficiency). |
| Incentive neutrality | Achieved when policy frameworks are not biased toward one option (such as toward disaster recovery over mitigation) and where decisions consider the impacts of the options over time, and are not biased toward delay or immediate action. |
| Mitigation | Measures taken in advance of disasters to reduce their impacts. |
| Natural disaster | A naturally occurring rapid onset event that causes a serious disruption to a community or region, such as flood, bushfire, earthquake, storm, cyclone, storm surge, tornado, landslide or tsunami. |
| Provision | Setting aside funds or capital to cover anticipated future losses or costs. |
| Recovery | Actions to support affected communities to restore damaged property and economic activity, as well as physical and psychological health and wellbeing. |
| Residual risk | The level of risk that a person or organisation remains exposed to after taking action to reduce the level of risk. |
| Resilience | The ability of communities to continue to function when exposed to hazards and to adapt to changes rather than returning to the original pre‑disaster state. |
| Response | Actions taken in anticipation of, during and immediately after an emergency to minimise its effects. |
| Risk | The combination of the probability of an event and its negative consequences. |
| Risk appetite | The level of risk that a person or organisation is willing to tolerate or bear rather than devoting further resources to reduce the risk. |
| Risk management | The systematic application of management policies, procedures and practices to the tasks of identifying, analysing, evaluating, treating and monitoring risk. |
| Shared risks | Risks that have impacts that affect many parties and that cannot be distinctly allocated to individual assets and so are shared by the community. |
| Vertical fiscal imbalance | The situation where the Australian Government raises more revenue than it requires for its own direct expenditure responsibilities, whereas state and territory governments raise less revenue than they require for their expenditure responsibilities. |
| Vulnerability | The characteristics and circumstances of a community or asset that make it susceptible to the damaging effects of a hazard. |