Appendix A:
Review of Insurance Arrangements of State and Territory Governments under the Natural Disaster Relief and Recovery Arrangements Determination 2011 Phase 1 Report – March 2012
Copy
right Notice
ISBN: 978-1-922096-16-6 (online)

With the exception of the Commonwealth Coat of Arms, this work is licensed under a Creative Commons Attribution 3.0 Australia licence (CC BY 3.0) (http://creativecommons.org/licenses/by/3.0/au/deed.en).

This work must be attributed as: “Commonwealth of Australia, Department of Finance and Deregulation, Review of the Insurance Arrangements of State and Territory Governments under the Natural Disaster Relief and Recovery Arrangements Determination 2011”
Copyright Notice

ISBN: 978-1-921600-95-1 (Print)
ISBN: 978-1-921600-94-4 (Online)

With the exception of the Commonwealth Coat of Arms, this work is licensed under a Creative Commons Attribution 3.0 Australia licence (CC BY 3.0) (http://creativecommons.org/licenses/by/3.0/au/deed.en).

This work must be attributed as: “Commonwealth of Australia, Department of Finance and Deregulation, Review of the Insurance Arrangements of State and Territory Governments under the Natural Disaster Relief and Recovery Arrangements Determination 2011”.

Use of the Coat of Arms
The terms under which the Coat of Arms can be used are detailed on the following website: http://www.itsanhonour.gov.au/coat-arms/.

Contact us
Inquiries regarding the licence and any use of this work are welcome at:
Insurance and Risk Management Branch
Department of Finance and Deregulation
John Gorton Building, King Edward Terrace, Parkes ACT 2600
Dear Minister

I present to you the Department of Finance and Deregulation’s (Finance) Phase 1 report on the appropriateness of the insurance arrangements of states and territories (States), in accordance with Guideline 5/2011 of the Natural Disaster Relief and Recovery Arrangements Determination 2011.

Finance will prepare a consolidated report to address suitable benchmarks for insurance and recommendations on possible changes to thresholds or rates of assistance for States, following the receipt of local government input, which is due to be submitted by 31 March 2012.

Yours sincerely

David Tune
5 March 2012
Table of contents

Table of contents .............................................................................................................................................. v
1. Executive Summary ......................................................................................................................................... 1
2. Introduction ..................................................................................................................................................... 3
   Natural Disaster Relief and Recovery Arrangements .................................................................................. 3
   Commonwealth Review of the Independent Assessments .......................................................................... 4
3. Approach ...................................................................................................................................................... 5
4. Key Findings ................................................................................................................................................ 7
   Insurance Arrangements .............................................................................................................................. 7
   Submission Process ..................................................................................................................................... 9
   Conclusions and Way Forward ....................................................................................................................11
Appendix A: Guide to Submission Requirements - clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011 .......... 14
Appendix B: Guide to Review Requirements of States’ Submissions under clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011 .................................................................................................................................20
Appendix C: KPMG Report ............................................................................................................................. 26
Appendix D: Australian Government Actuary Report .................................................................................. 104
1. Executive Summary

Natural disasters often result in large-scale expenditure by state and territory (State) governments in the form of disaster relief and recovery assistance and infrastructure restoration. The Australian Government provides financial assistance directly to the States through the Natural Disaster Relief and Recovery Arrangements (NDRRA) to help alleviate the financial burden and facilitate the provision of assistance to disaster-affected communities.

In March 2011, the then Attorney-General released an updated Determination of Terms and Conditions for the NDRRA (Determination). The updated Determination requires States to have an independent assessment of their insurance arrangements undertaken by an appropriate specialist no greater than three years apart, and to submit those assessments to the Commonwealth.

In accordance with Guideline 5/2011 of the Determination, the Department of Finance and Deregulation (Finance) has undertaken a review of the independent assessments submitted by the States in order to:

a. establish benchmarks for the appropriateness of each States’ insurance arrangements;

b. assess the appropriateness of States’ insurance arrangements, including the adequacy of States’ responses to recommendations; and

c. make recommendations as to differential thresholds or differential rates of assistance that should apply under the Determination depending on the appropriateness of individual States’ insurance arrangements.

Finance has undertaken an initial review of the independent assessments in relation to State Government assets. The conclusions and recommendations arising from that initial review are set out in this Phase 1 Report.

Finance engaged KPMG Actuarial Pty Ltd (KPMG) to review the States’ submissions and prepare a report addressing a range of issues relevant to the consideration of the adequacy of each State’s insurance arrangements. This Phase 1 Report draws substantially on the KPMG report. The Australian Government Actuary (AGA) undertook a high level review of KPMG’s report and provided independent comment on KPMG’s analysis and conclusions.

In summary, the quality, comprehensiveness and consistency of the information provided by the States in this phase of the process was varied. Whilst the information provided by States to date represents a positive start to the ongoing review of the insurance arrangements of States under the NDRRA, it is insufficient to: enable Finance to establish benchmarks; provide firm conclusions as to the adequacy of the States’ insurance arrangements; or make recommendations as to differential thresholds or different rates of assistance in this Phase 1 Report.
In addition, Finance is unable, at this stage, to form a view on the appropriateness of the insurance arrangements of all States, with the exception of the Australian Capital Territory (ACT). Further information is required from some States with respect to the availability and cost-benefit of insurance cover for currently uninsured assets.

With respect to the ACT, the KMPG review found, and Finance agrees, that its insurance arrangements are appropriate, cost-effective for both the ACT and the Commonwealth, and meet the obligations under the Determination to minimise the financial exposure of taxpayers at both levels of government.

The review found that the level of commercial insurance purchased varies significantly between the States. All States with the exception of the Northern Territory maintain a formal self-insurance arrangement by way of a managed fund or captive insurer. While captive insurers collect contributions/premiums from government departments and provide a level of pre-funding for the insurable losses of State government assets, they do not act to reduce the liability of the Commonwealth under the NDRRA and therefore taxpayers.

All States except Northern Territory and Tasmania have well-developed commercial insurance arrangements to protect their non-road assets. However, there remains a significant gap with respect to the insurance of road assets. In general, these assets are uninsured. Terrorism is also largely uninsured. Approaches to address these exposures which, in the absence of commercial insurance solutions, potentially create material liabilities for the Commonwealth under the NDRRA will be considered in Finance’s consolidated report.

States will provide Information on the insurance arrangements of local government assets by 31 March 2012. A consolidated report addressing the requirements of Guideline 5/2011 of the Determination will be prepared by Finance following receipt of the local government information and any supplementary information received from the States in response to the Phase 1 conclusions.
2. Introduction

Natural Disaster Relief and Recovery Arrangements

Australia’s size, location, geographically dispersed population and diverse geophysical and climatic conditions mean that, as a nation, we face a wide range of natural hazards. Natural disasters resulting from these hazards often result in large-scale expenditure by State governments in the form of disaster relief and recovery assistance and infrastructure restoration. Since 1974 the Australian Government, in recognition of the significant cost of natural disasters, has provided financial assistance directly to the States through the NDRRA to help alleviate the financial burden and facilitate the provision of assistance to disaster-affected communities.¹

A fundamental principle underpinning these arrangements, as stated in the Determination, is that they should not be seen as a disincentive to States to plan, mitigate, or allocate resources for natural disasters, nor discourage governments from taking out insurance to protect their assets.

The NDRRA sets out the arrangements under which the Commonwealth provides support for the States to help meet the cost of restoring or replacing essential public assets (of State and local governments) damaged or destroyed by a natural disaster. Usually the assistance is in the form of partial reimbursement of actual expenditure. States are reimbursed a proportion of expenditure that exceeds certain thresholds, which are calculated by reference to the annual general government sector revenue and grants of the State.

NDRRA Determination 2011

In March 2011, the then Attorney-General released an updated Determination of Terms and Conditions for the NDRRA. The updated Determination requires States to have reasonably adequate capital or access to capital to fund liabilities or infrastructure losses before being granted access to funds under the NDRRA. Access to capital may be through, but is not limited to, commercial insurance arrangements, a State-COAG² reinsurance fund or pool or internal State funds. The Determination also says that States have a responsibility to put in place insurance arrangements that are cost-effective for both the State and the Commonwealth, and that the financial exposure borne by taxpayers (at both levels of government) under the Determination should be minimised.

¹ In the context of the NDRRA a natural disaster means a serious disruption to a community or region caused by the impact of a naturally occurring rapid onset event that threatens or causes death, injury or damage to property or the environment and which requires significant and coordinated multiagency and community response. Such serious disruption can be caused by any one, or a combination, of the following natural hazards: bushfire; earthquake; flood; storm; cyclone; storm surge; landslide; tsunami; meteorite strike; or tornado.
² Council of Australian Governments
The Determination requires States to have an independent assessment of their insurance arrangements undertaken by an appropriate specialist and to submit those assessments to the Commonwealth at intervals of no greater than three years apart. The first assessments were due to be submitted by 30 September 2011.

Commonwealth Review of the Independent Assessments

In accordance with Guideline 5/2011 of the Determination, Finance has undertaken an initial review of the independent assessments submitted by the States in order to:

a. establish benchmarks for the appropriateness of each States’ insurance arrangements;
b. assess the appropriateness of States’ insurance arrangements, including the adequacy of States’ responses to recommendations; and
c. make recommendations as to differential thresholds or differential rates of assistance that should apply under the Determination depending on the appropriateness of individual States’ insurance arrangements.

The Government agreed to provide the States with an additional six months to provide information on the insurance arrangements relating to local government assets. Accordingly, this report provides preliminary views on the appropriateness of the insurance arrangements for State Government assets only, which are necessarily limited by the consistency and quality of the information provided by the States.

As outlined in Guideline 5/2011 of the Determination, this initial review has been guided by the following principles:

a. States have a responsibility to put in place insurance arrangements which are cost effective for both the State and the Commonwealth;
b. The financial exposure borne by taxpayers (at both levels of Government) under the NDRRA Determination should be minimised; and
c. The onus is on States to explore a range of insurance options in the market place and assess available options on a cost-benefit basis.

---

3 Submissions from all States on the insurance arrangements for State Government assets were received by the Commonwealth by 31 October 2011.
3. Approach

The requirement for independent assessments of States’ insurance arrangements necessitated the development of guidance material by Finance in order to assist States in developing their submissions in a way that would allow comparisons to be made across jurisdictions. The States were provided with an initial draft guidance document in June 2011. Finance then worked with the Australian Government Actuary (AGA) to produce a revised version that incorporated feedback from the States and increased clarity around definitions and data requirements.

The Guide to Submission Requirements - clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011 (the Guidelines) was first issued to States on 13 July 2011, followed by an updated version on 2 August 2011. The Guidelines are at Appendix A to this report.

States commented early in the process about the difficulties they expected to encounter in assessing the insurance arrangements of local government assets. States advised that the sheer number of local government authorities and their level of independence required the provision of additional time in order to address their insurance arrangements consistent with the Determination. As noted earlier, the Government agreed to provide States with an additional six months (to 31 March 2012) in which to complete the submissions for local government assets.

This initial review therefore only addresses the insurance arrangements for State Government assets. It does not consider the establishment of benchmarks or recommendations as to changes to differential thresholds or rates of assistance that should apply under the Determination. A further review will be undertaken by Finance following the receipt of local government information. This review will, subject to the quality of information received from local governments and supplementary information received from the States, as discussed later in this report, allow Finance to fully address the requirements under the Determination.

In order to have the level of specialist analysis required to undertake a review of this type, Finance engaged KPMG Actuarial Pty Ltd (KPMG) to review the States’ submissions and prepare a report addressing the following questions:

1. Has the State explored an appropriate range of insurance options available to it?
2. Has the State assessed these options on a cost-benefit basis?
3. Has the State put in place insurance arrangements which are cost-effective for both the State and the Commonwealth?
4. Has the State adequately met its obligation to minimise the financial exposure borne by taxpayers (both State and Commonwealth)?
As part of this analysis, KPMG was requested to comment on a range of issues relevant to the consideration of the adequacy of each State’s insurance arrangements. These issues are listed in the Guide to Review Requirements of States’ Submissions under clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011 at Appendix B to this report.

In conducting its review, KPMG prepared individual reports on the insurance arrangements of each State, along with summary information on the overall quality of the submissions, the risk profile of States and the claims history under the NDRRA. States were provided with their individual reports for comment on factual errors and omissions prior to the finalisation of the full KPMG report. The KPMG report is at Appendix C to this report.

The AGA subsequently reviewed the KPMG report and provided high-level independent comment on KPMG’s analysis and conclusions. The AGA’s comments are at Appendix D to this report.

This report draws substantially on the KPMG report.
4. Key Findings

The KPMG review of the appropriateness of the insurance arrangements of the States under the NDRRA Determination (Review) found that the level of commercial insurance purchased varies significantly between the States – from a totally self-insured approach to comprehensive programs that provide high levels of cover. All States with the exception of the Northern Territory maintain a formal self-insurance arrangement by way of a managed fund or captive insurer. Captive insurers collect contributions/premiums from government departments and provide a level of pre-funding for the insurable losses of State owned assets.

Captive insurance arrangements do not act to reduce the liability of the Commonwealth under the NDRRA. Amounts paid by the captive insurer for the restoration or replacement of assets contribute to the total expenditure of the State, and are therefore eligible for partial reimbursement under the NDRRA.

Insurance Arrangements

Captive insurers can purchase insurance in the commercial market to protect their capital position. This provides a stream of funding to meet losses as they occur without the need to seek additional State government funding. It is these commercial insurance arrangements that minimise the financial exposure borne by taxpayers (at both levels of Government) as NDRRA recoveries are calculated net of reinsurance recoveries.

The commercial insurance arrangements for States are detailed in Table 1 below:

<table>
<thead>
<tr>
<th></th>
<th>ACT</th>
<th>NSW</th>
<th>NT</th>
<th>QLD</th>
<th>SA</th>
<th>TAS</th>
<th>VIC</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-roads</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Roads</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Terrorism ⁵</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
</tbody>
</table>

All States except Northern Territory and Tasmania have well-developed commercial insurance arrangements to protect their non-road assets. However, there remains a significant gap with respect to the insurance of road assets. In general, these assets are uninsured. In the context of the Review, this is significant given that more than 40% of funding under the NDRRA over the past 10 years has been for road

⁴ TAS has insurance arrangements in place for the Tasmanian Museum and Art Gallery collections for losses in excess of $5m and for marine hull assets up to $10m.

⁵ Although not specifically referenced in the Determination, the then Attorney-General announced terrorism as an eligible event on 2 July 2010.
restoration and/or replacement.\textsuperscript{6} Terrorism is also largely uninsured, noting that the availability of commercial insurance to protect against terrorism risk has until recent years been quite limited.\textsuperscript{7}

Road Assets

Insurance for road assets is a complex matter. In general, traditional commercial insurance for road networks is not commonly purchased by governments, both within Australia and internationally. The availability and cost of such insurance is heavily dependent on the specific risk profile of an area, for example:

- exposure to loss, particularly through flooding;
- quality of construction;
- age and condition; and
- claims history.

Queensland’s approach to the market in 2011 met with a poor response, with commercial insurers declining to provide quotations for traditional asset-based cover. It is likely that this is a result, at least in part, to the significant level of losses in Queensland in recent years due to the impact of cyclones and flooding. Queensland’s lack of existing relationships with reinsurers and its past inconsistent buying patterns may also have contributed to the response. In contrast, the ACT and Victoria maintain commercial insurance policies for their road networks, demonstrating that cover is available in some circumstances.

Non-traditional insurance options are available in the market and offer alternative solutions to the transfer of risk.\textsuperscript{8} They are, however, generally complex arrangements to structure and negotiate, and as a result can be expensive relative to traditional insurance policies. To date, no State has fully explored these options to the point that would support a cost-benefit analysis. This is possibly due to the anticipated high cost of such options, however it should be expected that the transfer of high risk exposures will require a high premium. High premiums do not necessarily mean that the option is not cost-effective, particularly from the Commonwealth’s perspective.

Presently, commercial insurance may not provide a suitable solution for the insurance of roads for all jurisdictions, in particular Queensland and the Northern Territory where the risks are high. In the absence of commercial insurance solutions these exposures potentially create material liabilities for the Commonwealth under the NDRRA. Finance intends to further explore alternative risk transfer solutions that could be pursued with respect to road assets, beyond traditional insurance arrangements. These will be outlined in Finance’s consolidated report.

\textsuperscript{6} Figure relates to claims for both State and local government road assets as data for payments under NDRRA is not able to be split at this time.
\textsuperscript{7} Insurance for terrorism risk through the Australian Reinsurance Pool Corporation is not available for State owned assets (with the exception of assets owned by State public authorities).
\textsuperscript{8} Non-traditional options include arrangements such as parametric insurance where a pre-determined payment is made following the occurrence of a triggering event, such as amounts of rainfall or flood levels.
Insurance Decision Process

The decision process adopted by States to assess the benefits or otherwise of obtaining commercial insurance varies considerably. This is to be expected given the diversity of circumstances that the States each face. Nevertheless, it appears unusual that some States have not conducted a formal cost-benefit analysis in arriving at their insurance decisions. Further to this, in many cases States have not obtained – nor even sought – market quotations for insurance but rather have based their assessments on assumptions about the market appetite for providing coverage and/or its cost-benefit.

AGA notes in its report (Appendix D) “there is merit in a proper assessment of the value of insurance, even if the ultimate decision taken by a jurisdiction is not to purchase. This cannot be undertaken without any knowledge of the cost of insurance. As well as that, it is possible that insurance quotations might provide some insight into the underlying expected costs associated with natural disasters, which, of course, would be an important input for a jurisdiction into its risk management arrangements.”

Some of the conclusions in this report address this issue and look to improving the decision making process of States with respect to the purchase of insurance.

Submission Process

The States took varying approaches to the provision of data and general information in preparing their submissions. This resulted in a general lack of consistency between the submissions. Due to this, KPMG’s ability to conduct detailed quantitative analysis was diminished, necessitating a more qualitative approach and subjective judgement.

Essential Public Assets

A clear deficiency in most submissions was the failure to clearly define a State’s essential public assets (EPA). These assets form a critical category within the scope of the NDRRA. Most submissions assumed, explicitly or implicitly, that all assets are included hence there is a possible overstatement of assets eligible under the NDRRA.

Similarly, there might be assets which could be classified as EPA but are owned by statutory authorities or public trading enterprises which were not included in the submissions, for example water and electricity infrastructure assets.

---

9 Simply put, an essential public asset is an asset that in the State’s judgement is an integral and necessary part of its infrastructure, which if lost or damaged would severely disrupt the State’s normal functioning requiring this be addressed as a matter of urgency. See Clause 3.6.1 of the Determination.
Analysis of Insurance Arrangements

With the exception of the ACT, KPMG found that States provided minimal discussion or analysis of the support provided by past external insurance/reinsurance arrangements. Thus, it was difficult to determine the true gross expenditure with respect to past events and draw conclusions about the efficacy of insurance arrangements and the resulting benefits (if any) to the NDRRA.

Conclusions of the States' Independent Specialists

KPMG identified two main approaches adopted in preparing the submissions:

- The review was performed and signed by the State Auditor General. Under this approach, the opinion on the adequacy of the State’s insurance arrangements was focused on attesting to the quality of data submitted and information provided, benchmarked against the data requested in the Guidelines.

- The review was performed by a specialist, either a broker or actuary, with a supporting report or covering letter from the State Treasury. Under this approach, the review generally provides a clearer opinion in respect of insurance adequacy, with more in-depth discussion on the State’s risk profile and capital management policy under the optional items.

KPMG also recommended that all submissions should include a firm opinion drawn by the independent specialist on the adequacy of the State’s insurance arrangements, noting that a number did not in the first round of submissions. KPMG also recommended that the opinion should be supported by the discussions and information presented in the submission.

Future Submissions

The NDRRA requires States to submit an independent assessment of their insurance arrangements:

- At intervals no greater than three years; and

- Following any significant change in the State’s insurance arrangements or a major insurable disaster occurring in the State.

KPMG notes that this first round of submissions is a positive starting point for the ongoing review of the Commonwealth’s interaction with the States in respect of natural disaster relief under the NDRRA.

To improve the quantum, quality and consistency of data provided in future submissions, KPMG has prepared a ‘best practice’ submission template. This template sets out the information and key supporting evidence expected to support the independent assessment, including the format and breadth of the opinion provided. The template is at Appendix B to their report.
5. Conclusions and Way Forward

The information provided by States to date represents a positive start to the ongoing review of the insurance arrangements of States under the NDRRA. As noted earlier, this Phase 1 Report represents an initial review with further information required before final conclusions and recommendations can be made.

Appropriateness of Insurance Arrangements

Finance is unable, at this stage, to form a view on the appropriateness of the insurance arrangements of all States, with the exception of the ACT. Further information is required from some States with respect to the availability and cost-benefit of cover for currently uninsured assets, as set out below, as well as information in relation to local government assets.

**Australian Capital Territory (ACT)**

- The KMPG review found, and Finance agrees, that the ACT’s insurance arrangements are appropriate, cost-effective for both the State and the Commonwealth, and meet the obligations under the Determination to minimise the financial exposure of taxpayers at both levels of government. As the ACT has no local government assets its submission is complete.

**Queensland (QLD)**

- QLD is required to finalise an updated submission to address changed insurance arrangements, as required under Clause 4.6.3 (b) of the Determination.

- An overall view on the appropriateness of the insurance arrangements for QLD will be formed in the consolidated report following receipt of QLD’s updated submission and local government information.

**Victoria (VIC)**

- An overall view on the appropriateness of the insurance arrangements for VIC will be formed in the consolidated report following analysis of VIC’s local government information.

**New South Wales (NSW)**

- An overall view on the appropriateness of insurance arrangements for NSW will not be able to be formed until further information is provided including market quotes and analysis on the availability and cost-benefit of insurance for road assets and a firm conclusion from NSW’s independent specialist on the adequacy of insurance arrangements.
An overall view on the appropriateness of the insurance arrangements for NSW will be formed in the consolidated report following receipt of NSW’s additional information and analysis of NSW’s local government information.

**Northern Territory (NT)**

An overall view on the appropriateness of insurance arrangements for NT will not be able to be formed until further information is provided including market quotes and further analysis on the availability and cost-benefit of insurance, including non-road and road assets. KPMG noted that while indicative premiums had been obtained by NT as part of their cost-benefit analysis, firm market pricing had yet to be obtained.

An overall view on the appropriateness of the insurance arrangements for NT will be formed in the consolidated report following receipt of NT’s additional information and analysis of NT’s local government information.

**South Australia (SA)**

An overall view on the appropriateness of insurance arrangements for SA will not be able to be formed until further information is provided including market quotes and analysis on the availability and cost-benefit of insurance for road assets. KPMG noted that SA had already undertaken to obtain these quotes at the next reinsurance renewal.

An overall view on the appropriateness of the insurance arrangements for SA will be formed in the consolidated report following receipt of SA’s additional information and local government information.

**Tasmania (TAS)**

An overall view on the appropriateness of insurance arrangements for TAS will not be able to be formed until further information is provided including market quotes and analysis on the availability and cost-benefit of insurance, including non-road and road assets and a firm conclusion from TAS’s independent specialist on the adequacy of insurance arrangements.

An overall view on the appropriateness of the insurance arrangements for TAS will be formed in the consolidated report following receipt of TAS’s additional information and analysis of TAS’s local government information.

**Western Australia (WA)**

An overall view on the appropriateness of insurance arrangements for WA will not be able to be formed until further information is provided including market quotes and analysis on the availability and cost-benefit of insurance for road assets.
• An overall view on the appropriateness of the insurance arrangements for WA will be formed in the consolidated report following receipt of WA’s additional information and local government information.

Improving Future Submissions

Finance will issue an update to the Guidelines to incorporate the “best practice” approach developed by KPMG. The update will address key issues including:

1. All future submissions should include cost-benefit analysis of the efficacy of past reinsurance arrangements;

2. All future submissions should include a firm opinion drawn by the independent specialist on the adequacy of the State’s insurance arrangements. The opinion should be supported by the data and discussion presented in the submission.

3. Where a State makes a decision not to insure (whether for all assets or a specific class of assets such as roads), the decision should be supported by a formal cost-benefit analysis. Market quotations for insurance should be obtained and included in future submissions to support the decision.

4. States should develop and maintain a clearly defined register of EPA (including the assets of State Owned Corporations where they are classified as EPA) and include this information in all future submissions.

Consolidated Report - Next Steps

A further report will be produced later in 2012. This later consolidated report will be informed by:

a. submissions on the insurance arrangements for local government assets which are to be provided by 31 March 2012;

b. additional State information as set out earlier in this section of the report;

c. further consultation with the States; and

d. analysis by Finance of non-traditional insurance options.

Finance’s capacity to form a firm view on the appropriateness of the insurance arrangements of States, establish benchmarks for insurance and make recommendations as to differential thresholds or differential rates of assistance that should apply will be dependent on the receipt of full and complete information as discussed above.
Appendix A: Guide to Submission Requirements - clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011
Guide to Submission Requirements - clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011

Preamble

The purpose of this document is to provide an indication of the type of information and data which the Commonwealth expects states and territories (States) to provide to enable the Commonwealth to undertake an informed review of the independent assessments of States’ insurance arrangements.

Clause 4.6.4 of NDRRA Determination 2011 provides that the Commonwealth will conduct a review of each State’s independent assessment of its insurance arrangements. The Commonwealth review will be guided by the following principles:

a) a State has a responsibility to put in place insurance arrangements which are cost effective for both the State and the Commonwealth;

b) the financial exposure borne by taxpayers (at both levels of Government) under the Determination should be minimised; and

c) the onus is on a State to explore a range of insurance options in the marketplace and assess available options on a cost-benefit basis.

A State’s independent assessment should focus on financial exposure related to restoration or replacement of certain essential public assets that are at risk of being damaged as a direct result of a natural disaster\[10\] [refer clause 3.3.1a) of the 2011 Determination].

The Commonwealth will depend heavily on the information and data provided by a State in its submission. Accordingly, the information and data provided needs to be comprehensive. In general, the Commonwealth requires the following types of information and data:

Risk data

- Details of all essential public assets [refer clause 3.6.1 of the 2011 Determination].
- Details of historical losses on essential public assets as a direct result of a natural disaster.

Risk profile

- Information regarding the risk exposures of essential public assets.

\[10\] Natural Disaster currently includes terrorism related events which were added to the Determination temporarily (July 2010) pending a decision on permanent inclusion.
• Modelling undertaken in respect of financial risk exposures.

*Insurance arrangements*

• Details of current insurance arrangements in respect of essential public assets.
• Estimates of the cost of insuring currently uninsured essential public assets.

*Strategic information*

• Qualitative information relating to risk management policy and strategy (in respect of essential public assets).

**Guide to Submission Requirements - clause 4.6**

1. Under the Determination, States are required to submit an independent assessment of their insurance arrangements undertaken by an independent and appropriate specialist.

2. The submission will need to include sufficient commentary and evidence to support and substantiate a State’s assessment of the adequacy of their insurance arrangements, having regard to the provisions in the 2011 Determination, including Guideline 5/2011.

3. This guide sets out the Commonwealth’s information requirements in two sections:
   • Mandatory requirements. Each State is required to submit the information and data set out in this section.
   • Optional requirements. States are encouraged to submit additional information and data that they believe will enhance their submission. This section sets out some examples of additional information that might be considered.

4. Where information cannot be provided, or can only be provided in part, supporting reasons should be included as well as advice on when the additional information will be available.

**Mandatory Requirements**

**Asset registers**

5. States are required to submit a complete essential public asset register, giving details of essential public assets [refer clause 3.6.1 of the 2011 Determination].

6. For this purpose, essential public assets are to be split between roads and other essential public assets. Details required include:
   • description of asset;
   • location; and
   • estimate of replacement value.
7. States are required to collate and submit a separate essential public asset register in respect of local government essential public assets [refer 3.6.2 a) ii) of the 2011 Determination] within their jurisdiction.

**Eligible disasters**

8. States are required to submit a complete list of past eligible disasters [refer clauses 2.1, 4.2 and 5.4 of the 2011 Determination] that they have previously notified for NDRRA purposes.

**Claims/Loss history**

9. States are required to submit details of the historical costs of restoring or replacing essential public assets damaged or destroyed as a direct result of a natural disaster.

10. This information is required in respect of the 15 financial years from to 1996/97 to 2010/11.

11. The required information includes:

   - Total expenditure incurred by the state in each financial year (before any NDRRA recoveries) split between roads and other essential public assets;
   - Estimated future expenditure (yet to be incurred) in respect of past natural disasters split between roads and other essential public assets;
   - Detailed information on costs attributable to specific assets (other than roads) where the cost of restoring or replacing any individual asset has exceeded $1m:
     - description of the asset;
     - asset ownership (State or Local Government);
     - name of the natural disaster;
     - date of the loss;
     - total cost of restoration or replacement;
     - amount already paid (broken down by financial year); and
     - amount yet to be paid.

**Support received under NDRRA**

12. Each state is required to submit details of payments received under the NDRRA in each of the 15 financial years from 1996/97 to 2010/11 in respect of restoration or replacement of essential public assets broken down by Natural Disaster.
13. Each state is required to submit estimates of payments expected to be made under the NDRRA in future years in respect of restoration or replacement of essential public assets damaged or destroyed as a direct result of a past natural disaster, again broken down by Natural Disaster.

**Insurance arrangements**

14. Each State is required to submit details of its current insurance arrangements as they apply to essential public assets (details of any proposed/possible insurance arrangements, as a result of any recent approaches to the market which have not yet led to new insurance arrangements being finalised, should also be included separately here, if applicable).

15. Comprehensive analysis that supports the design of the State’s adopted insurance strategy including any financial modelling that has been undertaken.

16. Current commercial insurance information in respect of essential public assets:
   - Full details of the most recent approach to the market including all policies and premiums offered;
   - Details of the policies in place for the current year and details of the essential public assets covered;
   - Policy expiry dates;
   - Any exclusions or sub-limits for natural disasters;
   - Deductible levels; and
   - Limits of liability.

17. Details of all uninsured essential public assets, including:
   - Approaches made to the market to source insurance cover and the policies and premiums offered (if any);
   - Comprehensive analysis supporting the decision not to insure these assets including any financial modelling which has been undertaken; and
   - If there have been no approaches to market, reasons to support this decision.

18. Managed fund information:
   - Details of interaction between States’ managed fund arrangements and losses to essential public assets that are a direct result of a natural disaster; and
   - Specifically, whether any payments from the managed fund in respect of such losses are State expenditure for the purpose of clause 5.2.1 of the 2011 Determination.
19. Other capital

- Details of any other capital that may be available to the State to fund the costs of replacement or restoration of essential public assets following a natural disaster which would not be counted as State expenditure for the purpose of clause 5.2.1 of the 2011 Determination.

**Risk management information**

20. Each State is required to provide a statement of their risk management policy and strategy. The statement should focus on management of the financial risk associated with damage to, or destruction of, essential public assets as a direct result of a natural disaster.

21. This statement should set out the State’s risk management policy, including the rationale for its policy (within the context of clause 3.3.1a) of the 2011 Determination. It should also set out the strategy that the State adopts to give effect to its risk management policy, again including rationale.

**Optional information**

22. It is open to States to provide further information which they believe would enhance their submission. This might include information regarding the risk profile of their essential public assets, with a focus on financial exposure related to damage to essential public assets from a natural disaster.

23. The sort of information that might be considered includes any assessment of the potential costs associated with natural disaster risks. This would cover the type of natural disaster that the State is exposed to, and an indication of the costs that might arise for natural disasters of different frequency. Appropriate frequencies might include: 1 in 10 year event, 1 in 20 year event, 1 in 100 year event, and maximum possible event.
Appendix B: Guide to Review Requirements of States’ Submissions under clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011
Guide to Review Requirements of States’ Submissions under clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011

The purpose of this document is to provide an overview as to the areas the Commonwealth would expect the successful reviewer (Reviewer) to consider and report on in their review of each state and territory’s (States) independent assessment of their insurance arrangements under clause 4.6 of the NDRRA Determination 2011.

These reviews should be conducted in the context of the key principles of the Commonwealth’s evaluation of the States’ insurance arrangements:

d) a State has a responsibility to put in place insurance arrangements which are cost effective for both the State and the Commonwealth;

e) the financial exposure borne by taxpayers (at both levels of Government) under the Determination should be minimised; and

f) the onus is on a State to explore a range of insurance options in the marketplace and assess available options on a cost-benefit basis.

The Reviewer will be required to consider each State’s independent assessment and form an opinion as to whether or not the State has satisfactorily addressed these principles.

This document should be used as a guide as to how the Reviewer might structure its report.

The Reviewer should outline the State’s risk profile. The Reviewer should describe the State’s risk exposure:

- What level of exposure to natural disaster risk does the State face in terms of potential damage to essential public assets?

The Reviewer should comment on:

- Natural disaster experience
  - Summarise the State’s experience with eligible natural disasters. What types of natural disaster has the State experienced historically? How often have eligible disasters occurred and how often are they expected to occur?
• Asset exposure
  – How does the State’s essential public asset register look? Is it complete? How are these assets concentrated? What is the split between roads and other assets in terms of replacement value for different areas? Are the majority of essential public assets the responsibility of the State or Local Governments?

• Claims/Loss history
  – How significant have natural disasters been in respect of damage to essential public assets? How geographically concentrated have losses been from eligible natural disasters? Do relationships exist between disaster class and types of losses? What sort of split exists in claims between asset classes (particularly between roads and other assets)?

• Support received under NDRRA
  – What is the relationship between support received under the NDRRA and losses related to essential public assets caused by an eligible natural disaster? How often does the State break its 1st threshold in relation to expenditure on reparation and replacement of essential public assets?

The Reviewer should determine whether the State has explored a range of insurance options in the marketplace and assessed available options on a cost-benefit basis. In conjunction with discussions with the Department of Finance and Deregulation (Finance) and insurance brokers if required, benchmarks should also be established for the appropriateness of each States’ insurance arrangements. Examples of elements which may be incorporated in this section include:

• Current insurance arrangements
  – The Reviewer should provide an overview of any insurance arrangements currently in place.
  – Do these manage exposure to natural disasters in a cost effective manner for both the State and the Commonwealth? Is the cover provided by these arrangements appropriate?
  – Does the State have any uninsured essential public assets? What asset classes are included in this group? The Reviewer should assess the suitability of any approaches to market made by the State in respect of these assets and why insurance programs were not put in place for these assets.
  – Is the State’s decision not to insure these assets consistent with its obligations under the key principles?
In the opinion of the Reviewer, has the State achieved the objective of using insurance to minimise the financial exposure borne by tax payers at both levels of Government in a cost effective manner?

If not, then the Reviewer should set out how the State’s insurance arrangements could be adjusted to satisfy this condition.

- Managed funds and other capital
  - Does the State have a managed fund, formal self-insurance arrangements or any other capital sources in place to deal with large losses caused by natural disasters? How do these schemes deal with losses to essential public assets that are a direct result of natural disasters and do payments made from these sources act to reduce the Commonwealth’s potential liabilities under the NDRRA?

- Risk management information
  - What approach does the State take towards risk management?
  - Is this approach consistent with its obligations under the key principles?

- Optional Information
  - If additional information has been provided by the State in their submission this should be considered by the Reviewer.
  - Is this information relevant? How does this information impact or change conclusions relating to the State’s ability to bear the financial exposure of essential public assets to damage as a result of a natural disaster?

**Stage 1**

Based on the Reviewer’s analysis of the State’s independent assessment and supporting material the Reviewer should respond to each of the following questions, providing supporting argument and analysis as required:

- Has the State explored an appropriate range of insurance options available to it?
- Has the State assessed these options on a cost-benefit basis?
- Has the State put in place insurance arrangements which are cost effective for both the state and the Commonwealth?
- Has the State adequately met its obligation to minimise the financial exposure borne by taxpayers (both State and Commonwealth)?
If the answer to any of these questions is ‘no’ or ‘not fully’, the Reviewer should make recommendations on what course of action could be pursued in order to bring the State’s insurance arrangements in line with the requirements under the NDRRA Determination 2011.

**Stage 2**

Following the submission of the Reviewer’s reports, the Commonwealth Attorney-General may make recommendations to the States in light of the report. In this case, the Reviewer may be called upon to assess the adequacy of the States’ responses to these recommendations.

Additionally, the Reviewer should make recommendations regarding possible differential thresholds or rates of assistance that should apply under the NDRRA Determination 2011 if the Commonwealth is not satisfied with a State’s response to any recommendations made by the Attorney-General in respect of insurance arrangements.
Appendix C: KPMG Report
6 March 2012
This report contains 76 pages
Contents

1 Executive Summary 1
  1.1 Our Scope 1
  1.2 Our Findings 2
    1.2.1 Current Insurance Arrangements 3
    1.2.2 Risk Profile by EPA 4
    1.2.3 Natural Disaster Exposure 5
    1.2.4 Past Claims Experience and NDRRA Support 6
    1.2.5 Capital Management Policy 10
  1.3 Conclusions and Recommendations 10
  1.4 Reliances and Limitations 11

2 Introduction 12
  2.1 Natural Disaster Relief and Recovery Arrangements (NDRRA) 12
  2.2 States’ Submissions 13
  2.3 General Approach and Methodology 15

3 Overview of the Quality of States’ Submissions 17
  3.1 Who Performed the Assessment? 17
  3.2 Information Provided and Discussion of Risks 17
    3.2.1 Exposures 17
    3.2.2 Past Claims Experience 18
    3.2.3 Current Insurance Arrangements 18
    3.2.4 Uninsured Assets 18
    3.2.5 Capital Management Policy 18
    3.2.6 Risk Management Policy 19
    3.2.7 Financial Modelling 19
    3.2.8 Conclusion of the Independent Assessment 19

4 Australian Capital Territory (ACT) 20
  4.1 Who Performed the Assessment? 20
  4.2 Current Insurance Arrangements 20
  4.3 Declared Assets 21
  4.4 Natural Disaster Experience 21
  4.5 Claims History and Past NDRRA Support 22
  4.6 Capital Management 23
  4.7 Risk Management 23
  4.8 Conclusion 23
  4.9 Recommendations 24

5 New South Wales (NSW) 25
  5.1 Who Performed the Assessment? 25
5.2 Current Insurance Arrangements 25
5.3 Declared Assets 26
5.4 Natural Disaster Experience 26
5.5 Claims History and Past NDRRA Support 27
5.6 Capital Management 28
5.7 Risk Management 28
5.8 Conclusion 28
5.9 Recommendations 29

6 Victoria (VIC) 31
6.1 Who Performed the Assessment? 31
6.2 Current Insurance Arrangements 31
6.3 Declared Assets 31
6.4 Natural Disaster Experience 32
6.5 Claims History and Past NDRRA Support 33
6.6 Capital Management 34
6.7 Risk Management 34
6.8 Conclusion 35
6.9 Recommendations 36

7 Queensland (QLD) 37
7.1 Who Performed the Assessment? 37
7.2 Current Insurance Arrangements 37
7.3 Declared Assets 38
7.4 Natural Disaster Experience 38
7.5 Claims History and Past NDRRA Support 39
7.6 Capital Management 40
7.7 Risk Management 40
7.8 Conclusion 40
7.9 Recommendations 41

8 South Australia (SA) 42
8.1 Who Performed the Assessment? 42
8.2 Current Insurance Arrangements 42
8.3 Declared Assets 43
8.4 Natural Disaster Experience 43
8.5 Claims History and Past NDRRA Support 44
8.6 Capital Management 45
8.7 Risk Management 45
8.8 Conclusion 45
8.9 Recommendations 47

9 Western Australia (WA) 48
9.1 Who Performed the Assessment? 48
1 Executive Summary

Natural disasters often result in large-scale expenditure by state and territory (State) governments, imposing financial burdens on States’ budgets. To alleviate the burden on the States from eligible disasters assistance from the Commonwealth government was formalised in 1974 under the Natural Disaster Relief and Recovery Arrangements Determination.

Due to a number of significant natural disasters across a number of States in 2011, the Determination was amended to incorporate requirements for States to submit independent assessments of their insurance arrangements, resulting in the release of the Natural Disaster Relief and Recovery Arrangements Determination 2011 (Determination). Further details on the framework and operation of the Determination are set out in the Introduction section of this Report.

1.1 Our Scope

The Department of Finance and Deregulation (Finance) has agreed undertake an independent review of State insurance arrangements (the Review) in accordance with Guideline 5/2011 of the Determination. KPMG Actuarial Pty Ltd (KPMG) has been engaged by Finance to perform the Commonwealth review on the States’ submissions on behalf of Finance.

Based on the States’ submissions, KPMG has been asked to respond to the following questions, providing supporting argument and analysis as required:

- Has the State explored an appropriate range of insurance options available to it?
- Has the State assessed these options on a cost-benefit basis?
- Has the State put in place insurance arrangements which are cost effective for both the State and the Commonwealth?
- Has the State adequately met its obligation to minimise the financial exposure borne by taxpayers (both State and Commonwealth)? and
- Has the submission provided evidence of the items above?

It is important to note the above questions relate solely to the insurance arrangements of the States. No comment is made in respect of other aspects of risk management or risk mitigation and any conclusions or comments on the States’ insurance arrangements do not infer comment or conclusion on any other aspect of risk mitigation.

As agreed with Finance, the following matters are considered to be outside the scope of this Report:

- All analysis will be performed on the information available. No modelling will be performed by KPMG to ascertain the required information.
- KPMG will not specify recommendations on the following matters:
  - The equity of funding between the States under the Determination; and
  - The appropriateness and effectiveness of the Determination.
As agreed with Finance, this Report concentrates on the insurance arrangements of State-owned assets and is an interim report pending the local governments’ submissions, due on 31 March 2012.

As agreed with Finance, items that are commercial in confidence from States’ submissions have not been included in this Report in accordance with Clause 4.6.2 of the Determination.

Details relating to forecast NDRRA support will be addressed as part of the consolidated report on State and local government arrangements. We have therefore been requested not to present details relating to forecast NDRRA support for 2012 and beyond at this stage.

1.2 Our Findings

The first round of submissions sets out a positive starting point for the ongoing review of the Commonwealth’s interaction with the States in respect of natural disaster relief under the NDRRA.

The Review shows wide interpretation and different treatments by the States in respect of both mandatory and optional elements of the submission. This lack of consistency and detail is a limiting factor in the quantitative examination. To provide an independent, objective and consistent basis for the Review, we have prepared a ‘best practice’ submission template which draws on the strengths of each submission. This template sets out the information and key supporting evidence expected to support the independent assessment, including the format and breadth of the opinion provided. From that, we have examined whether the submission meets the review requirements we have been given (specifically the questions we have been asked to respond to as set out in the “Our Scope” section of this Report).

Overall, the quality of the States’ submissions can be summarised as follows (further details are set out in the “Overview of the Quality of States’ Submissions” section of this Report):

- Most submissions do not clearly define or quantify “Essential Public Assets” (EPA). Generally, submissions either put this out of scope or assume, explicitly or implicitly, that all assets are included, possibly overstating assets eligible under the NDRRA. The States do not appear to have a readily available inventory of EPA under the NDRRA. This round of submissions provides a starting point for the improvement of this data.

- Some of the States have elected to transfer risks of lower frequency and moderate severity (such as large losses or catastrophes) to external reinsurers (where a captive insurer has been set up) or to insurers (where a captive insurer is not in place) at a cost. For these States, it is noted generally there is minimal discussion on the past efficacy of the reinsurance/insurance arrangements and the benefits (if any) to the NDRRA with respect to past events.

- Not all State assets are insured through reinsurance or insurance. For civil assets in particular, such as roads, bridges, storm water, water and sewerage and electricity distribution, there is a common theme of non-insurance. The general response to not insuring these assets is:
  - There is no appetite in the insurance market to underwrite these risks; and/or
  - It is not cost effective.
In such instances, there is typically limited or no factual evidence presented with respect to these assets that the State has approached the market, obtained competitive quotes and/or performed any cost-benefit analysis to arrive at this conclusion. It is also noted that insurance of civil assets, including roads, has been purchased in some instances.

- With respect to the States’ current capital management policy, the presented treatments range from having a specific policy in place prior to any event, to funding decisions that are determined post-event and on a case-by-case basis. Specific policies generally include a defined funding ratio or range, or current capital position in relation to the Australian Prudential Regulation Authority (APRA) standard for commercial insurers, complemented by a defined mechanism for managing capital, should the capital position fall outside the target range.

- Not all submissions provided detailed discussions on the risk management framework that the State has in place, in particular the management of financial impacts. In some cases, the level of risk management/mitigation practices are inferred from the existence and depth of discussion of the State’s understanding of its own exposures and risk profile, and the resultant capital management policy.

- Not all submissions have a firm opinion drawn on the adequacy of the insurance arrangements and for some, the opinion could be better supported by the discussions and information presented in the submission.

A summary of the States’ submissions, presenting the following factors is set out in the section below:

- Current insurance arrangements.
- Risk profile by declared values of EPA.
- Exposure to natural disaster.
- Past claims experiences and NDRRA support.
- Capital management approach / assess to other capital.
- Our conclusions and recommendations.

1.2.1 Current Insurance Arrangements

Table 1 sets out the current insurance arrangements for each State.

<table>
<thead>
<tr>
<th>Insurance Arrangement</th>
<th>ACT</th>
<th>NSW</th>
<th>VIC</th>
<th>QLD</th>
<th>SA</th>
<th>WA</th>
<th>TAS</th>
<th>NT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Self Insurance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Arrangement?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captive Insurer</td>
<td>ACTA</td>
<td>TMF</td>
<td>VMIA</td>
<td>QGIF</td>
<td>SAI</td>
<td>RiskCover</td>
<td>TRMF</td>
<td>N/A</td>
</tr>
<tr>
<td>External Reinsurance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Arrangement?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It can be observed from the table above:

- All but one State has a formal self insurance structure through a captive insurer.
- It should be noted that typically the captive insurer or external reinsurance arrangements do not cover all of the States’ assets.
- Most of the States (with the exception of TAS) that have a captive insurer have chosen to transfer risks of lower frequency and moderate severity (such as large losses or catastrophes) to external reinsurers at a cost.
- For QLD, new reinsurance arrangements were put in place after the submission with a commencement date 1 November 2011.

1.2.2 Risk Profile by EPA

Table 2 sets out the assets declared in the States’ submissions.

<table>
<thead>
<tr>
<th>State</th>
<th>Property</th>
<th>Civic Assets</th>
<th>Civil Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Roads</td>
<td>Bridges</td>
</tr>
<tr>
<td>ACT</td>
<td>12,509</td>
<td>3,232</td>
<td>1,176</td>
</tr>
<tr>
<td>NSW</td>
<td>158,181</td>
<td>39,610</td>
<td>14,085</td>
</tr>
<tr>
<td>VIC</td>
<td>78,913</td>
<td>37,260</td>
<td>3,761</td>
</tr>
<tr>
<td>QLD</td>
<td>46,027</td>
<td>40,106</td>
<td>8,298</td>
</tr>
<tr>
<td>WA</td>
<td>57,137</td>
<td>20,331</td>
<td>4,473</td>
</tr>
<tr>
<td>SA</td>
<td>59,552</td>
<td>17,429</td>
<td>2,331</td>
</tr>
<tr>
<td>TAS</td>
<td>5,928</td>
<td>3,886</td>
<td>1,473</td>
</tr>
<tr>
<td>NT</td>
<td>8,658</td>
<td>3,589</td>
<td>779</td>
</tr>
<tr>
<td>Total</td>
<td>404,576</td>
<td>162,211</td>
<td>35,200</td>
</tr>
</tbody>
</table>

In comparing the assets between the States, it should be noted there are inconsistencies in the type of assets included in the submission. This is mainly due to:

- Different interpretations by States as to what constitutes an EPA and in the valuation basis of these assets.
- Inclusion or exclusion of State Owned Corporation assets which could be deemed as EPA in special circumstances under Clause 3.6.3 of the Determination.

The types of assets included in the submission, and key differences between submissions, are clarified below:

- For NSW, it should be noted most underground pipes are not insured and the values of underground pipes have not been provided in the submission. Hence, the percentage of uninsured assets is in fact higher than the 17% stated in the table above.
- For VIC, storm water assets appear to be local government assets which are expected to be covered in the local government submission. Some water assets (for example, Melbourne Water) are statutory authority owned assets and therefore are not included in the submission.
• For QLD, water assets are Government Owned Corporations’ assets and therefore are not included in the submission.

• For SA, all water assets (including storm water assets) are included but do not appear to be separately identified in the submission.

• For WA, the uninsured assets include roads, bridges, water and sewerage, storm water and electricity infrastructure. In Table 2, electricity infrastructure is classified under Property. The value of uninsured assets of $61.806bn shown in the table includes electricity infrastructure.

• For TAS, storm water and water assets are not owned by the State and thus are not considered in the submission. In addition, State owned marine hull assets and the Tasmanian Museum and Art Gallery Collections are re-insured commercially. However, a breakdown of these assets has not been provided in the submission. Hence, the percentage of uninsured assets is in fact lower than the 100% stated in the table above.

• For NT, all assets are self-insured with no external insurance cover. The only exceptions are for assets owned by the Power and Water Corporation (PWC) and Darwin Port Corporation (DPC). A breakdown of the assets owned by PWC and DPC by type of asset has not been provided in the submission. Hence, in Table 2, all assets owned by PWC and DPC are classified under Property. In addition, these insurance arrangements exclude water and sewerage assets and electricity infrastructures. Hence, the percentage of uninsured assets is in fact higher than the 69% stated in the table above.

It can be also noted from Table 2 that road assets are approximately 20% to 30% of overall State assets (as declared in the submissions), which for most States are not insured under their captive insurer or insurance/reinsurance arrangements. From the States’ submissions, there is a common assertion that the commercial insurance options are either not available or cost prohibitive for civil assets. However, the submissions typically provide no suggestion or confirmation that approaches have been made to market (with the exception of SA) to support these assertions. It appears NDRRA is acting as the insurer of most of Australia’s roads and bridges.

Notwithstanding these assertions, VIC and ACT have been successful in insuring civil assets. 42% of QLD assets are roads and currently uninsured. As seen in the later sections of this Report, claims for roads is one of the major components of the NDRRA support provided to date.

1.2.3 Natural Disaster Exposure

Table 3 sets out a qualitative indication of each State’s level of exposure to natural disaster, based on past claims experience (which may or may not have drawn on the support of NDRRA) and, for earthquakes, identified exposures. Two ticks indicate high exposure to the particular peril.
A number of observations can be made from Table 2:

- With the exception of earthquake, the level of exposure for each type of peril has been determined by the natural disaster claims experience of each State.

- Other than the 1989 Newcastle earthquake in NSW, another significant earthquake event is yet to eventuate for the States exposed to earthquake risk. It is important to note for most of these States (specifically but not limited to NSW and SA) underground pipes, sewer assets and electricity infrastructure are generally not insured or reinsured. If and when an earthquake event occurs, it is likely NDRRA will be the first point of support.

- NSW is exposed to a number of perils. However, the average size of natural disasters to date is modest when compared to QLD. By contrast, QLD is exposed to both frequency and large average financial impact for natural disasters. NT has similar exposures but with a somewhat lower average financial impact.

1.2.4 Past Claims Experience and NDRRA Support

Table 4 summarises the historical NDRRA support provided to each State relating to natural disaster events to 30 June 2011, as declared in their submissions. It should be noted the figures in Table 4:

- Include the support provided for the restoration of EPA and financial hardship/community recovery. From the information provided, it is not possible to separate out the support provided for restoration of EPA only.

- Include the support provided for local governments as NDRRA support is based on the combined position of State and local government claims.

- Are interpreted to be net of reinsurance recoveries as NDRRA support is provided after recoveries. However, this is not stated clearly in the States’ submissions.

- Reflect the figures provided in the States’ submissions.
Table 4 – Historical NDRRA Support

<table>
<thead>
<tr>
<th>Year Ending</th>
<th>ACT</th>
<th>NSW</th>
<th>VIC</th>
<th>QLD</th>
<th>WA</th>
<th>SA</th>
<th>TAS</th>
<th>NT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0.0</td>
<td>81.7</td>
<td>0.0</td>
<td>29.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4.4</td>
<td>115.2</td>
</tr>
<tr>
<td>2003</td>
<td>16.0</td>
<td>53.2</td>
<td>30.9</td>
<td>3.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>103.7</td>
</tr>
<tr>
<td>2004</td>
<td>0.0</td>
<td>0.1</td>
<td>1.0</td>
<td>4.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
<td>6.1</td>
</tr>
<tr>
<td>2005</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>22.8</td>
<td>0.3</td>
<td>2.3</td>
<td>0.0</td>
<td>0.2</td>
<td>25.8</td>
</tr>
<tr>
<td>2006</td>
<td>0.0</td>
<td>0.6</td>
<td>0.2</td>
<td>47.4</td>
<td>0.5</td>
<td>0.3</td>
<td>0.6</td>
<td>3.1</td>
<td>52.7</td>
</tr>
<tr>
<td>2007</td>
<td>0.0</td>
<td>0.5</td>
<td>50.6</td>
<td>157.8</td>
<td>0.0</td>
<td>0.6</td>
<td>0.0</td>
<td>7.2</td>
<td>216.7</td>
</tr>
<tr>
<td>2008</td>
<td>0.0</td>
<td>12.6</td>
<td>4.5</td>
<td>90.1</td>
<td>0.2</td>
<td>1.3</td>
<td>0.0</td>
<td>8.1</td>
<td>116.7</td>
</tr>
<tr>
<td>2009</td>
<td>0.0</td>
<td>3.8</td>
<td>226.4</td>
<td>170.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4.2</td>
<td>404.7</td>
</tr>
<tr>
<td>2010</td>
<td>0.0</td>
<td>58.3</td>
<td>102.0</td>
<td>354.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.0</td>
<td>2.4</td>
<td>517.3</td>
</tr>
<tr>
<td>2011</td>
<td>0.0</td>
<td>71.9</td>
<td>126.1</td>
<td>1,288.8</td>
<td>0.8</td>
<td>0.1</td>
<td>8.9</td>
<td>7.7</td>
<td>1,504.2</td>
</tr>
<tr>
<td>2002 - 2011</td>
<td>16.0</td>
<td>282.8</td>
<td>541.7</td>
<td>2,168.7</td>
<td>2.0</td>
<td>4.7</td>
<td>9.5</td>
<td>37.7</td>
<td>3,063.1</td>
</tr>
</tbody>
</table>

A few observations can be made on the level of support provided under the NDRRA across the States from Table 4:

- Some form of support has been incurred under the NDRRA on a yearly basis. The commitment in years 2012 to 2013 is expected to be very high, and likely to exceed levels of support previously provided, due to the number and magnitude of natural disasters occurring in 2010 and 2011.

- On a State basis, yearly support has been provided to QLD since 2002 and NT since 2004. (NT support in 2003 rounds to $0.0m)

- The quantum of support provided to QLD has been growing since 2008. This could be due to a combination of:
  - Increased frequency of events.
  - Higher severity events.
  - QLD had no reinsurance arrangements in place until 1 November 2011. Hence, the NDRRA has been acting as QLD’s insurer prior to this date and, in particular, the impact of large events has not been reduced by external insurance.
  - Possibly a higher impact of events with increasing population, housing development and infrastructure in high risk areas.

It appears that to date the NDRRA has been acting as the default reinsurer for several States.

As noted above, QLD had no reinsurance arrangements in place until 1 November 2011. Hence, the NDRRA has been acting as QLD’s insurer prior to this date. Similar observations can be made for NT, but to lesser extent.

For States such as SA, TAS, and ACT, there has been relatively minimal support under the NDRRA. The level of support does not necessarily relate to the frequency of events as shown in Table 5 below.
Table 5 – Number of Eligible Events

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>ACT</th>
<th>NSW</th>
<th>VIC</th>
<th>QLD</th>
<th>WA</th>
<th>SA</th>
<th>TAS</th>
<th>NT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>2003</td>
<td>1</td>
<td>11</td>
<td>13</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
<td>9</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>2005</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>2006</td>
<td>3</td>
<td>22</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>44</td>
</tr>
<tr>
<td>2007</td>
<td>4</td>
<td>28</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>53</td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
<td>13</td>
<td>1</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>19</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>2010</td>
<td>1</td>
<td>43</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>59</td>
</tr>
<tr>
<td>2011</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>45</td>
</tr>
<tr>
<td><strong>2002 - 2011</strong></td>
<td><strong>16</strong></td>
<td><strong>168</strong></td>
<td><strong>42</strong></td>
<td><strong>53</strong></td>
<td><strong>41</strong></td>
<td><strong>11</strong></td>
<td><strong>2</strong></td>
<td><strong>35</strong></td>
<td><strong>368</strong></td>
</tr>
</tbody>
</table>

- For SA, there were no eligible disasters prior to 2005.
- Apart from NSW, the number of natural disasters has been quite stable across the years and between the States. This may suggest the main factor contributing to the level of NDRRA support is the size of the event and related magnitude of the financial impact, rather than the frequency of events. However, we also note the interactive nature of events relative to the NDRRA thresholds and that, as a result, a higher frequency of events also has the potential to increase NDRRA support levels.
- For NSW, there is a relatively large variation in the number of disasters from year to year which does not appear to impact the level of NDRRA support. This may suggest the financial impact of each event has been relatively limited and/or most of the impact has been absorbed by commercial insurance arrangements. Only the impact of extreme events, and expenditure relating to financial relief on personal hardship and community recovery, are supported by the NDRRA.
- For SA and ACT, the low level of past NDRRA support is most likely due to a combination of low frequency of natural disasters and the existence of commercial insurance arrangements.
- For TAS, the low level of past NDRRA support is due to the low frequency of events and impact of these events.

Taking into consideration that States have differing exposures to natural disasters, the level of support provided under the NDRRA, expressed as a percentage of the expenditure incurred by the States in restoring EPAs and providing financial relief for personal hardship and community recovery provides a valuable comparison. This is set out in Table 6 below.
Table 6 – NDRRA Support – % of Eligible Expenditure

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>ACT</th>
<th>NSW</th>
<th>VIC</th>
<th>QLD</th>
<th>WA</th>
<th>SA</th>
<th>TAS</th>
<th>NT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>41% ^</td>
<td>0%</td>
<td>33% ^</td>
<td>50%</td>
<td></td>
<td></td>
<td>39% ^</td>
<td></td>
<td>38%</td>
</tr>
<tr>
<td>2003</td>
<td>42% ^</td>
<td>32% ^</td>
<td>29% *</td>
<td>7% *</td>
<td></td>
<td></td>
<td>1%</td>
<td></td>
<td>32%</td>
</tr>
<tr>
<td>2004</td>
<td>0%</td>
<td>50%</td>
<td>9% *</td>
<td></td>
<td></td>
<td></td>
<td>5%</td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td>2005</td>
<td>0%</td>
<td>10%</td>
<td>26% ^</td>
<td>50%</td>
<td>41%</td>
<td></td>
<td>4%</td>
<td></td>
<td>21%</td>
</tr>
<tr>
<td>2006</td>
<td>1%</td>
<td>17%</td>
<td>35% ^</td>
<td>50%</td>
<td>7%</td>
<td>9% **</td>
<td>27% ^</td>
<td></td>
<td>24%</td>
</tr>
<tr>
<td>2007</td>
<td>1%</td>
<td>33% ^</td>
<td>55% ^</td>
<td>50%</td>
<td>31%</td>
<td></td>
<td>42% ^</td>
<td></td>
<td>39%</td>
</tr>
<tr>
<td>2008</td>
<td>12% **</td>
<td>10%</td>
<td>44% ^</td>
<td>50%</td>
<td>5% *</td>
<td></td>
<td>42% ^</td>
<td></td>
<td>29%</td>
</tr>
<tr>
<td>2009</td>
<td>4% **</td>
<td>50% ^</td>
<td>54% ^</td>
<td>0%</td>
<td>0%</td>
<td></td>
<td>28% ^</td>
<td></td>
<td>44%</td>
</tr>
<tr>
<td>2010</td>
<td>27% ^</td>
<td>48% ^</td>
<td>63% ^</td>
<td>2%</td>
<td>4%</td>
<td></td>
<td>18% ^</td>
<td></td>
<td>51%</td>
</tr>
<tr>
<td>2011</td>
<td>29% ^</td>
<td>42% ^</td>
<td>71% ^</td>
<td>2%</td>
<td>1%</td>
<td>37% ^</td>
<td>34% ^</td>
<td></td>
<td>61%</td>
</tr>
<tr>
<td>2002-2011</td>
<td>42%</td>
<td>23%</td>
<td>42%</td>
<td>60%</td>
<td>3%</td>
<td>8%</td>
<td>31%</td>
<td>30%</td>
<td>48%</td>
</tr>
</tbody>
</table>

* 1st threshold has been breached but not the 2nd threshold
^ Both 1st and 2nd thresholds have been breached
** Claim against Clause 5.8.2 of the NDRRA Determination 2011 for a higher level of support
Both 1st and 2nd thresholds have not been breached, claiming Non Category B payments through Clause 5.8.1(a) of the NDRRA Determination 2011

It can be noted from Table 6:

- In recent years, NDRRA support is up to 71% for QLD and 42% for NT of the eligible expenditures incurred. This high level of support is mainly because QLD and NT have consistently exceeded the two financial thresholds for assistance since 2006 (noting the Commonwealth’s liability is material (75%) and unlimited once the second threshold is exceeded).

- For other States with reinsurance, lower contribution rates are noted but not to a significant degree. This is mainly due to the inclusion of the expenditures relating to providing financial hardship relief and community recovery (relating to the social intent of the NDRRA) to determine eligibility of NDRRA support, and the level of NDRRA support provided to uninsured assets such as roads and bridges, which is material.

The level of NDRRA support provided to roads is illustrated in Table 7 below. Expenditure information split by road and non-road assets was only provided by NSW, QLD and NT.
Table 7 – Proportion of Historical NDRRA Support Relating to Road Assets

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>NDRRA Support - Percentage relating to Roads</th>
<th>NSW + QLD + NT Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACT</td>
<td>NSW</td>
</tr>
<tr>
<td>2002</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>0%</td>
<td>26%</td>
</tr>
<tr>
<td>2009</td>
<td>0%</td>
<td>26%</td>
</tr>
<tr>
<td>2010</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>2002 - 2011</td>
<td>54%</td>
<td>42%</td>
</tr>
</tbody>
</table>

* Based on the weighted average of the years 2008 to 2011
** Based on the weighted average of the years 2002 to 2011
NDRRA support relating to roads is approximated in the same proportion of expenditure.

Based on the three States which have expenditure information split by road and non-road assets, it is noted more than 41% of the total NDRRA support is related to the restoration of roads. This implies that the NDRRA has been acting as the default natural disaster insurer for roads in particular.

1.2.5 Capital Management Policy

Table 8 summarises the capital management policy for each State.

Table 8 – Capital Management Policy by State

<table>
<thead>
<tr>
<th>Capital Management Policy</th>
<th>NS</th>
<th>NT</th>
<th>WA</th>
<th>SA</th>
<th>TAS</th>
<th>NT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific policy - target funding</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ratio and funding management plan</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Pre-funding (contributions)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

All States with a captive insurer have a pre-funding policy in place. Other than that, pre-identified access to capital under extra-ordinary circumstances varies from that of a level of pre-funding to that of funding decisions being made after the event.

1.3 Conclusions and Recommendations

As this is the first round of submissions, it is expected there will be improvement areas for each State. Our recommendations for each State are set out in the later sections of this Report. The common themes in our recommendations are summarised below:
• For States with no reinsurance arrangements, in particular road assets, we recommend alternative insurance options be explored and subsequent cost-benefit analysis performed, before maintaining the current decision of non-coverage. These analyses should be presented in the next submission. We recommend that market quotes should be sought to support any assertion on cost-benefit.

• We recommend analysis of past efficacy of the external insurance/reinsurance arrangements (if any) be presented in the next submission to support consideration of the cost effectiveness of the insurance/reinsurance arrangements for the State and, subsequently, to the Commonwealth.

• For States which have only discussed the assets insured with the captive insurer in the submission, we recommend information for all State assets which may be considered as EPA (regardless of whether covered by the captive insurer or not) be set out in detail in the next submission, including any associated insurance arrangements.

Based on the review of the States’ submissions, we have a number of suggestions for potential improvements to the contents of the States’ submissions which would clarify the information required and improve the quality of data collected. These are set out in Appendix B of this Report.

1.4 Reliances and Limitations

This Report has been prepared in accordance with the agreed scope as set out in the “Our Scope” section of this Report. We draw your attention to the limitations of scope set out therein. In summary:

• In preparing this Report, full reliance was made on data supplied. The accuracy of the results therefore depends upon the accuracy and completeness of the data.

• This Report must be read in its entirety – note that the opinions expressed in the Report are based on a number of assumptions and qualifications which are set out in full in the Report.

• We have prepared this Report on the basis of information supplied to us, in particular the States’ submissions to the Commonwealth under the Determination. Nothing in this paper should be taken to imply that KPMG has verified any information supplied to it, or has in any way carried out an audit of the information provided in the States’ submissions.

• We have no reason to believe that any material facts have been withheld from us but do not warrant that our inquiries have revealed all of the matters which an audit or extensive examination might disclose. Further, we have not verified, and do not assume responsibility for the accuracy or completeness of, information provided to us.
2 Introduction

2.1 Natural Disaster Relief and Recovery Arrangements (NDRRA)

Natural disasters often result in large-scale expenditure by State governments, imposing financial burdens on States’ budgets. To alleviate the burden on the States from eligible natural disasters, assistance from the Commonwealth government was formalised in 1974 under the Natural Disaster Relief and Recovery Arrangements Determination.

Due to a number of significant natural disasters occurring across a number of States in 2011, the Determination was amended to incorporate requirements for States to submit independent assessments of their insurance arrangements, resulting in the release of the Natural Disaster Relief and Recovery Arrangements Determination 2011 (Determination). The Determination is a framework for providing financial assistance to the States in the form of partial reimbursement of the States’ actual expenditure on disaster relief, recovery payments and infrastructure restoration in the event of a natural disaster. The Commonwealth’s assistance is intended to complement the State’s other risk management strategies in relation to natural disasters, such as insurance and disaster mitigation planning and implementation.

In the Determination, natural disaster is defined to include one or a combination of the following natural hazards: bushfire, earthquake, flood, storm, cyclone, storm surge, landslide, tsunami, meteorite strike or tornado, and excludes drought, frost, heatwave, epidemic or events where human activity is a significant contributing cause. Although not specifically referenced in the Determination, the Attorney-General announced terrorism as an eligible event on 2 July 2010.

Commonwealth financial assistance is provided when certain criteria are met, including:

- The natural disaster is classified as “eligible”, that is exceeds the small disaster criterion amount of $240,000.
- Eligible expenditure must exceed the State threshold, which is expressed as a percentage of the State’s total revenue in the financial year two years prior to the relevant financial year.
- Eligible expenditure is net of all recoveries and must be spent, in general, twenty-four months after the end of the financial year in which the relevant disaster occurred.

Eligible expenditure is defined in the Determination as being of a type described as a Category A, Category B, Category C or Category D measure as follows:

- Category A measure – emergency assistance given to individuals to alleviate personal hardship or distress.
- Category B measure - restoration or replacement of essential public assets, loans/subsidies/grants given to non-profit bodies, certain businesses and primary producers and individuals to alleviate financial burden, and counter disaster operations for the protection of the general public.
- Category C measure – community recovery package to support recovery of regions, communities or sectors severely affected by a natural disaster.
• Category D measure – assistance provided in circumstances, that are, in the opinion of the Minister, exceptional.

An Essential Public Asset (EPA) is defined as an asset of an eligible undertaking that, in the judgement of the State concerned:

a) is an integral and necessary part of the State’s infrastructure; and
b) would, if lost or damaged, severely disrupt the normal functioning of a community; and
c) would, if lost or damaged, be restored or replaced as a matter of urgency.

An eligible undertaking is a body that:

a) is one of the following:
   i) a department or other agency of a State government; or
   ii) established by or under a law of a State for public purposes (for example, a local government body); and

b) provides community, social or economic services free of charge or at a nominal charge well below the costs of production.

The level of Commonwealth financial assistance is determined on the basis of the State’s two thresholds for a financial year as follows:

a) if the State’s first threshold has not been exceeded - 50% of Category A and C expenditures;

b) if the State’s first threshold has been exceeded - 50% of Category A, B and C expenditures between the State’s first and second threshold and 75% above the State’s second threshold. However, if the financial assistance calculated under point (a) is greater, the State may opt to restrict its claim to Category A and C expenditures.

2.2 States’ Submissions

A condition of assistance under the Determination is that States are required to have independent assessments of their insurance arrangements undertaken by an independent and appropriate specialist and must publish the outcome of the assessment. These independent assessments are also required to be provided to the Commonwealth.

To assist with the States’ reviews, the “Guide to Submission Requirements – Clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011” was issued by Finance with respect to the submission requirements from the States. Details of the guide are set out in Appendix A to this Report.

Clause 4.6.3 of the Determination requires States to submit an independent assessment under the following circumstances:

• At intervals no greater than three years; and
• Following any significant change in the State’s insurance arrangements or a major insurable disaster occurring in the State.

Clause 4.6.4 of the Determination states that the Commonwealth will conduct a review of the States’ independent assessments, guided by the following principles:
a) a State has a responsibility to put in place insurance arrangements which are cost effective for both the State and the Commonwealth;

b) the financial exposure borne by taxpayers (at both levels of Government) under the Determination should be minimised; and

c) the onus is on a State to explore a range of insurance options in the market place and assess available options on a cost-benefit basis.

The Department of Finance and Deregulation (Finance) has agreed to undertake the independent reviews of State insurance arrangements (the Review) in accordance with Guideline 5/2011 of the Determination. KPMG Actuarial Pty Ltd (KPMG) has been engaged to perform the Commonwealth review on all the States’ submissions on behalf of Finance.

Based on the States’ submissions, KPMG has been asked to respond to the following questions, providing supporting argument and analysis as required:

- Has the State explored an appropriate range of insurance options available to it?
- Has the State assessed these options on a cost-benefit basis?
- Has the State put in place insurance arrangements which are cost effective for both the State and the Commonwealth?
- Has the State adequately met its obligation to minimise the financial exposure borne by taxpayers (both State and Commonwealth)? and
- Has the submission provided evidence of the items above?

It is important to note the above questions relate solely to the insurance arrangements of the States. No comment is made in respect of other aspects of risk management or risk mitigation and any conclusions or comments on the States’ insurance arrangements do not infer comment or conclusion on any other aspect of risk management or risk mitigation.

As agreed with Finance, the following matters are considered to be outside the scope of this Report:

- All analysis will be performed on the information available. No modelling will be performed by KPMG to ascertain the required information.
- KPMG will not specify recommendations on the following matters:
  - The equity of funding between the States under the Determination; and
  - The appropriateness and effectiveness of the current Determination.

Under the Determination, NDRRA exposure and support is based on the combined State and local government’s loss position. We understand the local government’s submission is a separate and later process. In the States’ submissions, details of the local government claims’ against the NDRRA are included, but not necessarily details of assets and insurance arrangements. As such, a complete picture of the insurance arrangements relevant to the NDRRA workings is not available at this stage.

As agreed with Finance, this Report concentrates on the insurance arrangements of State owned assets and is an interim report pending the local governments’ submissions, due on 31 March 2012. Details relating to forecast NDRRA support will be addressed as part of the
consolidated report on State and local government arrangements. We have therefore been requested not to present details relating to forecast NDRRA support for 2012 and beyond at this stage.

As agreed with Finance, items that are commercial in confidence from States’ submissions have not been included in this Report in accordance with Clause 4.6.2 of the Determination.

2.3 General Approach and Methodology

The first round of submissions has set out a positive starting point for the ongoing review of the Commonwealth’s interaction with the States in respect of natural disaster relief under the NDRRA. The Review shows wide interpretation and different treatments by the States to the mandatory and optional elements of the submission. It is apparent that each State approached the submission from a different perspective. The disparity between the States’ submissions is with respect to:

- The format of the report.
- The credentials and specialised skills of the reviewer.
- The level of discussions presented in the submissions.
- The quality and quantum of the information provided in the submissions
- The format and breadth of the opinion provided and the extent of any qualifications asserted.

To provide an independent, objective and consistent basis for the Review, we have prepared a ‘best practice’ submission template which draws on the strengths of each submission. This template sets out the information and key supporting evidence expected to support the independent assessment, including the format and breadth of the opinion provided. From that, we have examined whether the submission meets the review requirements we have been given (specifically the questions we have been asked to respond to as set out in the “Our Scope” section in this Report).

Details of the “best practice” submission are set out in Appendix B to this Report. The information expected to be provided in the States’ submissions can be summarised as follows:

- The States’ risk profile
  - Underlying essential public assets.
  - Exposure to natural disaster risk.
  - Claims experience with respect to natural disasters.
  - Support received from NDRRA.
- Current insurance arrangements
  - Summary of the current insurance arrangements, including coverage basis, costs and limits of liability.
- The procurement process, including philosophy and principles in purchasing cover and catastrophe modelling performed to support the terms and conditions of the insurance arrangements.
- Known gaps in the current insurance arrangements (that is, uninsured EPA), including discussion on the decision of non-insurance.

- **Capital Management Strategy**
  - Summary of the States’ capital management principles and its current capital position.
  - Strategies/planned responses the State has if the capital position falls below the minimum target.
  - Any other capital the State has that may assist in replacing essential public assets after a natural disaster, in particular where NDRRA support is not available (that is, expenditure is below the first threshold).

- **Risk Management Strategy**
  - Summary of the approach towards risk management.

- **Conclusion**, that a clear opinion is provided as regards to:
  - The adequacy of the current insurance arrangements and whether they are cost effective for both the State and Commonwealth.
  - The adequacy of the States’ capital position and access to capital.
  - That any limitations or qualifications are stated and explained, and do not in substance negate the opinions given.
3 Overview of the Quality of States’ Submissions

The following section provides an overview of the quality of information provided in the States’ submissions.

3.1 Who Performed the Assessment?

There were two main approaches adopted by the States in performing the assessment.

- The assessment was performed and signed by the Auditor General. Under this approach, the opinion is focused on attesting to the quality of data submitted and information provided, benchmarked against the data requested in the Guidelines. However, in this instance the opinion must be extended to provide comment on the discourse of State responsibilities in full, not simply confirm that the required data has been provided. Similarly the opinion should confirm the insurance/risk financing expertise used within the engagement to assess the appropriateness of the insurances etc. as requested.

- The assessment was performed by a Specialist, either a broker or actuary, with a supporting report or covering letter from Treasury. Under this approach, the submission generally provides a clearer opinion in respect of insurance adequacy, with more in-depth discussion on the State’s risk profile and capital management policy under the optional items. In these cases, presentation is also typically more developed in respect of risk transfer and management principles, risk modelling and expertise.

3.2 Information Provided and Discussion of Risks

Generally, all mandatory information set out in the submission guide has been provided by the States, however, to varying degrees of detail. Generally, no information has been provided on the definition or valuation basis of the information provided, such as gross versus net claims costs, the valuation basis used to set asset values and the valuation date. Hence, consistent comparisons between States in terms of past claims experiences and asset values is not possible.

In addition, NDRRA exposure and support is based on the combined position of State and local governments. Local government information is incomplete at this stage (generally claims information is provided but not details of assets or insurance arrangements). This limits the ability to draw conclusions on thresholds given the combined State and local government exposures define recoveries under the current NDRRA structures and thresholds.

3.2.1 Exposures

Most submissions do not clearly define or quantify EPA as defined under Clause 3.6.2 of the Determination. Generally, submissions either put this out of scope or assume, explicitly or implicitly, that all assets are included, possibly overstating assets eligible under the NDRRA. The States do not appear to have a readily available inventory of EPA under the NDRRA. This round of submissions provides a starting point for the improvement of this data.

The treatment of assets which could be classified as EPA but owned by statutory authorities or public trading enterprises varies between submissions. In many cases, these are excluded.
However, in other cases, they are included. It is noted that such assets could be deemed eligible in respect of special circumstances under Clause 3.6.3 of the Determination.

There are also varying levels of discussion of State risk profiles across the submissions.

3.2.2 Past Claims Experience

For States with external insurance/reinsurance arrangements, eligible expenditures provided appeared to be net of all recoveries. Hence, no visibility is given of the support provided by the external insurance/reinsurance arrangements and the true gross expenditure. Thus, it is difficult to draw a conclusion about the efficacy of any external insurance arrangements and whether the State has met its obligation to minimise financial exposures borne by taxpayers (at both State and Commonwealth levels).

In addition, past and future expenditures (in most cases) have been provided on a financial year basis rather than by eligible events and asset type. This limits the ability to examine the impact on the NDRRA from the frequency of events, as opposed to severity, of individual events.

3.2.3 Current Insurance Arrangements

All but one State has a formal self-insurance arrangement through the set up of a captive insurer. The captive insurer provides insurance for State assets owned by government departments/agencies, and in some cases, State Owned Corporations. In return, the agencies pay an annual contribution/premium to the captive insurer.

Some of the States have elected to transfer risks of lower frequency and moderate severity (such as large losses or catastrophes) to external insurers/reinsurers at a cost. For these States, it is noted generally there is minimal discussion on the past efficacy of the insurance/reinsurance arrangements and the benefits (if any) to the NDRRA with respect to past events.

3.2.4 Uninsured Assets

Not all State assets are insured through reinsurance or insurance. For civil assets in particular, such as roads, bridges, storm water, water and sewerage and electricity distribution assets, there is a common theme of non-insurance. The general response to not insuring these assets is:

- There is no appetite in the insurance market to underwrite these risks and/or
- It is not cost effective.

In such instances, there is typically limited or no factual evidence presented with respect to these assets that the State has approached the market, obtained competitive quotes and/or performed any cost-benefit analysis to arrive at this conclusion. It is also noted that civil asset insurance, including roads, has been purchased in some instances.

3.2.5 Capital Management Policy

The depth of discussions on the State capital management policy varies, ranging between:

- A specific and predefined policy with a defined range of funding ratio or current capital position in relation to the APRA standard for commercial insurers.
• Adjusting the level of agencies’ contributions to the fund as a mechanism to access additional capital.
• Access to capital through budget processes or re-prioritisation of capital works in restoring EPA.

3.2.6 Risk Management Policy
Not all submissions provided detailed discussions on the risk management framework each State has in place, in particular for the management of financial impact. The level of risk management/mitigation practices is inferred from the existence and depth of discussion on the State’s understanding of its own exposures and risk profile, and capital management policy.

3.2.7 Financial Modelling
The response to optional items such as financial modelling was varied. Financial modelling of a State’s Maximum Probable Loss (“MPL”) and estimated losses under various return periods is an optional requirement, hence analysis presented in the submissions is sparse with disparate approaches. Overall, the information is not sufficient to form a clear view on the financial commitment of the Commonwealth under the NDRRA in respect of events that have not yet occurred, either at an expected (mean level) or higher level of adequacy.

Where financial modelling is presented, it is generally provided in the context of obtaining insurance arrangements. This does not necessarily represent the probable losses of the State, for the following reasons:
• Local government assets and claims history are not included.
• The modelling generally covers only those assets for which cover is in place or is sought. Therefore, in almost all cases it excludes roads/bridges/culverts, large infrastructures and other assets not included in the insurance arrangements.

3.2.8 Conclusion of the Independent Assessment
Not all submissions have a firm opinion drawn on the adequacy of the insurance arrangement and for some, the opinion could be better supported by the discussions and information presented in the submission.
4 Australian Capital Territory (ACT)

4.1 Who Performed the Assessment?

The assessment has been performed by a specialist, QR Consulting. The results of the assessment are set out in the document titled “Review of Insurance Arrangements provided by the ACT Insurance Authority for the ACT Government in response to NDRRA Determination 2011” September 2011.

4.2 Current Insurance Arrangements

The ACT Insurance Authority (ACTIA) was established in April 2001 and provides insurance coverage to all government departments and statutory authorities, unless exempted by the Treasurer. The property policy offered by ACTIA provides indemnity on a reinstatement and replacement basis. The policy excludes terrorism.

ACTIA is in turn protected by a reinsurance arrangement. Based on the submission:

- The policy limits and sublimits are reviewed on an annual basis, taking into consideration the exposure profile and the cost/availability of the reinsurance programme.
- The latest catastrophe modelling performed in reviewing the policy limits (provided in the submission) was in 2007. That is some time ago, however, it is noted an investigation was being performed at the time of writing the submission. Based on the 2007 catastrophe modelling, the current policy limit of $1bn is more than adequate to cover the APRA minimum requirement of a 1 in 250 return period event.
- The submission also provides evidence of a planned strategy, exploration of insurance options and negotiation in the reinsurance renewal process.

The reinsurance arrangement for the year ending 30 June 2012 can be summarised as follows:

- The first $250k of any loss is self retained.
- For any loss which exceeds $250k, the proportion above $250k contributes to an annual aggregate retention of $5.0m. When the $5.0m aggregate retention is exceeded, a deductible of $100k applies for any one event.
- The combined limit of any one loss and any one event is $500m and $1bn respectively.
- Lower sublimits apply for roads ($100m), storm water assets ($50m) and floods ($100m). However, it should be noted none of the events to date have triggered this level of recovery.

- Excludes terrorism.

It is noted there is a gap in the insurance coverage for ACT’s EPA in respect of terrorism, which is excluded in both ACTIA policies and its reinsurance policy. The submission states that market quotes have been sought (between $250k and $450k depending on policy limit and retention) and that these were under consideration by the ACTIA Board at the time of preparing the submission.
Based on the historical claims experience, it would appear the reinsurance program has been beneficial to ACTIA, where a total of $68.2m recoveries have been received from the reinsurers between the years ending 30 June 2002 and 30 June 2011, compared to $44.8m in premiums paid for the same period.

### 4.3 Declared Assets

All operational assets of ACT Government agencies have been included in the submission. Assets excluded from the submission include privately owned entities such as Canberra Airport, TransAct, and AGL Distribution. There has been no attempt to determine the State owned assets deemed as EPA under the Determination.

A summary of the State’s assets detailed in the submission is summarised in Table 9 below.

<table>
<thead>
<tr>
<th>Type</th>
<th>Component</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Assets</td>
<td>Property</td>
<td>12,208.9</td>
</tr>
<tr>
<td>Civil Assets</td>
<td>Roads</td>
<td>3,232.2</td>
</tr>
<tr>
<td></td>
<td>Bridges</td>
<td>1,376.1</td>
</tr>
<tr>
<td></td>
<td>Storm Water</td>
<td>3,733.7</td>
</tr>
<tr>
<td></td>
<td>Water + Sewer</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8,342.0</td>
</tr>
</tbody>
</table>

**Table 9 – ACT – State’s Assets**

The total declared assets is $20.5bn where $8.3bn relates to civil assets. 16% (or $3.2bn) of the declared assets relates to roads which are insured with ACTIA and subsequently reinsured with an external reinsurer. The ACT’s approach to civil assets insurance, and in particular roads, is not typical.

### 4.4 Natural Disaster Experience

In the submission, there is generally no discussion on the State’s exposure to various natural disasters and special characteristics (e.g. geographic location) which would contribute to the State’s exposure to natural disasters.

However, based on the catastrophe modelling performed in 2007 to review the reinsurance policy limits and natural disaster claims experiences to date, it can be inferred the ACT is exposed to earthquakes, bushfires, storms and floods.
4.5 Claims History and Past NDRRA Support

Claims information set out in the submission guidelines has generally been provided. However, we note:

- The split between roads and non roads associated eligible expenditure and thus NDRRA support is not available.

- The basis of the eligible expenditure associated with restoring EPA (for example, gross or net of reinsurance) is not stated. We have assumed the eligible expenditure to be net of reinsurance.

A summary of the natural disaster claims experiences and the past NDRRA support is set out Table 10 below. The figures in the table reflect the figures provided in the State submission.

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>Number of Events</th>
<th>Category B</th>
<th>Non Category B</th>
<th>Total Eligible Expenditure</th>
<th>NDRRA Support</th>
<th>NDRRA Support % Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2003</td>
<td>1</td>
<td>38.2</td>
<td>0.0</td>
<td>38.2</td>
<td>16.0</td>
<td>42%</td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2005</td>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2006</td>
<td>3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2007</td>
<td>4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2010</td>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2011</td>
<td>5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>2002 - 2011</strong></td>
<td><strong>16</strong></td>
<td><strong>38.2</strong></td>
<td><strong>0.0</strong></td>
<td><strong>38.2</strong></td>
<td><strong>16.0</strong></td>
<td><strong>42%</strong></td>
</tr>
</tbody>
</table>

The total may not add up due to rounding errors.
Number of Events is the number of events occurred in the year. However, payments made in the year may relate to events from prior years.

Based on the past 10 years of historical claims information, the natural disaster experiences appear to be cyclical with years having no events followed by periods of three to five events per year. However, all but one (Canberra bushfires in 2003) sits below NDRRA thresholds. For the Canberra bushfire in 2003, a breakdown of the expenditure by Category has not been provided in the submission. In the table above, expenditures relating to this event have been classified as Category B.

This relatively low level of NDRRA support in the past 10 years may be due to a combination of the reinsurance arrangements ACT has in place, relatively lower accumulations of risk relative to other States, the lack of cyclone risk and, in particular, the relatively high NDRRA thresholds applicable after reinsurance.
4.6 Capital Management

In the submission, there is no discussion on the State’s key principles for its capital management policy and its ability to obtain further capital in the event of natural disaster.

ACTIA is a captive insurer hence it can be inferred its mechanism of accessing additional capital is adjusting the annual contributions from Government departments and statutory authorities to which it provides coverage and seeking additional funding from the ACT Government budget.

4.7 Risk Management

The ACT Government Risk Management Framework sets out the minimum standard required across all public sector agencies. This framework is currently being revised by ACTIA, and the submission sets out that it will be tailored to be consistent with the AS/NZA ISO 31000:2009 Risk Management – Principles and Guidelines Standard.

This risk management framework is complemented with the Bushfire Management Plan and visits from the lead reinsurer to identify areas of risks where an improvement strategy should be put in place.

4.8 Conclusion

The submission provides clear conclusions on the adequacy and cost effectiveness of the State’s insurance arrangements. However, in our view, some of these conclusions are not fully supported by the submission.

Based on our Review of ACT’s independent assessment, our conclusion to the questions set out within the scope of requirements is as follows:

1 Has the State explored an appropriate range of insurance options available to it?

Yes. We note that a current review is underway to update catastrophe modelling and that market quotes on terrorism cover were being considered at the time of the submission.

2 Has the State assessed these options on a cost-benefit basis?

It could be inferred from the reinsurance renewal process that cost-benefit analysis was performed but if so, this was not presented or confirmed in the submission.

With respect to the cover for terrorism, market quotes were being considered at the time of the submission. Thus cost-benefit analysis for this cover is not presented in the submission.
3  Has the State put in place insurance arrangements which are cost effective for both State and the Commonwealth?

Yes. The past reinsurance arrangements appear to have provided a positive contribution to ACT. This in turn, has provided benefits to NDRRA given that the ACT has only received support once in the past 10 years despite the number of natural disasters. The reinsurance arrangements also cover road and sewer assets and losses arising from floods. This is relatively unique but beneficial in minimising the potential calls on both the State’s and the Commonwealth’s budget in the event of a natural disaster.

4  Has the State adequately met its obligations to minimise financial exposure borne by taxpayers (both State and Commonwealth)?

Overall, yes. Based on the information provided in the submission, ACT has in place a reinsurance arrangement that has proved to be beneficial in the past.

4.9  Recommendations

Based on our Review of the ACT submission, our recommendations for the next regular submission are as follows:

- Provides cost-benefit analysis to support its decision on terrorism coverage.
- The catastrophe modelling presented in the submission was completed as at 28 August 2007. Updated catastrophe modelling results should be provided.
5 New South Wales (NSW)

5.1 Who Performed the Assessment?

The assessment has been performed by a specialist, Finity Consulting. The results of the assessment are set out in the document titled “NDRRA: Independent Assessment of State Insurance Arrangements – New South Wales Treasury” dated October 2011. This is complemented with a Letter from the Secretary of the NSW Treasury to the Secretary of AGD dated 18 October 2011.

5.2 Current Insurance Arrangements

Treasury Managed Fund (TMF) was established in 1989 and is operated by the NSW Self Insurance Corporation (SICorp). TMF provides insurance coverage to all budget dependent government agencies and some Public Trading Enterprises (PTE). PTE who choose not to insure with TMF arrange insurance coverage independently. The Property policy offered by TMF covers all perils including terrorism and floods, but excludes any road assets and most underground pipes.

TMF is in turn protected by a reinsurance arrangement. The reinsurance arrangement for the year ending 30 June 2012 can be summarised as follows:

- The first $30m of any natural event is self-retained.
- The first $100m of any terrorism event is self retained.
- The insurance coverage for property catastrophe is $3.0bn and $1.2bn for terrorism.
- Excludes any road assets.
- There are no sublimits on selected perils such as floods and bushfires
- Based on the financial modelling (not presented in the submission), the policy coverage should more than cover the APRA minimum requirement of 1 in 250 return period.

However, no further information was provided on:

- The past efficacy of the reinsurance arrangements and the benefits (if any) to the NDRRA with respect to the past events. Any other exclusions

With respect to the non-insurance of road assets the submission confirms that no market quotes have been sought. However, no further discussion is presented, for example whether alternative insurance options have been explored or any subsequent cost-benefit assessment conducted before arriving on the current decision on non-coverage. We were subsequently advised by TMF that NSW considered insurance for roads and found it unnecessary in view of:

- The risk being geographically spread;
- The provision of maintenance appropriations to road administering agencies; and
- The potential questions on indemnities or validity of claims.

These considerations are not presented in the submission.
With respect to the reinsurance renewal process, it is noted in the submission that financial modelling is performed on annual basis. However, discussions in the submission on the decision process for the reinsurance arrangements in regard to the retention level and limits of liability are limited.

5.3 Declared Assets

In the submission, all State owned assets (other than those held within State Owned Corporations) have been included. There has been no attempt to determine the State owned assets deemed as EPA under the Determination.

However, the submission also notes other potential assets that may be considered as essential in the event of a natural disaster but may not be covered by the NDRRA. These assets are excluded from the submission.

A summary of the State’s assets stated in the submission is summarised in Table 11 below.

<table>
<thead>
<tr>
<th>Type</th>
<th>Component</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Assets</td>
<td>Property</td>
<td>158,181.3</td>
</tr>
<tr>
<td>Civil Assets</td>
<td>Roads</td>
<td>39,610.0</td>
</tr>
<tr>
<td></td>
<td>Bridges</td>
<td>14,085.0</td>
</tr>
<tr>
<td></td>
<td>Storm Water</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Water + Sewer</td>
<td>24,509.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>78,204.0</td>
</tr>
</tbody>
</table>

The grand total is 236,385.3

| Grand Total |                | 236,385.3 |

Uninsured 39,610.0

Uninsured (%) 17%

Road % 17%

The total declared assets is $236.385bn where $78.204bn relates to civil assets. Approximately 17% (or $39.610bn) of the total assets relate to roads. Roads are uninsured.

With respect to the $24.509bn of water and sewerage assets, most underground pipes are not insured. However, declared values of underground pipes have not provided in the submission. Hence, the percentage of uninsured assets is in fact higher than the 17% shown in the table above.

5.4 Natural Disaster Experience

In the submission, there are discussions on the State’s exposure to various natural disasters. These exposures can be summarised as follows:

- High to moderate exposure: Bushfire, windstorm, flood and terrorism
- Low / Potential exposure: Landslip, earthquake and tsunami.
These exposures are further confirmed by the past claims experiences which have been dominated by bushfire and storm/flood.

Further information on the geographical concentration of losses from natural disaster events, in regards to frequency and quantum of losses may be available from the financial modelling performed on an annual basis but has not been presented in the submission.

5.5 Claims History and Past NDRRA Support

Claims information set out in the submission guidelines is generally provided. However, we note:

- NDRRA exposure and support is based on the combined State and local governments’ loss position. Hence, claims from local governments are included in the claims information provided in the State submission. The submission notes the split between claims from State owned and local government owned assets is approximately 48% and 52% respectively.

- The basis of the eligible expenditure associated with restoring EPA (for example, gross or net of reinsurance) is net of reinsurance.

A summary of the natural disaster claims experiences and the past NDRRA support is set out in Table 12 below. The figures in the table reflect the figures provided in the State submission.

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>Number of Events</th>
<th>Category B Total Eligible Expenditure</th>
<th>NDRRA Support</th>
<th>NDRRA Support % Total</th>
<th>NDRRA Support Relating to</th>
<th>% of NDRRA Support Relating to</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>5</td>
<td>107.7 89.7 197.4</td>
<td>81.7</td>
<td>41%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>11</td>
<td>157.5 8.1 165.6</td>
<td>53.2</td>
<td>32%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>9</td>
<td>38.0 0.2 38.2</td>
<td>0.1</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>9</td>
<td>24.0 0.1 24.1</td>
<td>0.0</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>22</td>
<td>59.0 1.2 60.2</td>
<td>0.6</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>28</td>
<td>92.0 1.0 93.0</td>
<td>0.5</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>13</td>
<td>82.0 26.0 108.0</td>
<td>12.6</td>
<td>12%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>2009</td>
<td>19</td>
<td>99.0 7.7 106.7</td>
<td>3.8</td>
<td>4%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>2010</td>
<td>43</td>
<td>184.0 33.0 217.0</td>
<td>58.3</td>
<td>27%</td>
<td>25.5</td>
<td>44%</td>
</tr>
<tr>
<td>2011</td>
<td>9</td>
<td>203.0 43.0 246.0</td>
<td>71.9</td>
<td>29%</td>
<td>54.1</td>
<td>75%</td>
</tr>
</tbody>
</table>

| 2002 - 2011         | 168               | 1,046.2 210.0 1,256.2               | 282.8         | 23%                  | 79.6                     | 54%                            |

Totals may not add up due to rounding errors. Number of Events is the number of events occurred in the year. However, payments made in the year may relate to events from prior years.

* refers to years 2008 to 2011 where roads expenditures are available. NDRRA support relating to roads is approximated in the same proportion of expenditure.

It can be observed from the table above:

- As noted in the submission, NSW is exposed to frequent natural disasters (storms/floods and bushfires). To date these have been of moderate average claim size.
• Over the past 10 years, the NDRRA reimbursed approximately 23% of the eligible expenditures made by NSW. The NDRRA support is concentrated in the financial years 2002 to 2003 and 2010 to 2011.

• NDRRA reimbursement which relates to the restoration of roads is 44% and 75% for 2010 and 2011 respectively. This high level of NDRRA support reflects the outcome of high incidences of floods in the recent years with no insurance coverage for road assets in place. As such, NDRRA is acting as the default insurer of NSW roads.

Based on the significance of the 2011 events, it is expected the level of NDRRA support in 2012 and 2013 will also be material.

5.6 Capital Management

The capital management policy for NSW, as stated in the submission, can be summarised as follows:

• Prospective funding: Annual contributions from agencies covered by TMF. Contributions are set to cover the following year’s claims and expenses.

• In the case of road assets, losses are funded on a post event basis through budget processes or re-prioritisation of capital works.

The submission stated the TMF currently has a fund balance of $5.5bn as of 30 June 2010 but is unclear on the historical funding ratio of TMF. With respect to a specific capital management policy, the NSW government adopted a capital guarantee policy for funding capital shortfalls in TMF. However, no information on a target capital adequacy operating range is presented in the submission.

5.7 Risk Management

The risk management approach within NSW is from two sources:

• The State Emergency and Rescue Management Act 1989 – provides the legal framework for emergency management in NSW. It defines responsibilities and mandates the development of disaster management and recovery plans. In addition, various other legislations mandate agencies responsible for specific hazards to develop and coordinate risk management and response strategies for that hazard.

• TMF’s Contract of Coverage has an obligation of risk management. Each agency has a Risk Manager acting as an interface between TMF and the agency on matters of claims, indemnity and development of risk management plans.

5.8 Conclusion

The submission provides no firm and clear conclusion on the adequacy of NSW’s insurance arrangements by the consultants performing the independent review.

Based on our Review of NSW’s independent assessment, our conclusion to the questions set out within the scope of requirements is as follows:
1 Has the State explored an appropriate range of insurance options available to it?

Yes for non-road assets where NSW maintains a reinsurance arrangement. Financial modelling is performed on an annual basis to re-examine the appropriateness of coverage with consideration to the changing exposure profile. However, evidence of the financial modelling was not presented in the submission.

With respect to road assets, no discussion, other than confirmation that no market quotes have been sought, was presented on whether alternative insurance options have been explored or whether any subsequent cost-benefit assessment was conducted before arriving at the current decision on non-coverage.

2 Has the State assessed these options on a cost-benefit basis?

No information was presented in the submission to confirm that cost-benefit analysis has been undertaken for both non-road and road assets. For non-road assets, it could be inferred from the reinsurance renewal process that cost and benefit analysis was performed but if so, this is not presented or confirmed in the submission.

3 Has the State put in place insurance arrangements which are cost effective for both State and the Commonwealth?

The level of support provided by NDRRA for the restoration of public assets has been low until 2009. The past reinsurance arrangements appear to have provided a positive contribution to NDRRA with respect to expenditure relating to non road assets. It therefore appears that the arrangements have been cost effective for the Commonwealth.

However, a firm conclusion cannot be drawn as analysis of the past efficacy of the reinsurance arrangements was not presented in the submission; hence it is unclear whether the arrangements are cost effective to NSW.

4 Has the State adequately met its obligations to minimise financial exposure borne by taxpayers (both State and Commonwealth)?

For non-road assets, it would appear NSW has minimised the financial exposure borne by taxpayers (both State and Commonwealth) with the purchase of reinsurance. However, a firm conclusion cannot be reached as the efficacy of these arrangements has not been presented in the submission. The low level of past NDRRA support could also be due to the size of the past natural events rather than usage of the reinsurance arrangements, or a combination of such factors.

5.9 Recommendations

Based on our Review of the NSW submission, our recommendations are:

- A firm conclusion on the adequacy of insurance arrangements by the independent specialist. A re-submission or an addendum to the existing submission should be provided.
- Alternative insurance options and market quotes on road assets be obtained at the next reinsurance renewal and cost-benefit analysis be performed to support the decision of non-insurance on road assets. A re-submission or an addendum to the existing submission should then be provided.
• Cost-benefit analysis of past reinsurance arrangements be presented at the next regular submission to support the cost effectiveness of the reinsurance arrangements for the State and subsequently to the Commonwealth.
6 Victoria (VIC)

6.1 Who Performed the Assessment?

The assessment has been performed by a specialist, PricewaterhouseCoopers. The results of the assessment are set out in the document titled “Department of Treasury and Finance – Independent Assessment of State Insurance Arrangements” dated 21 September 2011.

6.2 Current Insurance Arrangements

Victorian Managed Insurance Authority (VMIA) is the captive insurer of Victoria, providing property insurance coverage for assets owned by Victorian Government departments and public health institutions and some statutory authorities and agencies. The property policy offered by VMIA covers most peril including floods and earthquakes but excludes terrorism.

VMIA is in turn protected by reinsurance arrangements on both per loss and per event basis, as well as on an aggregate portfolio basis. The reinsurance arrangements for the year ending 30 June 2012 can be summarised as follows:

- Property cover
  - VMIA retains the first $50m of any one loss or series of losses arising out of any event.
  - The policy limit of this cover is $2.05bn.
  - Covers road and public transport assets.
  - Excludes terrorism.

  Based on the financial modelling, the property policy coverage of $2.05bn should more than cover the APRA minimum requirement of a1 in 250 return period event.

- An Aggregate Stop Loss with an aggregate deductible of $100m to provide additional protection. This cover applies to VMIA as a whole and therefore includes liability.

- Other reinsurance arrangements for assets under construction and fine arts

However, no further information was provided on the past efficacy of the reinsurance arrangements and its benefits (if any) to the NDRRA with respect to the past events.

With respect to the reinsurance renewal process, the approach and strategy adopted by VMIA is noted in the submission. The process includes setting a desired risk preference with a reinsurance management strategy, seeking market quotes, catastrophe modelling and financial modelling (to assess impact of reinsurance management on capital needs).

6.3 Declared Assets

All State owned assets (other than those held within some State Owned Corporations) that are covered by VMIA are included in the submission. In the submission, there has been no attempt to determine the State owned assets deemed as EPA under the Determination.
The submission also notes other potential assets that may be considered as essential in the event of a natural disaster but may not be covered by the NDRRA. These assets are excluded from the submission.

A summary of the State’s assets stated in the submission is summarised in Table 13 below.

<table>
<thead>
<tr>
<th>Type</th>
<th>Component</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Assets</td>
<td>Property</td>
<td>78,913.3</td>
</tr>
<tr>
<td>Civil Assets</td>
<td>Roads</td>
<td>37,260.2</td>
</tr>
<tr>
<td></td>
<td>Bridges</td>
<td>3,761.3</td>
</tr>
<tr>
<td></td>
<td>Storm Water</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Water + Sewer</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>41,021.5</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>119,934.7</td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>Uninsured (%)</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Road %</td>
<td></td>
<td>31%</td>
</tr>
</tbody>
</table>

The total declared assets is $119.934bn where $41.021bn relates to civil assets. Approximately 31% (or $37.260bn) of the total assets relate to roads (including traffic signals, sound barriers and etc) which are fully insured. VIC’s approach to civil assets insurance, and in particular roads, is not typical.

Some water related assets have been included in the submission for the following reasons:

- Stormwater assets appear to be local government assets and will be covered in the local government submission.
- Some water assets (for example, Melbourne Water) are statutory authority owned assets and therefore not included in the submission. The owners of the assets are responsible for obtaining their own insurance.

### 6.4 Natural Disaster Experience

In the submission, there are discussions on the State’s exposure to various disasters and geographical concentration of losses from natural disaster events, in regards to frequency and quantum of losses. These discussions are presented in the financial modelling and reinsurance renewal packs, as supplementary information and not directly presented / noted in the main submission document.

Based on the historical claims experience to date, it can be inferred VIC is exposed to floods, storms and bushfires.
6.5 Claims History and Past NDRRA Support

Claims information set out in the submission guidelines is generally provided as supplementary data. They are not directly discussed and presented in the main submission document. However, we note:

- The split between roads and non-roads associated eligible expenditure, thus the NDRRA support is not available.
- NDRRA exposure and support is based on the combined State and local governments’ loss position. Hence, claims from local governments are included in the claims information provided in the State submission. However, the split between claims arising from State owned and local Government owned assets is not available.
- The basis of the eligible expenditure associated with restoring EPA (for example, gross or net of reinsurance) is not stated. We have assumed the eligible expenditure to be net of reinsurance.

A summary of the natural disaster claims experiences and the past NDRRA support is set out in Table 14 below. The figures in the table reflect the figures provided in the States’ submissions.

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>Number of Events</th>
<th>Category B</th>
<th>Non Category B</th>
<th>Total Eligible Expenditure</th>
<th>NDRRA Support</th>
<th>NDRRA Support % Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0</td>
<td>2.8</td>
<td>0.0</td>
<td>2.8</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>2003</td>
<td>13</td>
<td>48.5</td>
<td>59.5</td>
<td>108.0</td>
<td>30.9</td>
<td>29%</td>
</tr>
<tr>
<td>2004</td>
<td>3</td>
<td>0.0</td>
<td>1.9</td>
<td>1.9</td>
<td>1.0</td>
<td>50%</td>
</tr>
<tr>
<td>2005</td>
<td>2</td>
<td>0.5</td>
<td>0.1</td>
<td>0.6</td>
<td>0.1</td>
<td>10%</td>
</tr>
<tr>
<td>2006</td>
<td>4</td>
<td>0.7</td>
<td>0.3</td>
<td>1.0</td>
<td>0.2</td>
<td>17%</td>
</tr>
<tr>
<td>2007</td>
<td>8</td>
<td>52.9</td>
<td>98.5</td>
<td>151.4</td>
<td>50.6</td>
<td>33%</td>
</tr>
<tr>
<td>2008</td>
<td>1</td>
<td>36.7</td>
<td>9.0</td>
<td>45.7</td>
<td>4.5</td>
<td>10%</td>
</tr>
<tr>
<td>2009</td>
<td>2</td>
<td>49.3</td>
<td>407.9</td>
<td>457.1</td>
<td>226.4</td>
<td>50%</td>
</tr>
<tr>
<td>2010</td>
<td>2</td>
<td>53.2</td>
<td>157.9</td>
<td>211.1</td>
<td>102.0</td>
<td>48%</td>
</tr>
<tr>
<td>2011</td>
<td>7</td>
<td>235.4</td>
<td>62.8</td>
<td>298.2</td>
<td>126.1</td>
<td>42%</td>
</tr>
</tbody>
</table>

Table 14 – VIC – Historical Eligible Expenditure and NDRRA Support (S’m)

- Totals may not add up due to rounding errors.
- Number of Events is the number of events occurred in the year. However, payments made in the year may relate to events from prior years.
- Figures for 2009 to 2011 are estimates as declared in the submission.

It can be observed from the table above:

- With the exception of 2008, Victoria has been exposed to at least two natural disasters per year.
• Since 2003, the NDRRA has been providing some level of support to Victoria. Between the
years 2002 to 2011, NDRRA reimbursed on average 42% of Victoria’s eligible expenditure
on natural disasters.

• The type of support provided by NDRRA for the years 2007 to 2010 is mainly on non
Category B expenditures (i.e. associated with personal hardship and community recovery)
which are generally not covered by the reinsurance arrangements. For these years, category
B expenditure on a standalone basis would not have exceeded the NDRRA’s first threshold
for Victoria.

• For 2011, the type of support provided by NDRRA is mainly on Category B expenditures
(restoration of essential public assets). This is due to the floods in 2011. As the VMIA’s
reinsurance arrangements include floods and coverage for road assets, it is unclear whether
the high level of NDRRA support from the 2011 floods is due to claims from the local
government or other specific expenditures not covered by VMIA’s reinsurance
arrangements or the exhaustion of VMIA’s reinsurance arrangements.

• Due to the significance of the floods in 2011, it is expected the future level of NDRRA
support will be material.

6.6 Capital Management

Based on the information provided in the submission, VMIA has a clear capital management
policy which includes:

• Prospective funding: Annual contributions from agencies covered by VMIA.
• Target funding range which VMIA aims to operate within.
• Planned strategy responses in place should the funding ratio falls below or rises above the
target funding range.

The submission also presented the funding ratios and the target ranges for the past six years in
support of VMIA’s financial strength and the operation of the capital management policy.

6.7 Risk Management

The risk management approach within VIC is is set out in a document titled “The Victorian
Government Risk Management Framework” dated March 2011. In summary:

• Each agency must have its own risk management framework and must attest to the
effectiveness of the risk management processes put in place in their annual reports.
• There is a risk management framework which is consistent with the Australian/New Zealand
• VMIA monitors risk management by departments and participating bodies and provides risk
management to the State.
• The purchase of reinsurance cover is the key risk management strategy to manage
“financial” risks.
6.8 Conclusion

The submission provides a firm and clear conclusion on the adequacy of VIC’s insurance arrangements and capital management policy. In our view, this conclusion is supported by discussions and information provided in the submission.

Based on our Review of the VIC independent assessment, our conclusion to the questions set out within the scope of requirements is as follows:

1 Has the State explored an appropriate range of insurance options available to it?

Yes, based on the discussions of the reinsurance renewal process presented in the submission and the reinsurance renewal packs provided as supplementary information to the submission.

As for terrorism cover, no discussions, other than confirmation that no market quotes have been sought, were presented on whether alternative insurance options have been explored and subsequent cost-benefit assessments conducted before arriving at the current decision on non-coverage.

2 Has the State assessed these options on a cost-benefit basis?

Yes, based on the discussions of the reinsurance renewal process presented in the submission and the reinsurance renewal packs provided as supplementary information to the submission. It can be inferred that cost-benefit analysis of insurance arrangements has been confirmed.

3 Has the State put in place insurance arrangements which are cost effective for both State and the Commonwealth?

The level of support provided by NDRRA for the restoration of public assets has been low until 2010. The past reinsurance arrangements appear to have provided a positive contribution to NDRRA with respect to expenditure relating to restoration of public assets. It therefore appears that the arrangements have been cost effective for the Commonwealth.

However, a firm conclusion cannot be drawn as analysis of the past efficacy of the reinsurance arrangements was not presented in the submission; hence it is unclear whether the arrangements are cost effective to VIC.

4 Has the State adequately met its obligations to minimise financial exposure borne by taxpayers (both State and Commonwealth)?

Based on the information presented in the submission and the level of NDRRA support provided in the past, it would appear that VIC has attempted to minimise financial exposure borne by the taxpayers (both State and Commonwealth) for the assets covered by VMIA.

However, a firm conclusion cannot be made as the efficacy of these arrangements has not been presented in the submission. The low level of past NDRRA support could also be due to the size of the past natural events rather than the impact of the reinsurance arrangements.
6.9 Recommendations

Based on our Review of the VIC submission, we recommend that at the next regular submission:

- Alternative insurance options and market quotes on terrorism be obtained at the next reinsurance renewal and cost-benefit analysis be performed to support the decision of non-coverage.

- Cost-benefit analysis of past reinsurance arrangements be presented to support the cost effectiveness of the reinsurance arrangements for the State and subsequently to the Commonwealth. The current submission only considers assets covered by VMIA. It is unclear whether there are any assets (in quantum and level of insurance coverage) that could be classified as EPA and covered by NDRRA that have been excluded in the submission. We recommend VIC include any such assets.
7 Queensland (QLD)

7.1 Who Performed the Assessment?

The assessment has been performed by the Auditor-General. The results of the assessment are set out in a letter from the Auditor-General of Queensland to the Under Treasurer of Queensland Treasury Department.

This is further supported by a presentation pack provided to the Commonwealth on 9 December 2011 following the placement of a reinsurance program effective 1 November 2011. Our Review is based on the combined information of both documents.

We understand that QLD is in the process of preparing a re-submission to the Commonwealth addressing the adequacy of the new insurance arrangements.

7.2 Current Insurance Arrangements

Queensland Government Insurance Fund (QGIF) was established in July 2001 as an internal fund within Queensland Treasury to provide insurance coverage to all government agencies and statutory bodies that elect to insure with QGIF. Government Owned Corporations are not eligible to insure with QGIF.

A broad overview of the insurance policy coverage and limits of liability is provided in the presentation pack to Commonwealth. However, any exclusions either for type of perils or assets were not discussed or presented.

With respect to non road assets and bridges, a reinsurance program has been placed effective 1 November 2011. This program can be summarised as follows:

- $1.420bn in excess of $20m on a per risk basis, and $50m on a per event basis
- Includes bridges and tunnels
- Includes terrorism cover
- Unlimited reinstatement of total limits.

Based on the brokers’ benchmarking to other government portfolios, they are of the opinion that the premium paid is competitive taking into consideration QLD’s exposure to natural disasters and portfolio size. However, detailed comparisons are not evident in the presentation pack provided to the Commonwealth.

For road assets, traditional insurance options have been explored but reinsurers declined to quote. Alternative conceptual options were explored but reinsurers were not in a position to provide actual pricing of these options as there was no product fit for purpose readily available in the market. Hence, QLD did not explore further to the point of obtaining actual pricing of these conceptual options and no cost-benefit analysis is available at this time to support the conclusion that the transfer of risk for roads would not be cost effective.
7.3 Declared Assets

The presentation pack provided to the Commonwealth documented the type of assets included in its reinsurance program. These assets are those covered by QGIF. However, there is no attempt to determine which assets are deemed to be EPA under the Determination.

No discussion was provided on potential assets (other than road assets) which have been excluded from the submission but may be considered as EPA and eligible for NDRRA support.

A summary of the State assets stated in the submission is summarised in Table 15 below:

<table>
<thead>
<tr>
<th>Type</th>
<th>Component</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Assets</td>
<td>Property</td>
<td>46,027.0</td>
</tr>
<tr>
<td>Civil Assets</td>
<td>Roads</td>
<td>40,106.0</td>
</tr>
<tr>
<td></td>
<td>Bridges</td>
<td>8,298.0</td>
</tr>
<tr>
<td></td>
<td>Storm Water</td>
<td>2,175.0</td>
</tr>
<tr>
<td></td>
<td>Water + Sewer</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50,579.0</td>
</tr>
</tbody>
</table>

| Grand Total   |               | 96,606.0  |
| Uninsured     |               | 40,106.0  |
| Uninsured (%) |               | 42%       |
| Road (%)      |               | 42%       |

The total declared assets are $96.606bn where $50.579bn relates to civil assets. Approximately 42% (or $40.106bn) of the total assets relate to roads which are not insured by QGIF and its reinsurance arrangements.

Water assets are State Owned Corporation assets and are not eligible to insure with QGIF and therefore not included in the submission. It is unclear from the submission whether State Owned Corporations privately insure their assets, or the extent to which their assets may qualify as EPA.

7.4 Natural Disaster Experience

Through the presentation pack prepared for Commonwealth, there were clear discussions presented on the State’s exposure and risk accumulation by geographic locations.

Based on the property claims arising from the top 20 events, it can be inferred QLD has high exposure to floods, storms and cyclones.
7.5 Claims History and Past NDRRA Support

Claims information set out in the submission guidelines is generally provided as supplementary data and not directly discussed and/or presented in the main submission document. However, we note:

- NDRRA exposure and support is based on the combined State and local governments’ loss. Hence, claims from local governments are included in the claims information provided in the State submission. However, the split between claims arising from State owned and local Government owned assets is not available.

- The basis of the eligible expenditure associated with restoring EPA is gross of reinsurance as there have been no reinsurance arrangements prior to 1 November 2011.

A summary of the natural disaster claims experiences and the past NDRRA support is set out in Table 16 below. The figures in the table reflect the figures provided in the States’ submissions.

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>Number of Events</th>
<th>Category B</th>
<th>Non Category B</th>
<th>Total Eligible Expenditure</th>
<th>NDRRA Support</th>
<th>NDRRA Support % Total</th>
<th>NDRRA Support Relating to</th>
<th>% of NDRRA Support Relating to</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>3</td>
<td>87.4</td>
<td>0.2</td>
<td>87.6</td>
<td>29.0</td>
<td>33%</td>
<td>9.5</td>
<td>33%</td>
</tr>
<tr>
<td>2003</td>
<td>3</td>
<td>45.2</td>
<td>2.9</td>
<td>48.1</td>
<td>3.5</td>
<td>7%</td>
<td>1.1</td>
<td>32%</td>
</tr>
<tr>
<td>2004</td>
<td>6</td>
<td>50.9</td>
<td>1.1</td>
<td>52.0</td>
<td>4.8</td>
<td>9%</td>
<td>1.2</td>
<td>26%</td>
</tr>
<tr>
<td>2005</td>
<td>5</td>
<td>85.5</td>
<td>1.9</td>
<td>87.4</td>
<td>22.8</td>
<td>26%</td>
<td>7.2</td>
<td>32%</td>
</tr>
<tr>
<td>2006</td>
<td>6</td>
<td>120.5</td>
<td>13.7</td>
<td>134.2</td>
<td>47.4</td>
<td>35%</td>
<td>11.2</td>
<td>24%</td>
</tr>
<tr>
<td>2007</td>
<td>5</td>
<td>237.5</td>
<td>50.1</td>
<td>287.6</td>
<td>157.8</td>
<td>55%</td>
<td>26.8</td>
<td>17%</td>
</tr>
<tr>
<td>2008</td>
<td>10</td>
<td>178.5</td>
<td>26.2</td>
<td>204.7</td>
<td>90.1</td>
<td>44%</td>
<td>23.2</td>
<td>26%</td>
</tr>
<tr>
<td>2009</td>
<td>5</td>
<td>272.3</td>
<td>44.6</td>
<td>317.0</td>
<td>170.3</td>
<td>54%</td>
<td>29.6</td>
<td>17%</td>
</tr>
<tr>
<td>2010</td>
<td>4</td>
<td>542.3</td>
<td>18.4</td>
<td>560.7</td>
<td>354.2</td>
<td>63%</td>
<td>323.3</td>
<td>91%</td>
</tr>
<tr>
<td>2011</td>
<td>6</td>
<td>1,642.0</td>
<td>180.5</td>
<td>1,822.4</td>
<td>1,288.8</td>
<td>71%</td>
<td>485.6</td>
<td>38%</td>
</tr>
</tbody>
</table>

2002 - 2011          | 53              | 3,262.1    | 339.6          | 3,601.6                   | 2,168.7       | 60%                   | 918.6                     | 42%                         |

Totals may not add up due to rounding errors.
Number of Events is the number of events occurred in the year. However, payments made in the year may relate to events from prior years.
NDRRA support relating to roads is approximated in the same proportion of expenditure.

It can be observed from the table above:

- With the exception of 2008, QLD on average has had five natural disasters per year.
- NDRRA has been providing support to QLD for the past ten years and the level of support has been growing since 2005 in both Category B and non Category B expenditures.
- The level of reimbursement as a percentage of the total expenditures is approximately 71% in 2011. This is expected to remain so for 2012 and 2013.
- Of the total support provided by NDRRA in the past 10 years, on average, 42% relates to road assets.

39
• This high level of NDRRA support provided to date reflects QLD’s high level of exposure to natural disaster in both frequency and average claim size. It also reflects NDRRA has been acting as the default insurer of QLD road and non-road assets as no reinsurance arrangements were in place until the current year, to transfer the risk to an external reinsurer at a cost.

7.6 Capital Management
No discussions on the State’s key principles for its capital management policy were presented in the submission.

7.7 Risk Management
Minimal discussions on the key principles and approach towards risk management were presented in the submission.

7.8 Conclusion
The submission provides no clear conclusion on the adequacy of the State’s insurance arrangements and capital management policy. However, we understand this will be addressed in the QLD resubmission.

Based on our Review of QLD’s independent assessment, our conclusion to the questions set out within the scope of requirements is as follows:

1 Has the State explored an appropriate range of insurance options available to it?
Yes for non-road assets. The submission provides evidence that QLD has explored insurance options, albeit only in respect of the 2011-12 financial year.
For road assets, the reason behind the decision not to insure is that traditional insurance options are not available and no market quotes have been sought on alternative insurance options.

2 Has the State assessed these options on a cost-benefit basis?
With respect to non-road assets, it could be inferred from the brokers’ opinion in the presentation pack to Commonwealth that cost-benefit analysis or benchmarking analysis may have been performed but if so, this is not presented or confirmed in the submission.

3 Has the State put in place insurance arrangements which are cost effective for both State and the Commonwealth?
For non-road assets and bridges, as the current reinsurance program was put in place after the submission and effective 1 November 2011, efficacy analysis of the current reinsurance arrangements is not possible.

4 Has the State adequately met its obligations to minimise financial exposure borne by taxpayers (both State and Commonwealth)?
For non-road assets and bridges, it would appear QLD has attempted to minimise the future financial exposure to be borne by taxpayers (both State and Commonwealth) with the placement of the current reinsurance arrangements. However, a firm conclusion cannot be made due the
recent purchase of the reinsurance program. Historically, as QLD has not had commercial reinsurance in place it is unlikely that the financial exposure to either QLD or the Commonwealth has been minimised in the past.

7.9 Recommendations

Based on our Review of the QLD submission, our recommendations are:

- Given the changes to the insurance arrangements QLD should be requested to finalise an updated submission as soon as possible, as required under Clause 4.6.3(b) of the Determination.

- Further exploration of alternative insurance options for road assets with market quotes and cost-benefit analysis to support decision of non-coverage should be completed.

- Efficacy of the current reinsurance arrangements be presented at the next submission to support the cost effectiveness of the reinsurance arrangements for the State and subsequently for the Commonwealth.
8 South Australia (SA)

8.1 Who Performed the Assessment?

The assessment has been performed by a Specialist, PricewaterhouseCoopers. The results of the assessment are set out in a document titled “South Australian Government Financing Authority - Independent Assessment of State Insurance Arrangements” dated 29 September 2011.

8.2 Current Insurance Arrangements

SAICORP is the insurance arm of South Australian Government Financing Authority (SAFA) and provides property insurance coverage to all assets owned by the South Australian government departments and statutory authorities unless exempted by the Treasurer. The property policy offered by SAFA covers most perils including floods and earthquakes. The insurance cover also includes bridges but excludes State roads.

SAICORP is in turn protected by reinsurance arrangements on both per loss and per event base, as well as on an aggregate portfolio basis. The purchase of reinsurance cover has been in practice for the past 20 years. The reinsurance arrangements for the year ending 30 June 2012 can be summarised as follows:

- Retains the first $1.0m of any one loss or series of losses arising out of any event.
- Amounts exceeding $1.0m contribute towards the annual aggregate self insured retention of $15.0m.
- Once the $15.0m aggregate self insured retention is reached, all further claims have a deductible of $1.0m.
- Policy limit is $750m of any one loss or series of losses arising out of any event.
- Cover excludes terrorism and State road assets.
- Based on the financial modelling, the reinsurance policy coverage should more than cover the APRA minimum requirement of a 1 in 250 return period event.

In the submission, no further information was provided on the past efficacy of the reinsurance arrangements to SA. However, its benefits (if any) to the NDRRA can be inferred by the low level of past support provided.

The gaps in the insurance coverage of the State assets are essentially the State road assets and losses arising from terrorism.

- With respect to terrorism, it is stated in the submission that indicative quotes were sought for the 2010/11 renewal, however, the State decided not to purchase cover after considering the cost and benefits of such cover. However, details of the cost-benefit analysis were not discussed in the submission.
- With respect to State road assets, market quotes will be sought for the 2011/12 reinsurance renewal and the catastrophe modelling updated to include road assets. This work was yet to be completed at the time of the submission.
The reinsurance renewal process, the approach and strategy adopted by SAICORP is noted in the submission. The process includes setting a desired risk preference with a reinsurance management strategy, seeking market quotes and catastrophe modelling.

8.3 Declared Assets

In the submission, all State owned assets (including those held within State Owned Corporations) that are covered by SAICORP are included in the submission. The submission has defined all assets covered by SAICORP as EPA under the Determination.

However, the submission also notes other potential assets that may be considered as essential in the event of a natural disaster but may not be covered by the NDRRA. These assets are excluded from the submission.

A summary of the State’s assets based on the information provided with the submission is summarised in Table 17 below:

<table>
<thead>
<tr>
<th>Type</th>
<th>Component</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Assets</td>
<td>Property</td>
<td>49,551.5</td>
</tr>
<tr>
<td>Civil Assets</td>
<td>Roads</td>
<td>17,428.5</td>
</tr>
<tr>
<td></td>
<td>Bridges</td>
<td>2,331.3</td>
</tr>
<tr>
<td></td>
<td>Storm Water</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Water + Sewer</td>
<td>16,125.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35,885.2</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>85,436.8</td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td>17,428.5</td>
</tr>
<tr>
<td>Uninsured (%)</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Road %</td>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>

The total declared assets are $85,436bn where $35,885bn relates to civil assets. Approximately 20% (or $17.428bn) of the total assets relate to roads, which are not insured by SAICORP and its reinsurance arrangements.

All water assets (including storm water assets) are included in submission but not separately identified.

8.4 Natural Disaster Experience

In the submission, discussions on the State’s exposures and risk accumulation by geographical concentration, and expected losses under various return periods are presented in the catastrophe modelling performed by AON Benfield for the Property Catastrophe Review 2011.
Based on the historical claims experience to date, it can be inferred SA is exposed to floods and storms. In addition, based on the catastrophe modelling performed, earthquake is a known risk to SA but a significant earthquake event has not occurred in recent years.

8.5 Claims History and Past NDRRA Support

Claims information set out in the submission guidelines is generally provided as supplementary data. They are not directly discussed and presented in the main submission document. However, we note:

- The split between roads and non-roads associated eligible expenditure, thus the related NDRRA support, is not available.
- The basis of the eligible expenditure associated with restoring EPA (for example, gross or net of reinsurance) is not stated. We have assumed the eligible expenditure to be net of reinsurance.

A summary of the natural disaster claims experiences and the past NDRRA support is set out in Table 18. The figures in the table reflect the figures provided in the State submission.

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>Number of Events</th>
<th>Category B</th>
<th>Non Category B</th>
<th>Total Eligible Expenditure</th>
<th>NDRRA Support</th>
<th>NDRRA Support % Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>1</td>
<td>1.0</td>
<td>4.7</td>
<td>5.7</td>
<td>2.3</td>
<td>41%</td>
</tr>
<tr>
<td>2006</td>
<td>1</td>
<td>2.9</td>
<td>1.5</td>
<td>4.4</td>
<td>0.3</td>
<td>7%</td>
</tr>
<tr>
<td>2007</td>
<td>2</td>
<td>0.7</td>
<td>1.1</td>
<td>1.8</td>
<td>0.6</td>
<td>31%</td>
</tr>
<tr>
<td>2008</td>
<td>2</td>
<td>28.0</td>
<td>0.1</td>
<td>28.1</td>
<td>1.3</td>
<td>5%</td>
</tr>
<tr>
<td>2009</td>
<td>1</td>
<td>7.8</td>
<td>0.0</td>
<td>7.8</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>2010</td>
<td>2</td>
<td>2.2</td>
<td>0.2</td>
<td>2.4</td>
<td>0.1</td>
<td>4%</td>
</tr>
<tr>
<td>2011</td>
<td>2</td>
<td>6.6</td>
<td>0.1</td>
<td>6.7</td>
<td>0.1</td>
<td>1%</td>
</tr>
<tr>
<td><strong>2002 - 2011</strong></td>
<td><strong>11</strong></td>
<td><strong>49.1</strong></td>
<td><strong>7.7</strong></td>
<td><strong>56.8</strong></td>
<td><strong>4.7</strong></td>
<td><strong>8%</strong></td>
</tr>
</tbody>
</table>

Totals may not add up due to rounding errors.

Number of Events is the number of events occurred in the year. However, payments made in the year may relate to events from prior years.

It can be observed from the table above:

- There were no eligible disasters prior to 2005.
- On average, South Australia has experienced at least one natural disaster event per year between 2005 to 2011.
- The level of support provided by NDRRA since 2005 has been minimal, where:
- the largest reimbursement was $2.3m in 2005 where the majority of payments related to non Category B (associated with personal disaster and community recovery), followed by
- $1.3m in 2008 relates to the Mid to Far North floods which occurred in January 2007.

- The low level of historical NDRRA support reflects both the outcome of low incidences of natural disaster events with relatively minor impacts to EPA, and the insurance coverage in place for non-road assets and bridges.

As no insurance cover is purchased for State road assets, NDRRA is acting as the default insurer of SA’s roads. However, damage to roads due to past floods appears to have resulted in minimal cost to NDRRA.

### 8.6 Capital Management

Based on the submission, SAICORP has a clear capital management policy which includes:

- Prospective funding: Annual contributions from agencies covered by SAICORP.
- Pre-funding: Target funding range which SAICORP aims to operate within.
- Planned strategy responses in place should the funding ratio falls below the target funding range.

The submission also presented the funding ratios and the target ranges for the past six years as supporting evidence of the operation of the capital management policy.

### 8.7 Risk Management

The risk management approach of SA includes:

- A risk management policy statement in force since November 2009.
- The requirement by SAFA/ SAICORP that each agency should have its own risk management framework.
- One of SAICORP’s roles is to provide risk management advice to the State.
- The purchase of reinsurance cover is the key risk management strategy to manage “financial” risks.

### 8.8 Conclusion

The submission provides a clear conclusion on the adequacy of the State’s insurance arrangements and capital management policy. In our view, this conclusion is supported by discussions and information set out in the submission.

Based on our Review of SA’s independent assessment, our conclusion to the questions set out within the scope of requirements is as follows:
1 Has the State explored an appropriate range of insurance options available to it?

Yes, based on the discussions of the reinsurance renewal process presented in the submission and the reinsurance renewal packs provided as supplementary information to the submission.

As for terrorism cover, market quotes were considered before a decision to continue with no insurance cover was made. However, discussion of the associated cost-benefit analysis was not presented in the submission.

As for road assets, market quotes were being sought at the time of submission. Hence subsequent cost-benefit assessments were not available or presented in the submission.

2 Has the State assessed these options on a cost-benefit basis?

Yes for non-road assets, based on the discussions of the reinsurance renewal process presented in the submission and the reinsurance renewal packs provided as supplementary information to the submission. It can be inferred that cost-benefit analysis of insurance arrangements has been confirmed.

3 Has the State put in place insurance arrangements which are cost effective for both State and the Commonwealth?

The level of support provided by NDRRA for the restoration of public assets has been low. The past reinsurance arrangements appear to have provided a positive contribution to NDRRA with respect to expenditure relating to restoration of public assets. It therefore appears that the arrangements have been cost effective for the Commonwealth. However, a firm conclusion cannot be drawn as analysis of the past efficacy of the reinsurance arrangements was not presented in the submission; hence it is unclear whether the arrangements are cost effective to SA.

For uninsured State road assets, there are plans to seek market quotes such that subsequent cost-benefit assessment can be performed prior to arriving at a decision on insurance coverage.

For terrorism cover, market quotes were sought for the 2011/12 renewal, and the State decided not to purchase cover after considering the cost and benefits of such cover. However, details of the cost-benefit analysis were not discussed or presented in the submission.

4 Has the State adequately met its obligations to minimise financial exposure borne by taxpayers (both State and Commonwealth)?

Based on the information presented in submission and the level of NDRRA support provided in the past, it would appear that SA has attempted to minimise financial exposure borne by the taxpayers (both State and Commonwealth) for the assets covered by SAICORP.

However, a firm conclusion cannot be reached as the efficacy of these arrangements has not been presented in the submission. The low level of past NDRRA support could be due to either the size of the past natural events, the existence of the reinsurance arrangements or some combination of these factors.
8.9 Recommendations

Based on our Review of the SA submission, our recommendations are:

- A re-submission or an addendum to the existing submission when the outcome of the market quotes for road assets are available and subsequent cost-benefit analysis has been performed.

- Cost-benefit analysis of past reinsurance arrangements be presented at the next regular submission to support the cost effectiveness of the reinsurance arrangements for the State and subsequently to the Commonwealth.

- The current submission only considers assets covered by SAICORP. It is unclear whether there are any assets (in quantum and level of insurance coverage) that could be classified as EPA and covered by NDRRA that have been excluded from the submission. We recommend SA include any such assets in the next regular submission.

- The cost-benefit analysis to support the decision on terrorism coverage should be presented at the next regular submission.
9 Western Australia (WA)

9.1 Who Performed the Assessment?

There were a number of documents presented in the WA submission. The main documents include:


- Various independent assessments provided by government agencies and trading enterprises (GTE) that “are likely to have essential public assets which are not insured by RiskCover (the State’s insurance fund)”. These agencies and GTE include:
  - Department of Environment and Conservation
  - Gold Corporation
  - Horizon Power
  - Department of Housing
  - Department of Indigenous Affairs
  - Main Roads WA
  - Public Transport Authority
  - Synergy
  - Verve Energy
  - Water Corporation
  - Western Power.

9.2 Current Insurance Arrangements

RiskCover (the State’s insurance fund) was established on 1 July 1997 and provides property coverage to most government agencies unless exempted by the Treasurer. Government Trading Enterprises (GTE) may own EPA but are not required to be covered by RiskCover. In these cases, agencies and GTE’s will seek their own commercial insurance arrangements.

Those agencies and GTE not covered by RiskCover generally own large infrastructure such as water and sewage assets, electricity infrastructure and State roads.

RiskCover is in turn protected by a combined property and motor catastrophe excess of loss cover. Prior to the year ending 30 June 2007, a hybrid quota share and excess of loss arrangement was in place for 2006 and a full proportional arrangement prior to 2006. A move
to a full non-proportional arrangement is due to availability in the reinsurance market and improving claims experience in RiskCover which makes the proportional arrangement less attractive from a cost-benefit perspective.

RiskCover’s catastrophe arrangement for the year ending 30 June 2012 can be summarised as follows.

- RiskCover retains the first $20m of any one loss or series of losses arising out of any event.
- The policy limit of this cover is $956m.
- Separate cover for terrorism is purchased with a limit of $250m aggregate excess of $10m. No further information was provided on the past efficacy of the reinsurance arrangements and its benefits (if any) to the NDRRA with respect to past events.

With respect to the reinsurance renewal process, catastrophe modelling results for RiskCover were presented in the submission. However, discussion on the general approach and strategy adopted by RiskCover and other agencies not insured with RiskCover was not presented in the submission.

With respect to other agencies and GTE not covered by RiskCover:

- Water assets, road assets and electricity infrastructure are generally not insured. The reasons provided in the submission for the decision to not purchase reinsurance cover for these assets are “based on historical precedent and an understanding that insurance obtained on a commercial basis would be cost-prohibitive”. As such, to the extent that any loss arising from these assets are eligible under the NDRRA (for example under special circumstances presented by the State), NDRRA is acting as the default insurer for WA State roads, water assets and electricity infrastructure. No evidence was presented in the submission that recent market quotes were actively sought to perform cost-benefit analysis in support of the decision not to insure. Whether the State has sought a quote for insurance protection in recent years is not clear.

- Information on the reinsurance arrangements placed was not presented in the submission.

- The State noted that no NDRRA claims have been made from GTE (specifically Western Power, Horizon Power and the Water Corporation) across the past 15 years and that Main Roads WA has been allocated NDRRA funding of only $2.0m across the period 2005/06 to 2010/11 despite incurred losses from natural disasters of $33.1m.

### 9.3 Declared Assets

The submission defines all State owned assets covered by RiskCover, and assets owned by Government agencies and trading enterprises but not insured with RiskCover, as essential public assets (EPA).

A summary of the State’s assets (including those defined as EPA owned by agencies and trading enterprises but not insured with RiskCover) is given in Table 19 below.
Table 19 - WA – State’s Assets

<table>
<thead>
<tr>
<th>Type</th>
<th>Component</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Assets</td>
<td>Property</td>
<td>57,316.6</td>
</tr>
<tr>
<td>Civil Assets</td>
<td>Roads</td>
<td>20,331.3</td>
</tr>
<tr>
<td></td>
<td>Bridges</td>
<td>4,472.7</td>
</tr>
<tr>
<td></td>
<td>Storm Water</td>
<td>28.2</td>
</tr>
<tr>
<td></td>
<td>Water + Sewer</td>
<td>29,195.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>54,027.7</td>
</tr>
</tbody>
</table>

Grand Total 111,344.3

Uninsured 61,805.9
Uninsured (%) 56%
Road % 18%

The total declared assets is $111.344bn where $54.027bn relates to civil assets. Approximately 18% ($20.331bn) of the total assets relate to roads. All State owned civil assets are not reinsured with an external reinsurer.

9.4 Natural Disaster Experience

In the submission, discussions on the State’s exposure to various disasters and geographical concentration of losses from natural disaster events, in regards to frequency and quantum of losses are presented in the catastrophe modelling performed in June 2011.

Based on the claims experience to date, WA is exposed to cyclones, floods, storms and bush fires.

9.5 Claims History and Past NDRRA Support

Claims information set out in the submission guidelines is generally provided as supplementary data. They are not directly discussed or presented in the main submission document. However, we note:

- NDRRA exposure and support is based on the combined State and local governments loss position. Hence, claims from local governments are included in the claims information provided in the State submission. However, the split between claims arising from State owned and local Government owned assets is not available.

- The basis of the eligible expenditure associated with restoring EPA (for example, gross or net of reinsurance) is not stated. We have assumed the eligible expenditure to be net of reinsurance.

A summary of the natural disaster claims experiences and the past NDRRA support is set out in Table 20 below. The figures in the table reflect the figures provided in the States’ submissions.
It can be observed from the table above:

- With the exception of 2011, WA has experienced on average three natural disasters per year. 2011 is well above that average with eleven natural disasters which include cyclone, bushfire, severe storms and floods.

- The low level of NDRRA support prior to 2009 could be due a change of RiskCover’s reinsurance arrangements where fully proportional or hybrid proportional and excess of loss arrangements were in place prior to 2007 as the reinsurer shares in the losses under proportional covers regardless of the size of the event. Under an excess of loss reinsurance arrangement, if the event is below the retention ($20m for the year ending 30 June 2012), RiskCover will pay the full loss of the event (as opposed to the portion after the quota share percentage) and in turn, considered as eligible expenditure under NDRRA.

- From the year ending 30 June 2007 onwards, the reinsurance arrangement is a full excess of loss arrangement with a retention of $20.0m compared to a NDRRA first threshold of $17.5m (2009), $19.3m (2010) and $19.4m (2011).

In addition, with the number of the events in 2011, it is expected the level of NDRRA support in 2012 and 2013 will be material.

### 9.6 Capital Management

Minimal discussion is provided on the State’s key principles for capital management policy. However, it is noted that discussions were made on accessing additional capital if a natural event exceeds, or is not covered by, the reinsurance arrangements.
9.7 Risk Management

As stated in the submission, the overall risk management approach includes:

- Risk management policies and associated guidance notes.
- The purchase of reinsurance cover is the key risk management strategy to manage “financial” risks.
- One of RiskCover’s roles is to provide risk management advice to the State.
- Discussion on the risk management framework consistent with the Australian/New Zealand Risk Management Standard: AS/NZS ISO 31000:2009 was not presented in the submission.

9.8 Conclusion

The submission provides no firm conclusion on the adequacy of the State’s (RiskCover insured EPA and all other agencies’ EPA) insurance arrangements.

Based on our Review of WA’s independent assessment, our conclusion to the questions set out within the scope of requirements is as follows:

1. Has the State explored an appropriate range of insurance options available to it?

Yes for assets covered by RiskCover where a catastrophe reinsurance arrangement is in place and catastrophe modelling has been performed to examine the appropriateness of coverage including a changing exposure profile. The gradual switch from a full proportional to excess of loss reinsurance arrangements is an example of exploring a range of insurance options to best fit RiskCover’s needs.

For road assets, no discussions, other than confirmation that no market quotes have been sought are provided.

2. Has the State assessed these options on a cost-benefit basis?

Similar to the above question. For non-road assets covered by RiskCover, it could be inferred from the reinsurance renewal process cost-benefit analysis was performed but if so, this not presented or confirmed in the submission.

3. Has the State put in place insurance arrangements which are cost effective for both State and the Commonwealth?

The level of support provided by NDRRA for restoration of public assets (Category B payments) has been low until 2009. The past reinsurance arrangements appear to have provided a positive contribution to NDRRA with respect to expenditure relating to restoration of public non road assets. It therefore appears that the arrangements have been cost effective for the Commonwealth. However, a firm conclusion cannot be drawn as analysis of the past efficacy of the reinsurance arrangements for RiskCover and GTEs were not presented in the submission; hence it is unclear whether the arrangements are cost effective to WA.
4 Has the State adequately met its obligations to minimise financial exposure borne by taxpayers (both State and Commonwealth)?

Based on the information presented in submission and the level of NDRRA support provided in the past, it would appear that WA has attempted to minimise financial exposure borne by the taxpayers (both State and Commonwealth) for the non road assets covered by RiskCover.

9.9 Recommendations

Based on our Review of the WA submission, our recommendations are:

- Alternative insurance options and market quotes on road assets be obtained at the next reinsurance renewal and cost-benefit analysis be performed to support the decision of non-insurance on road assets. A re-submission or an addendum to the existing submission should then be provided.

- A firm conclusion on the outcome of the independent assessment by the independent specialist be provided. A re-submission or an addendum to the existing submission should be provided.

- Cost-benefit analysis of past reinsurance arrangements be presented in the next regular submission to support the cost effectiveness of the reinsurance arrangements for the State and subsequently to the Commonwealth.
10 Tasmania (TAS)

10.1 Who Performed the Assessment?

The assessment has been performed by a specialist, Finity Consulting. The results of the assessment are set out in the document titled “NDRRA: Independent Assessment of State Insurance Arrangements – Department of Treasury and Finance (Tasmania)” by Finity Consulting, dated 28 September 2011.

10.2 Current Insurance Arrangements

The Tasmania Risk Management Fund (TRMF) is the captive insurer of Tasmania, providing property insurance coverage to assets owned by the State Government but not State Owned Companies. The property policy offered by TRMF covers all perils including floods and terrorism, but excludes road assets.

With State bridges, the first $5m is retained by the agency and losses in excess of $5.0m are covered by TRMF.

With Housing Tasmania, for the year ending 30 June 2012, the agency retains the first $14m of losses in the financial year, and any losses in excess of $14.0m are met by TRMF. The retained amount varies yearly and is based on the recommendation by an independent actuary.

TRMF does not purchase external reinsurance cover for any single large loss or a series of losses arising from an event. The only exceptions are for the Tasmanian Museum and Art Gallery Collections where an excess of loss arrangement ($45.0m in excess of $5.0m) is purchased and State owned marine hull assets are fully insured for $10m for the year ending 30 June 2012.

With respect to the decision to not purchase reinsurance cover, the following reasons were put forward:

- Limited support from NDRRA to date
- Proven ability to post fund large claims
- Anticipated high cost of reinsurance. However, it is not clear from the detail presented whether market quotes have been sought or whether alternative insurance options have been explored. Similarly there is no detail presented on whether a cost-benefit assessment was completed before arriving at the current decision on non-coverage.

10.3 Declared Assets

All State owned assets covered by TRMF are included in the submission. There has been no attempt to determine the State owned assets deemed as EPA under the Determination.

There are other assets which may be classified as EPA but not covered by TRMF and thus excluded from the submission. These assets include:

- Stormwater assets and local roads, owned by local governments have been included in the submission but are to be considered in a separate review.
• Large infrastructure such as water and electricity assets owned by State Owned Corporations.

A summary of the State assets (covered by TRMF) based on the information presented with the submission is summarised in Table 21 below.

<table>
<thead>
<tr>
<th>Civic Assets</th>
<th>Property</th>
<th>5,928.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Assets</td>
<td>Roads</td>
<td>3,886.3</td>
</tr>
<tr>
<td></td>
<td>Bridges</td>
<td>1,472.6</td>
</tr>
<tr>
<td></td>
<td>Storm Water</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Water + Sewer</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5,358.9</td>
</tr>
</tbody>
</table>

| Grand Total  | 11,287.4     |
|             |              |
| Uninsured   | 11,287.4     |
| Uninsured (%)| 100%         |
| Road %      | 34%          |

The total declared assets is $11.8bn where $5.4bn relates to civil assets. Approximately 33% (or $3.9bn) of the total assets relate to roads. As noted above, storm water and water assets are not owned by the State and thus not considered in the current submission.

State owned marine hull assets and the Tasmanian Museum and Art Gallery Collections are re-insured commercially. However, a breakdown of these assets has not been provided in the submission. Hence, the percentage of uninsured assets is in fact lower than the 100% stated in the table above.

10.4 Natural Disaster Experience

In the submission, discussions on the State’s exposure to various disasters and geographical concentration of losses from natural disaster events, in regards to frequency and quantum of losses are not presented in the submission.

Based on the claims experiences to date, Tasmania is exposed to bushfires and floods.

10.5 Claims History and Past NDRRA Support

Claims information set out in the submission guidelines is generally provided as supplementary data. They are not directly discussed and presented in the main submission document. However, we note:

• Split between roads and non-roads associated eligible expenditure, and thus the relating NDRRA support is not available
The basis of the eligible expenditure associated with restoring EPA (for example, gross or net reinsurance) is not stated. We have assumed the eligible expenditure to be gross of reinsurance as there have been no reinsurance arrangements in the past.

A summary of the natural disaster claims experiences and the past NDRRA support is set out in table 22 below. The figures in the table reflect the figures provided in the State submission.

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>Number of Events</th>
<th>Category B</th>
<th>Non Category B</th>
<th>Total Eligible Expenditure</th>
<th>NDRRA Support</th>
<th>NDRRA Support % Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>1</td>
<td>5.5</td>
<td>1.2</td>
<td>6.7</td>
<td>0.6</td>
<td>9%</td>
</tr>
<tr>
<td>2007</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>1</td>
<td>19.7</td>
<td>4.2</td>
<td>23.9</td>
<td>8.9</td>
<td>37%</td>
</tr>
</tbody>
</table>

It can be observed from the table above.

- Since 2002, there have been two events (2006 East Coast Bushfires and 2011 Floods) that required support from NDRRA.
  - For the 2006 East Coast Bushfires, the $5.5m Category B expenditure was not claimed as the State pursued NDRRA support through Clause 5.8.1(b) of the Determination (which provided reimbursement of 50% of Non Category B expenditure).
  - For the 2011 Floods, a claim is yet to be lodged with NDRRA as the expenditures have not been finalised.

- The historical low level of NDRRA support could be a combination of relatively benign natural disaster experience in the past 10 years, and/or the unique risk profile and geographical dispersion of assets within Tasmania.

- However, the financial impact of the 2011 floods may suggest some of the financial impacts and risks could be mitigated away from NDRRA through reinsurance cover with an external reinsurer.
10.6 Capital Management

The capital management policy can be summarised as follows:

- Prospective funding: Annual contributions from agencies covered by TRMF
- TRMF self retains the first $5.0m of any losses. The funding of costs over $5.0m is determined post-event on a case-by-case basis, either from the Consolidated Fund or by an increase in contributions over time.
- In the case of roads assets, losses are funded on a post-event basis through budget processes or re-prioritisation of capital works.

As noted in the submission, there appears to be no explicit structure on the post-event funding of any losses in excess of $5.0m. The funding appears to be decided after the event, where the first point of responsibility will be the agency, then the Treasury and NDRRA when the funding threshold is exceeded.

10.7 Risk Management

The submission presents limited discussion on the key principles and approach to risk management adopted by the State.

The risk management approach to financial risks is essentially through TRMF self retaining $5.0m of any losses and access to financial assistance under the NDRRA when eligible.

10.8 Conclusion

The submission provides no firm conclusion on the current insurance arrangements of TAS.

Based on our Review of TAS’s independent assessment, our conclusion to the questions set out within the scope of requirements is as follows:

1 Has the State explored an appropriate range of insurance options available to it?

The submission provides no evidence that TAS has explored any insurance options in recent years. The reasons behind the decision of the State not to insure were presented as:

- Limited support from NDRRA to date.
- Proven ability to post-fund large claims.
- Anticipated high cost of reinsurance. However, no market quotes have been sought and nothing has been presented on whether alternative insurance options have been explored. As such, any subsequent cost-benefit assessment before arriving on the current decision on non-coverage is unclear.

2 Has the State assessed these options on a cost-benefit basis?

As no insurance options and market quotes were explored, no cost-benefit analysis has been performed, or if it has, details have not been presented in the submission.
3 Has the State put in place insurance arrangements which are cost effective for both State and the Commonwealth?

As exploration of insurance options has not been undertaken, no conclusion can be drawn on whether the decision to not purchase insurance is cost effective for the Commonwealth.

4 Has the State adequately met its obligations to minimise financial exposure borne by taxpayers (both State and Commonwealth)?

As exploration of insurance options has not been undertaken, the submission does little to support a conclusion that the obligation has been met.

10.9 Recommendations

Based on our Review of the TAS submission, we recommend:

• A firm conclusion on the outcome of the independent assessment by the independent specialist be provided. A re-submission or an addendum to the existing submission should be provided.

• A re-submission should be provided to include market quotes on non-road and road assets and cost-benefit analysis to support the cost effectiveness of the current insurance arrangements.
11 Northern Territory (NT)

11.1 Who Performed the Assessment?

A number of documents were presented in the submission. The main documents are

- “Northern Territory Response to Requirements – Clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011”

11.2 Current Insurance Arrangements

The assets of NT are self insured by the State government with no external insurance cover. The only exceptions are for assets owned by the Power and Water Corporation (PWC) and Darwin Port Corporation (DPC). Details of these insurance arrangements are provided in the submission. PWC insurance arrangements cover all buildings and major structures, such as power stations, pump stations, some water storage facilities and treatment plants, but exclude dams, sewerage ponds, underground assets and overhead power transmission and distribution networks.

Financial modelling on natural disasters (earthquake, cyclones, other perils) was performed by consultants to support the decision of non insurance and the assertion is made that there is no benefit in purchasing external commercial insurance given the NDRRA support provided. All assets including road assets were included in the modelling. The consultant also noted in its report that the modelling results could underestimate general losses from small and localised perils such as road damage and storms due to the lack of detailed information.

Two reinsurance options, $1,200m in excess of $50m and $1,150m in excess of $100m were investigated in the financial modelling. Notional premiums for the reinsurance options were also presented. However, it is unclear whether these reinsurance premiums are market quotes or estimates. If market quotes were sought, the cost to NT may differ and could possibly be lower than the indicative premiums presented by the consultant.

Based on these notional premiums, cost-benefit analysis on these options (excluding PWC and DPC) was also presented in the consultant’s report. Although the costs of the covers are presented in the submission, the benefits of a reinsurance program to the State in the absence of the NDRRA support are not discussed. In addition, there is no clear consideration of the cost-benefit of reinsurance in reducing volatility and financial exposure for the Commonwealth.

11.3 Declared Assets

It appears all State assets, including those owned by PWC and DPC are included in the submission. Assets owned by PWC and DPC totalled $3,997m are not classified as EPA under Clause 3.6.2 of the Determination. However, these assets could be deemed as EPA under Clause 3.6.3 of the Determination (special circumstances). The owners of these assets are responsible for the purchase of insurance protection.
A summary of the State’s assets based on the information presented with the submission is summarised in Table 23 below:

<table>
<thead>
<tr>
<th>Type</th>
<th>Component</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Assets</td>
<td>Property</td>
<td>8,657.7</td>
</tr>
<tr>
<td>Civil Assets</td>
<td>Roads</td>
<td>3,588.8</td>
</tr>
<tr>
<td></td>
<td>Other Infrastructures</td>
<td>778.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4,367.6</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td><strong>13,025.3</strong></td>
</tr>
<tr>
<td>Road %</td>
<td></td>
<td>28%</td>
</tr>
</tbody>
</table>

The total declared assets is $13.025bn where $4.368bn relates to civil assets. Approximately 28% (or $3.589bn) of the total assets relate to roads. It is not possible to determine the exact proportion of assets which are not insured with an external insurer as only some of the assets (not all) owned by PWC and DPC are covered by insurance arrangements.

### 11.4 Natural Disaster Experience

Discussions on the State’s exposure to various natural disasters and special characteristics (e.g. geographic location) that contribute to the State’s exposure to natural disasters are presented in the financial modelling discussed in the submission.

Based on the claims experiences to date, NT is exposed to cyclones and floods.

### 11.5 Claims History and Past NDRRA Support

Claims information set out in the submission guidelines is generally provided as supplementary data. They are not directly discussed and presented in the main submission document. However, we note:

- NDRRA exposure and support is based on the combined State and local governments’ loss position. Hence, claims from local governments are included in the claims information provided in the State submission. However, the split between claims arising from State owned and local Government owned assets is not available.

- The basis of the eligible expenditure associated with restoring EPA (for example, gross or net reinsurance) is not stated. We have assumed the eligible expenditure to be gross of reinsurance as there have been no reinsurance arrangements in the past.

A summary of the natural disaster claims experiences and the past NDRRA support is set out in Table 24 below. The figures in the table reflect the figures provided in the State submission.
Table 24- NT - Historical Eligible Expenditure and NDRRA Support (S’m)

<table>
<thead>
<tr>
<th>Year Ending 30 June</th>
<th>Number of Events</th>
<th>Category B</th>
<th>Non Category</th>
<th>Total Eligible Expenditure</th>
<th>NDRRA Support</th>
<th>NDRRA Support % Total Expenditure</th>
<th>NDRRA Support Relating to Roads</th>
<th>% of NDRRA Support Relating to Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2</td>
<td>11.4</td>
<td>0.1</td>
<td>11.5</td>
<td>4.4</td>
<td>39%</td>
<td>3.2</td>
<td>72%</td>
</tr>
<tr>
<td>2003</td>
<td>4</td>
<td>2.1</td>
<td>0.0</td>
<td>2.1</td>
<td>0.0</td>
<td>1%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>2004</td>
<td>5</td>
<td>5.7</td>
<td>0.0</td>
<td>5.7</td>
<td>0.3</td>
<td>5%</td>
<td>0.3</td>
<td>93%</td>
</tr>
<tr>
<td>2005</td>
<td>2</td>
<td>5.2</td>
<td>0.4</td>
<td>5.7</td>
<td>0.2</td>
<td>4%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>2006</td>
<td>3</td>
<td>8.9</td>
<td>2.6</td>
<td>11.5</td>
<td>3.1</td>
<td>27%</td>
<td>1.2</td>
<td>40%</td>
</tr>
<tr>
<td>2007</td>
<td>2</td>
<td>15.8</td>
<td>1.5</td>
<td>17.3</td>
<td>7.2</td>
<td>42%</td>
<td>5.2</td>
<td>72%</td>
</tr>
<tr>
<td>2008</td>
<td>3</td>
<td>15.3</td>
<td>3.9</td>
<td>19.2</td>
<td>8.1</td>
<td>42%</td>
<td>5.9</td>
<td>73%</td>
</tr>
<tr>
<td>2009</td>
<td>6</td>
<td>14.9</td>
<td>0.0</td>
<td>14.9</td>
<td>4.2</td>
<td>28%</td>
<td>3.7</td>
<td>88%</td>
</tr>
<tr>
<td>2010</td>
<td>4</td>
<td>13.4</td>
<td>0.1</td>
<td>13.6</td>
<td>2.4</td>
<td>18%</td>
<td>2.0</td>
<td>84%</td>
</tr>
<tr>
<td>2011</td>
<td>4</td>
<td>21.3</td>
<td>1.2</td>
<td>22.5</td>
<td>7.7</td>
<td>34%</td>
<td>5.9</td>
<td>77%</td>
</tr>
<tr>
<td>2002 - 2011</td>
<td>35</td>
<td>114.0</td>
<td>9.9</td>
<td>123.9</td>
<td>37.7</td>
<td>30%</td>
<td>27.4</td>
<td>73%</td>
</tr>
</tbody>
</table>

Totals may not add up due to rounding errors.
Number of Events is the number of events occurred in the year. However, payments made in the year may relate to events from prior years.
NDRRA support relating to roads is approximated in the same proportion of expenditure.

It can be observed from the table above:

- NT, on average, has two to six natural disasters per year.
- NDRRA has been providing support to NT on a yearly basis since 2006. The reimbursement rate has been between 18% and 42%
- Of the total past support provided by NDRRA, approximately 73% relates to road assets.
- This high level of NDRRA support provided to date reflects NT’s high level of exposure to natural disaster in both frequency and average claim size. It also reflects NDRRA acting as the default insurer of NT assets as there are no insurance or reinsurance arrangements in place to transfer the risk to an external insurer/reinsurer.

11.6 Capital Management

As the State’s assets are self insured, no premiums or contributions are collected from the agencies / departments. The funding arrangement is a combination of:

- Prospective funding: A notional budget allowance of $10m is provided annually.
- Post funding: NDRRA support and re-prioritisation of capital works.

11.7 Risk Management

Discussions on the key principles and approach of risk towards risk management adopted by the State were not presented in the submission.
11.8 Conclusion

The submission provides a firm and clear conclusion that the current insurance arrangement is adequate due to the availability of NDRRA on the premise that it is not cost-effective from NT’s perspective to purchase insurance.

Based on our Review of NT’s independent assessment, our conclusion to the questions set out within the scope of requirements is as follows

1 Has the State explored an appropriate range of insurance options available to it?

The submission provides a consultant’s report that presented two reinsurance options. The reason behind the decision of the State not to insure is the assertion that there are no benefits in purchasing external commercial insurance relative to the NDRRA support provided in the absence of insurance. However, no market quotes have been sought and nothing has been presented on whether alternative insurance options have been explored. As such any subsequent cost-benefit assessment before arriving at the current decision on non-coverage is unclear.

2 Has the State assessed these options on a cost-benefit basis?

No, notional premiums were presented in the submission but market quotes were not explored. The cost-benefit analysis has been performed from the State perspective noting the expected NDRRA support in the absence of reinsurance. A cost-benefit analysis with confirmed market quotes and from the Commonwealth perspective has not been presented.

3 State put in place insurance arrangements which are cost effective for both State and the Commonwealth?

As an exploration of insurance options has not been made, no conclusion can be drawn on whether the decision to not purchase insurance is cost-effective for the Commonwealth. It appears in the submission that NT has only considered the cost effectiveness for the State noting that NDRRA is acting as the default insurer. No considerations were made on the cost effectiveness from the Commonwealth perspective.

4 Has the State adequately met its obligations to minimise financial exposure borne by taxpayers (both State and Commonwealth)?

As exploration of insurance options has not been made the submission does little to support a conclusion that the obligation has been met.

11.9 Recommendations

Based on our Review of the NT submission, we recommend:

- A re-submission or addendum to include market quotes on non-road and road assets be obtained and cost-benefit analysis be performed to support the cost effectiveness of the current insurance arrangements as soon as possible.
Appendix A

Guide to Submission Requirements – clause 4.6 of Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011

Preamble

The purpose of this document is to provide an indication of the type of information and data which the Commonwealth expects States and territories (States) to provide to enable the Commonwealth to undertake an informed review of the independent assessments of States’ insurance arrangements.

Clause 4.6.4 of NDRRA Determination 2011 provide that the Commonwealth will conduct a review of each State’s independent assessment of its insurance arrangements. The Commonwealth review will be guided by the following principles:

a) A State has a responsibility to put in place insurance arrangements which are cost effective for both the State and the Commonwealth;

b) The financial exposure borne by taxpayers (at both levels of Government) under the Determination should be minimised; and

c) The onus is on a State to explore a range of insurance options in the marketplace and assess available options on a cost-benefit basis.

A State’s independent assessment should focus on financial exposure related to restoration or replacement of certain essential public assets that are at risk of being damaged as a direct result of a natural disaster \(^1\) [refer clause 3.3.1a) of the 2011 Determination].

The Commonwealth will depend heavily on the information and data provided by a State in its submission. Accordingly, the information and data provided needs to be comprehensive. In general, the Commonwealth requires the following types of information and data:

Risk data

- Details of all essential public assets [refer clause 3.6.1 of the 2011 Determination].
- Details of historical losses on essential public assets as a direct result of a natural disaster.

Risk profile

- Information regarding the risk exposures of essential public assets.
- Modelling undertaken in respect of financial risk exposures.

Insurance arrangements

- Details of current insurance arrangements in respect of essential public assets.

\(^1\) Natural Disaster currently includes terrorism related events which were added to the Determination temporarily (July 2010) pending a decision on permanent inclusion.
• Estimates of the cost of insuring currently uninsured essential public assets.

*Strategic information*

• Qualitative information relating to risk management policy and strategy (in respect of essential public assets).

**Guide to Submission Requirements – clause 4.6**

1 Under the Determination, States are required to submit an independent assessment of their insurance arrangements undertaken by an independent and appropriate specialist.

2 The submission will need to include sufficient commentary and evidence to support and substantiate a State’s assessment of the adequacy of their insurance arrangements, having regard to the provisions in the 2011 Determination, including Guideline 5/2011.

3 This guide sets out the Commonwealth’s information requirements in two sections:

- Mandatory requirements. Each State is required to submit the information and data set out in this section
- Optional requirements. States are encouraged to submit additional information and data that they believe will enhance their submission. This section sets out some examples of additional information that might be considered.

4 Where information cannot be provided, or can only be provided in part, supporting reasons should be included as well as advice on when the additional information will be available.

**Mandatory Requirements**

**Asset registers**

5 States are required to submit a complete essential public asset register, giving details of essential public assets [*refer clause 3.6.1 of the 2011 Determination*].

6 For this purpose, essential public assets are to be split between roads and other essential public assets. Details required include:

- Description of assets;
- Location; and
- Estimate of replacement value

7 States are required to collate and submit a separate essential public asset register in respect of local government essential public assets [*refer 3.6.2 a) ii) of the 2011 Determination*] within their jurisdiction.

**Eligible disasters**

8 States are required to submit a complete list of past eligible disasters [*refer clauses 2.1, 4.2 and 5.4 of the 2011 Determination*] that they have previously notified for NDRRA purposes.

**Claims/Loss history**

9 States are required to submit details of the historical costs of restoring or replacing essential public assets damaged or destroyed as a direct result of a natural disaster.
10 This information is required in respect of the 15 financial years from 1996/97 to 2010/11.

11 The required information includes:

- Total expenditure incurred by the State in each financial year (before any NDRRA recoveries) split between roads and other essential public assets;
- Estimated future expenditure (yet to be incurred) in respect of past natural disasters split between roads and other essential public assets;
- Detailed information on costs attributable to specific assets (other than roads) where the cost of restoring or replacing any individual asset has exceeded $1m;
  - Description of the asset;
  - Asset ownership (State or Local Government);
  - Name of the natural disaster;
  - Date of the loss;
  - Total cost of restoration or replacement;
  - Amount already paid (brow down by financial year); and
  - Amount yet to be paid.

**Support received under NDRRA**

12 Each State is required to submit details of payments received under the NDRRA in each of the 15 financial years from 1996/97 to 2010/11 in respect of restoration or replacement of essential public assets broken down by Natural Disaster.

13 Each State is required to submit estimates of payments expected to be made under the NDRRA in future years in respect of restoration or replacement of essential public assets damaged or destroyed as a direct result of a past natural disaster, again broken down by Natural Disaster.

**Insurance arrangements**

14 Each State is required to submit details of its current insurance arrangements as they apply to essential public assets (details of any proposed/possible insurance arrangements, as a result of any recent approaches to the market which have not yet led to new insurance arrangements being finalised, should also be included separately here, if applicable).

15 Comprehensive analysis that supports the design of the State’s adopted insurance strategy including any financial modelling that has been undertaken.

16 Current commercial insurance information in respect of essential public assets:

- Full details of the most recent approach to the market including all policies and premiums offered;
- Details of the policies in place for the current year and details of the essential public assets covered;
- Policy expiry dates;
• Any exclusions or sub-limits for natural disasters;
• Deductible levels; and
• Limits of liability.

17 Details of all uninsured essential public assets, including:
• Approaches made to the market to source insurance cover and the policies and premiums offered (if any);
• Comprehensive analysis supporting the decision not to insure these assets including any financial modelling which has been undertaken; and
• If there have been no approaches to market, reasons to support this decision.

18 Managed fund information:
• Details of interaction between State’s managed fund arrangements and losses to essential public assets that are a direct result of a natural disaster; and
• Specifically, whether any payments from the managed fund in respect of such losses are State expenditure for the purpose of clause 5.2.1 of the 2011 Determination.

19 Other capital
• Details of any other capital that may be available to the State to fund the costs of replacement or restoration of essential public assets following a natural disaster which would not be counted as State expenditure for the purpose of clause 5.2.1 of the 2011 Determination.

Risk management information

20 Each State is required to provide a statement of their risk management policy and strategy. The statement should focus on management of the financial risk associated with damage to, or destruction of, essential public assets as a direct result of a natural disaster.

21 This statement should set out the State’s risk management policy, including the rationale for its policy (within the context of clause 3.3.1a) of the 2011 Determination. It should also set out the strategy that the State adopts to give effect to its risk management policy.

Optional information

22 It is open to State to provide further information which they believe would enhance their submission. This might include information regarding the risk profile of their essential public assets, with a focus on financial exposure related to damage to essential public assets from a natural disaster.

23 The sort of information that might be considered includes any assessment of the potential costs associated with natural disaster risks. This would cover the type of natural disaster that the State is exposed to, and an indication of the costs that might arise for natural disasters of different frequency. Appropriate frequencies might include: 1 in 10 year event, 1 in 20 year, 1 in 100 year event, and maximum possible event; and
Appendix B

Best Practice Submission Template

B.1 Executive Summary

• Purpose and scope. It is important that the report notes and confirms any specific items which are deemed out of scope by the author.
• Contact details of the reviewer for further discussion.
• Summary of the review’s findings including:
  − Conclusions on the completeness and compliance of the information provided by the State to the Federal government.
  − Conclusions on the insurance / reinsurance program adequacy.
  − Conclusions from the review of capital management.
  − Conclusions from the review of risk management.
• The executive summary should include key exhibits and or cross references to key exhibits in the body of the report that provide support for each conclusion, for example any graphs/tables, analysis, such as catastrophe modelling results, market insurance quotes or premiums.

B.2 Checklist of Data Provided

• A road map of the data provided with the submission with respect to the data provided in the Appendices or CD and the relevance to the section required within the submission.

B.3 Exposure Information

B.3.1 Overview of Eligible Public Assets (EPA)

• Comment the compliance/non-compliance and completeness of the EPA register to contain correct and sufficient detail of EPA. Additionally note the same for the local council asset register.
• Comment and list of assets between General Government agencies, Public Trading Enterprises (“PTE”), State Owned Corporations (“SOC”) and local governments.
• Provide a brief summary of declared asset values by General Government agencies, Public Trading Enterprises (“PTE”), State Owned Corporations (“SOC”) and local governments, split between civic (building and contents) and civil assets (roads, bridges and storm water, water and sewers, and power transmission).
• Comment on profile and distribution of the EPAs (including the concentration of assets and largest single historical loss).

• Where data is incomplete some indication of the materiality of the missing data should be provided.

B.3.2 Exposure to Natural Disaster

• Comment on the State’s exposure to various natural disasters and special characteristics (e.g. geographic location) that attributes to the State’s exposure to natural disasters.

<table>
<thead>
<tr>
<th>Peril</th>
<th>Exposure level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peril</td>
<td>High/Med/Low + comments if any</td>
</tr>
<tr>
<td>Peril</td>
<td>High/Med/Low + comments if any</td>
</tr>
</tbody>
</table>

• Specific comments should be given on key risk accumulations and high risk areas.

B.4 Claims History and Past NDRRA Support

B.4.1 State/Councils’ natural disaster records

• Comment on the completeness of the historical costs of restoring/replacing essential public assets due to natural disasters including estimated future payments for past natural disasters.

• Provide summaries by type for the number, estimated (gross and net) incurred cost by accident year.

B.4.2 State/Councils’ past NDRRA claims

• Provide a summary of the past claims to NDRRA by Category type and financial year. If State and councils are included together then a split between the two. The claims cost must include expected future payments for past natural disasters.

• Full details on the past and expected (gross and net) eligible expenditure and amounts expected to receive from NDRRA by event, accident year, financial year, asset type (at a minimum, road and non-roads) and category type in the past 15 years in the appendices.

• Provide the amounts expected to be received from NDRRA arising from the expected events in the coming financial year.

• Provide a list of top natural disasters in terms of support received from NDRRA. (Ideally, the report should also map claims to each relevant natural disaster giving rise to the payments).

• Comment on the geographical concentration of past losses from natural disaster with respect to frequency and quantum of losses.

68
• Comment on the frequency and quantum of support received from NDRRA in the past, including alternative insurance options explored or being explored to reduce the level of commitment from the Commonwealth, taking into consideration the objective of NDRRA.

B.5 Current Insurance Arrangements

B.5.1 Current Arrangements
• Provide a clear summary of the current insurance arrangements of State and local government assets, including the funding arrangement and policy coverage.
• With respect to the EPA, comment on the assets which are not insured with respect to the declared asset values, historical experience, reasons for non-insurance and the associated cost and benefit analysis (if any).
• For assets which are insured, comment on cost, coverage basis and limits of liability.
• Comment how the State deals with large losses / natural disaster prior to seeking NDRRA for support.
• Any planned changes to the current insurance / reinsurance arrangements, and the potential impact to the State and Commonwealth.

B.5.2 Insurance / Reinsurance procurement process
• Document and comment on the process and strategy taken by the State to acquire insurance/reinsurance. In particular note and comment on:
  • The philosophy/principle taken in purchasing cover.
  • If stated, the risk appetite of the State or State run insurance fund.
  • Any efforts taken to minimise/optimise the cost of insurance/reinsurance, including quotes received.
  • Any excluded perils (terrorism, floods) and lower sub-limit.
  • Past efficacy of the arrangements.
  • Reinsurance slip of the most recent insurance / reinsurance arrangements.
  • Credit rating of the insurance / reinsurance provider.
  • Confirm date of last review of external insurance/reinsurance arrangements (particularly for uninsured risks and where this is not an annual process).

B.5.3 Catastrophe Modelling (and any other financial modelling)
• Summarise any findings/results of catastrophe or reinsurance programme modelling. Especially comment on the whether it is sufficient to cover a 1 in 250 year event if the analysis has been done. Present the following results if available:
• A summary of the model output for the loss estimation of various 1 in X years
catastrophe event if available.
• The net impact of catastrophes on the State with the insurance/reinsurance to purchased,
where the catastrophes modelled would be various scenarios of 1 in X year event.
• Comparison of the PML with the cover limit.
• A summary of the largest asset / asset concentration risk and comparison to the cover
limit.
• Provide details of the catastrophe/financial modelling in the appendices.
• A summary of the assets which have been excluded in the financial modelling and the
potential impact on the results had they been included.

B.5.4 Other Insurance/Reinsurance options
• Note any other insurance/reinsurance options considered by the State include the quoted
premium.
• Present any catastrophe/financial modelling done for the alternative programs and note the
rationale on why the current program was chosen over the alternatives.

B.5.5 Capital Management Policy
• Summarise and comment on the State’s Capital management principles, current capital
position and the current capital position in relation to APRA’s Minimum Capital
Requirement (MCR) as a proxy to required capital.
• Present and comment on the State capital position in the last five years. Any instances
where additional capital is required, comment on the circumstances of such need and source
of capital.
• Any strategies/responses the State has if the capital position falls below the minimum target
the State has.
• Note any other capital the State has that may assist in replacing essential public assets after a
natural disaster, in particular where NDRRA support is not available (that is below the 1st
threshold).

B.5.6 Risk Management Policy
• Summarise and comment on the State’s Risk management strategy including its compliance
to the submission requirements.

B.5.7 Conclusion
• Present the key finding of the review in particular:
  • Adequacy of insurance/reinsurance cover.
• Clear conclusion on the cost effectiveness of the insurance arrangements in place for the State.
• Clear conclusion on the cost effectiveness of the insurance arrangements in place for the Commonwealth.
• Adequacy of capital to cope with natural disasters.
• Risk management strategies.
• Compliance of the submission from the State.
Appendix D: Australian Government Actuary Comments
1 March 2012

Mr David Tune PSM
Secretary
Department of Finance and Deregulation
John Gorton Building
King Edward Terrace
PARKES ACT 2600

Dear Mr Tune

KPMG REVIEW OF STATE SUBMISSIONS ON NDRRA

You have asked me to review the report prepared by KPMG on its review of State NDRRA submissions in order to provide a high-level independent comment on their analysis and conclusions.

Briefly, I think that KPMG have tackled a difficult task as well as could be expected. They have considered all of the information that was available to them and have reached defensible conclusions.

It will be apparent that, in order to reach their conclusions, KPMG have necessarily exercised a degree of subjective judgement. The approach taken by KPMG is not, in my view, unreasonable. However, there are alternative approaches that would also be reasonable and care will be needed in assessing their conclusions and recommendations because of this.

In general, I think it is appropriate to consider the set of questions (and KPMG’s answers) as a whole for each jurisdiction, rather than in isolation for each question.

In that regard, KPMG is essentially recommending that:

- jurisdictions should seek insurance quotes where they haven’t previously
- jurisdictions should formally assess the cost-benefits of insurance before deciding to insure or not to insure
- jurisdictions which have had insurance in place previously should assess the cost/benefit of these historical arrangements and report on this in future

In my view, the Commonwealth can reasonably expect that jurisdictions adopt sound risk management policies and practices. While this might not necessarily mean that jurisdictions should be purchasing a lot of insurance (or indeed any external insurance at all), it will be clear that insurance is one of a suite of risk management tools that might be available to a jurisdiction.

Accordingly, there is merit in a proper assessment of the value of insurance, even if the ultimate decision taken by a jurisdiction is not to purchase. This cannot be undertaken without any knowledge of the cost of insurance. As well as that, it is possible that insurance quotations might provide some insight into the underlying expected costs associated with natural disasters, which, of course, would be an important input for a jurisdiction into its risk management arrangements. Accordingly, taken together, KPMG’s recommendations appear defensible.

Yours sincerely

[Signature]

Peter Martin
Australian Government Actuary