Independent Pricing and Regulatory Tribunal

IPART
New South Wales

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PO Box Q290, QVB Post Office NSW 1230
Level 8, 1 Market Street Sydney NSW 2000
T (02) 9290 8400 F (02) 9290 2061
ABN 49 202 260 878

www.ipart.nsw.gov.au

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Natural Disaster Funding Arrangements
Productivity Commission
LB2 Collins Street East
Melbourne Victoria 8003

Contact Peter Leventis

Dear Commissioners

SUBMISSION TO REVIEW OF NATURAL DISASTER FUNDING ARRANGEMENTS

Australia experiences a range of natural disasters. Without careful management, natural disasters cost more than they need to. We welcome the opportunity to participate in the Productivity Commission's review of natural disaster funding arrangements to ensure that the arrangements provide the right incentives for mitigation, resilience and recovery activities.

IPART is the independent economic regulator in New South Wales, regulating a range of industries including water and local government. We also serve as the NSW Government's economic advisor and policy think tank. In this role we have recently conducted a review for the NSW Government into Local Land Services. We developed a cost recovery framework based on the concepts of impactor and beneficiary-pays, which should reduce the incentive to cost shift. Our work makes us well-placed to comment on aspects of natural disaster funding.

Our response to the questions raised in the paper is attached below. If you have any questions in relation to this submission please contact Peter Leventis

Yours sincerely

Peter J. Boxall AO
Chairman

SUBMISSION TO REVIEW OF NATURAL DISASTER FUNDING ARRANGEMENTS ISSUES PAPER

June 2014

Australia experiences a range of natural disasters, including fires, floods and storms and cyclones. Without careful management, natural disasters cost more than they need to. It is important to get the right mix of mitigation, resilience and recovery activities so that it does not cost too much to protect against disasters (gold-plating) or too much in recovery activities. We welcome the Productivity Commission's review of natural disaster funding arrangements to ensure that the arrangements provide the right incentives for mitigation, resilience and recovery activities.

We consider that:

- Funding arrangements should be based on the cost sharing principles of impactor-pays and beneficiary-pays. This framework based on impactor / beneficiary pays provides a link to who should pay. Taxpayer funding should be considered as a last resort, where it is not efficient or effective to charge impactors or beneficiaries.
- Insurance should be compulsory to avoid potential moral hazard by local councils self-insuring or not insuring but ultimately relying on State or Commonwealth taxpayer assistance. By insuring, councils face a trade-off between premiums and the cost of mitigation activity.
- Cost-benefit analysis should support decision making to ensure efficient actions to mitigate or otherwise are undertaken that maximise net benefit to society. The action that is undertaken should be the one that delivers the highest net benefit.

Our submission draws upon our experience in setting fees for local land services, regulating water prices and licenses and setting the rate peg for local councils.

1. Developing a principles-based approach to assess funding

Funding arrangements should be based on the cost sharing principles of risk creator and beneficiary-pays.[1] Such a principles-based approach is a robust way that provides stakeholders with incentives to act efficiently, and to ensure inefficient cost-shifting does not occur.

We have recently undertaken a review for the NSW Minister for Primary Industries to develop an efficient and transparent cost recovery framework for the newly created Local Land Services NSW to sustainably fund its activities.[2,3] Our proposed framework is in part based on the PC's review into *'Cost Recovery for Government Agencies'*, in 2001.[4] In our Draft Report, we develop a funding approach based on a hierarchy where (see Box 1 for a detailed explanation):

- Preferably the impactor/risk creator should pay (including where government agencies are risk creators)
- if that is not possible, the beneficiary should pay (direct beneficiaries before indirect beneficiaries)
- as a last resort, taxpayers should pay.

This hierarchy identifies who creates risk or demands an activity and hence who should be considered to pay for its provision. This approach provides a signal to the identified party the cost of their decisions or actions and provides an incentive to act efficiently. When those creating the need or receiving a benefit from a service are disconnected from the cost of their actions, there is a real risk that inefficient demand for action will occur or that individuals will rely on the efforts of others.

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1 The term risk creator is used in literature mainly for biosecurity issues, but it is analogous to polluter-pays or impactor-pays.

2 IPART, *Review of funding framework for Local Land Services NSW*, for Minister for Primary Industries – Draft Report, September 2013. We have provided a Final Report to Government, but it is not yet publicly available.

3 Local Land Services will deliver a variety of activities including, advice on production for farm businesses, biosecurity (plant and animal health), plant and animal pest control, natural resource management and emergency response.

4 Another PC review we found helpful for our Local Land Services review is, *'Rural Research and Development Corporations'*, in 2011, in particular the concept of 'additionality'.

Box 1 Funding hierarchy established under our Local Land Services review

Impactors or risk creators – Where possible, those causing an adverse impact (eg, degrading the environment) or creating a risk (eg, harbouring pest animals on their property) should pay. They are best placed to alter their risky behaviour and achieve an efficient outcome. The cost of the activity should be allocated to the impactor(s) or risk creator(s) in proportion to their contribution to the impact or risk created, where it is efficient and cost effective to identify and charge them.

Beneficiaries – Where the impactor or risk creator cannot pay for an activity because it is inefficient to levy them, landholders benefitting from a risk reduction or risk mitigation service should pay. When determining cost allocation to beneficiaries sufficiency[5] and additionality[6] principles need to be applied properly.

Taxpayers – as a last resort the cost of a service should be borne by taxpayers. That is where it is not feasible, efficient or cost effective to charge either an impactor or beneficiary.

Cost-shifting occurs when there's an unjustified allocation of costs to parties that do not create the need or receive a benefit from an activity but are required to fund its costs. We consider that a transparent approach that considers who creates the need or is demanding action is the best way to highlight who should pay. For example, for natural disasters, cost-shifting might occur where a decision has been made to locate structures in a flood prone area. However, this decision may have been made without requiring risks to be sufficiently mitigated and therefore relying on others to pay for reconstruction in the event of a natural disaster.

Cost benefit analysis is an important part of this framework. Service providers and governments need to determine appropriate/optimal courses of action that will maximise the net benefit to society and ensure that resources are managed efficiently. This is discussed in more detail in section 3.

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5 The sufficiency principle applies where the selected funders include direct beneficiaries that can capture sufficient benefits to justify charging them for the activity (ie, the benefits are equal to or outweigh the cost of the service). In this situation, it is efficient to allocate the entire cost to these direct beneficiaries - even when indirect beneficiaries obtain some residual benefit.

6 The additionality principle applies where the direct beneficiary is unable to capture enough of the benefits to at least equal the cost. In this situation, it may be worth considering allocating part of the cost to the direct beneficiary (up to the point equal to its benefit), and the residual to the indirect beneficiary (assuming they can capture benefits equal to or greater than this amount):

- Where the direct beneficiary captures sufficient benefits to meet the costs of the activity, indirect beneficiaries should not pay.
- Where the direct beneficiary is unable to capture sufficient benefits to meet the cost of the activity, the direct beneficiary should pay up to the point where benefits equal costs. The indirect beneficiary should pay the residual to meet the cost of the activity for the additional benefits, where it is efficient for them to do so.

Box 2 shows an example from our LLS review on cost-sharing based on who creates the need for an activity.[7]

Box 2 Who should pay for wild dog control?

The presence of wild dogs in national parks, forestry lands and private landholdings has negative effects on livestock and native fauna. An eradication program has been developed. All landholders are potential harbourers of wild dogs since the dogs are mobile. Therefore, all landholders (private and public) contribute to this problem, ie, are risk creators (coincidentally also beneficiaries). Therefore, all landholders should be charged for the program in proportion to the risk they generate.

2. Insurance as incentives to undertake risk mitigation

The PC seeks comment on the insurance arrangements of essential public assets, and the incentives to insure given the current NDRRA arrangements. Our research led us to the following insurance arrangements for the industries we regulate. Importantly, we consider the cost of adequate insurance provides an incentive to asset owners to undertake efficient risk mitigation activity.

The following schemes exist for state and local government assets respectively:[8]

- The NSW Self-Insurance Corporation (SICorp) administers the Treasury Managed Fund (TMF), which is the NSW Government's self-insurance scheme. SICorp also purchases reinsurance on behalf of the fund in local and overseas markets.[9] A number of regulated water utilities are members of the scheme including, the Sydney Catchment Authority, Sydney Water Corporation, Hunter Water Corporation and State Water.
  - Insurance arrangements of SOCs are generally out of scope of the NDRRA unless the (Federal) Attorney-General has deemed otherwise.[10]

[7] This case study pre-dates the framework developed for the LLS review but uses the same ideas.
[8] Commonwealth of Australia, Department of Finance and Deregulation, *Review of the Insurance Arrangements of States and Territory Governments under the National Disaster Relief and Recovery Arrangements Determination 2011*, NDRRA Phase 2 Report, September 2012.
[9] See, https://riskinsite.nsw.gov.au/portal/server.pt/community/publications/272 - TMF Brochure.
[10] Ibid., p 26.

- Statewide Mutual administers a scheme for councils in NSW to enter into a 'self-insurance mutual' arrangement that is backed by reinsurance in local and overseas markets.[11] United Independent Pools is another entity that provides a number of councils an independent pooling arrangement.[12]
  - Flood events are not covered under the Statewide Mutual.[13]

We consider the potential for under-insurance to be more of a risk for non-commercial local government assets than for SOCs, and we explore this issue in more detail below.

Insurance should be compulsory to avoid potential moral hazard by councils self-insuring or not insuring but eventually relying on taxpayer assistance in the event of a natural disaster. Therefore, we consider that councils should be required to take out adequate insurance that provides an incentive to undertake efficient mitigation/resilience/recovery investment. By doing so, councils can trade off premiums against expenditure and choose the most efficient option. This outcome may provide councils an indication of whether it makes sense to continue operating the asset if they cannot fund its reconstruction in the event of a natural disaster.

We acknowledge that councils' revenues are limited. They levy rates on land (increases are regulated by IPART), receive grant funding from other levels of government,[14] earn revenue from fees and charges and earn investment income. Many NSW councils currently have infrastructure backlogs, which limits their capacity to increase mitigation strategies or resilience activities. Hence, many councils depend on funding from other levels of government to assist with disaster recovery and clean up.[15] If disasters are not state declared then recovery/clean-up activities impact a council's day to day operations.[16]

Our view is that the Commonwealth should tailor existing financial assistance grant arrangement to assist councils **most** in need. Together with compulsory insurance, this provides the incentive for all councils, including disadvantaged councils, to undertake efficient risk mitigation actions where possible.

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[11] See, https://www.statewide.nsw.gov.au/.

[12] See, http://www.unitedindependentpools.org/default.asp.

[13] Commonwealth of Australia, Department of Finance and Deregulation, *Review of the Insurance Arrangements of States and Territory Governments under the National Disaster Relief and Recovery Arrangements Determination 2011*, NDRRA Phase 2 Report, September 2012, p 28.

[14] Natural Disaster Relief and Recovery Arrangements (NDRRA), National Partnership Agreement on Natural Disaster Resilience, the state or commonwealth government may provide additional funding to councils to assist in short term and longer term recovery.

[15] For example, following the 2007 storm and flood events on the NSW Central Coast the state and federal governments provided $500,000 for the Central Coast Recovery Fund which was distributed by the 2 councils in the region, Gosford City Council and Wyong City Council. The councils form a joint committee and distributed the money by way of grant application.

[16] State or Federal funding is usually not provided unless disasters are state declared.

3. Cost-benefit analysis (CBA) for standard setting and risk management decisions

We agree with the PC's view that CBA is integral to decision making, and should be used when considering risk management options. Further, we would note that the option chosen should result in a net benefit to society, and should provide the highest net benefit compared to all other potential uses of funds.

We have previously identified an issue with potential over-investment when assessing the productivity of State Owned Corporations. That is, we consider that some capital investment has been undertaken to meet regulatory requirements, but these requirements may not have been subject to rigorous analysis. We provide an example in Box 3 below.

Box 3 Appropriate levels of risk mitigation – Dam Safety

IPART considered the efficiency of safety related capital expenditure in our 2010 review into the productivity of NSW State Owned Corporations.[17] In particular, we considered the regulatory requirement of the Dams Safety Committee (DSC), under the *Dam Safety Act 1978*. In NSW, the DSC plays an important role in assessing dam risks and reviewing the capital projects proposed by State Water, and other dam owners, to mitigate risks of dam failure.

In our 2010 review, we expressed concern that the DSC does not review project costs. Rather, we noted that it undertakes a process to assess whether a project will reduce the risk of failure from probable maximum floods to acceptable levels, irrespective of the cost of this work.[18] We also noted that the mandatory nature of DSC requirements means dam safety upgrades are not subject to the same discipline as other major capital expenditure projects. Given the high costs of dam safety and related requirements, we consider it is important to ensure that the proposed dam safety solution or requirement achieves the intended outcome at greatest net benefit to society. For example, for the financial years 2009/10 to 2013/14 expenditure to meet dam safety standards comprised 63% of State Water's proposed capital expenditure.

Following our 2010 report on State Owned Corporation productivity, the NSW Government commissioned KPMG to review the *Dams Safety Act* (NSW) 1978 and the DSC. Our March 2013 submission to that review recommended that the necessary legal changes be made to ensure that CBA of all dam safety upgrades should be undertaken. This would help ensure the expected benefits (eg, lives saved, property and income protected, etc.) exceed the cost of the dam safety upgrade. Further, we recommended that dam safety expenditure should also be subjected to normal Budget Committee processes.

We note that options analysis is an important element of cost benefit analysis. For example, in considering options to manage flood risks, dam safety upgrades should be assessed against options such as better early warning systems, enhanced evacuation strategies and routes, and selective purchase of downstream properties at high risk. The relative merit of options is likely to vary across dams and geographic areas.

Since our March 2013 submission, KPMG has released a report that supports our recommendations. As part of the next stage of the process, the NSW Department of Trade & Investment, Regional Infrastructure and Services will engage in a consultation process with broader stakeholders.

In our Local Land Services review we found that early intervention (including mitigation) can yield higher returns than investing in the protection of assets (or recovery). However, it is important that these actions be assessed with both costs and benefits in mind to ensure the chosen action is the most efficient option available.

17 IPART *Review of the Productivity Performance of State Owned Corporations*, Final Report, July 2010.

18 The DSC requires that all of State Water's dams are maintained in accordance with the Australian National Committee on Large Dams (ANCOLD) publication Guidelines on Dam Safety Management.

Although we support the use of CBA, we are concerned with the ability of some smaller local councils to undertake rigorous cost-benefit analysis because they do not have the required capacity or capability.[19] This is particularly true of smaller, rural councils, which also can be in disaster prone areas. Larger, urban councils tend to have greater resources than smaller, rural councils.

As discussed in section 2, resource issues exist for disadvantaged councils, tailoring financial assistance grants to councils most in need may overcome resource issues that lead to the inability to undertake cost-benefit analysis.

[19] Despite these challenges councils hold a lot of information critical to undertaking CBAs, which at present are unlikely to be used for such a purpose. For example, GIS databases that hold topographical, flooding and bushfire risk data, some coastal councils hold bathymetric datasets, council disaster plans that include risk assessments, and access to RFS and SES data.