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Natural Disaster Funding Arrangements Inquiry
Productivity Commission
LB2 Collins Street East
MELBOURNE VIC 8003
Via email: disaster.funding@pc.gov.au

Dear Commissioners,

The Early Warning Network (EWN) welcomes the opportunity to contribute to the inquiry into Natural Disaster Funding Arrangements.

As a private enterprise which specialises in the protection of people and property from the risks of severe weather events, bushfire and tsunami, through the provision of timely, accurate and geospatially targeted multi-channel alerts, safety apps and API capability, we recognise the importance of mitigation as a key strategy.

Our submission addresses those elements in the Terms of Reference which relate to our specific expertise, experiences and underlying body of knowledge.

Our in-house knowledge base includes weather, risk management, local government responsibilities, the role of volunteer emergency services, insurance industry exposure and liabilities, planning, safety, ICT and the impacts of climate change. EWN's Australian clients include local councils, statutory authorities, infrastructure operators, tier one construction firms, tourism operators, insurance firms, property managers, logistics firms, rail and road transport operators and private individuals. We also have recently been engaged to provide our services to an insurance industry firm in Canada.

This gives us an ongoing source of insights into how the risks play out at ground level, and the constraints and opportunities in terms of improved risk management.

At all times, we apply the hierarchy of safety practise, and our service is geared towards minimising exposure to risk, as avoiding these risks altogether is not possible. By minimising exposure, our clients are able to reduce and in many cases entirely avoid preventable damage to persons and property, which reduces the cost burden for the client, their insurance provider and the various authorities who subsidise post-disaster recovery.

We address the relevant terms of reference and make our recommendations, in the order in which they were published in the Inquiry documentation.

Sincerely,

Kerry Plowright

Managing Director, The Early Warning Network

Comments addressing the terms of reference and EWN recommendations

- 1. The sustainability and effectiveness of current arrangements for funding natural disaster mitigation, resilience and recovery initiatives, including – where directly relevant to an improved funding model – the management of disaster relief and recovery;**

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

These are all risks which our alerting system covers, with our focus being squarely on informing people at the precise moment of escalation to enable them to take action to protect persons and property.

Current finding for natural disaster at each stage (mitigation, resilience and recovery) is often focused on areas where a substantial amount of the damage to property is preventable through better planning and design (for example buildings on ground level slab on historical floodplain), and the risks to people better managed through effective alerting, backed by safety education and investment in emergency facilities.

While all states have now developed a basic bushfire alert system, in most years, there are more fatalities from severe weather in terms of motor vehicle accidents, drownings, lightning strike and crush injuries from falling debris.

EWN believes more focus needs to be given to ensuring the community are better informed about all severe weather risks, and this requires funding towards appropriate resources across all community language groups and age groups.

We believe the current model where funding is disbursed through the states, and to some degree through the states to local government, is effective, as it is at the local government level where clear understanding of the community and the local risks exists. It is also at the local level where responsibility for the majority of repair works is located, with 80 per cent of Australia's road network under local government management.

It is of some concern that the freezing of the Federal Assistance Grants will reduce the amount of funds available for the more exposed (regional and rural) councils, to carry out betterment projects to mitigate risks. This situation carries with it an escalation of potential hazards, as poorly maintained roads and bridges are more likely to fail during severe weather events.

Further, the tightening of LGA budgets will likely impact on the types of environmental remediation projects which contribute to geotechnical stability, effective landscape drainage, fuel load reduction and the planting of shelter belts to reduce wind speeds.

It is vital there is more support for better stormwater management in local government areas, which should be approached holistically in that the harvesting of stormwater and its storage in landscape forms can also provide a reservoir of water for fire fighting should the need arise.

We recommend more funds be directed to local government from the federal level for stormwater management betterment, preventative local road and bridges maintenance and preventative environmental projects.

A further note on monitoring.

EWN has invested in systems for clients which include monitors for rainfall and ground water levels at critical locations which enable us to inform people of risks at the moment of escalation, when a risk moves from being a concern to a catastrophe. This also enables a more geographically precise warning than the Bureau of Meteorology monitors, which are predominantly located at strategic locations on rivers and creeks.

While the BOM monitors are immensely valuable, and we do draw on them as part of our information matrix, they are not positioned throughout all areas where groundwater flooding – flash flooding in particular – occurs as a result of intense rainfall events. The result of this lack of monitoring can be tragic, as was seen at Grantham. The report of the Queensland Floods Royal Commission highlights this issue.

http://www.floodcommission.qld.gov.au/_data/assets/pdf_file/0006/8781/QFCI-Interim-Report-August-2011.pdf

Because we monitor weather 24/7 EWN became aware of the problem before it escalated into catastrophe, but at that point the area as a whole was not subscribed to our system and warnings could not therefore be widely delivered. Lockyer Valley Shire Council has since subscribed to EWN alerts, to ensure there is better warning for all residents should inundation like that seen in 2011 occur again.

EWN made a submission to the Queensland Floods Royal Commission, which highlighted the critical gaps in the existing alerting systems.

Our submission can be found here

http://www.ewn.com.au/media/queensland_floods_commission_ewn.pdf . Managing Director Kerry Plowright also gave evidence at the Commission.

We therefore recommend funding be directed to the installation of monitoring in risk-prone local government areas at known points of flash flooding to enable better protection of persons and property.

2. Risk management measures available to and being taken by asset owners – including the purchase of insurance by individuals, business and state, territory and local governments, as well as self-insurance options;

Every time one of our clients moves a vehicle under cover and avoids hail damage, or is able to avoid a flash flooding incident, they reduce the burden on their insurer and contribute towards keeping premiums from needing to escalate. There should be a recognition of this type of proactive action in the form of a comparative premium benefit, and also in terms of workers compensation premiums where an employer uses an alert system to prevent deaths and injuries due to severe weather events (motor vehicle accidents in particular).

This is a clear example of using a risk management approach to reduce the financial burden of severe weather and bushfire events, as the increase in premiums which accompanies the post-disaster phase also impacts on the budgets of all federal, state and local government bodies and statutory authorities.

3. Options to achieve an effective and sustainable balance of natural disaster recovery and mitigation expenditure to build the resilience of communities, including through improved risk assessments. The options should assess the relationship between improved mitigation and the cost of general insurance. In doing this, the Commission should consider:

- a. Options for urban planning, land use policy and infrastructure investment that support cost-effective risk management and understanding of the changes to the risk profile;*

Climate change must be factored in to all planning decisions, including approvals for renovations and redevelopments, as these are generally undertaken to increase property value.

Global insurance bodies including Lloyds of London are now saying insurers must account for climate change, and policy should also be doing so. Risks of storm surge, king tides, severe coastal storms, flash flooding and fire need to be overlaid with planning zones, and considered in relation to all development applications for new developments.

Not only is the intensity and frequency of severe weather and fire increasing, there is a very real possibility homes and businesses in the highest risk areas will in the future be unable to obtain insurance. This would put greater pressure on the Government to assist financially when things go wrong.

EWN recommends that in zones which have historically shown themselves to be high risk areas, there should be no question of compensation for developers who have been holding land for future development. Too often an industry ignores information and then seeks compensation when the consequences of this information become apparent – in this case, the exclusion of some areas from development due to an unacceptable risk level in terms of flooding and fire. In some LGAs, such as City of Marion in South Australia, a proactive decision has already been made to exclude the most vulnerable part of the coastal land from development to avoid the impact of higher tides and severe storm combinations.

This is in keeping with the hierarchy of risk management according to workplace health and safety, which makes reducing exposure to a risk a preferable tactic to managing it. **We cannot change or control the weather, but we can plan to reduce exposure of people and property to its impacts.**

EWN also strongly recommends funds be allocated to develop national mapping of risk zones, including flood, to enable effective decision making in future. Currently there is no national flood mapping database, and no consistent and reliable mapping of flood risk (both riverine and groundwater flooding) zones across many local government areas.

EWN also recommends that extra funding be strategically deployed to local government to enable betterment of: stormwater management systems, flood hazard signage, council information systems and resources, safe pedestrian walkways over drainage lines in suburban areas, local road bridges, emergency power and water supplies in event of prolonged blackout.

We further recommend that state budgets for volunteer emergency services be increased to enable betterment of equipment and increased capacity-building of volunteer skills. The Defence Forces also could have an increased role in emergency response and preparedness.

These measures we believe will pay for themselves in terms of reducing the funds the Commonwealth contributes to post-disaster recovery.