

Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Dear Secretary,

Re: Terms of Reference

That the following matters be referred to the Environment and Communications References Committee for inquiry and report by 20 March 2013:

(a) recent trends on the frequency of extreme weather events, including but not limited to drought, bushfires, heatwaves, floods and storm surges;

(b) based on global warming scenarios outlined by the Intergovernmental Panel on Climate Change and the Commonwealth Scientific and Industrial Research Organisation of 1 to 5 degrees by 2070:

(i) projections on the frequency of extreme weather events, including but not limited to drought, bushfires, heatwaves, floods and storm surges,

(ii) the costs of extreme weather events and impacts on natural ecosystems, social and economic infrastructure and human health, and

(iii) the availability and affordability of private insurance, impacts on availability and affordability under different global warming scenarios, and regional social and economic impacts;

(c) an assessment of the preparedness of key sectors for extreme weather events, including major infrastructure (electricity, water, transport, telecommunications), health, construction and property, and agriculture and forestry;

(d) an assessment of the preparedness and the adequacy of resources in the emergency services sector to prevent and respond to extreme weather events;

(e) the current roles and effectiveness of the division of responsibilities between different levels of government (federal, state and local) to manage extreme weather events;

(f) progress in developing effective national coordination of climate change response and risk management, including legislative and regulatory reform, standards and codes, taxation arrangements and economic instruments;

(g) any gaps in Australia's Climate Change Adaptation Framework and the steps required for effective national coordination of climate change response and risk management; and

(h) any related matter.

I refer to the following, [The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters](#) and to which the Committee completed its Inquiry on 23 November 2011.

The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters

Terms of Reference

That the following matter be referred to the Environment and Communications References Committee for inquiry and report by 2 November 2011:

The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters, with particular reference to:

- a. the effectiveness of communication networks, including radio, telephone, Internet and other alert systems
(in particular drawing on the spate of emergencies and natural disasters of the 2010/2011 Australian summer):
 - (i) in warning of the imminent threat of an impending emergency,
 - (ii) to function in a coordinated manner during an emergency, and
 - (iii) to assist in recovery after an emergency;
- b. the impact of extended power blackouts on warning systems for state emergency services, including country fire brigades and landholders or home owners;
- c. the impact of emergencies and natural disasters on, and implications for, future communication technologies
such as the National Broadband Network;
- d. the scope for better educating people in high-risk regions about the use of communications equipment to
prepare for and respond to a potential emergency or natural disaster;
- e. new and emerging technologies including digital spectrum that could improve preparation for, responses to
and recovery from, an emergency or natural disaster; and
- f. any other relevant matters.

The Committee received 47 Submissions to that Inquiry and although its Report to the Senate was interesting, one notes the Federal Government's response.

The current Terms of Reference are very broad and having read through the detail within the submissions – currently available on the Committee's webpage to its current Inquiry; is the Committee going to see a better response than the one into Emergency Communications?

Commonwealth Government response to
Environment and Communications
References Committee report

*The capacity of communication networks and emergency warning
systems to deal with emergencies and natural disasters*

November 2012 Commonwealth Response: Environment and Communications References Committee report – *The
capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters* Page 3
of 9

INTRODUCTION

The Senate Environment and Communications References Committee tabled its report, *The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters* on 23 November 2011. The report contains six recommendations. The Commonwealth Government response to each of the recommendations made by the Senate References Committee, are provided below.

While the Commonwealth has a national coordination role, primary responsibility for the protection of life, property and the environment rests with the states and territories, who are the first responders to emergencies in their jurisdictions. Therefore, state and territory emergency management agencies have full autonomy in relation to: (i) whether and when to issue an emergency warning, (ii) which delivery mechanisms to use to disseminate the emergency warning, and (iii) the content of the warning. Individual states and territories choose which warning technologies to adopt and when to activate them in accordance with the specific circumstances of an incident.

All states and territories have disaster or emergency plans that include a communications component for the dissemination of rapid onset emergency warnings to the community. At the Commonwealth level, the Bureau of Meteorology (the Bureau) issues warnings and watch notices via the broadcast media, HF Radio and Fax, recorded telephone and the internet, directly to the public for weather warnings (such as severe thunderstorm, high sea, flood and tropical cyclone warnings) and, in conjunction with Geoscience Australia, also issues tsunami warnings. Warnings issued by these agencies also inform the warning messages that state and territory control agencies disseminate to the public.

The states and territories are also responsible for the communications systems within their jurisdiction. The Commonwealth's role is to support public safety operations by, inter alia, making adequate provision of spectrum for use by agencies involved in the defence or national security of Australia, law enforcement, or the provision of emergency services, including for use by other public or community services. Commonwealth Response: Environment and Communications References Committee report – *The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters* Page 4 of 9

RESPONSE TO RECOMMENDATIONS

Recommendation 1

2.11 The committee recommends that interoperability of narrowband voice radiocommunications between federal, state and territory emergency service organisations is achieved as soon as practicable and that all services attending major incidents be compelled to maintain a common emergency communications platform to ensure seamless real time communication from and to the Incident Controller.

Commonwealth Position: Supported

The Government supports this recommendation, noting all jurisdictions are moving towards mobile radio networks that support real time and seamless communications.

The Attorney-General's Department (AGD) through its membership on the National Coordinating Committee for Government Radiocommunications (NCCGR) is working with the states and territories to achieve improved narrowband voice communications interoperability within the indicative time frame set out in the Council of Australian Governments (COAG) endorsed framework. This work includes achieving consensus amongst all jurisdictions on technologies and Standard Operating Protocols that will assist with moving towards fully interoperable radio networks and operating procedures. The Government understands that the COAG endorsed framework does not prescribe a single technology for jurisdictions (and agencies within them); rather that each jurisdiction as part of their current and future procurement cycles considers technologies that will enable voice communications interoperability with other Emergency Service Organisations (ESOs) throughout Australia. Accordingly, relevant Commonwealth agencies are in the process of planning to transition their voice communications to systems that will be interoperable with state and territory ESOs operating within spectrum harmonised for government use in the 400 MHz band. Commonwealth Response: Environment and Communications References Committee report – *The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters* Page 5 of 9

Recommendation 2

2.50 The committee recommends the Commonwealth Government allocate sufficient spectrum for dedicated broadband public protection and disaster relief (PPDR) radiocommunications in Australia.

2.51 The committee further recommends that any allocation of broadband spectrum to emergency service organisations (ESOs) for PPDR must be provided on the basis of interoperability amongst Australian ESOs and with ESO counterparts overseas.

Commonwealth Position: Noted

The *Radiocommunications Act 1992* states that the object of the Act is to provide for management of the radiofrequency spectrum in order to:

- (a) maximise, by ensuring the efficient allocation and use of the spectrum, the overall public benefit derived from using the radiofrequency spectrum;
- (b) make adequate provision of the spectrum:
 - (i) for use by agencies involved in the defence or national security of Australia, law enforcement or the provision of emergency services; and
 - (ii) for use by other public or community services;
- (c) provide a responsive and flexible approach to meeting the needs of users of the spectrum;
- (d) encourage the use of efficient radiocommunication technologies so that a wide range of services of an adequate quality can be provided;
- (e) provide an efficient, equitable and transparent system of charging for the use of spectrum, taking account of the value of both commercial and non-commercial use of spectrum;
- (f) support the communications policy objectives of the Commonwealth Government;
- (g) provide a regulatory environment that maximises opportunities for the Australian communications industry in domestic and international markets;
- (h) promote Australia's interests concerning international agreements, treaties and conventions relating to radiocommunications or the radiofrequency spectrum.

The then Commonwealth Attorney-General, the Hon Robert McClelland MP, and the Minister for Broadband, Communications and the Digital Economy, Senator the Hon Stephen Conroy, co-chaired a roundtable meeting on 10 May 2011 on the matter of public safety mobile broadband. The key outcome of that meeting was the establishment of a multijurisdictional high-level officials' Public Safety Mobile Broadband Steering Committee to progress this work, led nationally by the Commonwealth Attorney-General's Department and the Department of Broadband, Communications and the Digital Economy. Commonwealth Response: Environment and Communications References Committee report – *The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters* Page 6 of 9

Membership of the Committee includes representatives of the following key national stakeholder groups, committees and agencies:

- the COAG Senior Officials Group
- the National Policing Senior Officers Group
- the National Counter-Terrorism Committee
- the Australia New Zealand Police Advisory Agency
- the Australasian Fire and Emergency Service Authorities Council
 - the Council of Ambulance Authorities
 - the National Coordinating Committee for Government Radiocommunications
 - the Law Enforcement and Security Radio Spectrum Committee, and
 - the Australian Communications and Media Authority (ACMA).

The Committee has analysed public safety mobile communications needs, developed models to meet those needs and collected information to assist the ACMA in its determination of spectrum requirements.

The Commonwealth has worked with the states and territories to develop a national implementation plan for a nationally interoperable public safety mobile broadband capability. In parallel with this activity, the Commonwealth has considered whether radio spectrum should be allocated and, if so, what the quantum of a possible allocation would be.

The Commonwealth announced on 29 October 2012 that it would make provision for 10 MHz from the 800 MHz band for the specific purpose of realising a dedicated, nationally interoperable public safety mobile broadband cellular 4G data capability.

The offer of the spectrum to the states and territories will be at a Public Interest Price and is conditional on factors including:

- the capability being nationally interoperable
- the states and territories funding all costs associated with designing, building, equipping, maintaining and operating the capability, and
- an agreement to provide reasonable access to state and territory networks by relevant Commonwealth agencies.

In terms of interoperability with counterparts overseas, this will be guided by the domestic approaches that those countries take as well as future outcomes of key fora such as regional radio harmonisation in region 3 (the Asia-Pacific region in which Australia sits). Commonwealth Response: Environment and Communications References Committee report – *The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters* Page 7 of 9

Recommendation 3

3.63 The committee recommends that the Commonwealth Government together with national, state and territory emergency service organisations and radio and television broadcasters, develop a secure database of up-to-date contact details for key personnel to be used during an emergency.

Commonwealth Position: Noted

The Commonwealth, state and territory agencies and the ESOs all have media services and dedicated databases in place that perform this role.

The Australian Government will work with the states and territories, through the Australia-New Zealand Emergency Management Committee (ANZEMC) (formerly the National Emergency Management Committee), to effectively coordinate the maintenance of appropriate contact details in both emergency service and media organisations for use during an emergency.

Recommendation 4

3.69 The committee recommends the Commonwealth Government require guaranteed access to emergency call services for people with a disability at all times.

Commonwealth Position: Noted

The Government is a member of the National Forum on Emergency Warnings to the Community which has recently completed drafting the document, 'Inclusive Communications Guidelines for Emergency Managers'. These guidelines, when finalised, will be used as a tool to help emergency managers understand the requirements to assist people with disabilities during emergencies. They are intended to be used in conjunction with each state and territory's own policies and procedures.

The Government is aware that people who are deaf, hearing and/or speech impaired often have limited access to emergency services outside of the home as a result of not being able to access a teletypewriter to call the National Relay Service (NRS) dedicated emergency number 106. In response to this need, the Government included mobile access to text-based emergency services for people who are deaf, hearing impaired and/or speech impaired in the new NRS tender. On 15 August, the Telecommunications Universal Service Management Agency (TUSMA) issued a request for tender to identify and select a company(s) to provide the NRS for the next five years. The tender has now closed and a public announcement is expected in early 2013.

On 12-13 January 2011, the NRS experienced interruption for nearly 24 hours as a result of severe flooding in Brisbane where the NRS call centre is based. However, it should be noted that this interruption did not affect access to the 106 emergency number. Since that time, the Australian Communications and Media Authority (ACMA) has been working with the NRS service provider, Australian Communication Exchange (ACE), on lessons learnt and Commonwealth Response: Environment and Communications References Committee report – *The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters* Page 8 of 9

opportunities to better mitigate disruptions in the event of similar emergency situations. This has resulted in a number of new initiatives, including new redundancy strategies and software improvements, to better prioritise certain types of calls.

Recommendation 5

3.81 The committee recommends emergency service organisations in collaboration with television and radio broadcasters, the print media and other relevant organisations, use regular and ongoing public education well in advance of an emergency situation as an opportunity to teach the public about their responsibilities during an emergency and how they can appropriately prepare themselves for such an event.

Commonwealth Position: Noted

The Commonwealth notes this recommendation is directed at emergency service organisations, radio broadcasters, the print media and other relevant organisations. However, in a broader context, the Commonwealth and all state and territory governments are implementing the COAG National Strategy for Disaster Resilience 2011 (the Strategy).

The Strategy focuses on building disaster resilient communities across Australia, including educating people about risks and that disaster resilience is a shared responsibility. Aligned to this Strategy, the Commonwealth delivers education programs including:

- School education resources and teaching aids including: the online ‘Dingo Creek’ interactive disaster preparedness and recovery game and related teaching material, the online ‘Digital Stories’ series where students who have been involved in disasters record their stories, recently released ‘DisasterMapper’, an online and Google Map based product to allow students to investigate disasters relevant to them or to their studies, and soon to be released ‘Before the Storm’ phone application (app), a teaching resource aimed at improving preparedness
- Ensuring disaster resilience is considered in the current national curriculum review for Australia
- Producing source materials for vulnerable communities including those of a non-English speaking background, such as the recent Pictorial Storyboards, and
- Providing all these materials, together with a range of publication and brochure prototypes, available online at the national emergency website www.em.gov.au.

The recently released DisasterWatch phone app provides access to emergency and disaster information in a mobile device format derived from authoritative sources in the states and territories and agencies. The app also provides public educational information, such as how to prepare for various hazard events. More than 11,000 downloads of the app have occurred since its launch in December 2011. Commonwealth Response: Environment and Communications References Committee report – *The capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters* Page 9 of 9

Recommendation 6

4.33 The committee recommends the government consider granting public broadcasters priority access to fuel during times of emergency for the purpose of broadcasting emergency warnings and information, and in a way that does not impede the ability of emergency service organisations to access fuel.

Commonwealth Position: Noted

Australia's state and territory governments have constitutional responsibility for planning and coordinating the response to fuel shortages within their territorial boundaries and have appropriate legislation and associated response plans in place to manage such emergencies.

Whilst every jurisdiction has legislation in place to address a liquid fuel supply emergency, not every emergency will trigger the use of that legislation. Many emergencies that include localised fuel distribution issues, but which do not include an overall fuel supply problem for the jurisdiction, are managed under general emergency response legislation rather than liquid fuel specific legislation.

As such, during an emergency within a particular jurisdiction, determinations about access to fuels, including for public broadcasters, will be a decision for the relevant state or territory government.

At a national level, the *Liquid Fuel Emergency Act 1984* (LFE Act) grants the Commonwealth Minister for Resources and Energy the power, by legislative instrument, to identify a person or organisation as an essential user of fuel for the purpose of a national liquid fuel emergency. Declaration of a national liquid fuel emergency under the LFE Act remains a low probability event, as it would require a severe (i.e. prolonged and widespread) national shortage of fuel.

On providing the above extracts, it provides one with an interesting picture but personally, I do not believe that this country "could" handle a major disaster or emergency on a much wider scale than what we saw via Tropical Cyclone "Yasi" and the Brisbane Floods.

For the last 6 years, I have followed our Weather scene with considerable interest but more importantly, during our Summer months. I tracked "Yasi" from the time it first came on the radar as a low and its subsequent crossing of the Queensland coast.

From a personal position, I knew that we were in trouble when considering that the Weather Bureau warned before "Yasi" that the ground was saturated.

We also know that Telecommunications was under severe pressure and did fail when considering what happened to the Mobile Telephone Network up there in Cairns when "Yasi" hit. Even government communication networks here in Queensland were severely impacted on during "Yasi" and the Brisbane floods. Here in Brisbane, police had to use some UHF "CB" channels as their own network was in trouble. The Queensland Emergency Services have the UHF CB channels as Plan B.

When considering Telecommunications, since Queensland's 2010-11 Severe Summer, the flow-of-information to the community has improved considerably – via Telecommunications and using both, Facebook and Twitter Social Forum Sites as an example and secondly, factoring in the reporting of our Major Fires. However; what happens if Telecommunications fails????

Not being a Climate or Weather expert, I get annoyed when there are those who are clearly intent on pushing their own views on the majority such as the Climate Commission and similar international bodies. One only has to consider some very interesting reporting in our media.

I am more interested in seeing the Australian community “engaging” in a debate where all facts are available

With reference to our recent so-called “Heat-Wave” conditions; what other weather factors can be included, thus providing us with a better explanation?? We saw a massive high pressure system over parts of Australia that was pulling in heat from Central Australia and was slow-moving. Another weather factor has been left out of the picture and I refer to the following extracted item from the www.bom.gov.au website.

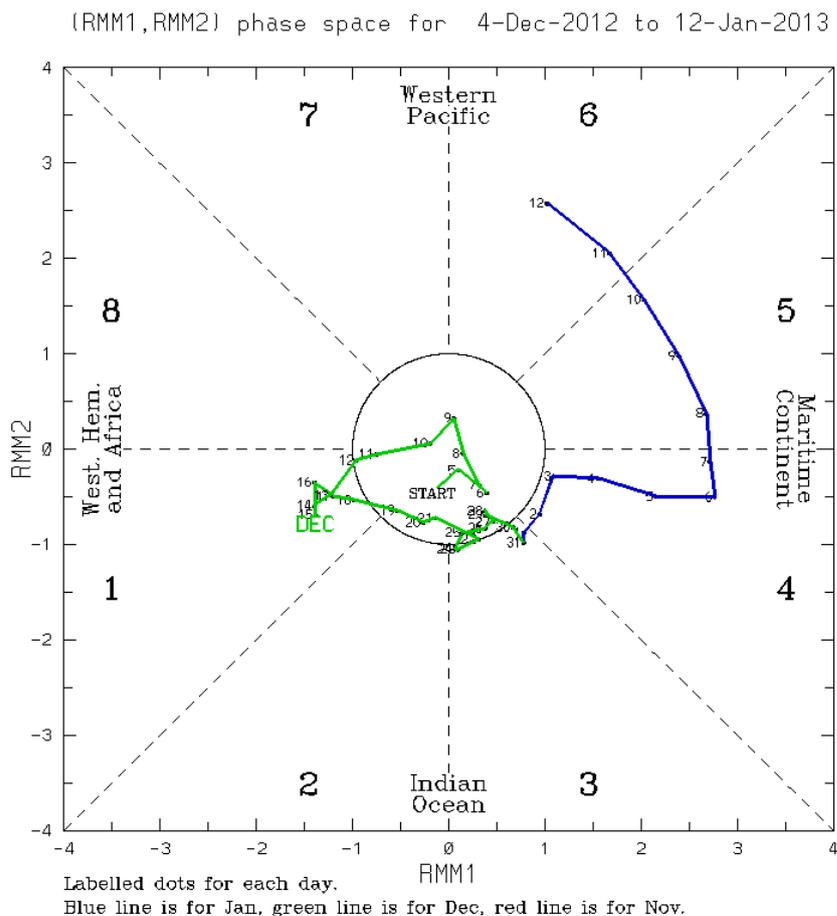
The Madden-Julian Oscillation

<http://www.bom.gov.au/watl/about-weather-and-climate/australian-climate-influences.shtml?bookmark=mjo#intro>

At a glance

The Madden-Julian Oscillation is associated with weekly to monthly periods of enhanced and suppressed rainfall over parts of Australia.

This climate influence is related to: [The Australian Monsoon](#) [Tropical Cyclones](#) [Tropical Depressions](#)



(C) Copyright Commonwealth of Australia 2013. Bureau of Meteorology

On providing the above, it is useful to consider and from my understanding, it has been very slow-moving from the western side of the Indian Ocean and is now over Australia.

Perhaps, this Committee could request of the BOM, a better explanation on why we have seen some very interesting weather patterns, so-far this Summer??

Freak storm devastates northern NSW farm

By Lisa Herbert
Monday, 14/01/2013

A beef producer in northern New South Wales says his property has been "annihilated" in a freak storm cell which tore across his farm last night.

Ian MacCue runs a 2,000 head feedlot at Bellata and says 137 kilometre-an-hour winds brought down power poles and damaged every building on his place, yet his neighbour's place was untouched.

No cattle were injured in last night's storm, but Mr MacCue isn't sure how he's going to feed them.

He says the damage is so widespread he's not sure where to start.

"Three of those big cement poles have just been snapped off at ground level and there's power lines hanging throughout the trees and the paddocks everywhere. We've got no power, of course, and we've got 2,000 head of hungry cattle we can't feed.

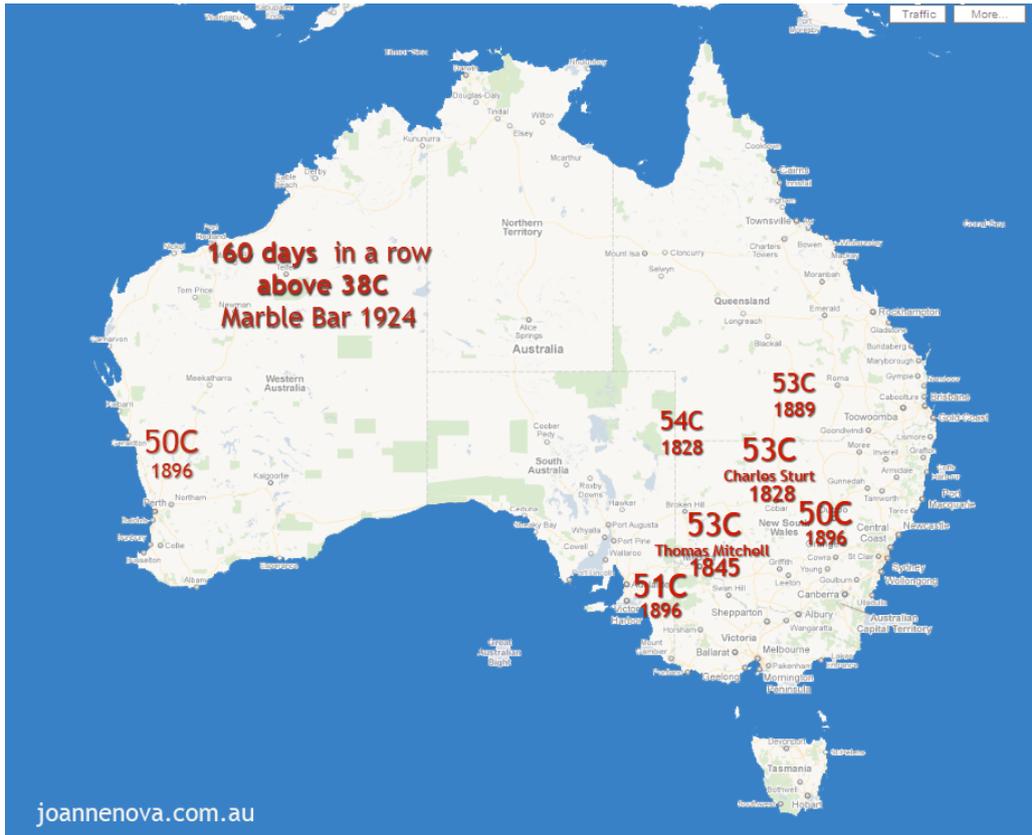
"We've had to cancel this week's contracts because we could be days without power when you look at these big cement power poles that are down."

When we consider the detail within this extracted item from the ABC; are we going to say that this "freak Storm" cell is related to Climate Change??? I remember experiencing the 1974 Brisbane floods, where I was trapped by a high tide that saw me sitting in a bus for nearly 4 hours, unable to get to my home, the original Hornibrook Highway going under and even, a workplace near the Royal Brisbane Hospital, completely submerged due to flooding.

I find the definition of "Climate Change" interesting but are we learning from our Weather history books? No one can control Mother Nature. We have in recent days, seen an interesting document released by the Australian Climate Commission and at this point-in-time, I haven't read the document.

Of concern, if Australia was to experience a major Emergency or Disaster, our public hospital system wouldn't be able to handle such an event and this is shared by others that I know. Here in Queensland, the State's hospital system is worsening, shortages of bed, hospitals going on bypass, units of the Queensland Ambulance Service – ramping issues, patients unable to get surgery within a reasonable amount of time and hospitals going on bypass.

This isn't exclusive to Queensland, especially seeking medical treatment and it is for this reason, why I mentioned re being unable to handle a disaster. Then; what are we doing about removing those people who live along Australia's Eastern Seaboard –Coastal regions, who could be impacted by rising Sea Levels???



<http://joannenova.com.au/2013/01/australia-was-hot-and-is-hot-so-what-this-is-not-an-unusual-heat-wave/>

Extremes of rain, heat on the way

Date

January 15, 2013

- **Tom Arup**

AS AUSTRALIA recovers from last week's record-breaking temperatures, the head of the United Nations' Intergovernmental Panel on Climate Change says it is clear heatwaves are occurring more frequently, and will increase further with global warming.

Dr Rajendra Pachauri, who arrived in Australia on Monday, stopped short of directly linking last week's heatwave across much of the country to climate change. While it could be part of a trend, he said, conclusions could not be drawn from a single event.

But he told Fairfax Media work by the IPCC had found that some extreme weather events, including heatwaves, had become more frequent in recent decades.

He said the panel's projections found as climate change intensified, heatwaves would occur more often and with more intensity. The projections, in a 2012 IPCC special report, found a one-in-20-year hottest day will instead occur once every two years by the end of the century in most regions of the world, if rising greenhouse-gas emissions are not reduced.

"It [last week's record temperatures] could be [a result of climate change], but I wouldn't draw any conclusions on one single event. I think you have to take the whole aggregation over a period of time and then come up with the conclusion; which is precisely what we have done," he said.

"They [the findings] are very very clear. Heatwaves are on the increase, extreme precipitation events are on the increase, and on that there is really no room for doubt anymore," he said.

Dr Pachauri is in Hobart for a meeting of scientists working on the IPCC's fifth climate assessment, which is prepared for the UN every five or six years. The first of three parts of the assessment - the subject of the Hobart meeting - will be released in September.

Dr Pachauri's visit follows several leaks of the panel's next assessment report in the past month.

Last week Canadian writer Donna Laframboise - author of a book critical of the IPCC's work - posted on her blog a leaked draft of the section tackling the impacts and adaptation to climate change. Ms Laframboise accused the panel of secrecy and said it needed to be upfront about each step in arriving at its conclusion.

Dr Pachauri rejected the claim that the IPCC was too secretive, saying the group processes were very transparent and would take into account more than 30,000 comments from people who had voluntarily signed up to be reviewers, including some climate sceptics.

"The very fact that we even go out and include those so-called expert reviewers who may not have the same view of climate change as most scientists shows the process is very inclusive," he said.

CSIRO's Dr Steve Rintoul, a co-ordinating lead author of the oceans chapter of the report, said the Hobart meeting would review all comments and develop a strategy to respond formally to each one.

The IPCC was first formed in 1988 on the request of UN member countries, and has released four major assessments of the climate, with each report approved by all governments.

<http://www.smh.com.au/environment/extremes-of-rain-heat-on-the-way-20130114-2cpq4.html>

On providing the above items; when is the Commonwealth Government going to stop wasting billions of dollars, when considering that the BOM needs more resourcing? We know that they are training new staff but; when are we going to see an extended weather picture out to 340 hours? Another area that should be considered is the issuing of Severe Weather Warnings and as an example, Thunderstorm Warnings. We saw concern expressed here in Queensland's Sth East corner, re the failure of BOM Brisbane to issue a warning and where central Brisbane was impacted on.

The operations of the Weather Bureau need to be reviewed and a better service provided to the Australian community.

David Tones.