

# The Australian

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## Save spectrum for disasters

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**AS floodwaters engulfed southeast Queensland and as Cyclone Yasi crossed the far north Queensland coast, the lives of thousands hung in the balance and the mobile telecommunications network crashed.**

Emergency service workers who desperately needed to be kept up to date with developments were left in an information vacuum. While the floods demonstrated the courage, resilience and resourcefulness of Queensland emergency services, they also exposed the inadequacies and inabilities of Australia's telecommunications infrastructure to handle large-scale public emergencies.

In the next few weeks, the federal government will make a critical decision about telecommunications infrastructure that will have an important bearing on our ability to respond to events such as the Queensland floods and Yasi, the Victorian bushfires or terrorism threats.

The federal government intends to auction off a band of radio communications spectrum that Broadband, Communications and the Digital Economy Minister Stephen Conroy calls the digital dividend.

This is 126MHz of the 700MHz band that will become available when the country moves from analog to digital television over the next few years.

Emergency services such as police are competing against cashed up business monoliths such as Telstra, Optus and Vodafone to get a slice of the available spectrum.

The 700MHz band is special because communications in this band can carry large amounts of data at high speed, over long distances and through buildings.

It's ideal for mobile broadband services and for emergency and policing services at critical times of national emergency when normal radio and telephone communications are pushed to the limit or severely overloaded.

At present most police and emergency services communications are in the 400MHz band. They are largely confined to voice communications.

These systems can also become overloaded in trying to get information to and from the field and command centres during emergencies, particularly when trying to cope with a natural disaster or a terrorist incident.

The Council of Australian Governments decided in 2009 that police and emergency services must move to seamless communication so they become interoperable and can work together across state boundaries as well as across organisational boundaries.

This means moving to a contemporary, 21st century communications system which can handle mobile voice, data, video and broadband communication over a secure network.

With this in mind, the police commissioners from every state and territory and the AFP have agreed that they need 20MHz of this newly available 700MHz band to establish a leading-edge network for law enforcement and emergency services agencies. Premiers have written to ministers and Julia Gillard supporting a proposal that in the national interest the government reserve 20MHz for these vital essential services.

The Australasian Fire Authorities Council and the Council of Ambulance Authorities are both supporting the proposal. They are all convinced it is not prudent or feasible to rely on buying the necessary communications services from commercial carriers.

There are concerns surrounding capacity, redundancy, security and reliability needed for such "mission critical" purposes.

Unfortunately, bitter experience has shown that commercial communications services almost always fail the police and emergency services.

They are not set up to provide the kind of guaranteed, fail-safe, secure system these emergency services must have. Outdated, overstretched police and fire service networks also fail.

So, why is it proving difficult to secure the 700MHz spectrum these life and property-saving services need?

Two things stand in the way. First, the government wants to achieve the best return it can from the digital dividend. It's a valuable commodity and the proceeds can help to bring the federal budget back into surplus by 2012-13, as promised.

Second, there will be fierce competition between carriers for the limited spectrum available, 126MHz.

The Australian Communications and Media Authority proposes to auction the spectrum in the second half of next year. To do that, it needs decisions from the government this month.

This is a case of national interest coming up against budget imperatives and market forces.

When the Keating government embarked on radical market-based reform of spectrum allocation in 1992, it foresaw this problem arising. Recognising that these not-for-profit public safety agencies could not compete in an open market system for a rare commodity, the government built a series of safeguards into the Radiocommunications Act 1992.

The act specified that the system must make adequate provision of spectrum for law enforcement and emergency services.

Charging for spectrum must also take into account the value of non-commercial use of spectrum. In other words, the public safety agencies should not be expected to pay the commercial rate for their spectrum.

Finally, the act provided for spectrum to be reserved for these essential public purposes so that they would not have to compete for it at auction. The safeguards must be upheld.

The next few weeks will show how the Gillard government and the nation's parliament measure up in protecting the national interest and the federal budget, not one or the other.

*Mark Burgess is chief executive of the Police Federation of Australia.*