



# EMERGENCY BROADCAST: EXPECT STATIC

A federal auction of radio frequencies could leave state essential services out in the cold, **Paul Hemsley** reports.

■ Police, fireman and ambulance officers might be used to dealing with life-and-death scenarios as a workplace staple, but there's a critical situation of a different kind brewing thanks to the rapidly shifting dynamics of the communications industry.

After decades of relying on rugged and reliable digital and analogue radio systems, many emergency service organisations (ESO) are now questioning if they will be able to communicate adequately in crisis situations when the Canberra auctions off the next big chunks of digital frequency.

The federal government has said it will make the leap from analogue to digital broadcasting by the end of 2013, a switch that acts as the trigger for the action of a big tranche of spectrum that will bring in much needed cash to boost the Budget bottom line.

But there's a catch. The sale presents a big problem for ESOs who say they need the 700MHz band of spectrum to ensure sufficient communications in situations

that range from disasters relief to simple messaging between field officers and headquarters.

In a classic showdown between Canberra and the states, Victorian Premier Ted Baillieu argues that the spectrum would enable first responders to send real-time video to command and control centres.

The radio industry and the states maintain that that settling for a different spectrum slot with less capacity to meet their needs would effectively put ESOs at the mercy of mobile telecommunications providers, who have a strong commercial interest in wresting control of the airwaves for themselves.

If that situation comes to pass, stakeholders like police, ambulance, fire and state emergency services across Australia are worried that they will need to 'roam' over private mobile networks and be charged fees to use the 700MHz frequency range.



In a sign of just how high the stakes are, the situation has now escalated to the point where state Premiers have written to Prime Minister Julia Gillard urging her to reconsider the auction and allocate the spectrum to their emergency services.

Those creating static in Canberra are NSW, Victoria, Queensland and Western Australia, all Liberal governments, who have bluntly told the PM that building a system on 800MHz spectrum will cost them more money.

If the federal government does sell the 700MHz band, the states are demanding the financial dividend be spent on offsetting the costs of building a system in



the 800MHz range, which the states say they will have to bear.

Key industry player Motorola Solutions, which supplies radio communications equipment to police and other services, believes that 800MHz remains a strong candidate for emergency services use and its Australian managing director, Gary Starr, says applications running on the available 700MHz would readily translate to 800MHz.

"I think it's fair to say we know the mobile operators, understandably, would like to see all spectrum available for carrier use to build public networks," Mr Starr says.

Carriers have their own views. The Australian Mobile Telecommunications Association (AMTA) has disputed claims by both state governments and the Police Federation of Australia (PFA) that a Senate Committee has suggested that digital dividend spectrum be reserved – or essentially quarantined – for police and emergency services.

AMTA chief executive, Chris Althaus likens the scale of building a separate

### CALLING ALL CARS

Police are simply not copping the telco's arguments. The Police Federation of Australia has asked Ms Gillard and Opposition Leader Tony Abbott to consider the needs for ESOs as the peak body has a vital interest in securing radio spectrum for Australia's 56,000 police officers.

PFA chief executive, Mark Burgess says they have met some "pretty stiff opposition" over a period of time from the Australian Communications and Media Authority (ACMA) over the issue.

He says that if the federal government doesn't allocate the necessary spectrum slot of 20MHz (in the 700MHz range), the community will pay for it.

"We pursued 700MHz for digital dividend primarily because it was available, it was already free, as in free of users," Mr Burgess says.

He says the 800MHz band is a good option but the challenge is that it already has so many users.

But Mr Althaus counters that claims 800MHz is less suitable because it's

given any comfort from the Opposition to say they would do anything different," Mr Burgess says.

Mr Burgess believes it's possible state governments could buy the spectrum at the federal government auction . . . but they would have to act collectively, buy at premium and use taxpayers money.

"They would be competing with the cashed-up telcos. I would suspect in the current fiscal climate, that's highly unlikely," he says.

Instead, Burgess argues state governments have to work collectively with Canberra on how the spectrum is used when it's allocated.

While the steering committee still hasn't finalised its report, he says it did some work on determining exactly how much spectrum was required in a mission critical exercise – flood, fire, earthquake or terrorist attack – which need far more than 20MHz.

"By and large 20 MHz would work for most instances. In a mission critical scenario, you could require up to 80 MHz," Mr Burgess says.

### ALL THE WAY WITH THE USA

Australia could be at risk of being left behind internationally on spectrum allocation to emergency services as other nations are making the necessary provisions.

Mr Burgess cites the United States Government's authorisation of spectrum to emergency services under a network called 'FirstNet'.

"Considering the fiscal problems in the US, the reality is they have made the bi-partisan decision and they are going through the process," he says.

He says he would like to see a similar federal scheme in Australia rather than depend on private carriers.

The FirstNet system aims to use 500MHz of additional spectrum "where a firefighter can turn up to a burning building with a handheld device that can access plans for that building".

"Someone on the fire front could have data that relates to them on the handheld device or in their vehicle or people under siege or held hostage can be immediately saved," Mr Burgess says.

He says that if Australia goes into another area, the implications for the equipment used means that it will have to be modified for the Australian market.

"If we don't get this right long term, the public's going to pay for it. We need to get it right in the area of spectrum that we need, the amount that we need and that it's got some consistency in our region and the rest of the world," Mr Burgess says. **GN**



mobile telecommunications network for emergency services to that of building separate roads for their vehicles. He says it would be prohibitively expensive and divert billions of dollars from government and ESO budgets.

"It is vital that government considers the massive cost implications for Australia if ESOs were to build a standalone public safety network," Mr Althaus says.

Carriers say they already have successful partnerships with ESOs and that the Department of Attorney-General had already found the best option was for ESOs to partner with industry, Mr Althaus said in a public statement from AMTA.



'narrowband' and not broadband are incorrect.

"There is technically no difference between 700 and 800," Mr Althaus says.

Mr Burgess says to actually find a supportive spot for it, it will require other users being moved around, many of them from the government.

A spot in the 700MHz range was available, Mr Burgess says, was free of users and would have very easily accommodated ESOs.

"But that's not what's happened," he laments. "And neither side of politics have made any firm commitments in this area."

"It's quite evident now certainly under this government, but we haven't been