



**The ABA warns of the risks associated with urban encroachment on AM transmitter sites and advises state planning authorities to be sensitive to these risks.**

# AM radio transmission sites under pressure

State planning agencies should be sensitive to the risks of allowing urban encroachment onto the remaining metropolitan AM radio transmission sites across Australia, the ABA has warned.

'Suitable AM radio sites in and around major cities are few in number and extremely difficult to replace without affecting the coverage area of what the listening public regards as essential services,' said Professor Flint.

The ABA has no direct role in the selection of radio and television transmitter sites. Broadcasters negotiate about their sites directly with local planning authorities.

'The ABA is responsible for coordinating radio signals to minimise their interference. Our engineers have planned carefully and signals are tightly packed, especially around cities. Moving a transmitter changes the area its signal covers. This often leads to new interference with other broadcasts. Because of the way they travel, AM signals sometimes even need international coordination,' said Professor Flint.

'Ground conductivity has a major impact on how well AM radio waves are launched and salt water is considered to provide the best conductivity. AM radio transmitters are therefore

often built in swampy areas, that have not historically been desirable for residential use. Our cities have grown, but if housing developments crowd out the sites we use for broadcasting, it will be difficult to find alternatives. There are many pressures on city planners, but broadcasting services

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are an important part of most people's lives. The ABA is concerned that state and local governments may not appreciate the scarcity and value of the existing sites.'

The ABA's comments have been prompted by the development of major residential projects in close proximity to the AM transmission towers at Homebush Bay as a part of the Sydney Olympic Park master plan. 'The situation at Homebush highlights the continuing challenges facing AM broadcasters in congested metropolitan areas,' Professor Flint said.

A recent engineering survey on the levels of electromagnetic radiation (EMR) from the Homebush sites to the (as yet unoccupied) Waterside apartments has recommended the re-siting of the transmitters. While the ABA is already working with the affected broadcasters and will give high priority to

any move, it could be extremely difficult to find a suitable alternative site and technical specifications.

Neither the broadcasting licensees nor the relevant federal regulatory authorities (the ABA and the Australian Communications Authority) have any authority over the actions of local and state town planning authorities.

## **Sydney broadcasting**

The Sydney AM broadcasters, 2UE, 2SM, 2GB, 2KY, 2EA and 2CH have been broadcasting in

Homebush Bay for many years. There have been no changes to the transmission characteristics of the services since 1985.

The ABA and the ACA have met with those stakeholders affected by the proposal that the AM radio sites at Homebush, notably the one used by Sydney stations 2UE and 2SM, move further away from the new Waterside residential developments at Olympic Park. The developments are due to be occupied in August – September 2003.

The broadcasters and regulators raised the issue with Planning NSW over a year ago, when the proximity of the new residential developments became known. The broadcasters have been considering possible alternative transmission sites to serve the Sydney area since prior to the Olympics, and in 2001 had objected to the Sydney Olympic Park post-Olympic master plan.

## **Drop zone**

In a connected matter, part of the Waterside residential development is said to be within the 'drop zone' of the 145 metre 2UE and 2SM broadcasting tower structure, the area potentially at risk if it fell over. The two transmission towers of a



Brisbane AM station, 4BH, fell over in August 2002, as a result of vandalism.

#### EMR levels

The levels of EMR at all broadcasting transmission sites are the responsibility of the relevant broadcasters and site owners. The aggregate powers of more than one service may exceed permitted levels, even though a single service does not. Site owners would need to be aware of the aggregate level of the radiation hazard.

The Sydney commercial AM radio broadcasters wrote to the NSW Department of Urban Affairs and Planning in September 2001, expressing concern at not being asked to comment on the Olympic Park post-Olympic master plan, indicating the potential health and safety risks associated with the proposed developments and noting the impact on possible day/night switching power increases. In February 2002 2UE wrote to the ABA, reiterating these concerns, and the ABA met with the ACA, with the ACA agreeing to coordinate responses on this issue.

The ACA is the Commonwealth agency responsible, under the *Radiocommunications Act 1992*, for regulating electromagnetic compatibility and human health exposure to radiofrequency electromagnetic energy from radio transmitters.

The ACA wrote to the Sydney Olympic Park Authority in April 2002, expressing concern at the proximity of new residential developments to high electromagnetic fields existing in the vicinity of Homebush Bay AM transmission facilities. The ACA

was concerned at the potential for substantial interference to electrical and electronic devices that may cause malfunction of equipment and the possibility of health exposure implications. The Sydney Olympic Park Authority and Planning NSW first met with the ACA, ABA and the broadcasters in June 2002 to discuss the issue and have met with the stakeholders periodically since that time.

The ACA expects to mandate new transmitter licence conditions specifying a new radiation protection standard for electromagnetic radiation on 1 March 2003. Compliance by broadcasters with the existing EMR standard is only advisory.

The ABA is the Commonwealth agency responsible for the planning of radio services. The ABA will assess any new siting proposals and related changes to technical operating conditions of AM services in Sydney.

#### Day/night switching

Under the ABA's day/night switching guidelines, AM broadcasters can seek increases in transmission power to improve reception and coverage within their licence area. Two of the broadcasters at Homebush, 2CH and 2GB, have sought to increase their power. Such daytime power increases are subject to agreement with the ABA and 18-month trial periods. However, the trial power increases for Homebush have been put on hold until this issue is resolved. AM broadcasters elsewhere in Australia are also seeking to trial daytime power increases.



**After consultation with the people of the local community to seek their views on what additional broadcasting services were needed in their areas, the ABA has allocated new community radio licences in Port Hedland and Break O'Day.**

## New community radio licences for ...

### Port Hedland, WA

The ABA has allocated a new community radio licence for Port Hedland in Western Australia to Port Hedland Indigenous Media Aboriginal Corporation (PHIMAC).

The service will broadcast on 101.3 MHz on the FM band. The permanent community radio broadcasting licence will commence on 1 March 2003.

The ABA made this licence available after a process of consultation with the people of the local community to seek their views on what additional broadcasting services were needed in their area.

PHIMAC was the only applicant for the licence. Its application was assessed with particular regard to whether the proposed service would meet the existing and perceived future needs of the indigenous community in the Port Hedland area.

PHIMAC's proposed service will operate 24 hours a day, seven days a week and provide programs that will cover a wide

range of local issues, in addition to news, information and entertainment that appeals to the indigenous community throughout the Port Hedland licence area.

### Break O'Day, Tasmania

The new community radio licence for Break O'Day in north-eastern Tasmania has been allocated to BOD FM Inc. which will broadcast on 93.7 MHz (St Helens) and 100.3 MHz (St Marys) on the FM band.

The permanent community radio broadcasting licence will commence on 1 March 2003.

BOD FM was the only applicant for the licence. BOD FM's service will operate 24 hours a day, seven days a week. The proposed service will provide programs that will cover a wide range of local issues, in addition to news, information and entertainment that appeals to the different community groups throughout the Break O'Day licence area.

