14 July 2009

Ms Alison Kelly
Inquiry Secretary
Senate Select Committee on the National
Broadband Network
PO Box 6100 Parliament House
Canberra ACT 2600

Dear Ms Kelly

Thank you for your email message of 3 July 2009 to the Executive Director of the Water Services Association of Australia (WSAA) in which you sought the Association's comments regarding the Telecommunications Legislation Amendment (National Broadband Network Measures No. 1) Bill 2009.

WSAA is the peak body of the Australian urban water industry. Its 33 members provide water and sanitation services to more than 16 million Australians and New Zealanders, in addition to many of Australia's largest industrial and commercial enterprises.

WSAA was formed in 1995 to provide a forum for debate on issues of importance to the urban water industry and to be a focal point for communicating the industry's views to the public. WSAA provides a national focus for the provision of information on the urban water industry to all interested parties.

Full WSAA membership is available to urban water utilities that provide water, recycled water and/or sewerage services to 50,000 or more customers (i.e. service connections), either directly as retailers or indirectly as wholesalers.

WSAA is grateful of the opportunity to comment on the Telecommunications Legislation Amendment (National Broadband Network Measures No. 1) Bill 2009 currently before the Australian Parliament. In providing these comments, WSAA acknowledges the considerable importance of the deployment of a high speed national broadband network and the need to keep the costs of this deployment as low as possible to ensure the Australian government maximises the project's net benefits to the Australian community.

In keeping with the legitimate desire to keep the costs of the deployment of this national broadband network as low as practically possible, the Australian government has every right to explore all opportunities to utilise existing infrastructure from other network industries (including the urban water industry). Nevertheless, the Australian urban water industry has serious misgivings regarding use of the urban water industry's infrastructure for the deployment of the national broadband network as contemplated in the Bill in question. These concerns relate to both the provision of information regarding the location of the water utilities' infrastructure and to the provision of access to any of this infrastructure for the deployment of the national broadband network. These concerns are outlined in this submission.

On the subject of seeking information regarding the location of urban water utilities' ducts, trenches, pipes, stormwater drains etc., the first point that WSAA wishes to make is that the location of our industry's infrastructure has national security implications. Accordingly, whoever is given the responsibility to make such request for information must be able to protect the security of this information and to ensure this also applies to any parties that are able to access this information. WSAA notes that the Australian government has acknowledged the need to develop an instrument for the handling, storage and disposal of network information in order to protect the security and confidentiality of such information. Until such an instrument is drafted, it is not possible to provide any further comment regarding this matter.

WSAA notes that the Bill proposes to extend the period required to provide information regarding the location of the infrastructure from that allowed for in the existing Act (i.e. 3 days) to 5 business days. WSAA agrees that the period should be extended from the current 3 days but, nevertheless, considers that the proposed 5 business days period may be too short. Advice on readily available information (e.g. existing asset approximate locations) may be provided within 5 business days by the larger utilities but smaller utilities may require as long as 2 weeks. Advice on land and easement availability will take longer as the utility would also need to assess its future infrastructure requirements as well as the location at the time of the request.

It must also be noted that asset registers include information regarding infrastructure assets that have been completed and are in service. Details regarding works that are under construction is located elsewhere (often with other entities); making such requests for information more complex and taking longer. WSAA notes that there are many water infrastructure projects being constructed around Australia at this time. In addition, the accuracy of the information regarding the location of some underground infrastructure (particularly some of the older infrastructure) may be problematic.

The remaining comment regarding the provision of information regarding the location of the urban water industry's network infrastructure is its cost. WSAA assumes that urban water utilities would be compensated for incurring such costs.

WSAA notes that the provision of information regarding the location of the urban water industries' network infrastructure is one matter, the provision of access to such infrastructure is another matter. Third party access to infrastructure of national significance is provided for under existing legislation either under the jurisdiction of the Commonwealth or State governments. WSAA maintains that such provisions should not be bypassed in the case of the deployment of the national broadband network.

WSAA notes that, while it is unusual to use wastewater infrastructure to deploy communication cables, it is not unheard of (WSAA understand that this is the case at limited sites in Japan, UK, France and Germany) but WSAA wishes to emphasise that such an approach would have significant implications which must be recognised and factored into any assessment. Indeed, WSAA wishes to emphasise that the assessment should not be undertaken in respect of minimising the deployment costs of the national broadband network but in respect of the 'whole of life' costs and benefits of all the infrastructure utilised in such an endeavour (i.e. including the impact on other infrastructure utilised, the much higher maintenance costs on all infrastructure and the service level implications for customers etc.).

WSAA has been advised that that the use of easements may be possible. Indeed Hunter Water has an established fee structure for telecommunications easement in its property or within its easements. WSAA would expect that such charging arrangements would continue to apply to the providers of the national broadband network. It is further noted that a water utility would expect that, in order to accommodate future water utility developments, the utility may require cables and/or transmitters within its property or easement to be subsequently moved.

The deployment of communication cables in the same trench as water/wastewater infrastructure is more problematic and will increase the cost of maintaining, repairing and rehabilitating the urban water industry's infrastructure. The co-location of network infrastructure of the two industries in the same trench would require this configuration to be reflected in the asset information systems and any repairs/maintenance would have to proceed with greater caution to avoid unintentional damage to the other industry's network. In such an environment it would either be impossible to use backhoes/excavators and other heavy equipment for repairs to water infrastructure and *vice versa* but also suggests that the deployment of the broadband network would pose significant risk of damage to

these assets. Ongoing maintenance for either water or the broadband network would result in service failure for both industries. This would have obvious and significant cost and service level implications.

Similarly the deployment of communication cables within pressurised pipelines (mainly water supply) is regarded as operationally impossible. For water supply, it is also important to ensure that drinking water quality is not comprised. However, what turns in-pipe use from “the need to take care” to “operationally impossible” is that it is simply incompatible with valving the water networks (valve closing) and the mechanical cleaning methods. In addition, particularly in regards to pipes with smaller diameter, the restricted cross section will increase the maintenance costs and indeed the mere presence of the communication cable may restrict the inspection and cleaning/clearing methods (effectively ruling out mechanical techniques). Burst water pipes would inevitably result in compromising the broadband asset (either in the actual burst or in the subsequent repair phase).

As has been previously mentioned, the location of communication cables in non-pressurised wastewater pipelines (sewers) is achievable especially in new construction where the design can take account of the asset management needs of, and cost implications to, both networks. Installation in existing sewers would require full condition assessment followed by necessary repairs, rehabilitation and renewals before the installation of communication cables could be undertaken. Without such action there would be an unacceptably high likelihood of the installed communication cable suffering damage due to clearance of blockages by high pressure jetting and other mechanical means, which, as can be seen from the National Performance Report 2006-7 for urban water utilities, is not an uncommon occurrence. The mixing of tree roots and communication cables in sewers would be particularly problematic and rule out existing techniques for dealing with the intrusion of tree roots in sewers. The use of trenchless (lining) techniques used in renewals and rehabilitation of existing pipes would be similarly compromised by the presence of communications cables within these pipes.

Accordingly, it is important that the above costs and service level implications are factored into any consideration to seek access to water/wastewater infrastructure and not ignored in a more narrow assessment of the costs merely incurred by the entity tasked to deploy the national broadband network (and which would ignore costs shifted to other industries but borne by the same end users and the ongoing maintenance and replacement costs for both industries).

WSAA notes that corridor allocations for utility services that have been established in many jurisdictions in Australia. These corridors have been agreed to for good reasons (some of which have been enunciated above) and should not be discarded without careful consideration. Similarly, third party access to infrastructure of national significance is the subject of existing legislation and assessment

processes that consider a broader range of costs and benefits than merely the costs associated with the deployment of the national broadband network. WSAA cannot conceive of any reason to bypass such arrangements and considerations and notes that it doubts that such an assessment would lead to the deployment of the broadband network receiving access to the urban water industry's infrastructure when such access would essentially make redundant almost all existing maintenance techniques while at the same time reducing the industry's service level and increasing prices to its customers.

In conclusion, I should like to thank the Senate Select Committee on the National Broadband Network for inviting WSAA to comment on this Bill and note that I would be pleased to discuss any matters raised in this submission or to answer any questions the Committee would like to raise.

Yours sincerely

**Ross Young**

**Executive Director**