



Submission to the House of Representatives
Committee on Infrastructure and Communications
Inquiry into the National Broadband Network

February 2011

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The MAV is the statutory peak body for local government in Victoria, representing all 79 municipalities. While this paper aims to broadly reflect the views of local government in Victoria, it does not purport to reflect the exact views of individual councils.

INTRODUCTION

Victorian councils are seeking better ways of doing business. Councils have recognised that through collaboration they can substantially improve service delivery. But first they must invest in a modern ICT platform built on a broadband network that can be shared by all participants and accessed anywhere in the state.

This submission demonstrates the benefits that the National Broadband Network (NBN) will deliver and the challenges that it must address. It addresses the first and last terms of reference, namely:

- a) the delivery of government services and programs;
- i) the optimal capacity and technological requirements of a network to deliver these outcomes.

Other terms of reference are impacted and briefly discussed.

DELIVERY OF GOVERNMENT SERVICES AND PROGRAMS

Victoria has 79 councils, over half of which have collaborated in developing the shared service project. Around 12 of these are now ready to implement the first stage of a shared ICT service that is planned to go live on 1 July 2011. The business case targets 40 councils over 4 years, including a significant proportion of rural and regional municipalities.

The outcomes achieved by the NBN infrastructure are key enablers that will allow councils to collaborate and transform the way services are delivered to their communities. Councils will use their collective capability to create innovative changes that none of them would be capable of achieving on their own, including:

- Providing customers with better access to council services, using a variety of modern communication channels;
- Improving the efficiency and responsiveness of field officers (eg environmental health officers, maternal and child health nurses, municipal building inspectors) by providing access to their data anywhere at any time and pushing work requests to them while in the field avoiding wasted journeys to and from council offices;
- Collaborating more easily on the establishment of regional centres of excellence eg regional asset management services that are able to deliver improved contract and materials management, uniform condition monitoring, deployment of advanced maintenance and renewal programs that enable councils to achieve between 15% and 30% improvement on their capital works program;
- Efficiently managing the collective procurement of goods and services, which has the potential to deliver significant savings across multiple spend categories;
- Providing much better reporting and public accountability for the delivery of community outcomes.
- Improving the interface between local government and state and federal governments as well as business and the 3rd sector.

Why do we need to transform council services?

Increasing Expectations

- **Online services (24 x 7 access):** Customers expect to be able to do business online at their convenience
- **Joined up services (one stop shop):** Customers want a single point of contact. They don't expect to be pushed from one department to the next. They expect that advice provided is mindful of their position across council, such as overlapping concerns across planning, building and health permits.
- **Correct and timely information:** Customers expect council to provide the right information when they need it. They do not want to come back in two days.
- **Continuously more efficient use of funds:** Councils are expected to continue to achieve more for less.
- **Integrated services:** Staff increasingly expect to be able to see a holistic picture. They expect that when they are making decisions they have all of the evidence.
- **Real time data:** Customers and staff expect that the decisions and advice provided is based on the correct information, for example, lists of vulnerable citizens used in emergency management.
- **Ubiquitous computing:** Customers and staff expect to be able to access their applications and data whilst on the move, using mobile devices, such as laptops and smart phones.
- **Instant support:** Staff expect instant support. Waiting three days to get a computer problem sorted is no-longer acceptable.

Decreasing Capacity

- **Competition for funding resources:** The level of dependency and support provided by business systems has risen rapidly. It is increasingly difficult for councils to budget the level of funding to keep pace with this need. Priority for funding is often transferred to more immediate front of house issues.
- **Computer systems beyond means:** Systems that provide the level of support required are beyond the financial scope of most councils. Consequently, the systems councils deploy are often not integrated and seldom customer facing.
- **Skill Shortages:** The skills and expertise required to deliver these services is increasingly difficult to find in rural and regional Victoria. Councils fortunate to attract staff face difficulty retaining them.

STRATEGIC INTERVENTION

It is recognised that a shared service model has considerable potential to transform service delivery. Councils will use their collective capability to bring about innovative transformation to the way local government delivers services that individually none of them could achieve from both a resource or cultural perspective.

Barriers to collaboration

- **Lack of commonality** the fragmented nature of the sector currently inhibits councils' ability to collaborate and leverage their collective capability. Every council's systems, business processes, data management and reporting are different.
- **Large numbers of localised solutions** often only implemented on an officer's desktop make it very difficult to share information, applications, staff or to join-up services.
- **Widespread under investment** means that most council ICT managers are consumed with operational tasks and have limited capacity to focus on strategic planning

The solution

- **Modernise local government ICT infrastructure** by investing in a shared solution that leverages the power of broadband networks to ensure all services are available across Victoria at all times;
- **Pool the skills, knowledge and resources of councils** to deliver service innovation and transformation that no one council could contemplate delivering on their own;
- **Build a common back-office service including systems**, processes and people that is shared by participating councils.

The move to a virtual shared service using cloud computing will be enabled through the outcomes of NBN. Without the broadband infrastructure these outcomes will remain inaccessible to many rural and regional councils.

BETTER OUTCOMES FOR VICTORIAN COMMUNITIES

NBN is an enabling technology that will support the reform of council service in Victoria, the benefits of which will be:

- **More responsive council services**
 - Better customer interfaces to council services;
 - Access to ubiquitous computing through solutions that support multiple smart devices eg iphone etc;
 - Co-ordination of resources to provide timely solutions and immediate responses to events such as floods and fires;
 - More efficient use of resources and potentially smarter applications, for example the planned Maternal and Child Health application in Victoria will be deployed to as a web application that provides much better support for nurses and enables the service to provide much better outcomes to vulnerable children and families.
- **Improved customer satisfaction**
 - Services available anywhere at any time;
 - An integrated platform with common customer, location, property, finances and assets across council enabling processes and service to be linked and joined up.
- **Improved financial certainty** and resource planning for ICT services.
 - Up to \$96m of cashable benefits in ICT spend.
 - Greater financial certainty for councils as the capital renewals are built into a service charge, meaning that council service will not fall behind the expectations and needs of their communities.
- **Better informed decision making** for councils and communities through more integrated and timely access to quality information.
 - Decision makers and knowledge workers will have immediate access to quality information
 - Data and reporting structures will be standardised allowing councils to benchmark service performance
- **Better interface with State and Federal Government**
 - A single stable interface for state and federal government to interact with local government for the delivery of state and federal programs
 - Single interface will better support innovations which are currently stymied by the need to work with 79 different systems.
- **Regional Employment Opportunity**
 - Maintain and potentially increase employment in rural Victoria, providing opportunity for skilled employment outside of the metropolitan centres;
 - Opportunity for rural and regional areas to develop as centres of excellence for particular functions eg accounts payable, payroll, HR, GIS, asset management, procurement and records management.
- **More efficient use of resources**
 - Enable collaborative reform programs around procurement, asset management and customer service programs.

REQUIREMENTS OF A NETWORK TO DELIVER THESE OUTCOMES

Rural councils, in particular, are very quick to see the benefits of such a program. It delivers outcomes that they aspire to, but which would normally be beyond their means. However, a major risk for many of these communities is the availability, reliability and affordability of the broadband service over which the shared service operates. The network needs to deliver:

Capacity Sufficient capacity to run council business in the "cloud". The intention is to place all business applications in the cloud and manage it as a virtual service. This includes all the telephony and video conferencing services. Whilst 100 - 1000 Mbits may sound excessive today we believe that as the paradigm for local government business changes we will soon see applications and services that are dependent upon these high speed networks. We believe it would be short-sighted to fix the network at the 10Mbits limit of today's business need or to migrate a larger proportion of the service to a wireless solution.

Potentially the greatest beneficiaries of the Victorian Shared Service will be rural councils. However, it could be several years before some of these councils are recipients of the NBN infrastructure. The shared service would like to encourage NBN Co to consider the readiness of communities to embrace and utilise the infrastructure, in particular a commitment to demonstrate a return on investment by investing in new ways of doing business that leverages the NBN investment. This will provide NBN Co positive feedback as to the benefits provided by their investment and help mitigate any reduction in the government's resolve to see the program through to completion. Whilst we understand the selection of pilot sites has been based on the research needs associated with rolling out the physical infrastructure. We would like to see future rollout patterns based on community and business readiness and need. As one of the key advocates for communities we would welcome continued dialogue with local government peak bodies and councils in selecting future rollout patterns.

Quality If the service experiences significant latency or jitter then applications, such as Voice over IP (VOIP), video conferencing and consultations will suffer to the point where users will revert back to the old solutions. Both latency or jitter are unlikely to be an issue on the fibre network but will require managing in the wireless and satellite services.

Reliability The service must be available 24 x 7, 365 days. Councils are the primary source of community information, such as vulnerable citizens etc., which are required in emergencies and adverse situation. Disasters can't be relied upon to fall in the 9-5 working week.

As councils move business critical applications onto the network they must be assured that it is resilient. The service cannot be brittle in that single points of failure can cause a loss of service, nor should trivial events be able to disrupt the quality of service. We expect that if links are broken the network will self heal with no noticeable loss to the end user.

Critical council services will require at least two independent routes, where independent routes have a low probability of being disrupted by a common event, such as a bushfire, flood or construction accident such as a back-hoe cutting through the cable.

Affordability NBN Co wholesale pricing structure must enable a competitive and innovative retail sector. In the retail business the Shared Service would like to see:

- No pricing discrimination based on location. Current rural broadband prices are almost four times metro prices. The retail price for rural services should be competitive with metropolitan or urban areas. NBN Co's proposal to provide fibre to communities of 1000 + appears reasonable as a starting point for a competitive retail model. However, the size of the community may have to decrease as end-user applications and services are developed and demanded by these smaller communities;
- A move away from fixed capacity service models to dynamic provisioning based on the immediate needs to the user. For example; we do not want to pay for a fixed video conferencing service that has less than 6% utilisation, or alternatively pay for a lesser service that degrades when pushed hard. Ultimately, we would like to see services models based on a performance outcome on the desktop or device irrespective of the application or business process.

Symmetry We anticipate running a two way business over the network, where upload speed and quality of service is as important as download. The Shared Service is pleased to see that the proposal is for Retail Service Providers to provide symmetrical services for business.

Role of councils in NBN rollout

Fibre to the Home is a key objective of the NBN. This will entail delivering drop fibre connections to individual properties.

NBN Co will require a property and address model to manage the precise location of its infrastructure, not least a model showing where drop cables interface with occupancies.

We strongly recommend the property model is based on occupancy as per the Victorian property model and not ownership such as obtained from the cadastre of land parcels and title data.

Using a property model based on occupation provides a more robust understanding of how the land is used and addressed. This will provide a more accurate model of occupancy addressing to support a contestable retail service market. Errors in the property and address data currently cost utility retailers of gas and electricity hundreds of hours a week to resolve.

Councils are the custodians (creators) of the property and address data, which is generally published by the State Government and the PSMA.

Maintaining a quality 3D record of the "As Constructed" fibre network will be critical to minimise accidental damage from future activity, in particular, future development activity.

These "As Constructed" records should be integrated with the property record maintained by councils to ensure future misinterpretation is minimised, in particular at the interface with properties and alignment with local road reserves.

CONCLUSION

The MAV Shared Services program supports the NBN initiative. We believe NBN will enable councils to significantly reform service delivery to communities, delivering better service outcomes more efficiently.

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