

In response to the Committee's question, please see the information below.

Examples of the type of value-add services RSPs can provide to utilities

In their [submission](#) to this inquiry Smart Grid Australia described their need for a smart grid network with millions of endpoints utilising Layer 2 inputs from the NBN, implying a Layer 3, security-enabled end-to-end solution. Telstra is well-placed to provide such an IP VPN solution using its Next IP network with cost and service benefits far in excess of anything utilities could build in-house.

- Telstra is a global leader in IP VPN technology with the depth and scale to provide a highly robust and flexible network
- Telstra can provide connectivity anywhere in the country from an extensive range of access technologies and speeds
- These include the Next G network (with the greatest coverage of any wireless network in Australia) as well as all NBN POIs

To achieve the inherent resiliency and scalability of the Next IP network a utility would need to build a high level of redundancy into their IP and underlying transmission network infrastructure

In addition to these basic IP VPN benefits, Telstra's network would integrate seamlessly with the applications and services necessary to manage and derive benefits from the network and the data it carries, including:

- Data centre management and storage of the vast amounts of data generated in a national smart grid network
- Security services such as Denial of Service detection/prevention and 24 hour Security Operations Centre
- Integrated cloud services including computing resources and application integration and development with full security

To emulate the integrated network, applications and services proposition that Telstra and other RSPs could supply, a utility would need to separately buy a multitude of inputs – from intercapital transport to data centre capacity to network management capability – and build the capacity to manage those inputs. With these capabilities already in place Telstra could achieve this end at far lower cost and with greater service benefits.

Telstra has a history of providing innovative telecommunications services to utilities in conjunction with best of breed partners.

- Workforce management solutions utilising the Next G network for telemetry purposes and M2M applications
- Video applications for infrastructure site management and security, including site cameras and intelligent helmets that stream workforce video to an operations centre

Building on that proven capability, an IP VPN smart grid network solution would provide the basis for rapid innovation to meet the unforeseen needs of utilities in future.

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