

SuperNet Operating Model

The Alberta SuperNet is a backhaul (or 'middle-mile') network that connects on one end to local access networks ('first-' or 'last-mile' connections), and on the other end to separate networks that connect to the internet. Today, the SuperNet serves both public sector customers through a unique suite of services (see Table 2), as well as business and wholesale customers.

For public sector customers, the Government of Alberta set a universal fee structure across the province for monthly flat-rate services, irrespective of a subscriber's physical location. This model contradicts conventional private sector telecommunications billing practices, where rates tend to be lowest in urban centres and highest in rural communities.

The SuperNet does not directly serve residential subscribers. It is intended to provide affordable wholesale fibre access to local ISPs. The ISPs can then provide last-mile connectivity and internet service to residents of SuperNet communities. For a partial list of ISPs providing services through the Alberta SuperNet, please see Appendix A3.

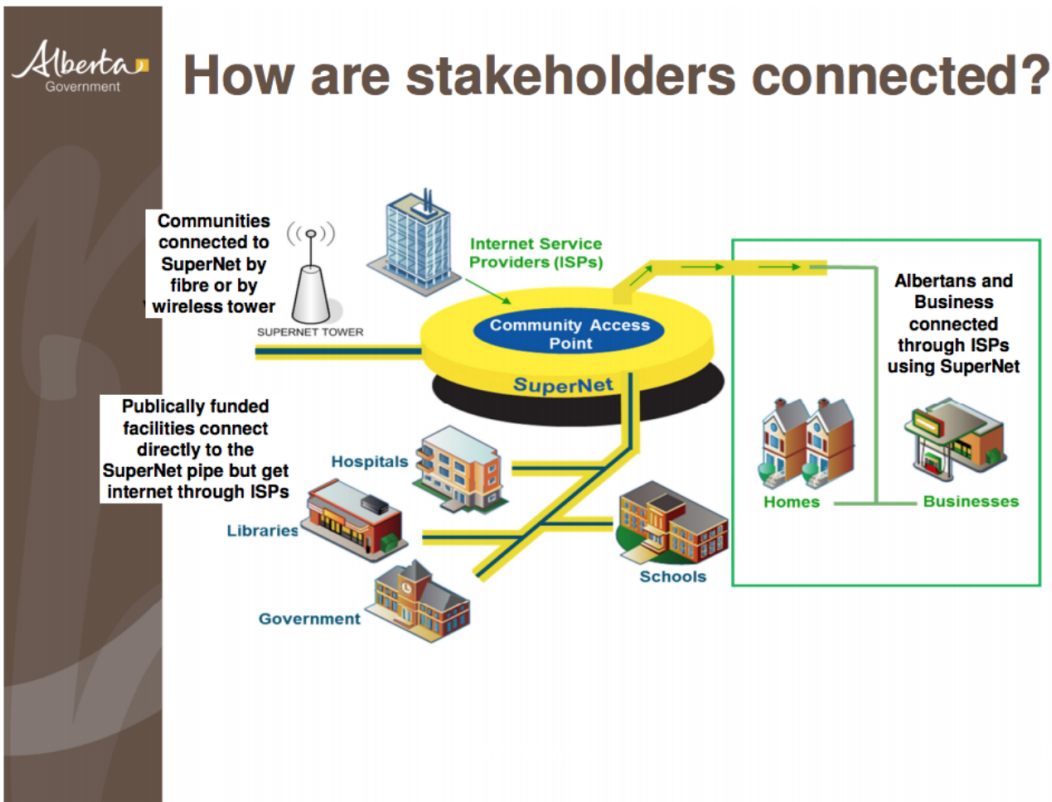


Figure 8. SuperNet - How are stakeholders connected? Source: June 8, 2016 Service Alberta IM Aware presentation²².

Public sector organizations that utilize the SuperNet include Government of Alberta ministries, schools, health facilities, libraries and municipalities. School districts receive subsidies of \$800 per month for each school site, which may only be spent on connecting to the Alberta SuperNet²³. Alberta Libraries, through the provincial Ministry of Municipal Affairs, subsidizes SuperNet annual costs for libraries participating in the Public Library Network by \$1.85 million per year²⁴.

Table 2. SuperNet Services for Government Ministries²⁵

SuperNet NGN SERVICE

<p>Base package of 100 Mbps: \$898/month</p> <ul style="list-style-type: none"> • 90 Mbps Basic • 5 Mbps Interactive • 5 Mbps Real Time <p>Includes up to 10 Layer 2 or Layer 3 VPNs, with additional VPNs available upon request at no additional cost.</p>	<p>Additional megabits available in increments of 1 Mbps</p> <ul style="list-style-type: none"> • Basic - \$0.75/Mbps • Standard - \$2.50/Mbps • Interactive - \$4.00/Mbps • Real Time - \$11.00/Mbps
SuperNet LINE RATE SERVICE	
<p>100 Mbps Line Rate Service: \$798/month</p> <p>1,000 Mbps Line Rate Service: \$1098/month</p> <ul style="list-style-type: none"> • Includes up to 10 Layer 2 or Layer 3 VPNs, with additional VPNs available upon request at no additional cost. • Up to 4 physical 1 Gbps Ethernet Ports. 	<ul style="list-style-type: none"> • For customers with large bandwidth requirements, but who don't need multiple classes of service. • Service can be leveraged by customers with a sophisticated network and IT team, who would like more control over their network.
SuperNet 10 Gbps SERVICE	
<p>10 Gbps Service:</p> <p>\$5,098/month</p> <ul style="list-style-type: none"> • Includes up to 10 Layer 2 or Layer 3 VPNs, with additional VPNs available upon request. • Includes 1 Physical 10 Gbps Ethernet Port. 	<ul style="list-style-type: none"> • For customers with very large bandwidth requirements, but who don't need multiple classes of service. • Service can be leveraged by customers with a sophisticated network and IT team, who would like more control over their network.

References

²²Service Alberta Artifact. Accessed 5 July 2016.

²³Funding Manual for School Authorities 2020/21 School Year, C3.3 SuperNet Service Funding and H1.1 Funding Rates for School Jurisdictions - School Based Grants.

²⁴Government of Alberta. [Public library statistics | Alberta.ca](#).

²⁵Axia. E-mail communication: Service Alberta and Axia announce newly available suite of SuperNet services for all government ministries, 18 September 2015.