

Rural Internet Specification

Some ideas on items to look at when specifying/comparing a rural internet provision.

Num	Item	Value
1	Are bit rates distance limited	Y/N
2	Downstream bit rate minimum	> 10 Mbits/s
3	Downstream bit rate average	
4	Downstream bit rate max	
5	Downstream bit rate max future	
6	Upstream bit rate minimum	> 10 Mbits/s
7	Upstream bit rate average	
8	Upstream bit rate max	
9	Upstream bit rate max future	
10	Upstream bit rate variable per customer	Y/N
11	Upstream bit rate maximum per customer	
12	Latency to exchange/backbone	< 20ms
13	Max contention to the exchange/backbone at 25 Mbits/s	
14	Max contention to the exchange/backbone at 100 Mbits/s	
15	Max packet loss when uncontended (%)	
16	Reliability to the exchange/backbone (uptime %)	
17	Power usage per customer (exchange to premises)	
18	Expected lifetime before upgrades needed	
19	Minimum monthly cost for 10 Mbits/s service	
20	Minimum monthly cost for 50 Mbits/s service	

Notes

- Whether bit rates are limited based on distance of property.
- Minimum downstream bit rate for a property covered.
- The average downstream bit rate for the properties covered.
- The maximum downstream bit rate that will be able to be achieved by some or all properties if paid for.
- The maximum downstream bit rate that could be achieved in the future without changes to the exchange to premises connection system.
- Minimum upstream bit rate for a property covered.
- The average upstream bit rate for the properties covered.
- The maximum upstream bit rate that will be able to be achieved by some or all properties if paid for.
- The maximum upstream bit rate that could be achieved in the future without changes to the exchange to premises connection system.
- Can a business/home have a significantly faster upstream bit rate if wanted/paid for.
- What maximum upstream bit rate can a business/home have.

12. The ping latency to the exchange/backbone.
13. The maximum contention ratio for any property with everyone using 25Mbits/s.
14. The maximum contention ratio for any property with everyone using 100Mbits/s.
15. The maximum packet loss without contention.
16. Reliability in terms of percentage uptime.
17. The power used per customer from the exchange to premises in Watts.
18. Expected life time in years before significant system upgrades will be required for maintenance or to handle increased Internet speeds.