

Introduction

ISPANZ is grateful to be able to comment on the draft paper entitled "Internet Interconnection and Peering Report". ISPANZ is a non-profit group representing most Internet Service Providers operating in New Zealand. All major ISPs outside of Telecom's Xtra are members and a broad range of medium to small ISPs are included.

In considering the draft, ISPANZ refers to its primary goals: to improve broadband uptake; enhance the international competitiveness of New Zealand businesses; improve internet pricing for New Zealanders; and enable the country to reap significant economic benefits as it becomes broadband enabled. These are clearly aligned with the policy goals of the Government under the Digital Strategy.

The benefits of peering

There appears to be little input from local ISPs in the draft document, which would have provided many illustrations of the benefits of peering.

ISPANZ regards neutral peering as key to the future of national internet connectivity in New Zealand. Peering enhances the structure of the Internet through resilience, diversity and economic efficiency, contributing directly to ISPANZ goals and those of the Government. Neutral peering should be encouraged wherever possible.

ISPANZ also notes that the Government is seeking to encourage development of New Zealand's digital content. There is huge growth in online usage across the board in New Zealand and a lot more content will be able to be made available through national connectivity if there is a substantial increase in peering.

The executive summary on page 3 downplays significant issues that have arisen with breakdowns in peering in New Zealand, excusing them because "it would be surprising if there weren't problems" and they are "not unique to New Zealand".

We respectfully suggest that the so-called "isolated problems" of link failure and alternative routing via overseas connectivity are unacceptable and unnecessary failures in today's internet environment and demonstrate how market forces have failed to deliver in a market dominated by two national players.

Against a background that increased peering does cost ISPs to set up and maintain, it is crucial that policy settings encourage peering so that New Zealand has a world class national infrastructure with quality broadband available to all its citizens. Peering leads to lower latency and lower packet loss and is a protection against a "digital divide" opening up in respect to access to the Internet.

The Azimuth draft report in detail

Referring to a quote on page 3 of the executive summary, in 2002 the OECD may well have been pleased with development in peering but it does not follow to conclude, in the final paragraph on page 3, that in 2006 there is no imbalance of market power, particularly when one considers New Zealand, and especially when one considers the dramatic actions of the two dominant telecommunications network players subsequently in 2004, as detailed by the report itself in Section 5.

It is therefore unclear how the statement comes about, those outcomes that are more in one party's interest than the others have not happened in New Zealand. The actions of 2004 indicate otherwise, and today it remains that ISPs and content providers are forced to connect on a paid basis to the larger ISPs with national infrastructure.

ISPs are in the business of providing services to customers. It is in our interests to ensure those services are resilient and fast. As noted in section 4.2 peering eliminates the number of hops and provides a connection with lower delay. As noted in section 4.4 the global trend is towards peering.

A concept of "backbone free-riding" is introduced in section 4.6. The apparent claims of certain "industry participants" are used to justify a conclusion that there is inequality in value between a large national ISP peering with a smaller or regional one. Note that ISPANZ is made up of "industry participants", many of whom would take issue with this.

There is a huge variation in value being offered considering the variety of "browsing" customers, "transactional" customers and "hosting" customers on the Internet and it is simplistic to imagine that one ISP has more value to contribute in its connection with another ISP just because of its size or because it has a larger geographic spread. The balance between parties for a neutral peering agreement is not limited to comparison of customer base.

Who is to say that a remote customer of a large national ISP is not getting as much value in reaching a customer of a local ISP as the other way around? Some smaller ISPs host major content sites of significant value to large ISPs customers. All ISPs offer their customer's access to the "Internet" and will only be able to deliver the full extent of it if they can send to and receive from each other.

If a national ISP has chosen to have a broad geographic reach then that is their investment decision with costs being recovered from its customers. To also attempt to recover their internal transit costs from other ISP's customers is double dipping. Further, it takes money from smaller ISPs that could be used for further investment and could prevent their growth, stunting or reducing the diversity of the Internet. It should be noted that much of the innovation and evolution in the Internet comes from smaller ISPs.

The second reason given for suggesting paid peering could be appropriate is scandalous. It is outrageous to suggest that a small ISP is "business stealing" because peering allows it to offer a similar quality of service when reaching the sites of the large ISP's customers. This is to suggest it is okay for the large ISP to knowingly reduce the service availability of its own customer's websites to one portion of that external customer's clients just so they can squeeze a bit of money from another ISP.

The Radio New Zealand discussion in section 5.2 misses an important point. All ISPs who connect to the peering exchanges and thereby peer with Radio New Zealand are able to offer the superior service. Those ISPs which decline to peer are missing out on the quality and quantity of material on the website, are causing "tromboning" of content overseas, and are paying for that international traffic, demonstrating that there are definite advantages with peering both for those ISP's and their customers.

The summary of Section 7.1 is a mystery. Large ISPs clearly do have significant market power in the New Zealand interconnect market, otherwise they would freely peer and few smaller ISPs would pay for interconnection to large ISPs.

Section 9 concludes on issues of regulation but looks at New Zealand markets only in the context of ensuring competition, lacking consideration of the wider strategic and policy issues. It appears the brief for this paper may have been too narrow to cover off the issue of peering sufficiently.

Peering is more about efficiencies in connectivity and higher levels of service for end users than commercial competition.

There is a temptation to consider regulation in favour of neutral peering, but while there might be benefits, ISPANZ prefers a self-regulatory model. Government, however, has a significant role to play. It can take a lead through its own agencies by requiring a commitment to neutral peering from its own Internet suppliers. This would both enhance the diversity and resilience of the Internet in New Zealand and also resolve the issue of tromboning of any sensitive Government content internationally.

A further significant issue surrounding peering that the Government would be able to assist with is the lack of solid information on the national infrastructure. The connectivity 'map' used in the draft document is far from complete and does not include the largest centres of peering – the Wellington Internet Exchange and the Auckland Peering Exchange. In that sense it should not have been used to even illustrate current interconnectivity in the draft. A regularly maintained dynamic map of national connectivity would help all ISPs in deciding whether to peer, and help the Government in determining its policy decisions.

In conclusion

ISPANZ would suggest the Azimuth draft report fails to fully inform on the issue of peering, particularly in the New Zealand context. Peering is an issue Government needs to explore more thoroughly as poor peering impacts directly on its policy goals under the Digital Strategy. Peering will become an even greater issue as the internet grows, unbundling occurs and Telecom develops its Next Generation Network. It is an issue Government can and should take a lead in to be benefit of all internet users and the wider economy.