

# **InternetNZ**

## **(The Internet Society of New Zealand Inc)**

Submission on the Commerce Commission's amended draft report on Telecommunications Act 2001 Section 64 review and schedule 3 investigation into unbundling the local loop network



**October 2003**

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## **1 INTRODUCTION**

- 1.1 The Internet Society of New Zealand Incorporated is a not for profit, common interest Incorporated Society, incorporated on 1 November 1995.
- 1.2 This Society uses the trading/operating name “InternetNZ” (INZ).
- 1.3 Membership of INZ is open to any person, upon payment of an annual subscription of \$50 + GST.
- 1.4 Since 1996 INZ has been the delegated authority for the .nz Domain Name, from the Internet Assigned Numbers Authority (IANA), the authority which administers the delegation of the 240 country code top level domain names (ccTLD’s).
- 1.5 INZ administers the registry for .nz through its wholly owned subsidiary company “New Zealand Domain Name Registry Ltd” (trading as NZRS), and provides governance and policy for the operation of the .nz namespace through the Office of the Domain Name Commissioner (DNC).
- 1.6 INZ’s primary aim is to “maintain and extend the availability of the Internet and its associated technologies and applications in New Zealand, both as an end in itself and as means of enabling organizations, professionals and individuals to more effectively collaborate, cooperate, communicate and innovate in their respective fields of interest. It is intended that the Society be the principal organization representing the interests of Internet users and Internet Service Providers in New Zealand” (INZ Constitution – Objectives).
- 1.7 The first objective included in the INZ constitution states “To promote the competitive provision of Internet access, services and facilities in an open and uncapturable environment.”
- 1.8 In recent years, in recognition of its own monopoly position relating to the operation of the .nz namespace, INZ has moved to a shared registry system (SRS), enabling a level playing field for registrars to compete for business, and interact directly with the registry.
- 1.9 INZ, as a not for profit organization, has already voluntarily been through its own process to essentially “unbundle” the operation of .nz, significantly reducing its own income and profitability in the process, but in the belief that such action is in the best interests of the Internet community.
- 1.10 The parallels between this and the concept of local loop unbundling (LLU) are self-evident: both reforms open a former monopoly service (.nz registrations or the local loop) to greater competition, to the ultimate benefit of consumers.

- 1.11 Local loop unbundling is therefore absolutely consistent with InternetNZ's objectives and own practice.
- 1.12 Our submission outlines the process and reasons for InternetNZ's "unbundling" of .nz, and its justifications for expressing a desire for Telecom to do so in the best interests of the Internet community.

[www.internetnz.net.nz](http://www.internetnz.net.nz)

[www.iana.org](http://www.iana.org)

[www.nzrs.co.nz](http://www.nzrs.co.nz)

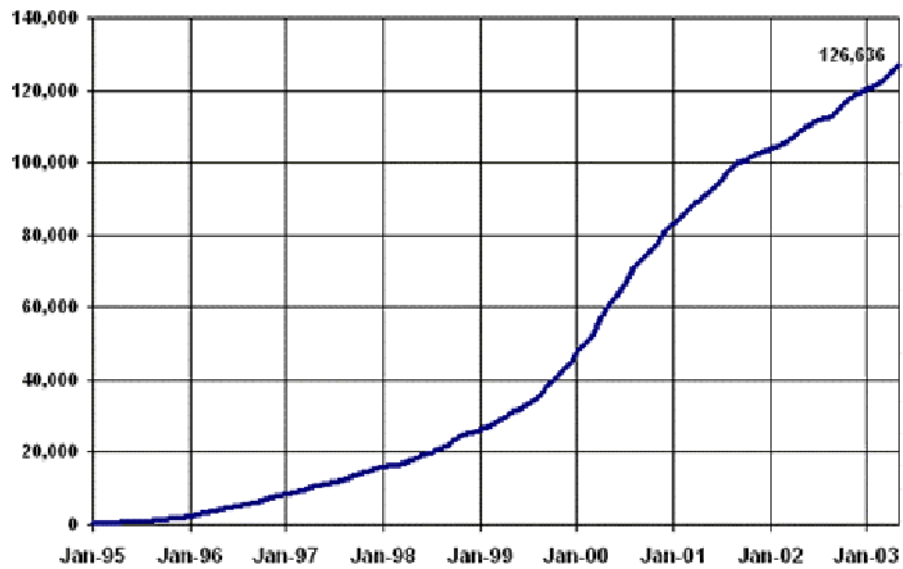
[www.dnc.org.nz](http://www.dnc.org.nz)

## 2 HISTORY OF THE OPERATION OF THE .NZ DOMAIN NAME

- 2.1 IANA delegated the .nz namespace to John Houlker on 19 January 1987, and the University of Waikato issued .nz domain names and maintained the .nz registry during the early part of Internet availability in New Zealand.
- 2.2 During 1996, as Internet use was flourishing in New Zealand, and operation of the .nz registry was becoming burdensome on the University of Waikato, John Houlker, IANA and INZ agreed to a redelegation of the .nz name to INZ.
- 2.3 From 16 March 1996 INZ assumed responsibility for the allocation of names in the .nz registry, at which time there were approximately 4,000 .nz names allocated
- 2.4 The University of Waikato was contracted to continue hosting the .nz namespace until INZ was in a position to assume full responsibility for the Domain Name System (DNS).
- 2.5 INZ established a subsidiary company “The New Zealand Internet Registry Ltd”, trading as Domainz, to run the .nz registry, on 15 April 1997.
- 2.6 Domainz commenced allocating domain names, to both resellers (“registrars” or “name agents”) and individuals, evolving what was known as the Domainz Registration System (DRS).
- 2.7 Registrars and individuals expressed concern that they could not interact directly with the registry, and that Domainz was effectively acting as registrar and registry within the DRS. This is akin to the current position with the local loop and ADSL offerings, where Telecom offers “wholesale” services to resellers at essentially the same price as “retail” services to its own customers, and with the same (i.e. minimal) level of flexibility for resellers and retail customers in price and service terms.
- 2.8 In 1999, despite the fact that Domainz was operating extremely effectively from a financial perspective, generating around 50% profit to turnover, INZ agreed that the DRS model was not acceptable as it was an abuse of the monopoly of .nz. INZ felt it improper that monopoly profits were being accrued in the performance of the dual function of registry and registrar, and that .nz domain name holders would be better served by a situation where only the basic infrastructure was retained as a monopoly (the register itself) with competitive access to it made available.
- 2.9 INZ therefore resolved to create a Shared Registry System (SRS) which would require all domain name registrants to utilise the services of authorised registrars, who in turn would interact directly with the registry. This removed the monopoly registrar position and opened the baseline infrastructure (the .nz register) to competition among registrars.

- 2.10 The above decision was made by INZ, in the public interest, despite the fact that the Commerce Commission had already determined (in 1999) that "There is no present need for the Government to intervene since it appears that the domain name system in New Zealand is competitive, well organised, properly administered, professionally serviced, and offers a high quality of service at an internationally competitive price."  
<http://www.med.govt.nz/pbt/infotech/internet/internet-05.html>
- 2.11 The SRS was implemented and became live on 14 October 2002, with Domainz as the sole registrar, acting in a stabilising role, until the first competitive registrar connected to the shared registry on 7 December 2002.
- 2.12 Presently there are in excess of 40 registrars interacting with the SRS, and domain name prices are now extremely competitive and considerably cheaper on average than in 1999.
- 2.13 Registrars are charged by NZRS a flat \$2 per month per name for .nz names maintained by them in the registry, or \$24 per year plus gst. This compares with the pre-reform price which Domainz offered, of \$44 per year plus gst. Registrars can also offer flexible registration terms, from one month to ten years at monthly intervals, compared to the previous situation of a single one year term.
- 2.14 As an interesting aside, the advertised .nz domain name price varies from \$28.13 per year (1<sup>st</sup> Domains) to \$189 per year (Xtra), with the average price at \$53.20 per year. I-hug are the only other registrar to offer names at more than \$100, at \$128 per year.
- 2.15 The above examples clearly demonstrate that the introduction of competition and the opening of competitive access to the core infrastructure (the .nz registry) has benefited consumers in price and service terms.
- 2.16 At the point where a competitive market for .nz was confirmed, INZ resolved to on-sell Domainz with its balance of around 30% of .nz names, so that Domainz could continue to operate as a commercial registrar but not be owned by (and therefore not conflict with) INZ, in its role as the monopoly holder of the .nz name.
- 2.17 INZ's total revenue has halved since the establishment of the new registry fees (despite increasing numbers of domain names), and fees will be further reduced if profits are more than required for the ongoing needs of INZ.
- 2.18 Despite loss of profits, INZ is extremely pleased with all aspects of the SRS, especially that registrars are competing on a level playing field and INZ has fulfilled its own objectives of operating in an open and uncapturable environment.

2.19 The graph below demonstrates the .nz namespace continues with astronomical growth, as at February 2003. Growth continues and as at 30 September 2003 there were more than 135,000 names registered.



### **3 TELECOM AND THE LOCAL LOOP**

- 3.1 The Commerce Commission's initial recommendation that the local loop be unbundled is fully supported by INZ, and INZ believes that unbundling to the greatest extent possible is in the best interests of New Zealand.
- 3.2 As stated, INZ can speak authoritatively on unbundling, having been through the process recently with its own operation of the .nz namespace.
- 3.3 It would be consistent with the actions of other incumbent telecommunication providers internationally, to assume that Telecom will seek to either reverse the initial decision to allow LLU, or to limit the scale and scope of any unbundling.
- 3.4 Incumbent telecommunication providers internationally have generally opposed LLU on the basis of the likely adverse impact on profitability and market share. From commentary by Telecom it would seem that company shares this view, rather than consider that LLU might lead to expansion opportunities, opportunities to form new relationships with suppliers and resellers, and to be more competitive and improve the quality and range of services at more competitive prices for consumers.
- 3.5 Initially the telephone network was used purely as the tool to connect Internet users to their network, but over recent years a strong degree of convergence between telephony and Internet has occurred. Examples include Voice over Internet Protocol (VOIP), text messaging between Internet applications and telephones, email and web browsing via telephone devices, to name but a few.
- 3.6 Providers, such as Saturn (pre TelstraClear) and I-hug already have customers using ranges of bundled services incorporating telephony, Internet, cable television and satellite connectivity. Many smaller telecommunications and ISP operations offer a degree of bundled telephony / Internet services.
- 3.7 These other telecommunications and ISP operations have been unable to offer meaningful total last mile solutions outside of heavy population density areas, due to the high wholesale pricing regime and lack of willingness by the incumbent provider to provide local loop access.
- 3.8 Where competition has been on relatively level playing fields, other providers have grown considerable market share, perhaps most notable in the cellular phone market where Vodafone has more than 50% of the market.
- 3.9 It is beyond the realms of possibility, with the low population and geographic diversity of NZ, that any provider could provide a second, national last mile solution on a separate network to compete with Telecom.

- 3.10 The most significant portions of the existing Telecom network and copper wire infrastructure was built utilising the contributions of phone customers and taxpayers, and the infrastructure was “given” to Telecom. INZ believes that if the state asset sales could be revisited, in hindsight it is extremely unlikely that the telephone network (or the electricity supply lines or railway lines) would have been disposed of.
- 3.11 Convergence of telephone and Internet technologies will continue, probably to the extent that services will be indistinguishable to consumers as belonging to “the Internet” or “the telephone system”. Consumers will not care if they are making a toll call or a VOIP call, so long as the call happens, and is of good quality and is affordable.
- 3.12 In New Zealand, the current opportunities to converge the technologies of Internet and telephony applications are restricted to the pace at which Telecom rolls out its services, and to the options Telecom believes are appropriate. No other provider can compete for nationwide last mile copper wire connectivity, due to Telecom’s unwillingness to permit other operators full access to what Telecom perceives as “their” network.
- 3.13 Telecom have frequently suggested that some portions of the local loop are unprofitable, for example, the rural loop – yet will neither seek to dispose of the rural loop, perhaps to an operator who could make it profitable, nor allow other providers to offer services over the rural loop which would ease the burden for Telecom.
- 3.14 NZ has been slower than most OECD countries to tackle the issue of LLU, and now is in good position to evaluate the success or otherwise of other countries unbundling processes.
- 3.15 In INZ’s judgement, generally those countries who have sought to unbundle their local loop to the maximum extent possible have been more successful in creating competitive consumer markets with greater ranges of services and pricing, than those countries which have chosen unbundle to a limited extent.

## **4 THE EFFECT OF LOCAL LOOP UNBUNDLING ON THE INTERNET INDUSTRY**

- 4.1 The Internet industry in NZ grew from a base of non-telecommunication providers, including the likes of Voyager, Actrix and Planet. During the early 1990's while Internet access was flourishing, the telecommunications providers were not proactive, and it was only in the latter half of the 1990's that Telecom launched into the Internet Service Provider market. In general, Telecom has been a reactive provider, rather than proactive.
- 4.2 The Internet challenges traditional businesses methods, the telecommunications sector more than others. Providers that are agile and responsive to customer needs are proving most successful. Incumbent telecommunications providers are rarely, if ever, agile or responsive.
- 4.3 If the uptake of the Internet in New Zealand had been left solely to telecommunications providers it is likely that the pricing, versatility and range of services would be significantly impaired by comparison to the actual market today.
- 4.4 It is worthwhile noting that while several ISP's offer Voice over Internet Protocol (VoIP) telephony as part of normal services, Telecom, in the Telecommunication Service Obligation (TSO), have sought to reserve its rights to charge for VoIP calls.
- 4.5 The TSO also allows Telecom to reduce existing connection speeds to individual consumers, providing it meets the minimum provision of 9.6kbps data capability to 99% and 14.4 kbps to 95% of existing lines.
- 4.6 InternetNZ believes the Internet offers unparalleled opportunities for communication, consultation and connectivity and is the single largest empowerment tool to have arisen from the technological revolution.
- 4.7 As many other countries standardise on 10 Mb connectivity and faster for broadband connectivity, Telecom initially attempted to convince New Zealand that 128K is sufficient to be considered broadband, although now appearing to settle on the suggestion that 256kb represents broadband.
- 4.8 While New Zealand has been quick to adapt to the Internet, with comparatively high numbers of Internet users and domain name holders, broadband uptake is comparatively low. INZ purports that pricing is the key to uptake, and to date, with no alternate providers having access to national last mile services, Telecom's pricing model for its broadband offerings are uncompetitive and stalling growth.
- 4.9 If New Zealand is to compete internationally and internally, a robust, agile and proactive telecommunications industry with truly competitive pricing and services is a basic requirement. The assured path to such an industry that will permit the consumer at the last mile to utilise the power of the Internet can only occur if a framework that includes an unbundled local loop to the maximum extend possible.

## 5 **CONCLUSION**

The poor uptake of broadband in New Zealand is largely due to the way that Telecom markets its exclusive ability to deliver ADSL technology. Although there are arguments for the continuation of Telecom's rights to this as a property rights issue, we are convinced that the monopoly would not have been granted had government foreseen the current issues.

Regardless of the arguments over property, the best way to release the local loop to a competitive market. Telecom stands to gain significantly as it will garner a strong share of an exponential growth wave.

We applaud the work of the Commerce Commission in the local loop unbundling investigation, and offer InternetNZ's support for the rapid implementation of the recommendations.