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Submission by InternetNZ and TUANZ on the Section 9A Backhaul Study

InternetNZ and TUANZ provide this submission confirming our mutual support for this study

1. Summary of submission

1.1   InternetNZ and TUANZ welcome the opportunity to submit on the Section 9A Backhaul Study.

1.2   We approach this submission based on two main principles:

a) Backhaul is a key input to all other telecommunications services. Efficient backhaul provision is vital for the long-term benefit of users.

b) Backhaul should deliver efficient and fair access, pricing, and capacity, enabling current and future access services to deliver their potential.

1.3   Based on those principles, we make the following key points:

a) Current specifications for regulated backhaul are needlessly prescriptive and tech-specific. Efficient backhaul should use the most efficient technology for each location, and should not be tied to particular modes for delivering access services.

b) Adequacy of competition and wholesale access should be considered for each area served rather than on a "national-market" basis. Issues are more likely at intra-regional levels, and in delivery to rural or remote locations.

c) Regulated backhaul prices are likely to be out-of-date, given declining prices internationally since the last review.

2. InternetNZ and TUANZ support better Internet for all Kiwis

2.1   Our vision for telecommunications is a world where network speeds are no longer a constraint on what New Zealanders can do with the Internet. Delivering that vision requires ongoing efficient investment.

2.2　UFB fibre and improved mobile networks allow faster access services, now and in future. We agree that it is time to review backhaul, to ensure it supports the full potential of those faster access services.

2.3　We are agnostic as to the ultimate choices of backhaul technology or mode of interconnection. Our concern here is the efficient delivery of better telecommunications services to users, at fair prices.

3.　We support a tech-neutral approach to scope

3.1　We welcome the proposed holistic approach, including a geographic classification of backhaul. We think that at this stage, a technology-neutral approach, allowing for variation in backhaul requirements, is sensible.

3.2　Our technology-neutral goal of efficient backhaul provision may benefit from specification of an agreed, interoperable standard for regulated backhaul. We are open to investigation of:

a) Whether requirements for efficient access backhaul can be specified in a tech-neutral way;

b) Whether there is an emerging industry standard for backhaul (the discussion document mentions ethernet in this regard);

c) The level or levels at which regulated backhaul might most usefully be specified (eg dark fibre may be the right level to serve larger players, but entrants or smaller entities may need services at other levels);

d) Methods for benchmarking efficient backhaul provision, potentially including:

(i)　Benchmark pricing based on a comparison with competitive routes, considering factors such as distance, capacity, and users served;

(ii)　Adequacy of non-price factors such as latency, loss, jitter, availability, and service restoration time;

e) Whether including ethernet as a regulated standard for backhaul would support efficient provision of and access to backhaul.

3.3　Current regulated backhaul services are tied to specific access services. We share Spark's concern that this makes efficient use of these links impossible [discussion paper at 25.1].

3.4　We hope this investigation will allow clear, simple, and transparent measures for efficient backhaul provision.

4.　Market definitions need more investigation

4.1　The Discussion Paper presents contrary views on the nature of New Zealand's backhaul market arising from the recent Schedule 3 review:

a) Chorus has argued that prices are set on a national basis, and that this constrains pocket pricing [Discussion Paper at 54.2]

b) Spark's experience of price reductions on routes with competitive entry - but not elsewhere - suggests otherwise [Discussion Paper at 54.1].

4.2 Given this difference in views from key players, more investigation is needed into the nature of the backhaul market and the extent of competition.

5. Benefits of a localised approach to backhaul markets

5.1 We favour an approach which allows route-by-route assessment of backhaul, in terms of competition, cost, capacity, and access. There may be significant variability between routes - a "national market" approach would risk missing this variability.

5.2 We are concerned that price-averaging may conceal potential problems in regional and intra-regional backhaul markets. Price-averaging may constrain pricing risks, but it definitely conceals price information.

5.3 Without route-specific information, we cannot know if there are route-specific problems. A lack of route-specific pricing information is likely to limit the efficiency of both commercial and regulated outcomes.

5.4 Though outside the scope of the present study, we note that there may be a desire (from users, retailers, or Government) for retail price-averaging. In our view, retail price-averaging need not imply backhaul price averaging - backhaul is operated and accessed by sophisticated players who can cope with price variations across routes.

6. New access services may reveal geographic differences

6.1 Historically, the main mode for access services - copper - has had capacity limits driven by noise and crosstalk. These factors affect performance in a largely continuous way, proportional to line length and quality. That dynamic will change.

6.2 Faster access services may reduce or remove bottlenecks in the access network, revealing hitherto unnoticed capacity constraints on backhaul. This may play out differently within and beyond UFB areas:

a) UFB fibre will reach 80% of New Zealand's homes and businesses, but is highly concentrated near the backbone network, covering less than 1% of our land area.

b) Outside UFB areas, backhaul is a key input for faster fixed wireless and mobile access services. We think improvements in these services will be needed to deliver the Government's 2025 targets (50 Mbps to 99%, 10 Mbps to the remaining 1%), and to deliver continued improvements for those who live or travel beyond UFB areas.

6.3 The terms of current agreements, for example under the RBI, may be important to current and future backhaul access. Even if these agreements allow adequate access for now, future-proofing may require regulation to fill gaps which arise over time.

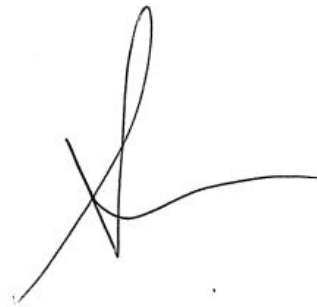## 7. Prices and competition tests need to be updated

7.1 With the last backhaul price review in 2008, it is likely that prices need updating.

7.2 We welcome consideration of overseas competition tests. Based on international comparisons, current competition thresholds are set high. There is a risk that a lack of efficiency in backhaul is a "bottleneck" on overall efficiency in telecommunications.
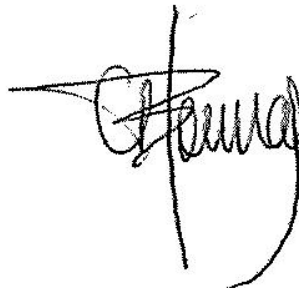
8. We look forward to the next phase of this study

8.1 With passage of time, and continuing change in technology, we welcome this study as a first step to ensure regulation of backhaul is efficient and up to date.

8.2 For further communications, please contact in the first instance:

a) James Ting-Edwards, Issues Advisor at InternetNZ on james@internetnz.nz.

b) Craig Young, CEO of TUANZ, on craig.young@tuanz.org.nz.

We thank you for the opportunity to submit on this study.

Yours sincerely,

Andrew Cushen

Deputy Chief Executive

InternetNZ

Craig Young

Chief Executive

TUANZ

Answers to Selected Questions

Question 2: Do you agree with the geographic classification for domestic backhaul services? Please explain any proposed changes.

We agree that a technology-neutral definition of backhaul is needed, to allow for efficient choices of technology based on specific local backhaul needs. Geographical classification is a reasonable approach.

Question 4: We invite comments on the regulated backhaul services. We are particularly interested in your view on whether the choice of backhaul transmission service depends in any way on the type of traffic that is to be conveyed ie, (i) whether transmission requirements for UCLL differ from those for UBA, whether transmission requirements for UCLL differ from those required for mobile backhaul; and any other relevant potential application for domestic backhaul services; (ii) what bandwidth options are required to meet future demand?

We favour a technology-neutral approach to backhaul, which allows the most efficient transmission service to be used, to deliver the most efficient access service. On our initial view, it is unlikely that transmission requirements differ fundamentally depending on the type of traffic to be conveyed.

Question 7: We invite any comments on the existing suppliers of domestic backhaul services. We are particularly interested in the following: (i) the extent to which existing suppliers self-supply backhaul services; and (ii) any major changes that recently occurred, or are expected to occur in the foreseeable future, in the provision of domestic backhaul services?

In the future, we expect wider adoption of fast mobile and fixed-wireless services, particularly outside areas served by UFB fibre. This may shift bottlenecks to the backhaul level.

Question 11: In your view, what is the likely impact of RBI and UFB on backhaul services eg, demand, supply, capacity, coverage and price?

Throughput demands on access services continue to increase, and with uptake of faster RBI and UFB services, this will increase demands on backhaul capacity and coverage. Bottlenecks in backhaul will limit the potential of faster access services.

Question 17: Are you concerned about any pricing behaviour in the provision of backhaul that may raise potential competition concerns?

We are concerned that a lack of competition in backhaul might inefficiently limit the rollout or performance of contemporary access technologies at the edge of the network.

Question 19: We invite views on the criteria for assessment of competition for domestic backhaul services. We are particularly interested in your view on (i) the most appropriate criteria that should be used in future competition test assessments, and also what criteria should remain intact; (ii) how far is close enough to a Chorus exchange to be a competitive constraint on Chorus and why?

We welcome consideration of overseas competition tests. Based on those comparisons, it seems likely that competition tests based on shorter distances from an exchange would serve the long-term benefit of consumers.