

## Telecommunications Carriers' Forum

### Project Scope for IP Interconnection Working Party

Date: 10 July 2008

#### A. Issue Identification

The Minister's Determination (as amended)<sup>1</sup> requires Telecom to provide within the Telecom Separation Undertakings ("the Undertakings") "a consultation process between Telecom and service providers about the approach to IP interconnection services" which must cover, at a minimum, "the process for transitioning from fixed PSTN interconnection for voice services to IP interconnection for voice services" and "the introduction of IP interconnection for virtual private network services".<sup>2</sup>

In the Undertakings Telecom commits to engage in consultation in accordance with this requirement. While the obligation to consult falls squarely on Telecom, the Undertakings also reflect Telecom's preference for making use of the TCF for this consultation. There is therefore an undertaking to present a Project Proposal for IP Interconnection consultation to the TCF Board by 4 April 2008.

The TCF Board approved the project proposal in May 2008 and there has been considerable industry engagement via the working party since then on issues around IP Interconnection. This engagement has shown that there is a strong industry preference that the focus of the working party and the report should be on industry-wide IP interconnection, rather than only covering IP interconnection between Telecom's NGN and the rest of the industry.

#### B. Background

As Telecom and other operators deploy IP networks the need arises to interconnect them to enable services to be carried from end to end across multiple operator networks in order to meet customer needs. At this stage we can only imagine the kinds of services making use of that capability that members of the industry will develop and introduce into the market, but what we do know is that interconnection is an essential part of that future landscape. Interconnection is a reciprocal relationship: in most cases, both parties to an interconnection need it to enable them to offer complete

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<sup>1</sup> Telecommunications (Operational Separation) Amendment Determination 2007, dated 24 December 2007.

<sup>2</sup> Ibid, clause 8.

services to their end users - for example, the ability to make calls to, and to be called from, customers on any other network.

Telecom is committed to its ongoing *Dialogue* programme of open consultation with the industry on matters arising from the development and deployment of Telecom's NGN. A vital element within this programme will be resolution of interconnection issues, and Telecom sees this process continuing over coming years as we and other operators define future services which need to be interconnected.

The Minister's Determination has specified some IP Interconnection matters that must be addressed in the near term. These are the subject of this Project Proposal.

While the wider industry acknowledges that Telecom's separation undertakings oblige Telecom to consult with the wider industry on IP interconnection with the NGN, it is clear that generally there is an appetite within the industry for an overarching approach and the creation of a voluntary code that can be applied to all future IP interconnection

Meanwhile the Commerce Commission has announced that it is launching its own study into Next Generation Network issues<sup>3</sup>, and interconnection matters form part of the scope of that study. As the Commission notes, their study does not affect Telecom's separation obligations in relation to IP Interconnection or NGN consultation, but it does expect to explore synergies that might arise between the different programmes of work. The industry generally supports this approach.

### C. Project Scope

It is intended that the working party will develop a code for the interconnection of IP networks within New Zealand and that the consultation required under the Undertakings will take place in the context of the development of that code.

The consultation is to deal with what is, in the Undertakings, termed "Service IP Interconnection". This is defined as, in general terms, the exchange of service level traffic between a Service Provider's NGN and Telecom's NGN for the purpose of ensuring service completion for IP-based services.

Whilst the Undertakings only relate to Telecom's network, the agreed protocols are intended to apply industry wide.

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<sup>3</sup> <http://www.comcom.govt.nz/IndustryRegulation/Telecommunications/Inquiries,ReviewsandStudies/ContentFiles/Documents/Proposed%20NGN%20Study.pdf>

## Matters to be covered

At a minimum the consultation will cover the following matters:

- (a) the approach to Service IP Interconnection between Service Provider's NGN networks and Telecom's NGN network for conversational IP voice services which originate in one party's network and terminate in another's, including the development of an IP Interconnection for Voice Service<sup>4</sup>;
- (b) whether it is appropriate for additional elements of Service IP Interconnection for conversational IP voice services to be made a Relevant Wholesale Service under the Undertakings and, if so, how the Arm's Length Rules in the Undertakings should be applied to that additional Relevant Wholesale Service;
- (c) the process for transitioning from service level Fixed PSTN interconnection for voice services to Service IP Interconnection for voice services including the possible use of interim service level Fixed PSTN to IP NGN interconnection arrangements;
- (d) the introduction of Service IP Interconnection between Service Provider's NGN networks and Telecom's NGN network for the linking of End Users' virtual private networks including the development of an IP Interconnection for Virtual Private Networks Service<sup>5</sup>; and
- (e) whether it is appropriate for additional elements of Service IP Interconnection for the linking of End Users' virtual private networks to be made a Relevant Wholesale Service and, if so, how the Arm's Length Rules should be applied to that additional Relevant Wholesale Service.

This consultation will take into account evolving international standards and international best practice on these matters.

## Consultation Scope

The scope of the consultation regarding the interconnection services described in (a) and (d) above will, at a minimum, include:

- (a) service definitions;
- (b) commercial model;
- (c) technical standards;
- (d) operational standards; and
- (e) timetable for service introduction.

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<sup>4</sup> The "IP Interconnection for Voice Service" referred to here is that defined in the Undertakings as a Relevant Wholesale Service.

<sup>5</sup> The "IP Interconnection for Virtual Private Networks Service" referred to here is that defined in the Undertakings as a Relevant Wholesale Service.

#### D. Working Party Membership

	Name	Organisation	Email
<b>Project Leader:</b>	Independent Chair - to be appointed	TBA	TBA
<b>Working Party Members:</b>	Stuart Goodin	Telecom Wholesale	stuart.goodin@telecom.co.nz
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	tba	Airnet	tba

#### E. Deliverables

The working party will produce the following deliverables:

1. an interim report to the TCF's Board by 30 November 2008;
2. a final report to the TCF's Board by 30 June 2009; and

As noted above, whilst the Undertakings only relate to Telecom's network, the agreed protocols are intended to apply industry wide. Consideration will be given to the other forms of output required from this working party and how that output will become enforceable.

These deliverables tie in to certain other requirements of Telecom's Undertakings:

- Following on from the first of these TCF deliverables, Telecom will, by 1 February 2009, develop and publish on the Wholesale Unit's Internet website a plan for delivery of the IP Interconnection for Voice Service and IP Interconnection for VPN Service (that is, those services defined as within the ambit of Relevant Wholesale Services).
- If as part of the consultation process Telecom and Service Providers agree:
  - that it is appropriate for additional elements of Service IP Interconnection for conversational IP voice services or the linking of End Users' virtual private networks to be made a Relevant Wholesale Service; and
  - how the Arm's Length Rules should be applied to that additional Relevant Wholesale Service,
then Telecom will notify the Minister of the things that were agreed and endeavour to agree a variation to the Undertakings to reflect those

- things in accordance with sections 69T to 69X of the Act.
- Following the second of the project’s deliverables, Telecom will, by 31 August 2009, develop and publish on the Wholesale Unit’s Internet website a plan for addressing the matters listed under the heading “Consultation Scope” above.

#### F. Timeline

The table below sets out the project timeline for the TCF deliverables.

Milestone	Date
Working Party complete interim report and submit it to the TCF Board	28 November 2008
TCF Board endorse the interim report (to the extent it requires TCF approval)	12 December 2008
Working Party complete final report and submit it to the TCF Board	30 June 2009
TCF Board endorse the final report (to the extent it requires TCF approval)	14 July 2009

#### G. Resources & Budget

The Working Parties will require the following external resources:

1. An Independent Chair
2. Forum Administrator

An allowance is also required for the travel and other incidental costs for the above resources.

Based on half day, fortnightly meetings, the total estimated budget for this resource is \$130,000 (excl GST). Fifty percent of this expenditure is expected to be incurred in 2008 and will be funded by existing TCF membership fees. The remaining 50% will be incurred in 2009, and it will be included in the calculation of the annual TCF membership fees for 2009.

No allowance has been made in this budget for an independent technical expert. If the working party unanimously agrees that an independent expert is required, and/or if the project costs more than \$65,000 in 2008 or 2009, Telecom agrees to fund any additional cost incurred over and above the amount budgeted for each of these years.

##### *Independent Chair*

The Independent Chair will be appointed by the Board following consultation with TCF member representatives.

The intention is that Working Party members will provide their own technical experts. If an independent technical expert is made available to

the Independent Chair, it will be the Independent Chair's responsibility to determine what action points are allocated to the independent expert and what action points are allocated to Working Party members.

With the exception of the independent resource referred to above, all Working Party members will bear their own costs and expenses of participation.

**H. Recommendation**

It is recommended that the Board:

- a) **Approve** this Project Scope.