



May 2006

To the Australian Communications Industry Forum

Via email: acif@acif.org.au

Re: QoS-Based VoIP Service Interconnectivity Industry Discussion Paper

Thank you for the opportunity to comment on the above discussion paper.

About CTN

The Consumers' Telecommunications Network (CTN) is a national peak body of consumer and community organisations, and of individuals representing community interests that participates in developing national telecommunications policy. CTN advocates policies for better access, quality of service and affordability of telecommunications facilities for all residential consumers.

CTN's members are national and state organisations representing consumers from non-English speaking backgrounds, deaf consumers, indigenous people, low income consumers, people with disabilities, young people including children, pensioners and superannuants, rural and remote consumers, women and consumers in general.

Overview

Rather than comment directly on the complex technical areas covered in the Discussion Paper, something CTN does not have specific expertise in, this submission states our position on the broad matters covered in the Paper and comments specifically where relevant.

Comments on the Discussion Paper

Development of industry-wide QoS mechanisms (including peering) and industry practice to support them is important not only to achieve a 'best case' scenario for consumers but also to address pressing issues in the market.

CTN supports QoS initiatives that lead to the best possible accessibility, affordability and quality of service for VoIP consumers. All VoIP consumers should have a clear, consistent, and uninterrupted experience every time they place or receive a VoIP call. They should also be able to rely on their VoIP service to make any type of call at any time.

Industry and government have a responsibility to ensure VoIP products perform as advertised and satisfy both legislative and basic consumer rights¹. This responsibility is of a heightened significance when bringing a new technology like VoIP to the market. There is considerable urgency to ensure these responsibilities are being met.

VoIP services are often advertised as a replacement for a traditional phone service, yet services currently in the market are of a highly variable quality². Basic but important consumer rights that are being not met – such as the right to safety (unreliable access to emergency services and other important calls), the right to be informed (a lack of explicit information regarding the range in quality one may experience using a VoIP service), the right to choose (services are not differentiated by quality standards), the right to redress (no consistent fault handling and complaint process), and the right to consumer education (little public explanation of quality issues involved in VoIP).

CTN urges the industry to take a big-picture approach to VoIP QoS-based interconnectivity. There is an opportunity at hand to take a direction that will benefit both industry and consumers – improving the quality, accessibility and reliability of VoIP services can lead to happier, better served customers and a bigger market in which all players can operate.

As an industry body, ACIF has a crucial leadership role to play. It must not only provide the forum to discuss the issues but also provide the atmosphere to support co-operation, forge relationships and develop industry-wide agreements. To do this ACIF must be proactive in pulling together as many relevant parties as possible.

Furthermore, ACIF has a crucial role in both monitoring and linking into domestic and international standards development work around QoS. This work includes discussions being held by ACMA (ENUM), the ITU and ETSI, all mentioned in the Paper, and also work around VoIP in the United States. In the case of the latter, CTN would like to point out the Federal Communications Commission's rules around emergency services access and VoIP³, which state that interconnected VoIP providers must deliver all emergency calls to the local emergency call centre, deliver the customer's call back number and location information where the emergency call center is capable of receiving it, and inform their customers of the capabilities and limitations of their VoIP service with respect to emergency services access. Any QoS work done through ACIF should look closely at the network architecture issues being discussed in the United States to support these rules.

¹ 8 Basic Consumer Rights adopted by the United Nations – the right to safety, to choose, to be heard, to the satisfaction of basic needs, to redress, to consumer education and to a healthy environment. See: <http://www.fairtrading.nsw.gov.au/shopping/shoppingtips/internationalconsumerrights.html>.

² See CTN's March 2006 research report, *Expectations and Experiences with Voice Over Internet Protocol (VoIP)*. Available at <http://www.ctn.org.au/content.cfm?ContentType=Content&ContentID=199>.

³ See Federal Communications Commission website: <http://www.voip911.gov/>

It is important to adopt this leadership role as soon as possible, before industry and technical developments make initiatives like QoS-based interconnectivity too big a challenge (QoS islands for example), thereby further compromising the quality of VoIP services, consumer rights and the growth of the market. However, there are other considerations that need to be made in this process. While QoS initiatives can provide boundaries for competition in the market (allowing consumers to make more informed choices), standards should be carefully developed so as to avoid creating a market conducive to only large, dominant players (thereby limiting the breadth of choice consumers have). Furthermore, development of an effective enforcement scheme must be included in this discussion to ensure that any standards and agreements made involving QoS are honored.

CTN would like to highlight a number of issues covered in the Paper. First, since both VoIP-originated calls terminating to the PSTN and private network-based VoIP calls have the potential to interact with Internet-based VoIP calls, the scope of this discussion must be widened to include them. Though the challenges to this approach are significant (a topic touched upon in the paper) interim measures can be taken – specifically ensuring that any frameworks developed not exclude or knowingly be incompatible with network performance parameters on private networks or the PSTN, and explicitly mapping out the players and technical issues involved and setting out on inviting these players to the table and brainstorming how to tackle the issues.

Second, CTN supports the concept of network neutrality. Any action stemming from QoS discussions should ensure that interconnectivity and fairness make information networks as neutral as possible to the benefit of the public.

Third, CTN would also like to highlight accessibility issues as they relate to QoS. The industry should aim to develop as universally accessible VoIP services as possible and support development of emerging Internet applications that will make communications more accessible – both areas in which QoS initiatives can impact greatly. QoS standards can help standardise VoIP equipment, making VoIP safer and user-friendly for consumers. Moreover, high quality, reliable telecommunications services are of particular importance to consumers with disabilities, who must be guaranteed a level of performance that meets their needs (something touched upon in the submission of the Deafness Forum of Australia). Furthermore, as touched upon in section 6.5 of the Paper, there is a great opportunity, if not an obligation, for QoS initiatives to support the development and deployment of not only additional applications on VoIP, but emerging services such as video.

Fourth, security issues (section 7.5) must more seriously enter into QoS discussions and appropriate protection measures must be built into any subsequent QoS initiatives. In relation to inter-domain QoS and VoIP-based peering, as discussed in section 7.5, CTN is particularly concerned that consumers' may be more prone to Spam and malware through VoIP, and the possibility that the confidentiality of consumers' information may be put into jeopardy.

Fifth, CTN urges the industry to use this QoS discussion as a springboard to establish effective fault restoration processes, technical support services and consumer complaint handling structures – areas that are currently underdeveloped in the VoIP market.

Finally, the industry must recognise and deal with a gap between consumer expectations of VoIP and their actual experiences. There is a great deal of hype around VoIP, yet CTN believes consumers are experiencing significant quality issues and are not well informed about VoIP technology and its impact on reliability – especially in product advertising⁴. Industry should be open and honest about the issues with VoIP rather than hide them. QoS interconnectivity initiatives can be used as a springboard to provide better product disclosure, honest advertising and support of consumer education.

Having stated our position in support of VoIP QoS-based interconnectivity, CTN also acknowledges the technical complexities and commercial challenges involved in developing industry wide agreements.

For this reason, CTN also supports parallel approaches to improving the quality, accessibility, and affordability of VoIP services. In particular, CTN supports initiatives to improve broadband availability and performance (an area identified by CTN research as being of great importance in improving consumer experiences with VoIP⁴), and supports the development of 'graded' VoIP products with guaranteed levels of performance (touched upon in section 7.11). If progress is made in these two areas, not only will consumers be better served, the urgency of taking immediate on QoS issues may be reduced.

Thank you again for the opportunity to comment on this important Discussion Paper. Should you wish to discuss this response in more detail please contact myself, Ryan Sengara or Sarah Wilson at the Consumers' Telecommunications Network on 02 9572 6007 or at ctn@ctn.org.au.

Yours sincerely,

A handwritten signature in black ink, reading "Teresa Corbin". The signature is fluid and cursive, with a long horizontal flourish at the end.

Teresa Corbin
CTN Executive Director

⁴ See CTN's March 2006 research report, *Expectations and Experiences with Voice Over Internet Protocol (VoIP)*. Available at <http://www.ctn.org.au/content.cfm?ContentType=Content&ContentID=199>.

This submission was prepared by Teresa Corbin, CTN Executive Director, Ryan Sengara, CTN Project Officer, and Sarah Wilson, CTN Policy Advisor. It has been approved out of session by the CTN Council.