Response to "Issues Related to Internet Telephony"

INTRODUCTION

At the outset, Google conveys its thanks and appreciation to the Telecom Regulatory Authority of India (TRAI) for its inclusive and thorough approach to public policy issues. This particular consultation is just one example of a broader, laudable approach to policymaking practiced by TRAI.

As TRAI may know, Google's global mission is to organize the world's information and to make it universally accessible and useful. In India, Google's charge is to innovate, implement, and launch free technologies and products that serve Indian users, organizations, and indeed, all Indian citizens. In practice, Google, like many other stakeholders, delivers these services – web search, e-mail, maps, online video, text- and voice-chat just to name a few – as free applications available over the Internet platform.

As TRAI has noted in its consultation paper entitled *"Issues Related to Internet Telephony,"* the Internet – largely thanks to the very nature of "Internet Protocol" itself – is experiencing rapid growth as a medium worldwide.

In India today, an opportunity exists from a regulatory perspective to ensure that the Internet medium is best positioned to positively impact the lives of hundreds of millions of individuals across the country. Google is in full agreement with TRAI regarding the opportunity convergence services have to reduce the digital divide in developing countries and especially in India.

In this submission, Google responds to TRAI's aforementioned consultation paper. While Google's focus is on many of the questions posed by TRAI to stakeholders, the company makes some overall comments as well and looks forward to further interactions with the regulatory body about the unique opportunities and challenges presented by convergence.

In many ways, Google offers this submission not simply on behalf of the aspirations of its own global organization but also on behalf of the countless other Indian innovators and entrepreneurs – those of today and those of the future – who seek to utilize the Internet to deliver powerful services, including voice applications, to users. These companies, of which Google is simply one, will play an important role in the economic and social progress of India.

Google looks forward to a long-lasting and productive relationship with TRAI, one in which both entities can work towards the common objective of ensuring India becomes a leading global information society.

ROLE OF APPLICATION SERVICE PROVIDERS

Before Google articulates its position on the specific strategic and important questions asked by TRAI in the consultation paper, the company would like to highlight, as a point of information, the important role played by "Application Service Providers" in the provision of Internet telephony both today and in the future.

TRAI briefly references this role at one point in the paper: In the section in which TRAI is describing PC-to-PC Internet telephony, the Authority writes, "large numbers of instant messaging applications are available on Internet to make PC-to-PC Internet telephony possible. The ISPs role in such scenario is limited to provide access to the Internet."

The above description describes the important role played today by many companies, including Google, that provide applications on the "edge," enabling PC-to-PC Internet telephony.

Google believes that these "Application Service Providers" – who seek to utilize the Internet to deliver free powerful services, including free voice applications, to users – will play an increasingly-central role in the provision of Internet telephony in India. As such, this role warrants further recognition, attention, and continued separation from TRAI.

As history suggests, it is difficult to predict how technology will evolve and how the role of Application Service Providers will change. Today, though, it is important to keep in mind the distinct role they play and distinct capabilities they have vis a vis ISP, UASL, and CMTS licensees; while the latter group actually executes Internet telephony and carries data, Application Service Providers merely facilitate Internet telephony on the edge. Of course, unlike ISP, UASL, and CMTS licenses, Application Service Providers offer their services at no cost.

Google thanks TRAI for noting the important role of Application Service Providers in its consultation paper and simply would like to reiterate their important function, point to their likely increasingly-evolving and central role, and confirm, as is the case today, that no regulation be applied to this stakeholder group.

REGULATORY ISSUES

In this consultation paper, TRAI's deliberation centers on one fundamental question: should Internet Service providers be permitted to connect with PSTN/PLMN in India? This seems to at least partially be in response to the fact that "Internet Service providers [themselves] are demanding that they may be permitted to call the PSTN/PLMN in India . . . ."

At the outset, Google states in unequivocal terms that it is fully supportive of the proposition that ISPs be allowed to provide Internet telephony in India to and from a telephone connected to India's PSTN / PLMN.

TRAI itself outlines many of the reasons such a shift is sensible. TRAI notes that such a shift would drive usage of Internet telephony itself, would lower National Long Distance Costs, and – importantly – would increase the perceived utility and use of broadband Internet services.

It is also important to note that the collective effect of these changes will be significant; indeed, they will yield a society that is more interconnected, productive, and innovative – which is of course a desirable outcome for all.

Level Playing Field

Another central, strategic question that TRAI wrestles with in this consultation is that of whether it "handle the non-facility based service providers [ISPs] with lighter regulation vis-à-vis facility based operators [UASL AND CMTS licensees]."

In Google's view, it is important that TRAI retain its current practice of treating ISP, UASL, and CMTS licensees "differently under their respective licenses." It is important that non-facilities-based service providers be more lightly regulated than facility-based operators.

Moving the regulatory approach in a direction that creates a unified licensing regime – by articulating a common regulatory approach towards non-facility-based service providers and facility-based operators – would oversimplify the similarities between otherwise distinct stakeholders and would fail to appreciate important and consequential differences.

Regulatory policy should reflect the distinct role that all licensees – non-facility based service providers and facility-based operators – play in the delivery of services to consumers and in the potential delivery of Internet telephony to millions.

As recent history suggests, it is difficult to predict how Internet-based technologies will evolve. As such, it would be sensible for TRAI to approach regulation with an acute awareness of the differences among non-facility based service providers and facility-based operators – in other words, the differences between ISP, UASL, and CMTS licensees – as it considers permitting ISPs to connect with the PSTN/PLMN in India.

TRAI should align itself with the rest of the world and retain its "lighter regulation" for ISPs via a vis UASL and CMTS licensees; creating a unified licensing regime in which the differences between stakeholders are underappreciated will have dire consequences for the growth of convergence in India.

Interconnection and IUC Regime

Google believes that TRAI should not issue additional guidelines regarding interconnection charges and the IUC regime beyond what already exists. Within the

existing guidelines, stakeholders should be expected to come to consensus regarding the various fees and agreements that are needed.

TRAI can, of course, feel free to request comments on the existing guidelines if that would be useful.

Google is opposed to the option presented in the consultation paper in which ISPs would be able to pay an additional entry fee and migrate to a "UASL license without spectrum" (TRAI deliberated on this issue in two recommendation papers dated 13th January 2005 and 28th August 2007).

Google's views on this issue is rooted in reasoning similar to what has been articulated in the section entitled "Level Playing Field": there is no regulatory, technological, industry, or user rationale to implement policy that would begin to move regulation in the direction of a unified licensing regime. Implying that policy is shifting in the direction of a unified licensing regime – by, for instance, creating a "UASL license without spectrum" – would signal to innovators that the regulator does not appreciate the core and structural differences among ISP, UASL, and CMTS licensees.

While allowing the possibility of a "UASL license without spectrum" might in the short-term seem to be a convenient way to simplify potential interconnection challenges, it will in the long-term serve as a disincentive for innovation in Internet telephony in India; to be clear, the latter will especially thrive under a separate and lighter regulatory system for ISPs.

From Google's vantage point, interconnection issues will best be resolved by the stakeholders themselves and not by a predefined regulatory approach that – by hinting at a unified licensing regime – would be counterproductive for the growth of innovation and, therefore, convergence itself.

Numbering

Google appreciates TRAI's articulation of the issues regarding how to properly "number" VoIP calls that would connect with the domestic PSTN/PLMN.

Google's view is that the most important factor to consider here is the perspective of users and the extent to which a numbering system would drive strong usage of Internet telephony itself which, as has been stated above, is a desirable outcome in and of itself.

With this in mind, Google believes that it is imperative that the E.164 format be retained for Internet telephony to ensure ease of user for users.

Emergency Number Dialing

On the issues related to Emergency Number Dialing, Google – like all other stakeholders – is above all committed to user safety.

Generally speaking, Google believes that it is important for regulatory policy not predefine an approach; rather, the policy can articulate a broad expectation that stakeholders should create mechanisms via which users can make emergency phone calls.

This kind of collaboration is difficult to outline in policy; as such, TRAI should simply outline the broad expectation.

Lawful interception and monitoring

As noted earlier, Google – like all stakeholders – is committed to user safety and the need to abide by all relevant Indian laws, regulations, and procedures.

At the same time, it is important that TRAI understand the distinct capabilities of the various stakeholders, especially with regard to lawful interception and monitoring.

All messages of unified communication – including but not limited to the Internet telephony communication – traverses over the telecom infrastructure of licensed operators of different type, and each respective license agreement already contains the requisite norms for lawful interception and monitoring.

As a result, it is unnecessary and redundant to place a similar burden on Internet telephony service providers. Such a burden would not only increase the cost of the service provisioning, but would also increase the complexity of the service itself.

Given that their role is to provide applications on the edge but not carry the data itself, stakeholders like Google should not be expected to play a role in interception and monitoring

As TRAI is most certainly aware, Google would like to highlight that any monitoring and interception should be in accordance with due process of law; more specifically, it should take note of the provisions of the Telegraph Act and the guidelines laid down by the Supreme Court.

As a separate but related point, Google would kindly request that TRAI consider articulating a "safe harbour" for ISPs in the policy. More specifically, ISPs should be considered immune from liability for unlawful activity taking place via their services unless it is demonstrated that the ISP actively conspired, abetted, or had knowledge of the act.

Articulating this latter point would go a long way towards assuaging ISP fears that they may unintentionally be held liable for the criminal activity of others. Moreover, in making this point, TRAI could further cement its stated position that the growth of domestic Internet telephony is a desirable outcome for all stakeholders (this "safe harbour" would

encourage participation in Internet telephony while the lack of such a "safe harbour" could discourage growth).

Quality of Service

Google believes that user demand and the market itself will ensure that Quality of Service becomes an important, universal priority for all in involved in domestic Internet telephony – and as competition increases, it will become a necessity.

As such, predefined parameters again do not make sense.

At most, TRAI should simply request that VoIP services be provided in much the same way Internet services are themselves provided today: with a "best efforts" approach.

This core principle of the Internet has yielded immense innovation and growth; the same approach ought to be articulated with regard to Internet telephony.

OVERALL

Overall, Google believes that TRAI's approach to this subject is thoughtful, balanced, and comprehensive.

Most importantly, Google is in full agreement with the need to hallow all ISPs to be able to connect VoIP calls with the domestic PSTN and PLMN in India. Furthermore, it is important that TRAI recognize appropriately the unique role that all stakeholders play in Internet telephony – ISP, UASL, and CMTS licensees, as well as "Application Service Providers" – and act accordingly.

Google looks forward to further interactions with TRAI in which it elaborates further on its views on this and other subjects.