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Mr. Petko Kantchev
Chair of the Informal Experts Group
World Telecommunication Policy Forum 2013
International Telecommunication Union
Place des Nations
1211 Geneva 20

Ref: Third Draft of the Secretary General's Report for the Fifth
World Telecommunication/Information and Communication
Technologies Forum 2013 - Comments from the Second Meeting
of the IEG 10-12 October 2012

Dear Mr. Kantchev,

I am honored and grateful to be part of such a group of professionals. Thank you for this tremendous opportunity to provide input to this process.

In light of your invitation to submit comments pertaining to the Second IEG Meeting 10-12 October 2012, may I offer the following remarks, suggested editorial clarifications and reasoning.

Interoperability, trust, and efficiency are the three forces that drive the current and future growth of the Internet. Being intrinsically intertwined, one cannot forego the thought of one without the consideration of the other two.

We depend on systems, networks, devices, and organizations in their ability to inter-operate. We trust in the agreements we make and the integrity of services. We rely on efficiency to achieve the economy of scale to suffice our current needs and growth. The current multi-stakeholder environment, the one whom invented and drives today's Internet, is and should remain the premier model moving forward. Any attempt to overly regulate, by any means without consensus, will thwart the global growth and adoption of the Internet and will prove contrary to our common goals.

Sincerely,

Gary Anderson/ Chairman
Uraxs Communications

I strongly encourage the injection of the word “interoperability” into the fourth listed theme as noted below:

2. Themes for WTPF-2013

2.2 ~~Bearing in mind that,~~ In accordance with Council 2011 Decision 562, the WTPF ~~would~~ will discuss all the issues raised in Resolutions 101, 102 and 133 (Rev. Guadalajara, 2010), given below are some of the suggested broad themes (from the ~~first~~ second IEG meeting) under which these issues could be discussed:

- How to develop an enabling environment for encouraging growth, interoperability and development of the Internet;

I would also like to suggest that starting any factual statement with a superfluous subjective such as “Some.....that,” and similar language be removed. It conveys a derogatory and somewhat discriminatory tone as well as being just plain bad English. As we work through this process in creating a document that can be understood universally, we must take great care to eschew obfuscation. In light of this thought, we might consider it prudent to create an **Annex B: List of Definitions**.

Below are suggested modifications of the following sections:

2.3.3 Internet Protocol (IP)-Based Networks and Management of Internet Resources

- a) Broadband Internet is ~~today~~ a critical infrastructure in the growing global economy. The increased use of the Internet creates value and encourages additional development of ~~enables additional~~ applications, and information services, and content e.g. the utilization of e-mail and text messaging, VoIP, streaming and real-time video conferencing, IPTV, social networking, e-government, e-banking, e-health, e-learning, mapping, search capabilities, e-books, etc. These services have become commonplace, although challenges regarding quality of service, ~~and~~ uncertainty of origin for some applications, and high costs of international Internet connectivity (IIC) persist for many developing countries.
- b) The Internet is ~~today~~ a critical information infrastructure and a vital part of national ~~infrastructure~~ and international infrastructures. Current and future IP-based networks and future IP developments will continue to introduce dramatic changes in the way we acquire, produce, circulate and consume information.
- c) On the basis of such growth, demands are now growing on the existing Internet design and infrastructure. New applications, services, interoperability and functionality are needed. ~~Some—have suggested that~~ The underlying technical architecture of the present Internet may not have been designed for, and hence may not be sufficiently robust; enough to support some new classes of applications and services. ~~,with~~ Security, identity management and multilingualism as are commonly cited examples. ~~Some others point out that~~ The current architecture has allowed astonishing levels of innovation and growth with, in particular, massive uptake of video traffic and multi-user applications [Source: [UK](#)]. ~~According to those holding this view, However,~~ there is no evidence that the current infrastructure will not be able to continue to evolve and grow to cope with demand.

g.) Due to the dramatic increase in mobile communications (both in terms of the number of registered devices and of the volume and transmission of requested resources), some have cautioned that migration scenarios and hybrid connections with existing wire-bound and traditional networks and terminals may be neglected and it may become increasingly difficult for network operators to establish or **maintain current enforce certain QoS standards.**

h.) **Some have stressed** The importance of standardization **so is such** that the quality of service of telecommunications/ICTs **is will be** consistent with international standards. **They opine that** It is in the public interest that IP-based networks and other telecommunication networks **should** be both **inter-operable** and provide, at a minimum, the level of QoS provided by traditional networks. **Some others have stated that** Any attempt to mandate traditional QoS in a packet switching Internet will significantly increase costs; a likely consequence of this could be to price LDCs out of the Internet and to reduce participation rates in developed and developing countries [Source: [UK](#)]. In response to this, **some have pointed out that** IP-based networks **can support end-to-end QoS if the routers in between support the mechanisms and the network is designed for QoS** [Source: CISCO, Nav6 Joint Contribution: [Saudi Arabia and Sudan](#)]. Any attempt to regulate or base QoS on a tier rate scenario will inhibit interoperability and growth.

i.) **According to some;** The present situation of the wide penetration of OTT (Over The Top) services over operators' networks and their impact on operators' services, may require ITU to consider management of QoS for OTT services which are carried over the Internet [Source: [Russia](#)]. **Specifically on OTT, some have stated that** OTT services are **is outside the scope of the ITU and that the** management of QoS for applications that run over the Internet are the core mandate of other organizations; except where these organizations **should work with** the ITU-T for those areas within the ITU-T's mandate [Source: [CISCO](#), [UK](#)]. In response, some others have stated that "it would appear that telecommunications services, whether or not carried over the Internet, are within the mandate of ITU" [Source: [Saudi Arabia and Sudan](#)]. Any attempt to regulate or base QoS on a tier rate scenario will inhibit interoperability and growth.

j.) As a natural consequence of today's environment, from a commercial perspective, there is a growing discrepancy between the growth in traffic (requiring corresponding significant growth in investment in telecommunication infrastructure) and trends in pricing and revenues (Figure 2). This has been cited as posing a significant challenge to network operators. Yet, any attempt to regulate or base QoS on a tier rate scenario will inhibit interoperability and growth.

2.3.4.3 Security of the DNS

The title of this section is an oxymoron, DNS is NOT secure by any means and great effort needs to be made to implement DNSSEC as well as universal HTTPS by default.

Furthermore, the swift adoption and implementation of IPv6 is of paramount concern if we are to sustain the current growth rate and beyond. I personally would like to see concrete steps taken to further this goal, perhaps a global print/ radio ad campaign in the world's major newspapers and radio stations would help kick-start the process. The world has invested much money and resources in providing the Internet and related services and it's in everyone's best interests to protect this investment by adopting IPv6 as soon as possible.

The following are questionable terms that should be reconsidered or redefined in their usage:

- 1.) Spam- we all know what it is when we see or get it, yet the correct term is *unsolicited electronic messages*
- 2.) Cyber-terrorism- hopefully the world will not come to this and as such at present, maybe we should just refer to it as cyber-crime or cyber-warfare.

Included below is a definition of interoperability taken from Wikipedia:

Interoperability is the ability of diverse systems and organizations to work together (inter-operate). The term is often used in a technical [systems engineering](#) sense, or alternatively in a broad sense, taking into account social, political, and organizational factors that impact system to system [performance](#).

While **interoperability** was initially defined for IT systems or services and only allows for information to be exchanged (see definition below), a more generic definition could be this one:

Interoperability is a property of a product or system, whose [interfaces](#) are completely understood, to work with other products or systems, present or future, without any restricted access or implementation.

This generalized definition can then be used on any system, not only information technology system. It defines several criteria that can be used to discriminate between systems that are "really" inter-operable and systems that are sold as such but are not because they don't respect one of the aforementioned criteria, namely:

- non-disclosure of one or several interfaces
- implementation or access restriction built in the product/system/service

The [IEEE](#) Glossary defines interoperability as:

the ability of two or more systems or components to exchange information and to use the information that has been exchanged.[\[1\]](#)

James A. O'Brien and George M. Marakas define interoperability as:[\[2\]](#)

Being able to accomplish end-user applications using different types of computer systems, operating systems, and application software, interconnected by different types of local and wide area networks.

I like to define interoperability as not having to buy special pants just to be able to tuck one's shirt in.