Summary

As we already stated in our contributions to previous opens consultation on this topic, the key issues for expanding Internet connectivity are to reduce the cost of connectivity and to maintain trust and security.

Reducing the cost of connectivity can be achieved by fostering competition (which may include functional separation), funding infrastructure, taking steps to reduce the cost of international connectivity, supporting the development of local content, capacity building, and a proper governance system.

Maintaining trust and security can be achieved by protecting human rights, protecting data privacy, combating spam, protecting consumers, enabling pervasive strong encryption, and curtailing unnecessary and disproportionate mass surveillance.

Further, it is time to recognize that colonialist attitudes left over from the past are not appropriate and must be banned. And the time has come to make the world a better place by using the Internet to increase social justice: the fair and just relation between the individual and society, measured in terms of the explicit and tacit terms for the distribution of wealth, opportunities for personal activity and social privileges. And the time has come to abandon neo-liberal policies that are in reality corporatist policies that favor the techno-imperialistic geopolitical and geoeconomic goals of one particular country.

Background and Introduction

The topic for the February 2020 – September 2020 Open Consultation is:

Expanding Internet Connectivity

1. What are the challenges and opportunities for expanding Internet connectivity, particularly to remote and under-served areas? What are the roles of governments and non-government actors in overcoming these challenges?

2. Are there particular challenges facing land-locked countries in securing affordable Internet access? What can be done to overcome these challenges?

3. How can small/community/non-profit operators help in promoting the increase of Internet connectivity?

We note that the topic for the present open consultation is similar to the topic for the first open consultation, February-October 2013. The issues of that open consultation included:\n
Issue 3: Consultation on developmental aspects of the Internet.
The Council Working Group on International Internet-Related Public Policy Issues invites all stakeholders to provide input on international public policy issues related to developmental aspects of the Internet.

1 info@apig.ch
We refer to our submission to that open consultation, reiterate the comments made therein, and hereby incorporate it by reference. It is at:


For convenience, we reproduce the abstract of that submission:

It is undeniable that the Internet has transformed telecommunications in recent years, and it has also had very beneficial effects on national economies and on international trade. However, the benefits have not been distributed evenly around the world: developed countries have benefited relatively more, as have some of their major private companies.

This paper reviews briefly the history of Internet and its governance, points out that the US government still exercises some (at least nominal) control over some aspects of the Internet, and links that to the well-known historical phenomena of colonialism and imperialism. The paper argues that a new form of imperialism, techno-imperialism, is conflated with traditional political imperialism for what concerns Internet governance.

The paper concludes that new Internet governance models should be envisaged so as to achieve true democratic and multi-lateral Internet governance.

We also note that the topic for the present open consultation is related to the topic for the 8th Open Consultation, October 2016- January 2017. The topic of that open consultation was:

**Developmental Aspects of the Internet**

"Considering the importance of Internet to the global digital economy, all stakeholders are invited to submit their comments on the following key aspects:

1. What are the developmental aspects of the Internet (for example, economic, social, regulatory and technical aspects), especially for developing countries?
2. How can governments and other stakeholders promote the developmental aspects of the Internet?
3. What are the challenges and opportunities?"

Our submission to that open consultation is at:


In addition to the previous submissions, we submit the comments below regarding issue 1 above.

**1. What are the challenges and opportunities for expanding Internet connectivity, particularly to remote and under-served areas?**

The key challenges and opportunities for expanding Internet connectivity well captured in an article by Constance Bommelaer (ISOC) and Tereza Horesjova (DiploFoundation):

- **Expanding infrastructure:** Private sector needs to invest for the infrastructure to provide Internet access and to create and host services, leaving to governments to prioritize areas with high costs or low demand.

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3 See https://www.itu.int/en/council/cwg-internet/Pages/consultation-oct2016.aspx
• **Fostering skills and entrepreneurship**: A skilled technical community is necessary to deploy and operate access and content infrastructure. It is also necessary to develop human capacity so that there are entrepreneurs, developers and others to create content and services and the innovative new business and delivery models built on them.

• **Developing a supportive governance system**: Good governance is needed to set the principles and rules of an enabling environment for a local Internet ecosystem, and specific policies to promote infrastructure investment and human capacity. Governments can also deploy their own content and services and encourage people to make the most of the Internet.

A key point made in that article – with which we agree – is that, while expanding infrastructure is a necessary step, it is not sufficient. Other steps need to be taken, in particular capacity building, making more local content available, but also maintaining trust, protecting data privacy, consumer protection, transparency, and the ability to communicate confidentially.\(^5\)

### 1.1 Cost of connectivity

We cite from paragraph 41 of the Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society, A/Res/70/125\(^6\) (emphasis added):

> We reaffirm the commitment set out in the Geneva Declaration of Principles and the Tunis Commitment to the universality, indivisibility, interdependence and interrelation of all human rights and fundamental freedoms, including the right to development, as enshrined in the Vienna Declaration and Programme of Action of the World Conference on Human Rights.

It is not disputed that the ability to connect to the Internet is an important component of enabling the right to development. But, for development to take place, the cost of connecting must be affordable. Therefore, it is important to stress that reducing the cost of connectivity must be a priority. We refer in this respect to our submission\(^7\) to the first 8\(^{th}\) open consultation and, for convenience, we reproduce here the relevant portions:

2.1 According to the 2015 report\(^8\) of The Alliance for an Affordable Internet\(^9\):

> "Bold steps are needed to accelerate connectivity among women, the poor, and other marginalised populations. Overcoming the challenges to access posed by income and gender inequalities will require policies designed with these populations in mind. *Market forces cannot connect everyone — free or subsidised public access in tandem with digital education will be critical to enabling connectivity for populations left behind.*" (Emphasis added)

2.2 Many steps, albeit not bold steps, are described in Supplement 2 of Recommendation ITU-T D.50\(^10\). A somewhat bolder step is proposed in Recommendation ITU-T D.156\(^11\). WTSA-12

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\(^8\) [http://a4ai.org/affordability-report/](http://a4ai.org/affordability-report/)


\(^10\) [https://www.itu.int/rec/T-REC-D.50/e](https://www.itu.int/rec/T-REC-D.50/e)
Opinion 1 invites Member States “to take all measures necessary for the effective implementation of Recommendation ITU-T D.156.”

2.3 In our view, the elements of an enabling environment to promote affordable Internet access include implementation of D.156 and of the measures described in Supplement 2 of D.50.

2.4 Functional separation is also an important element, see section 8 of our submission to a previous open consultation at:


2.5 Furthermore, we are of the view that the fostering of competition is an important element of an enabling environment to promote and affordable Internet, and that visibility and transparency of prices, in particular wholesales prices promotes competition. We would thus support proposals, such as those made in the preparatory process of the 2012 World Conference on International Telecommunications (WCIT) to encourage greater transparency in the pricing of international Internet interconnections.

Subsequent to the cited previous open consultation, two new relevant recommendations were approved, at the World Telecommunication Standardization Assembly: D.52, Establishing and connecting Regional IXPs to reduce costs of International internet connectivity; and D.53, International aspects of universal service. It is regrettable that some developed countries formally objected to the approval of those recommendations and took a reservation on those recommendations, see section 1.4 below. D.52 enunciates well known best practices and addresses international issues; D.53 enunciates several best practices and also addresses international issues. It must be stressed that all ITU-T Recommendations are voluntary, so, from the legal point of view, there is no need to express an explicit reservation: no state or private company is under any obligation to implement any ITU-T Recommendation.

1.2 Maintaining trust

In order to maintain trust in the Internet, which, as noted above, is a key development issue, it is important to combat spam (we refer to, and incorporate here by reference, paragraphs 3.3-3.5 and section 4 of our submission to the 8th open consultation). While spam was decreasing in the past, it has started to increase again, and is increasingly used as a method to propagate malware.

Further, we stress that security experts have long recognized that lack of ICT security creates a negative externality. For example, if an electronic commerce service is hacked and credit card information is disclosed, the users of the service users will have to change their credit cards. This is a cost both for the user and for the credit card company. But that cost is not visible to the electronic commerce service.

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11 https://www.itu.int/rec/T-REC-D.156/e
12 http://www.itu.int/pub/T-RES-T.1000-2012
14 https://www.digitaltrends.com/computing/spam-making-comeback/
Consequently, the electronic commerce service does not have an incentive to invest in greater security measures.\textsuperscript{16}

As the Global Internet Report 2016 of the Internet Society puts the matter\textsuperscript{17}:

There is a market failure that governs investment in cybersecurity. First, data breaches have externalities; costs that are not accounted for by organisations. Second, even where investments are made, as a result of asymmetric information, it is difficult for organizations to convey the resulting level of cybersecurity to the rest of the ecosystem. As a result, the incentive to invest in cybersecurity is limited; organisations do not bear all the cost of failing to invest, and cannot fully benefit from having invested.

The externalities arising from lack of security are exacerbated by the Internet of Things (IoT). As a well known security expert puts the matter\textsuperscript{18}: “Security engineers are working on technologies that can mitigate much of this risk, but many solutions won't be deployed without government involvement. This is not something that the market can solve. ... the interests of the companies often don't match the interests of the people. ... Governments need to play a larger role: setting standards, policing compliance, and implementing solutions across companies and networks.”

While some national authorities are taking some measures\textsuperscript{19}, at present, there does not appear to be adequate consideration of these issues at either the national or international levels.

Consequently, it we recommend that IETF, ISOC, ITU, UNCITRAL, and UNCTAD be mandated to study the issue of externalities arising from lack of security, which has technical, economic, and legal aspects. In particular, UNCITRAL should be mandated to develop a model law on the matter.

In our view, states have an obligation to take measures to prevent the connection to the Internet of devices that are not sufficiently secure. This obligation arises, on the one hand, from “the evolving international law principle of prevention, according to which sates are obliged to monitor, respond to, and prevent significant transboudary disruptions to, or interference with, the security and stability of international telecommunications networks”\textsuperscript{20}.

It also arises, on the other hand, from article 9 of the 1988 International Telecommunication Regulations (ITRs), article 13 of the 2012 ITRs, and article 42 of the ITU Constitution. All three instruments contain a provision to the effect that “special arrangements” should not cause “technical harm” to the operation of telecommunication facilities of third countries.\textsuperscript{21} The “special arrangements” in question are the use...


\textsuperscript{17} See p. 18 of the cited ISOC Global Internet Report 2016.

\textsuperscript{18} https://www.schneier.com/blog/archives/2016/07/real-world_secu.html

\textsuperscript{19} For example, for cybersecurity for motor vehicles, see: http://www.nhtsa.gov/About-NHTSA/Press-Releases/nhtsa cybersecurity_best_practices_10242016


\textsuperscript{21} For a full discussion, see p. 113 of Hill (2013), cited above.
of public telecommunication facilities to provide private network services, in particular the Internet.\textsuperscript{22} The “technical harm” in question originally referred to worms, viruses, and such,\textsuperscript{23} and clearly includes distributed denial of service (DDOS) attacks based on devices connected to the Internet.

1.3 Social issues

As already noted, social issues are also important, and those issues include freedom of expression. We refer to, and incorporate by reference, paragraphs 1.11-1.13 of our submission\textsuperscript{24} to the 8\textsuperscript{th} open consultation.

1.4 Other economic issues

Further, economic issues other than the cost of connectivity are important. As noted in paragraphs 1.12 and 1.13 of our submission to the 8\textsuperscript{th} open consultation, the current dysfunctional intellectual property regime results in excessively high costs for hardware and software. Various reports\textsuperscript{25} have recently highlighted that point in the context of human rights and development. As recent study put the matter\textsuperscript{26}:

... recent developments in copyright law attest to the need to rethink copyright in order to adapt its rules to its original dual character: as a right to secure and organize cultural participation and access to creative works on the one side, and as a guarantee for the creator to participate fairly in the fruit of the commercial exploitation of his or her works on the other. In these respects, it is proposed that copyright is to be (re)conceived as a right to access rather than a right to forbid, thereby emphasising the inclusive rather than the exclusive nature of copyright protection.

Use of open source software can help to ameliorate this situation. In that light, it is disappointing to note that many developed countries objected to the adoption of a resolution at the World Telecommunication Standardization Assembly (WTSA) that would have instructed TSAG to assess the possibility to improve the existing working methods of ITU-T, aiming to facilitate the development of ITU-T Recommendations on the basis of strong collaboration and coordination with open source projects; and to assess the possibility to increase participation and involvement of open source entities and organizations in the work of ITU-T. We note that a Resolution on open source in ITU-T was eventually adopted, but we regret that it did not include the substantive language referred to above.

\textsuperscript{22} See p. 7 of Hill (2013), cited above.

\textsuperscript{23} See pp. 8 and 113 of Hill (2013), cited above.

\textsuperscript{24} http://www.itu.int/en/council/cwg-internet/Pages/display-feb2016.aspx?ListItemID=13

\textsuperscript{25} For a high-level summary, see: http://www.ip-watch.org/2016/11/30/report-ip-access-science-troubled-relationship/

\textsuperscript{26} http://www.ictsd.org/sites/default/files/research/ceipi-ictsd_3_0.pdf . The citation is from page 14. See also pp. 84 ff. We cite from p. 85: “Copyright, originally conceived as a tool to protect the author and to provide incentives for him or her to create for the benefit of society, is nowadays more and more perceived as an instrument to the advantage of ‘large, impersonal and unlovable corporations’. ... Copyright is increasingly perceived as a right to sanction and punish that prevents the free flow of information and access to knowledge or cultural participation, not as a right that has positive effects for the development of society.”
Similarly, it is disappointing to note that some developed countries formally objected, at WTSA, to the adoption of certain recommendations, namely:

- Recommendation ITU-T D.52, Establishing and connecting regional Internet exchange points to reduce costs of international Internet connectivity, which guides regional collaboration to establish central hubs or Internet exchange points (IXPs) that enable local Internet traffic to be routed locally, saving international bandwidth and reducing the costs of international Internet connectivity.

- Recommendation ITU-T D.53, Universal Service, which, while recognizing the sovereign right of Member States to define and regulate their universal service/access policies, proposes general outlines to guide governments and regulators in their tasks and management functions regarding universal service funds in a globalized digital environment.

- Recommendation ITU-T D.261, Principles for market definition and identification of operators with significant market power, which proposes principles and guidelines to assist countries in defining and identifying significant market power (SMP) in the telecommunications sector.

Further, it is disappointing to note that the USA objected, at WTSA, to the approval of Recommendation ITU-T D.97— even if it did not express a formal reservation after the Recommendation was approved. That Recommendation’s title is Methodological principles for determining international mobile roaming rates; the Recommendation proposes possible approaches to the reduction of excessive roaming rates, highlighting the need to encourage competition in the roaming market, educate consumers and consider appropriate regulatory actions such as the introduction of caps on roaming rates.

1.5 Colonialist attitudes

It is disappointing to see how colonialist attitudes persist to this day.

For example, an analysis of WTSA stated “Countries with the most to gain economically and technically from flexible and agile standards are the very same countries that tend to support binding and counterproductive ITU standards”.

27 The published Recommendation contains the following statement: “-The following country has expressed a reservation with respect to this Recommendation: Australia; -The following countries have expressed a reservation and will not apply this Recommendation: Canada and United States of America; -This Recommendation is not applicable to the United Kingdom.”

28 The published Recommendation contains the following statement: “-The following country has expressed a reservation with respect to this Recommendation: Australia; -The following countries have expressed a reservation and will not apply this Recommendation: Canada and United States of America; -This Recommendation is not applicable for Finland, Norway, Switzerland and Sweden; -This Recommendation is not applicable to Germany, Poland, Portugal and the United Kingdom”.

29 The published Recommendation contains the following statement: “-The following country has expressed a reservation with respect to this Recommendation: Australia; -The following countries have expressed a reservation and will not apply this Recommendation: Canada and United States of America; -This Recommendation is not applicable for Finland, Norway, Switzerland and Sweden; -This Recommendation is not applicable to Germany, Poland, Portugal and the United Kingdom”.


Following the ban of zero-rating services in India, a well-known US venture capitalist stated: “Anti-colonialism has been economically catastrophic for the Indian people for decades. Why stop now?”

Perhaps the time has come to recognize that we, in the West, don't necessarily know better, and that the representatives of other countries know what they are talking about and are able to take positions that are in the interest of their citizens.

In that light, it is regrettable that the USA, and some other countries (Australia, Canada, Costa Rica, Finland, Norway, Paraguay, Sweden, UK) stated at WTSA (emphasis added):

... If the ITU-T is to be considered a peer to other standards development organisations, its recommendations must be technical in nature and considered in an inclusive and transparent process that results in high quality, flexible outcomes that are technology neutral, that promote non-proprietary solutions and that are consensus-based. ...

A similar statement was made by the European region, supported by Australia and the USA (emphasis added):

... Europe can only endorse Resolutions where there is consensus agreement.

These statements could be understood to imply that Europe, the US, and others, will not comply with the ITU rules that provide that, absent consensus, decisions can be made by majority vote. It is important to stress that most standards development organizations do not require unanimity for the approval of their standards: different definitions are used for “consensus”, but none require unanimity, and many standards organizations do approve standards by formal votes if consensus cannot be reached.

If the intent of Europe, the USA, and the countries that supported the USA, is to prevent decisions that are not unanimous, then any individual country could veto any proposal, and thus block any decisions. Since, as argued in our previous submissions, the USA and other developed countries benefit from the current situation of Internet governance, giving veto power to developed countries amounts to a form of disguised colonialism.

A good description of how US actions are viewed by non-US actors is given at:

http://www.slate.com/articles/technology/future_tense/2016/11/the_u_s_should_stop_lectureing_about_internet_values.html

And a good explanation of how it is a few large private companies, and not governments, that control much of the Internet is given at:


34 Plenary of 09h30, 3 November 2016. See 4.1 of WTSA Document 132.

The author of the cited article had also prepared a map showing the dominance but it was not published.36 The map is reproduced below. The author of the article provided the following explanation for the map: “It shows the Number 1 site by country as listed by Alexa.com. Red = Google/YouTube, Blue=Other. So, we have the situation where only countries which have actively protected their home markets are not led by Google!”

Separately, a particular situation of concern to developing countries is the commercial exploitation of geographic identifiers. This issue has been discussed in WIPO and, more recently, at the 2016 WTSA, but to date it has not been addressed to the satisfaction of the concerned countries. We incorporate here by reference our contribution and proposal regarding this matter submitted to the Working Group on Enhanced Cooperation, see:

http://www.apig.ch/Protection%20of%20country%20names.pdf

2. What are the roles of governments and non-government actors in overcoming these challenges?

Governments and other stakeholder can promote the developmental aspects of the Internet by implementing the actions outlined above, and by cooperation to put into place proper Internet government arrangements, in particular enhanced cooperation consistent with the roles and responsibilities outlined in the Tunis Agenda. We refer to, and incorporate here by reference our submissions to the previous open consultation:


36 Private communication with the author of the cited article.