5 Sep 2016

Dear sir/madam,

NM4203 ICT Policy Students' Response to the ITU Council Working Group on International Internet-related Public Policy Issues (CWG-Internet) Online Open Consultation (Sep 2016)

We thank the International Telecommunications Union (ITU) for the opportunity to feedback on how the global community can build enabling environments for access to the Internet. We strongly support the ITU's decision to have an online open consultation on this discussion. We believe that access to the Internet is the backbone to building a strong socio-economic future for the world, and as such, we submit our comments on the five questions raised.

We are an undergraduate class currently reading ICT and Telecommunications policy in the National University of Singapore, and following a robust discussion in class on the concepts surrounding affordable access to the Internet, we are submitting our private opinions in this consultation document for your consideration. As such, these views are a private submission, and DO NOT represent the views of the Republic of Singapore, nor the National University of Singapore.

We look forward to other similar consultations from the ITU in the future, and would be happy to engage with the ITU and global multi-stakeholder community. Should you and your team have further queries on our submission, please feel free to contact us. Or if would like to address us in class (in NUS on Mondays 12-3pm Singapore time), we would be more than happy to accommodate you in a videoconference session.

Yours sincerely,

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NM4203 Response to the ITU Council Working Group on International Internet-related Public Policy Issues (CWG-Internet) Online Open Consultation (February- September 2016)

1. What are the elements of an enabling environment to promote Internet connectivity?

We believe that countries should provide (i) free, (ii) open, and (iii) good quality Internet access through any means, in more places including areas with limited or no Internet connection. We also believe that (iv) the government has the duty to subsidise the cost of Internet access, keeping it affordable.

We also believe that to allow people to benefit from affordable Internet connectivity, affordable access to end-user devices such as smartphones and computers should be made available. E.g. telecentres and Internet cafes in Indonesia. These measures outlined below will facilitate Internet connectivity and access:

a. **Encouraging or introducing competition among Internet Service Providers (ISPs).** We believe that the introduction of healthy competition in the telecommunications industry with the presence of multiple Internet service providers will encourage affordability and quality of connection.

b. **Promoting public-private partnerships.** Public-private partnerships between the Government and private operators can help to provide robust telecommunications infrastructure that promote Internet connectivity. The Government can facilitate the development of such infrastructure by providing subsidies and clear regulation of Internet Service Providers. For instance, in April 2013, Singapore rolled out free public Wi-Fi through its Wireless@SG programme.[1] Under the programme, the government funded the infrastructure while the various operators provided the service. Therefore, the Singapore Wireless@SG programme shows that public-private partnerships can facilitate free or affordable Internet access on a national level.

c. **Improving computer literacy.** The issue of computer literacy should also be addressed to mitigate the digital divide. For example, services that educate digitally marginalised or disconnected populations such as the young, the elderly as well as migrant workers on how to access the Internet should be introduced.[2]

d. **Encouraging innovation.** Making the Internet more accessible through affordable smart devices is also another way to bridge the digital divide. The Government can encourage innovation in the market such that new technologies can foster affordable smart devices. For example, as part of the

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[1] https://www.ida.gov.sg/Learning/Technology-You/Wireless-SG
[2] http://m.huffingtonpost.in/2016/06/09/google-and-tata-trusts-Internet-literacy-program-for-rural-wome/

initiative 'Digital India' 2015, DataWind, known for its supply of cheaper tablets and smartphones, aims to provide fast Internet at a low cost to those living in rural areas in India who do not have access to the Internet by providing them with smart devices at a much cheaper price.[3]

2. What are the elements of an enabling environment to promote an affordable Internet?

It is our view that countries ought to bring in competition to the telecommunication market to prevent monopoly of telecommunication services so that prices remain competitive and affordable.

Governments should also provide funding for telecommunication infrastructure - particularly for rural markets - to ensure people can afford to use the Internet. For example, the Ministry of Information and Communication Technology in Thailand plans to use 20 billion baht (576 million USD) to build a national broadband infrastructure for all 70,000 villages across Thailand over the next year[4].

3. What are the elements of an enabling environment to promote the quality of access to the Internet?

  a. We feel that the government should exercise strict regulation among ISPs to ensure that they provide quality Internet to the best of their abilities and not shortchange users, such as violating principles of net neutrality.

  b. Introduce more foreign direct investments into the market to encourage greater competition in the market which would ideally lead to better quality Internet.

  c. Promote and ensure a steady rollout of IPv6 in all services and devices.

4. What are the elements of an enabling environment to build confidence and security in the use of the Internet?

  We believe that these elements are crucial in building confidence and security in the use of the Internet:

  a. **Encryption of messages** sent through the Internet will boost the security of these messages and increase people's confidence in using the Internet. An example is how Whatsapp has securely encrypted messages sent on the application which only the intended recipient can view and this places top priority on consumers' security and privacy[5].

  b. **Disallowing Deep Packet Inspection**[6] to ensure user privacy. Deep Packet Inspection permits surveillance or censorship techniques to be carried out, as message content can be intercepted

  c. **Protecting IP rights of original creators**

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[3] http://indiaincorporated.com/index/item/5190-bridging-the-digital-divide-india-inc-interview.html
[4] http://www.bangkokpost.com/tech/local-news/826868/cheap-broadband-service-due-this-year
[5] https://techcrunch.com/2016/04/05/whatsapp-completes-end-to-end-encryption-rollout/
[6] "Information that we send and receive through the Internet travels in so-called "packets", with "envelopes" indicating sender and receiver. unlike normal network equipment, DPi looks not just at the envelopes but into packet contents, and can be used to disrupt or block certain packets based on what they contain." https://edri.org/files/EDRi_NetNeutrality.pdf

d. **Establishing government regulation that safeguards user interests**. For instance, the Personal Data Protection Commission[7] in Singapore implements public education and engagement programmes for organizations and individuals to promote greater awareness of the importance of personal data. To make regulation more grassroots-friendly, information and education more freely available and easier to understand

e. **Establishing a cyber-security masterplan.** Governments should create a cyber security masterplan which addresses how the government will address threats to the nation in the case of cyber attacks. An example would be the setting up of national and regional Computer Emergency Response Teams (CERTs).

5. **What is the role of Governments in building an enabling environment?**

   a. **Improving Internet penetration in rural areas.** Governments can play an important role in building an enabling environment for users by improving Internet penetration, especially in rural areas. For instance, Vietnam's Last Mile Initiative: joint partnership between state-owned Vietnam Data Communications and Intel to expand ICTs in rural areas and improve socio-economic development.[8]

   b. **Subsidies and funding.** Governments should set aside subsidies and funding for telecommunication infrastructure, such as public-private partnerships.

   c. **Enable open market for fair competition** and prevent monopoly through the regulation of Internet Service Providers.

   d. **Open consultations** to allow citizens to engage and participate in telecommunications policy-making processes. Introduction of grassroot-friendly regulations where governments work together with communities and grassroots end users to understand citizens' needs.

   e. **Government to act as mediator** between citizen and Internet Service Providers

   f. Laws to protect organisations and individuals from cyber attacks

   g. **Transparency** in regulatory changes through annual reports or easily understood infographics, as well as ensuring transparency of ISPs in their reports.

   h. To execute intellectual property laws

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[7] https://www.pdpc.gov.sg/about-us
[8] http://solutionscenter.nethope.org/case_studies/view/success-story-vietnam-last-mile-initiative-lmi