



APC response to the ITU Council Working Group-Internet Open Consultation on Bridging the Digital Gender Divide

5 January 2018

Introduction

The Association for Progressive Communications (APC) welcomes this opportunity to contribute to the work of the ITU Council Working Group-Internet (CWG-I) Open Consultation on Bridging the Digital Gender Divide.

APC is an international network and non-profit organisation founded in 1990 that works to help ensure everyone has access to a free and open internet to improve lives and create a more just world. APC's Women's Rights Programme, both a programme within APC and a network of women throughout the world, is committed to using technology for women's empowerment. We promote gender equality in the design, implementation, access and use of information and communications technologies (ICTs) and in the policy decisions and frameworks that regulate them. In addition, APC advocates for more affordable and universal access to the internet generally, as well as internet policy and regulation that enable the promotion and protection of human rights, women's rights and the rights of people of diverse sexualities, particularly when those rights are threatened or violated by states and private sector actors.

APC considers the gender digital divide as both a symptom and cause of violations of women's human rights. It is a symptom, in that the discrimination that women face on the basis of social and cultural norms is one of the most pronounced causes of the gender digital divide. To put it simply, all disparities in internet access are situated within other disparities that women face in society, be they based on location, economic power, age, gender, racial or ethnic origin, social and cultural norms, education, or other factors. These are causes of violations of women's human rights, because the internet can be a critical enabler of human rights, and the gender digital divide

leaves women who are without meaningful internet access less equipped to exercise their human rights and participate in public life/society.¹ Barriers to women's meaningful access to the internet are multifaceted, and include:

- Availability (e.g. women have no broadband access, public internet centres are in spaces that women do not usually have access to, etc.)
- Affordability (e.g. insufficient income to pay for data, cannot afford a device, etc.)
- Culture and norms (e.g. boys are prioritised for technology use at home, online gender-based violence, restrictions to movement, etc.)
- Capacity and skills (e.g. gender literacy gap, lack of skills and confidence to access the internet or explore technology, etc.)
- Availability of relevant content (e.g. language issues, lack of content that speaks to women's contexts, gender-related content is censored/restricted, etc.)
- Women's participation in decision-making roles pertaining to the internet and/or in the technology sector (e.g. when women are not able to pursue careers in science and technology, when their participation in relevant policy-making forums is restricted).²

APC finds it encouraging to see increased attention from the international community focused on the various forms of gender digital divides. We have participated in and contributed to a number of efforts by the international community to address the underlying barriers to women's meaningful access to the internet that warrant recognition in the context of this current consultation. These include the Internet Governance Forum Best Practice Forum (IGF BPF) on Gender and Access,³ and the Office of the High Commissioner for Human Rights (OHCHR) report on Bridging the Gender Digital Divide from a Human Rights Perspective,⁴ among others.

Given the range of barriers contributing to the gender digital divides outlined above, and the fact that barriers to women's meaningful access to the internet are deeply rooted in cultural norms and values, we encourage the ITU to focus its efforts on barriers that fall within its remit, such as availability and affordability, as well as increasing women's participation in decision-making roles within the ITU itself. All efforts by the ITU to increase affordable and meaningful access to the internet should integrate a women's rights perspective. Efforts to address the gender digital divide must tackle the root causes of disparities in access, and require the ITU to work with other agencies and stakeholders, such as the IGF BPF on Gender and Access, the OHCHR, UN Women, and others. The fact that bridging gender digital divides involves addressing issues related to content, online gender-based violence, and underlying societal and economic discrimination, does not mean that the ITU should expand its work to those areas.

¹APC. (2017). Bridging the gender digital divide from a human rights perspective: APC submission to the Office of the High Commissioner for Human Rights. https://www.apc.org/sites/default/files/APCSubmission_OHCHR_BridgingGenderDigitalDivideHumanRightsPerspective_0.pdf

²Van der Spuy, A. (Ed.) (2016). *Overcoming Barriers to Enable Women's Meaningful Internet Access*. IGF Best Practice Forum on Gender output document. www.intgovforum.org/multilingual/index.php?q=filedepot_download/3406/437

³IGF Best Practice Forum Gender and Access <https://www.intgovforum.org/multilingual/content/bpf-gender-and-access-1>

⁴UN Office of the High Commissioner for Human Rights. (2017). Ways to bridge the gender digital divide from a human rights perspective (A/HRC/35/9). ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/35/9

As we have previously noted, the ITU should be concerned with underlying telecommunications networks, not with the services and content that run over them.⁵

Finally, we note that the framing of this consultation implies that the value of bridging the gender digital divide is economic empowerment for women through participation in small and medium-sized enterprises (SMEs) and in the digital economy. ICTs, including the internet, are increasingly important for all aspects of life. They can empower women in participation in political life, as producers of cultural content, as coders, doctors, engineers, activists, and enrich their lives in any number of ways. It is unclear to us why the focus of this consultation is on SMEs and the digital economy – which is only one dimension of achieving gender equality for internet users – and not the broader importance of ICTs for gender equality in the digital age.

Note on terminology used in this submission

All references to “women” should be construed as including “girls” and anyone identifying as women, unless otherwise specifically noted. Women of diverse sexualities and gender identities are also included in relevant sections of the submission.

“Gender” refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialisation processes. They are context- and time-specific, and changeable. Gender determines what is expected, allowed and valued in women or men in a given context. Gender is part of broader socio-cultural contexts, intersecting with other factors such as class, race, poverty level, ethnic group and age.

References to “access” should be construed as referring to “meaningful internet access” (see below) unless otherwise noted.

“Meaningful internet access” should be construed as pervasive, affordable connectivity (of sufficient quality and speed) to the internet in a manner that enables individuals to use and benefit from internet use, including to participate in the public sphere, exercise human rights, access and create relevant content, and engage with people and information for development and well-being.

1. What approaches and examples of good practices are available to increase Internet access and digital literacy of women and girls, including in decision-making processes on Internet public policy?

All disparities in internet access and use are located in other disparities that women face in society, be they based on location, economic power, age, gender, racial or ethnic origin, social and cultural norms, education, or other factors. While CWG-I’s general work on the gender digital divide is welcomed, APC emphasises that CWG-I’s focus on digital literacy and women’s participation in decision-making processes should not neglect other important elements that are inextricably entwined with these important issues. APC recommends a holistic approach, with all relevant stakeholders, to increasing not only internet access but also internet use; one that considers existing discrimination and disparities. Addressing some of these factors in isolation and/or to the exclusion of others is therefore not an advisable approach.

⁵APC. (2012). APC perspectives on the revision of the International Telecommunication Regulations. https://www.apc.org/sites/default/files/APC_input_WCIT_03112012.pdf

Keeping the aforesaid in mind, literature pertaining to the gender digital divide that APC has tracked indicates growing awareness of the fact that even if women can access the internet, they will not necessarily adopt or enjoy universal, affordable, unconditional, open, meaningful or equal access to it.⁶ Some refer to this more nuanced understanding of access as “meaningful” access (e.g. the Internet Governance Forum),⁷ signifying that the potential of the internet for development depends on how and the extent to which women use the internet.⁸

In general terms, this indicates an increased awareness that mere access is insufficient. Access must be universal and affordable, unconditional and equal, as well as unfettered.⁹ If the so-called “analog complements”¹⁰ for access are not met, the internet will not only fail to deliver promised “digital dividends”,¹¹ but can even aggravate inequality¹² by affecting those who are unconnected,¹³ or are not able to meaningfully access the internet because of lack of economic autonomy or the threat of online harassment and violence, for example.

While keeping in mind the aforesaid warning about tackling digital literacy independently of other factors, APC is particularly concerned that women who do not develop their digital skills will be excluded from the potential of digital dividends as technology becomes increasingly pervasive in political, cultural, social and economic life.¹⁴ This is especially worrying as women tend to have lower literacy and education levels than men in many regions of the world.¹⁵ This affects women’s ability to critically and sustainably use,

⁶Adera, E. O., Waema, T. W., May, T., Mascarenhas, O., & Diga, K. (Eds.) (2014). *ICT Pathways to Poverty Reduction: Empirical evidence from East and Southern Africa*. Practical Action Publishing and IDRC. www.idrc.ca/en/book/ict-pathways-poverty-reduction-empirical-evidence-east-and-southern-africa; Kee, J. (Ed.) (2011). *EROTICS: Sex, rights and the internet*. Johannesburg: APC. https://www.apc.org/sites/default/files/EROTICS_0.pdf; Kuga Thas, A. M. (2005). *Paddling in circles while the waters rise: Gender issues in ICTs and poverty reduction*. Johannesburg: APC. <https://www.apc.org/en/system/files/paddling.pdf>

⁷Internet Governance Forum. (2016). *Policy Options for Connecting and Enabling the Next Billion(s): Phase II (2016 edition)*. www.intgovforum.org/multilingual/index.php?q=filedepot_download/3416/412

⁸Chair, C., & Deen-Swarray, M. (2016). South Africa: Determining user capabilities to ensure the achievement of ESCRs through internet use. In A. Finlay (Ed.), *Global Information Society Watch 2016: Economic, social and cultural rights and the internet*. APC and IDRC. www.giswatch.org/sites/default/files/gw2016-southafrica.pdf

⁹Gurumurthy, A., & Chami, N. (2017). *A feminist action framework on development and digital technologies*. Johannesburg: APC. <https://www.apc.org/en/pubs/feminist-action-framework-development-and-digital-technologies>

¹⁰World Bank. (2016). *World Development Report 2016: Digital Dividends*. Washington DC: World Bank. www.wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2016/01/13/090224b08405ea05/2_0/Rendered/PDF/World0developm0000digital0dividends.pdf

¹¹Ibid.

¹²Galperin, H., Mariscal, J., & Barrantes, R. (2014). *The Internet and Poverty: Opening the black box*. DIRSI. www.dirsi.net/web/files/files/Opening_the_Black_Box.pdf; Castells, M. (2005). *The Network Society: From Knowledge to Policy*. In M. Castells, M., & G. Cardoso (Eds.), *The Network Society: From Knowledge to Policy*. Washington DC: Center for Transatlantic Relations. www.umass.edu/digitalcenter/research/pdfs/JF_NetworkSociety.pdf

¹³Gurumurthy, A., & Chami, N. (2017). Op. cit.

¹⁴World Bank. (2015). *Supporting women's agro-enterprises in Africa with ICT: A feasibility study in Zambia and Kenya*. Washington DC: World Bank. www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/04/29/090224b082c25eb5/1_0/Rendered/PDF/Supporting0wom00in0Zambia0and0Kenya.pdf; Cummings, C., & O’Neil, T. (2015). *Do digital information and communication technologies increase the voice and influence of women and girls? A rapid review of the evidence*. London: Overseas Development Institute. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9622.pdf>; Galperin, H., Mariscal, J., & Barrantes, R. (2014). Op. cit.; Belalcázar, C. (2015). *Mobile Phones & Literacy: Empowerment in Women’s Hands*. Paris: UNESCO. www.unesco.org/images/0023/002343/234325E.pdf; Broadband Commission Working Group on Broadband and Gender. (2013). *Doubling Digital Opportunities: Enhancing the Inclusion of Women and Girls in the Information Society*. www.broadbandcommission.org/documents/working-groups/bb-doubling-digital-2013.pdf

¹⁵Galperin, H., Mariscal, J., & Barrantes, R. (2014). Op. cit.; Belalcázar, C. (2015). Op. cit.; Kuga Thas, A. M. (2005). Op. cit.

design, code, adapt, and reclaim ICTs as platforms to challenge discriminatory conditions and to promote creativity and expression. Various authors, for instance, agree that gender disparities in education constrain women from using or fully benefiting from the internet, even when controlling for income and age.¹⁶ There are also studies showing that women without digital skills tend to lack the necessary confidence to use the internet.¹⁷

The challenges women face in developing their digital capacities differ between regions¹⁸ and among ages,¹⁹ complicating analysis and action, and warranting further study at local levels. General trends from available literature, which tends to focus on generalised global challenges, include the irrelevance of curricula to women; the importance of focusing training on adult women; the tendency to prioritise ICT resources for men and boys; varied stereotypes that constrain women from developing their digital skills; and women and girls' inability to gain access to devices or public access facilities safely.²⁰

In addition to digital literacy, supportive and enabling policy environments are crucial in democratising policy making that affects the internet and ICTs. Similarly, women's ability to participate in internet governance is necessary in diffusing ownership of and power in global and local networks and the network economy. APC therefore believes it is important to challenge patriarchal spaces and processes that control internet governance, to promote women's participation in policy-making processes, and to ensure that policies reflect a proper understanding of women's needs and priorities.

A particular challenge is the diversity of challenges and issues, as well as the pace of change, that are involved in the governance of ICTs. The diversity of platforms and processes that actors must remain involved in to vigilantly ensure that women's needs and rights are reflected in a plethora of issues of relevance to the internet and its governance can "easily overwhelm feminist activists."²¹

2. What approaches and examples of good practices are available to promote the access and use of ICTs by SMEs in developing and least-developed countries, particularly those owned/managed by women, in order to achieve greater participation in the digital economy?

APC and other organisations' work has shown that women are also less able to benefit from ICTs for entrepreneurship and business purposes because of their scarcity of skills (as was discussed in question 1 above).²² This does not mean that women do not participate in the digital economy, however. Some

¹⁶Ya'u, Y. Z., & Aliyu, M. A. (2017). *Internet for Men? Overcoming Gender-based Digital Exclusion in Northern Nigeria: A Strategy Document*. Centre for Information Technology and Development.

www.citad.org/download/overcoming-gender-based-digital-exclusion-in-northern-nigeria-a-strategy-document; Galperin, H., Mariscal, J., & Barrantes, R. (2014). Op. cit.; Deen-Swaray et al., 2012. Op. cit.

¹⁷GSMA & LIRNEasia. (2015). *Mobile phones, internet, and gender in Myanmar*. London: GSMA. www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/02/GSMA_Myanmar_Gender_Web_Singles.pdf; GSMA. (2015). *Accelerating digital literacy: Empowering women to use the mobile internet*. London: GSMA. www.gsma.com/connectedwomen/wp-content/uploads/2015/06/DigitalLiteracy_v6_WEB_Singles.pdf; World Wide Web Foundation. (2015). *Women's Rights Online: Translating Access into Empowerment*. <https://webfoundation.org/wp-content/uploads/2015/10/womens-rights-online21102015.pdf>

¹⁸UNESCO, Intel, & Girl Rising. (2014). *Towards Gender Equality in Education Policies and ICTs: An Action Brief and Toolbox*. Paris: UNESCO & Intel. www.intel.nl/content/dam/www/public/us/en/documents/corporate-information/gender-equality-education-ict-unesco-girl-rising.pdf

¹⁹Galperin, H., Mariscal, J., & Barrantes, R. (2014). Op. cit.

²⁰UNESCO, Intel, & Girl Rising. (2014). Op. cit.; Galperin, H., Mariscal, J., & Barrantes, R. (2014). Op. cit.

²¹Gurumurthy, A., & Chami, N. (2017). Op. cit.

²²See, for example, World Bank. (2016). Op. cit.; UNCTAD & ILO. (2014). *Empowering Women Entrepreneurs through ICT: A practical guide*. Geneva: UNCTAD. www.unctad.org/en/PublicationsLibrary/dtlstict2013d2_en.pdf

authors warn, for instance, about the exploitation of women and their labour in the network economy.²³ This not only extends to the ways in which women's inexpensive labour is used in mines for relevant materials, in fabrication laboratories and in electronic assembly plants,²⁴ but also to "unwanted" and "hidden and often-stigmatised and dangerous labour" of women who perform digital labour to create and/or moderate content, including misogynistic and sexist content, online.²⁵ Such forms of labour not only enable online platforms to become increasingly powerful, but also create more unequal and even fatal²⁶ labour chains defined by tedious and difficult occupations of electronics production primarily tasked to women.²⁷

Besides the challenges involved for women in digital labour, women must also often overcome stereotypes regarding their unsuitability for careers in ICT.²⁸ It is unsurprising that literature shows the gender gap between men and women in careers related to science, technology, engineering and mathematics (STEM) is large, not only in developing but also developed countries.²⁹ The lack of female representation in STEM is mirrored in a similar dearth of female representation in the governance and development of ICTs, which "affects society as much as the corresponding gender disparity in the offline world."³⁰ That said, there is a need for more research to better indicate and understand the connection between women in governance roles and STEM (as was also addressed in question 1 above).

3. Which are the available sources and mechanisms for measuring women's participation in the digital economy with focus on SMEs and micro-enterprises?

APC work:

Gender Evaluation Methodology for Internet and ICTs (GEM)³¹ is an evaluation methodology that integrates a gender analysis in its evaluations of initiatives that use ICTs for social change. It provides a means for determining whether ICTs are improving women's lives and gender relations or not, and whether they are promoting positive change at the individual, institutional, community and broader social levels.

²³See, for example, Nakamura, L. (2017). Racism, Sexism, and Gaming's Cruel Optimism. <https://lnakamur.files.wordpress.com/2015/02/racism-sexism-and-gamings-cruel-optimism.pdf>; Nakamura, L. (2015). The unwanted labour of social media: Women of color call out culture as venture community management. *New Formations: A journal of culture, theory, politics*, 86, 106-112. <https://lnakamur.files.wordpress.com/2011/01/unwanted-labor-of-social-media-nakamura1.pdf>; Gurumurthy, A., & Chami, N. (2017). Op. cit.

²⁴Nakamura, L. (2015). Op. cit.

²⁵Ibid.

²⁶Nakamura explains, for example, that a number of women had committed or attempted suicide by leaping out of their factory dormitory windows at the Foxconn plant in Shenzhen, China. Ibid.

²⁷Ibid.

²⁸World Bank, 2016. Op. cit. (pg. 100); AkiraChix (2015). *Women in STEM: Attitudes and motivations for women using technology & entering technology careers in Kenya*. www.drive.google.com/file/d/0B3Epr0-LCzppaGdNeHJIZnMwWDQ/view; Microsoft, UNESCO, UN Women, & ITU. (2014). *Girls in STEM and ICT Careers: The Path toward Gender Equality*. www2.tku.edu.tw/~tfstnet/upload/file/20130704153742d38d9.pdf

²⁹Broadband Commission (2016). *The State of Broadband 2016: Broadband Catalyzing Sustainable Development*. Geneva: ITU. www.itu.int/dms_pub/itu-s/opb/pol/S-POL-BROADBAND.17-2016-PDF-E.pdf

³⁰APC. (2015). *How technology issues impact women's rights: 10 points on Section J*. https://www.genderit.org/sites/default/upload/sectionj_10points_apc.pdf

³¹<https://www.apc.org/en/projects/gender-evaluation-methodology-internet-and-icts-ge>

As a set of principles to enable more women to fully enjoy their rights despite their different realities, contexts and specific challenges, the performative Feminist Principles of the Internet 2.0³² could be a useful source for measuring women's participation in general.

Research ICT Africa work:

For more than a decade, Research ICT Africa (RIA) has provided policy makers and other stakeholders with evidence through the development and gathering of universal indicators on ICT access and use. RIA's informal sector, household and individual surveys are conducted in seven African countries (Ghana, Kenya, Mozambique, Nigeria, Rwanda, South Africa and Tanzania), with sex-disaggregated data being collected on social networking, cybersecurity awareness and practices, digital finance, microwork and others aspects of the sharing economy. As the surveys are nationally representative, the data can be and is disaggregated on the basis of gender, location (urban and rural), income and education levels. Among other things, these indicators provide a holistic view of women's participation in the digital economy, including SMEs and micro-enterprises.

The surveys are part of a global initiative on producing much-needed quality data on ICT access and use in the global South. RIA coordinates the surveys with its sister networks LIRNEasia,³³ which focuses on six Asian countries (Bangladesh, Cambodia, India, Indonesia, Nepal and Pakistan), and DIRSI,³⁴ active in five Latin American countries (Argentina, Colombia, Guatemala, Paraguay and Peru).

4. What measures/policies could be envisioned in order to foster the role of women as entrepreneurs and managers of SMEs, specifically in developing and least-developed countries?

From a research perspective, RIA has noticed that descriptive statistics around the role of women as entrepreneurs and managers of SMEs tend to dominate any evidence that is gathered to guide policies and measures to bolster women's roles in this field. This is dangerous, as the formulation of policies and measures to foster the role of women as entrepreneurs and managers without proper evidence of the need for and priority areas for intervention lead to wasted resources and other adverse effects.

We believe there is a clear need to move beyond descriptive statistics, as they tend to mask the underlying factors of gender (and other) inequality. Supply- and demand-side data is needed to provide a more nuanced understanding of the factors impacting and determining gender and other inequalities

5. What are the gaps in addressing these challenges? How can they be addressed and what is the role of governments?

One of the main challenges to overcoming the access discrepancy is that it remains difficult to measure accurately. There is very limited gender-disaggregated data available – especially in low- and middle-income countries and between urban and rural contexts.³⁵ National statistics offices often lack the resources to collect gender-disaggregated data, and telecommunications operators and network

³²<https://www.apc.org/en/pubs/feminist-principles-internet-version-20>

³³lirneasia.net/projects/after-access

³⁴<https://dirsi.net/web/web/en>

³⁵Sylvester, G. (Ed.) (2016). *Use of Mobile Phones by the Rural Poor: Gender perspectives from selected Asian countries*. Bangkok: Food and Agriculture Organization of the United Nations, LIRNEasia, & International Development Research Centre. www.idrc.ca/en/book/use-mobile-phones-rural-poor-gender-perspectives-selected-asian-countries; Galperin, H., Mariscal, J., & Barrantes, R. (2014). Op. cit.

operators generally fail to publish customer data on grounds of data protection and other regulations.³⁶ Statistics do not reflect the spectrum of connectivity levels that exist around the world;³⁷ there is limited data that differentiates between how men and women use the internet; and there is a lack of understanding as to how women in different situations and circumstances (e.g. women refugees, women with disabilities,³⁸ young women and/or indigenous women) experience access challenges. Available data therefore tends to reflect a male view,³⁹ which reinforces the need for more women in policy making. Conclusions drawn from data are furthermore not always comparable or accurate due to the different measures for gender inequality available.⁴⁰ With the exception of RIA data, the data that is available is often descriptive rather than quantitative, which can mask real reasons and tend to propose “solutions” that deal symptomatically with specious problems, rather than with underlying issues.⁴¹ One of the first steps of tangible action should therefore be to gather data (both quantitative and qualitative) to better understand the situation.⁴²

Governments have a central role in ensuring women’s meaningful access to ICTs. We reference the following recommendations from the Office of the High Commissioner for Human Rights⁴³ in this area:

- Inhibitors to ICT access and use by women should be addressed as part of the state’s obligation to respect, protect and fulfil all human rights. This includes establishing and maintaining an enabling online environment that is safe and conducive to engagement by all, without discrimination and with special attention to the needs of groups facing systemic inequalities, in particular women within these groups.
- States should apply a comprehensive human rights-based approach in providing and expanding access to ICTs. They should adopt and implement ICT policies and strategies that include specific attention to gender considerations and address access to, affordability of and participation in ICTs for all women. Such policies should be developed in consultation with all sections of society, including business enterprises and civil society, in particular women’s organisations. ICT policies should also be linked to existing gender and development policies.

³⁶Alliance for Affordable Internet. (2015). *Women's Rights Online: Translating Access into Empowerment*. Washington DC: Alliance for Affordable Internet. www.webfoundation.org/docs/2015/10/womens-rights-online21102015.pdf; GSMA. (2015). *Bridging the gender gap: Mobile access and usage in low- and middle-income countries*. London: GSMA. www.gsma.com/connectedwomen/wp-content/uploads/2015/02/GSM0001_02252015_GSMAReport_FINAL-WEB-spreads.pdf; Broadband Commission Working Group on Broadband and Gender. (2013). Op. cit.

³⁷APC. (2015). Op. cit.

³⁸See, for example, the work of Point of View, which investigates the challenges that women with disabilities face in using and gaining access to dating apps. Goyal, N. (2016). *Is Access Real? Disability, Sexuality, and the Digital Space*. In Arrow for Change, *Sexuality, Sexual and Reproductive Health and Rights, and the Internet*. Asian-Pacific Resource & Research Centre for Women. www.arrow.org.my/wp-content/uploads/2016/08/AFC22.1-2016.pdf

³⁹Doria, A. (2015). *Women's rights, gender and Internet governance*. Johannesburg: APC. www.genderit.org/sites/default/upload/issue_womenrights_digital.pdf; UNCTAD. (2014). *Empowering Women Entrepreneurs through ICT: A practical guide*. unctad.org/en/PublicationsLibrary/dtlstict2013d2_en.pdf

⁴⁰Broadband Commission Working Group on Broadband and Gender. (2013). Op. cit.

⁴¹Deen-Swarraj, M., Gillwald, A., Morrell, A., & Khan, S. (2012). *Lifting the veil on ICT gender indicators in Africa*. Cape Town: Research ICT Africa & University of Cape Town. www.goo.gl/PmMqI5

⁴²Broadband Commission for Sustainable Development Working Group on the Digital Gender Divide. (2017). *Recommendations for Action: Bridging the gender gap in Internet and broadband access and use*. Geneva: ITU. www.broadbandcommission.org/Documents/publications/WorkingGroupDigitalGenderDivide-report2017.pdf; Alliance for Affordable Internet. (2015). Op. cit.; World Wide Web Foundation. (2015). Op. cit.; Cummings, C., & O’Neil, T. (2015). Op. cit.; GSMA. (2015). Op. cit.; World Wide Web Foundation. (2014). *Web Index Report 2014-2015*. www.thewebindex.org/report; UNCTAD. (2014). *Measuring ICT and gender*. Geneva: UNCTAD. www.uis.unesco.org/Communication/Documents/measuring-ict-and-gender.pdf

⁴³UN Office of the High Commissioner for Human Rights. (2017). Op. cit.

- States should collect, analyse and track sex- and gender-disaggregated data on ICT access and usage in order to reach a better understanding of how digital inclusion can be achieved and how to develop informed policies.
- States should include ICT literacy skills in educational curricula for girls, and support similar learning modules outside of schools.
- States must ensure equitable access to online information and public services, taking into consideration the diversity of internet users, as well as the ways people use the internet. They should provide public access to ICT facilities for women and improve relevant and local online content. In view of current limitations to digital access, states should also make available alternative offline modes of access to public information and services.
- States should enact adequate legislative measures and ensure appropriate responses to address the phenomenon of violence against women online, including through investigation of and action against perpetrators, the provision of redress and reparations to victims, and training on the application of international human rights norms and standards for law enforcement and the judiciary.