

Working Group on the Digital Gender Divide Recommendations for action: bridging the gender gap in Internet and broadband access and use March 2017











Working Group on the Digital Gender Divide

Recommendations for action: bridging the gender gap in Internet and broadband access and use

March 2017



This report has been created collaboratively, drawing on contributions and insights from the participants of the Broadband Commission Working Group on the Digital Gender Divide, under the auspices of the United Nations (UN) Broadband Commission for Sustainable Development.

The UN Broadband Working Group on the Digital Gender Divide is chaired by Mr Mats Granryd, Director General, GSMA, and is co-chaired by Ms Irina Bokova, Director-General of the UN Educational Scientific and Cultural Organization (UNESCO). GSMA has coordinated the process of drafting the document with special acknowledgement to Ms Claire Sibthorpe.

We wish to thank the members of the Working Group for their invaluable contributions, kind review, and useful comments (listed in alphabetical order of institution):

- Broadband Commissioners:
 - H.E. Dr. Abdulaziz Al Ruwais, Communications and Information Technology Commission (CITC), Saudi Arabia
 - Mr Börje Ekholm, Ericsson
 - Mr Kevin Martin, Facebook
 - Baroness Beeban Kidron, Filmmaker and Founder of 5Rights
 - Mr Amir Dossal, Global Partnerships Forum
 - Mr Mats Granryd, GSMA
 - Mr Luis Alberto Moreno, IADB
 - Mr Rupert Pearce, Inmarsat
 - Mr John Galvin, Intel
 - Mr Houlin Zhao, International Telecommunication Union (ITU)
 - Dr. Dato Lee Yee Cheong, ISTIC
 - Dr. Speranza Ndege, Kenyatta University
 - Prof. Gloria Bonder, Latin American Postgraduate Institute of Social Sciences
 - Mr Paul Mitchell, Microsoft
 - Mr Rajeev Suri, Nokia
 - Dr. Nasser Marafih, Ooredoo
 - Ms Irina Bokova, UNESCO
 - Dr. Kathy Calvin, UN Foundation
 - Ms Phumzile Mlambo-Ngcuka, UN Women
 - Mr Jean-Yves Charlier, VimpelCom Ltd.
 - Mr Francis Gurry, World Intellectual Property Organization (WIPO)

- External Experts:
 - Ms Caren Grown, Ms Samia Melhem, The World Bank
 - Ms Chat Garcia Ramilo, Association for Progressive Communications (APC)
 - Ms Helani Galpaya, LIRNEasia
 - Ms Sonia Jorge, Alliance for Affordable Internet (A4AI) and Web Foundation
 - Ms Ann Mei Chang

Additional contributions and support were also provided by the Broadband Commission Secretariat at the ITU, Dr David Souter, and Ms Anri van der Spuy.

The UN Broadband Commission for Sustainable Development

The UN Broadband Commission for Sustainable Development aims to showcase and document the power of information and communication technologies (ICT) and broadband-based technologies for sustainable development. It embraces a multi-stakeholder approach to promoting the roll-out of broadband and brings together a multi-stakeholder community, including industry leaders, senior policy-makers and government representatives, international agencies, academia, and organizations concerned with development.

More information about the Broadband Commission is available at www.broadbandcommission.org, and about the Broadband Commission Working Group on the Digital Gender Divide at http://broadbandcommission.org/ workinggroups/Pages/digital-gender-divide.aspx.

4

TABLE OF CONTENTS

Foreword by Mats Granryd, Director General, GSMA	6
Foreword by Irina Bokova, Director-General, UNESCO	7
Executive Summary	8
Acronyms and abbreviations	10
Introduction The Broadband Commission's work on gender and broadband access The need for urgent action	12
Recommendations for Addressing the Gender Gap in Internet and Broadband Access and Use 1: Understand the context: sex-disaggregated data on Internet access and use 2: Integrate a gender perspective in strategies, policies, plans and budgets 3: Address the barriers 3a: Affordable access 3b: Addressing threats that prevent access and use 3c: Digital literacy and confidence 3d: Relevant content, applications, and services 4: Working together and share good practice and lessons	17 22 28 29 32 35 38
Bibliography and further reading	45

The world is becoming increasingly connected and we cannot afford to leave anyone behind. Unfortunately, one big group is still missing out on the benefits delivered by connectivity: women.

Addressing the digital gender divide is critical to realising the significant potential benefits that the Internet can bring for women, their communities and the broader economy. This report outlines a set of practical actions that stakeholders can take to address the gender gap in Internet access and use in order to realise this substantial opportunity.

Mobile has the power to transform lives. It can help empower women, making them more connected and safer, and providing access to information, services and life-enhancing opportunities, such as health information and guidance, financial services and employment opportunities, often for the first time. Mobile is also the dominant platform for Internet access in many parts of the world, with the mobile industry connecting billions of people to the Internet. The issue is that while mobile connectivity is spreading quickly, it is not spreading equally.

GSMA research has estimated that in low- and middle-income countries,

there are 200 million fewer women than men who own a mobile phone, and that even when women do own a mobile device, they are less likely to use it for transformative services such as mobile Internet, further widening the divide.

The digital gender gap is not going to close on its own. Its root causes are driven by a complex set of social, economic and cultural barriers. These obstacles can only be overcome with targeted intervention by all stakeholders. Change is needed and it is needed now.

The GSMA is committed to helping tackle the mobile gender gap and is working with our members and others to connect everyone and everything to a better future. Gender equality and women's empowerment will be key to achieving the United Nations Sustainable Development Goals (SDGs), and specifically SDG 5 (Gender Equality).

We hope that the recommended actions in this report will inspire concerted efforts to reduce the gender gap in Internet access and use. Working together, we can make significant strides to address the digital gender divide, supporting the SDGs. When women thrive, societies, businesses and economies thrive.



Sincerely,

h latan

Mats Granryd Director General GSMA

The continuous development of new technologies and their application to economic, political and social processes is creating new opportunities that can enhance the quality of human life. To be sustainable, all new opportunities must be available to all, to empower all, for the benefit of all – especially, girls and women.

Worldwide, there is a gender gap of 12 percent in male and female access to the Internet. This rises to almost 31 percent in Least Developed Countries. Women are still left behind from the growth in mobile phone ownership, the most prevalent means of access to the Internet in developing countries. Mobile phones are important tools for enhancing the lives of women in lowand middle-income countries. They help women feel safer and more connected, save time and money, and access lifeenhancing services such as mobile money, or potential education and employment opportunities.

To bridge this digital gender gap, we need greater investment across the board – we need to build digital literacy skills into education systems, to overcome inequalities in access, to integrate gender perspectives into all strategies and plans, to collect sharper data, to design targeted policies for relevant services, applications and content.

This is precisely the aim of this report, which offers a set of clear and specific recommendations to address barriers to women's access and use of the Internet for all stakeholders involved – from policy makers, the private sector and NGOs to inter-governmental organizations and academia.

UNESCO is determined to encourage young women and men to fully participate in today's digital revolution by understanding technology as a means for giving shape to ideas and solutions and fostering creativity and innovation. In particular, UNESCO strives to provide young women with the skills and confidence to empower them and ensure they equally benefit from the opportunities of Internet. Together, let us ensure that the digital revolution is a development revolution for all, starting with girls and women.

Ining Sourig

Irina Bokova Director-General UNESCO



Photos: Yulian Donov

Executive Summary

Internet penetration rates are higher for men and boys than women and girls in all regions of the world today. Even more significantly, the ITU reports¹ that the gender gap in access to the Internet has in fact increased since the Broadband Commission's Working Group on Broadband and Gender published in 2013 its first report and recommendations for overcoming the digital gender divide.² A widening digital gender gap has significant implications in terms of women's empowerment and development as well as for societies, businesses and economies. As a result, effective, tangible and measurable action is now essential and urgently needed from a wide range of different stakeholders to overcome the digital gender gap in access to ensure that women³ can also benefit from the developmental capacity of information and communication technologies (ICTs).

Against this background, the Broadband Commission Working Group on the Digital Gender Divide was established in March 2016. The Working Group, chaired jointly by GSMA and UNESCO, aimed to develop a set of recommended actions designed to address the gender gap in Internet and broadband access and use. The outcome report was drafted in a collaborative manner by the Working Group Members, drawing on contributions and insights collected from the Commissioners and experts over a year-long consultation period. Drawing on existing documentation explaining the underlying drivers of the digital gender divide and why it is proving so persistent, this report embraces the ITU and UN Women's Action Plan to Close the Digital Gender Gap⁴ as a concrete starting point and proposes a set of clear and specific recommendations to address barriers to women's access and use of the Internet, in a clear and concerted 'Call to Action'. These recommendations help clarify the complementary roles of different actors, including governments and policy-makers, the private sector, intergovernmental organizations, NGOs, and academia and research institutions, as the Working Group believes that the digital gender divide can only be bridged effectively by coordinated actions. The report also gathers information about explicit and defined commitments from members of the Working Group on tangible actions to address these recommendations.

In **Part 1**, this report reviews current data on the digital gender gap, and summarises the reasons why access is important for women's individual empowerment as well as for broader societal and economic dividends. These include the ways in which broadband can help to protect women's rights and contribute to their economic, social and political empowerment and development. This part of the report also briefly describes how meaningful

¹ ITU, 2016. The gender gap estimated by the ITU represents the difference between the Internet user penetration rates for males and females relative to the Internet user penetration rate for males, expressed as a percentage. ITU estimates that the digital gender gap in fact increased from 11% in 2013 to 12% in 2016 – a small, but significant, trend, as gender inequality is increasing, not diminishing.

² Doubling Digital Opportunities: Enhancing the Inclusion of Women & Girls in the Information Society

³ Refers to women and girls (women under the age of 18 years) in this report.

⁴ ITU & UN Women, 2015.

access can support goals for gender equality and women's empowerment, along with universal access to ICTs, which are prioritised in the 2030 Agenda for Sustainable Development, especially under the Sustainable Development Goal 5, which calls for gender equality.⁵

Part 2 of the report sets out the Working Group's recommendations for action to address the gender gap in Internet access and use. These recommendations focus on four main action areas, concerned respectively with the need for:

- Data: the need to collect, analyse, and track gender-disaggregated data; the need for greater research into women's access to and use of the Internet; and the pressing priority for publishing and sharing data and research,
- Strategies, policies, plans and budgets: establishing gender equality targets for Internet and broadband access and use; assessing strategies, policies, plans and budgets for gender equality considerations; and consulting and involving women as well as relevant local communities and experts,
- Measures to address the barriers faced by women:
 - Affordable access: improved understanding of affordability issues; innovating to reduce the cost of devices and services; improving network coverage, capacity and quality; and providing public access facilities.
 - Addressing threats that prevent access and use: researching and understanding threats; increasing awareness of threats and how they can be addressed or reduced; developing safety

applications and services; and strengthening protection measures and reporting procedures.

- Improving digital literacy and confidence: understanding women's needs; investing in education and capacity-building initiatives; developing skills and confidence; supporting educators; and supporting and promoting female role models.
- Relevant content, apps and services: building awareness; developing relevant content and services; and consulting and engaging women.
- Enhancing cooperation between stakeholders: Developing and sharing tools, guidelines and case studies to support national and international efforts to address the digital gender gap; and supporting and encouraging multi-stakeholder cooperation and sharing of expertise.

For each action area, the report describes the challenges involved and presents a set of recommendations and actions needed to address the challenges and overcome the barriers. It is hoped that these recommended actions will inspire concerted and urgent efforts to reduce the gender gap in Internet access and use, and thereby support implementation of the Sustainable Development Goals. The report also compiles an initial example of work planned and currently underway by members of the Broadband Commission's Working Group on the Digital Gender Divide, in the hope that this report may prove a useful resource, and that others may be inspired to join these efforts, and ultimately, to help bridge the digital gender divide, to the benefit of women and girls everywhere so they too can join and participate in the online world.

UNGA, 2015b.

Acronyms and abbreviations

ICTInformation and communication technologyIGF BPFInternet Governance Forum Best Practice ForumIGOIntergovernmental organizationITUInternational Telecommunication UnionITU/ UN Women Action PlanITU/ UN Women Action Plan to Close the Digital Gender DivideNGONon-governmental organizationSDGsSustainable Development Goals (UN)STEMScience, Technology, Engineering and MathematicsWIPOWorld Intellectual Property Organization	A4AI	Alliance for Affordable Internet
IGF BPFInternet Governance Forum Best Practice ForumIGOIntergovernmental organizationITUInternational Telecommunication UnionITU/ UN Women Action PlanITU/ UN Women Action Plan to Close the Digital Gender Divide Women Action PlanNGONon-governmental organizationSDGsSustainable Development Goals (UN)STEMScience, Technology, Engineering and MathematicsWIPOWorld Intellectual Property OrganizationWorking GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	APC	Association for Progressive Communications
IGOIntergovernmental organizationITUInternational Telecommunication UnionITU/UN Women Action PlanITU/UN Women Action Plan to Close the Digital Gender Divide Women Action PlanNGONon-governmental organizationSDGsSustainable Development Goals (UN)STEMScience, Technology, Engineering and MathematicsWIPOWorld Intellectual Property OrganizationWorking GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	ICT	Information and communication technology
ITUInternational Telecommunication UnionITU/UN Women Action PlanITU/UN Women Action Plan to Close the Digital Gender DivideNGONon-governmental organizationSDGsSustainable Development Goals (UN)STEMScience, Technology, Engineering and MathematicsWIPOWorld Intellectual Property OrganizationWorking GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	IGF BPF	Internet Governance Forum Best Practice Forum
ITU/ UN Women Action PlanITU/ UN Women Action Plan to Close the Digital Gender Divide Women Action PlanNGONon-governmental organizationSDGsSustainable Development Goals (UN)STEMScience, Technology, Engineering and MathematicsWIPOWorld Intellectual Property OrganizationWorking GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	IGO	Intergovernmental organization
Women Action PlanNGONon-governmental organizationSDGsSustainable Development Goals (UN)STEMScience, Technology, Engineering and MathematicsWIPOWorld Intellectual Property OrganizationWorking GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	ITU	International Telecommunication Union
SDGsSustainable Development Goals (UN)STEMScience, Technology, Engineering and MathematicsWIPOWorld Intellectual Property OrganizationWorking GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development		ITU/ UN Women Action Plan to Close the Digital Gender Divide
STEMScience, Technology, Engineering and MathematicsWIPOWorld Intellectual Property OrganizationWorking GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	NGO	Non-governmental organization
WIPOWorld Intellectual Property OrganizationWorking GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	SDGs	Sustainable Development Goals (UN)
Working GroupBroadband Commission Working Group on the Digital Gender Divide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	STEM	Science, Technology, Engineering and Mathematics
GroupDivide, 2016WSISUNWorld Summit on the Information SocietyUnited NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	WIPO	World Intellectual Property Organization
United NationsUnited NationsUNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	Working Group	
UNCTADUnited Nations Conference on Trade and DevelopmentUNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	WSISUN	World Summit on the Information Society
UNDESAUnited Nations Department for Economic and Social AffairsUNESCOUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	United Nations	United Nations
UNESCOUnited Nations Educational Scientific and Cultural OrganizationUNGAUnited Nations General AssemblyUNITWINUniversity Twinning and Networking ProgrammeUSAIDUnited States Agency for International Development	UNCTAD	United Nations Conference on Trade and Development
UNGA United Nations General Assembly UNITWIN University Twinning and Networking Programme USAID United States Agency for International Development	UNDESA	United Nations Department for Economic and Social Affairs
UNITWIN University Twinning and Networking Programme USAID United States Agency for International Development	UNESCO	United Nations Educational Scientific and Cultural Organization
USAID United States Agency for International Development	UNGA	United Nations General Assembly
	UNITWIN	University Twinning and Networking Programme
USF Universal Service (and Access) Fund	USAID	United States Agency for International Development
	USF	Universal Service (and Access) Fund

Introduction

The Broadband Commission's work on gender and broadband access

On 21 September 2013, the Broadband Commission Working Group on Broadband and Gender published the report Doubling Digital Opportunities: Enhancing the Inclusion of Women & Girls in the Information Society.⁶ Noting the alarming presence of significant gender digital divides and barriers inhibiting women's⁷ ability to benefit from the developmental benefits associated with access to ICTs and broadband, the report made five overarching policy recommendations, addressing the need to:

- integrate gender and national ICT and broadband policies;
- improve sex-disaggregated ICT statistics and measurement;
- take steps to boost the affordability and usability of ICT products and services;
- improve relevant and local content online; and
- initiate an Action Plan to achieve gender equality in access to broadband by 2020.

The Broadband Commission Working Group on the Digital Gender Divide was proposed in March 2016 to take forward the work of its predecessor by helping to reduce the gender gap in Internet and broadband access and use. A key objective of the Working Group was to develop a set of recommended actions designed to address the gender gap in Internet and broadband access and use and, by doing so, to support the goals for gender equality and women's empowerment, as well as universal access to ICTs, which are included in the UN's 2030 Agenda for Sustainable Development.⁸

While the related issue of promoting women in the technology sector, including in positions of decisionmaking, is an equally important challenge that needs to be addressed, the focus of the Working Group and these recommendations is Internet and broadband access and use by women. It is hoped that the recommendations that the Working Group have carefully designed will be endorsed by other stakeholders and will lead to coordinated action to address these challenges.

This report is the outcome of a collaborative and multi-stakeholder process, which has benefited from the experiences of and contributions from a range of Broadband Commissioners and Working Group members. It also draws on existing work and internationally agreed goals and other commitments, including the work of other Broadband Commission Working Groups and UN reports, such as the outcome document of the Commission's 2013 Working Group on Broadband and Gender, the Commission's 2016 State of Broadband report, and the ITU/ UN Women Action Plan to Close the Digital Gender Gap.⁹

⁶ 2013. See the Bibliography for full references.

⁷ In this report, all references to 'women' should be understood to include 'girls', unless otherwise specified.

⁸ UNGA, 2015b.

⁹ 2015.

The need for urgent action

Policy and practical initiatives to address different barriers to gender equality in Internet access have increased in scope and number since the Broadband Commission's 2013 Working Group on Broadband and Gender published its report and policy recommendations on the subject. Yet the gender digital divide remains. Indeed, the ITU's most recent estimate indicates that the global Internet user gender gap has grown from 11% in 2013 to 12% in 2016. Today, Internet penetration rates remain higher for men than women in all regions in the world, with the estimated gap between men and women being particularly substantial in Least Developed Countries (LDCs) (31%) and in Africa (23%).¹⁰

It is increasingly urgent that effective, tangible and measurable action should be taken to overcome the digital gender gap in access in order to ensure that women benefit from the developmental capacity of ICTs. It is widely acknowledged that ICTs, including the Internet and broadband, have the potential to contribute positively to protecting women's human rights, and to their economic, social and political empowerment and development by, among other things, lowering information costs, creating information goods and expanding information bases, and boosting financial independence and productivity.¹¹

Addressing the gender gap in Internet access and use can not only deliver significant benefits for women and societies but also business and the economy. Mobile is the dominant platform for Internet access in many parts of the world and the GSMA estimates that closing the gender gap in mobile phone ownership and usage in low- and middle-income countries could unlock an estimated USD 170 billion market opportunity for the mobile industry from 2015 to 2020.¹² Closing the gender gap in Internet access and use more broadly is an even greater commercial and economic opportunity.

Women's digital inclusion can help to catalyse broader gender equality in social, economic and political dimensions — benefiting not only women themselves, but also their communities and the broader economy. As the Broadband Commission's Working Group on Broadband and Gender put it in 2013:¹³

Expanding women's access to ICT can enhance the reach of policymakers to a far broader population base, as women are more likely to take time to inform others and reflect such knowledge in family and community planning. By the same token, increased access will also give women distinct voice in development planning and allow them to be active participants in having gender-aware policies and programmes at the local and national levels.

The importance of gender equality and empowerment, along with the potential role of the Internet and ICTs as critical enablers of sustainable development, have also been affirmed in the 2030 Agenda for Sustainable Development, which was adopted by the UN in 2015. A target for universal and affordable access to ICTs in LDCs by 2020 is contained in goal 9c of the

¹² GSMA, 2015:7.

¹⁰ ITU, 2016. The gender gap estimated by the ITU represents the difference between the Internet user penetration rates for males and females relative to the Internet user penetration rate for males, expressed as a percentage.

e.g., A4AI, 2016; IGF BPF, 2016; World Bank, 2016; UNCTAD, 2015; Web Foundation, 2015; etc.

³ Broadband Commission Working Group on Broadband and Gender, 2013:11.

Agenda. Goal 5 of the Agenda sets targets for gender equality and the empowerment of women and girls, including a target to enhance the use of enabling technology, in particular ICT, to promote women's empowerment.

In 2015, the outcome document of the high-level meeting of the UN General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society (WSIS) similarly encouraged stakeholders to ensure 'the full participation of women in the information society and women's access to new technologies', and stressed the need for immediate measures to achieve gender equality in Internet users by 2020.¹⁴

The importance of addressing gender discrepancies in access has been addressed in a number of recent reports on the topic, including by the APC, GSMA, Internet Governance Forum (IGF), ITU, LIRNE*asia*, Research ICT Africa, UN Women, the Web Foundation, and the World Bank.¹⁵

The World Bank, for instance, writes in its *World Development Report 2016: Digital Dividends* that, while digital technologies can empower women economically and socially, gains will not be automatic and need to be complemented with 'analog changes that address the underlying barriers to women's employment,

voice, and agency'. It takes the view that interventions around digital technologies will be more effective if they are more gender-informed.¹⁶

In the ITU and UN Women's Action Plan to Close the Digital Gender Gap,¹⁷ stakeholders are encouraged to unify efforts and build synergies across international development processes and efforts towards closing the digital gender gap.The Plan notes that:

Women's equal and meaningful participation in the digital society is seen as both integral to the realization of women's rights in the 21st century, as well as the realization of a just, inclusive and rights based information society and to achieve global objectives around gender equality and women's empowerment by 2030.

While recognising the potential of broadband and the Internet for women's development, it is equally important to investigate and understand the barriers that prevent or inhibit women from gaining access to the Internet, and benefitting from and being empowered by access. Existing gender disparities and social norms that influence women's roles, status, empowerment, and access to education and income – among other things – have significant effects on gender digital divides and the barriers to Internet access and use that women face.¹⁸

- ¹⁴ UNGA, 2015a.
- ¹⁵ See the Bibliography for a reading list of relevant recent literature.
- ¹⁶ 2016:134.
- ¹⁷ ITU & UN Women, 2015.
- ¹⁸ e.g., IGF BPF, 2016.

Recommendations for Addressing the Gender Gap in Internet and Broadband Access and Use

Targeted action by a range of stakeholders is required to address the gender gap in Internet access and use. This report sets out recommended actions that stakeholders should take to help deliver on internationally agreed goals and commitments which aim to bridge gender digital divides and to support sustainable development.

The recommendations in this report, which are the outcomes of a collaborative and multi-stakeholder process, relate primarily to overcoming the barriers women face when accessing and using the Internet and broadband.

The following recommended actions fall into four groups:

• The first group is concerned with the need for stakeholders to gain a better understanding of relevant contexts by supporting the collection, tracking and analysis of sex-disaggregated **data** on Internet access and use.

- The second group is concerned with the integration of gender perspectives in relevant **strategies**, **policies**, **plans**, **and budgets**.
- The third group seeks to address **barriers** related to affordability, threats that hamper access and use, digital literacy and confidence, and the availability of relevant content, applications and services.
- The fourth and final group concerns the need for supporting stakeholders to **collaborate** more effectively in addressing digital gender gaps by sharing good practices and lessons learned.

These groups are represented in Figure 1 below. Other barriers, including the limited presence of women in the technology sector (not least in positions of decision-making), are also important and need to be addressed, but fall outside the primary focus of this report.



Figure 1: Recommendation areas

Understand the context: sex-disaggregated data on Internet access and use

The challenge

Sex-disaggregated data on Internet access and use are currently limited despite such data being critical to understanding and measuring the digital gender gap and informing policy and business choices which can address it. Unless data are sex-disaggregated, gender differences are masked, a proper understanding of the reasons for gender gaps cannot be achieved, and inappropriate policy-making, targets, and business choices for stakeholders are more likely to result. Conclusions drawn from limited data may be further clouded because different measures of gender inequality in access to ICTs can lead to unclear or conflicting findings.¹⁹

Many of the barriers women face when accessing and attempting to benefit from the Internet are closely related to social and economic circumstances that are not only deeply ingrained, but also difficult to measure quantitatively.²⁰ Barriers differ greatly according to contextual factors such as geography and culture, which complicate comparisons between countries.²¹ Men's and women's experiences when using the Internet also vary, as do data usage patterns between them.²²

While existing indicators aimed at measuring and studying ICTs for development can be used to document and identify variations in access and use, there are still no globally representative data sets on Internet access that are also sex-disaggregated.²³ The availability of data sets concerning the ways in which women access and use the Internet is limited,²⁴ with national statistical systems in many countries lacking the resources to gather sex-disaggregated data, while few countries and/or companies publish or share such data.

¹⁹ Broadband Commission Working Group on Broadband and Gender, 2013:6, 16.

²⁰ GSMA, 2015a:59.

²¹ c.f. UNESCO & Intel, 2014:3.

²³ c.f. A4AI, 2016:34; GSMA, 2015:2; UNCTAD, 2015:63; Web Foundation, 2016; Broadband Commission Working Group on Broadband and Gender, 2013:7.

²⁴ Cummings & O'Neil, 2015:5.

Broadband Commission Working Group on Broadband and Gender, 2013:23.

Recommendations to stakeholders

More detailed and consistent evidence concerning the digital gender gap is needed in order to inform policy and practice, particularly at national and sub-national levels. The Working Group's recommended actions to address data gaps are intended to improve stakeholders' general understanding of the issues and contexts relevant to women's ability to access and use of the Internet. These actions will facilitate focused policy and business decisions that address women's needs more effectively. The Working Group's proposed actions include:

- **Collecting, analysing, and tracking data**: The collection of robust, reliable, accurate, and timely sex-aggregated data is a crucial step in understanding the gender digital divide and measuring progress in addressing the issue. The Working Group calls on stakeholders to collect, analyse, and track sex-disaggregated data on Internet access and use. It recommends that stakeholders should support efforts to do so, that data should be accessible and collected in accordance with international guidelines, and that data gathering should be done in a manner that enables regular comparisons over time and between countries.
- **Researching women's access to and use of the Internet**: The Working Group calls on stakeholders to research women's access to and use of the Internet to improve understanding of the needs, circumstances, and preferences of women in different local contexts, and the factors limiting women's access to and use of the Internet, including cultural and social norms. This is critical in enabling effective and appropriately focused policy and strategies which address women's needs, priorities, and preferences in the diverse local contexts in which they live.
- **Publishing and sharing data and research:** The pace of technological development that characterizes ICTs means that flexible and responsive polices and strategies are required which are driven by accurate, up-to-date information that is shared between stakeholders. The Working Group recommends that sex-disaggregated data and research should be

published and shared among stakeholders in a safe and secure manner, within the limits of data protection requirements, privacy considerations, and commercial confidentiality.

The recommended actions for each stakeholder group are set out in the table below

G

Private

sector

policy-makers

Collect, analyse and track sexdisaggregated data related to Internet access and use in national official statistics databases and ensure that indicators to measure Internet access and use from a gender perspective are integrated into existing official data collection requirements

Support and conduct robust, reliable, accurate and up-to-date research concerning women and girls' access to and use of the Internet to better understand the needs, circumstances and preferences of women and girls in different contexts and the factors enabling and limiting women and girls' access to and use of the Internet (including cultural and social norms)

H

Use big data

to measure

Internet use.

women

and girls'

Publish sexdisaggregated data in a safe and secure manner and within the limits of data protection requirements/ privacy considerations

Conduct consumer insights research to better

for the different women in each market

understand the needs, circumstances and preferences

of women and girls and the factors limiting women

and girls' access to and use of the Internet, including



Ensure that **national data** to measure Internet access and use from a gender perspective is collected in accordance with international guidelines, is openly accessible and undertaken in a manner that enables regular comparisons over time and between countries

Ð

Assess baseline indicators for all strategies, policies and plans related to internet access and use and put in place measures to ensure that they are providing relevant, timely sex-disaggregated data which can be used for the development, implementation and measurement of future policies, strategies and plans



Share sex-disaggregated

data with other stakeholders

in a safe and secure manner

and within the limits of data

Support efforts to

data to measure

Internet access

and use from a

are collected in

accordance with

regional and global

gender perspective

international guidelines

protection requirements/

privacy considerations

Consider sharing sex-disaggregated data

with other stakeholders in a safe and secure manner and within the limits of data protection requirements/ privacy considerations and commercial confidentiality

[] Non-Governmental

Organizations

Inter-Governmental

Organizations

Collect, analyse and track sex-disaggregated

customer data related to Internet access and use (e.g. by tracking the gender composition of customer bases, analysing existing data with a gender lens and integrating gender questions into existing surveys)

0

Ð

3

For all Internet-related initiatives, collect, analyse and track sex-disaggregated data related to Internet access and use and ensure that indicators to measure Internet access from a gender perspective are integrated into existing data collection activities

Support Member States in

data related to Internet

access and use at national

level and encourage them to

include indicators to measure

Internet access from a gender

perspective into their existing

data collection requirements

the collection, analysis and

tracking of sex-disaggregated

Ð

Collect, analyse and track

sex-disaggregated data

and use in all relevant

activities and include

indicators to measure

Internet access from a

gender perspective in

requirements

existing data collection

related to Internet access

Support and conduct robust, reliable, accurate and up-to-date research concerning women and girls' access to and use of the Internet to better understand the needs, circumstances and preferences of women and girls in different contexts and the factors enabling and limiting women and girls' access to and use of the Internet (including cultural and social norms)

F



Support and conduct robust, reliable, accurate and up-to-date research concerning women and girls' access to and use of the Internet to better understand the needs, circumstances and preferences of women and girls in different contexts and the factors enabling and limiting women and girls' access to and use of the Internet (including cultural and social norms)

3 Publish sexdisaggregated data in a safe and secure manner and within the limits of data protection requirements/ privacy

considerations

Analyse gender considerations in public and private sector **policies** in relation to ICT

0, ensure that **national**,

Facilitate regular international comparisons over time and between countries

Publish sex-disaggregated data in a safe and secure manner and within the limits of data protection requirements/

privacy considerations

Academia/research institutions

Collect, analyse and

track sex-disaggregated data related to Internet access and use and conduct case studies

Support and conduct robust, reliable, accurate and up-to-date research concerning women and girls' access to and use of the Internet to better understand the needs, circumstances and preferences of women and girls in different contexts and the factors enabling and limiting women and girls' access to and use of the Internet (including cultural and social norms)

20

A number of members of the Broadband Commission Working Group on the Digital Gender Divide have made commitments to take forward some of the recommended actions specified above:

- A4AI, the Web Foundation, GSMA, • and **APC**, agreed to collaborate to develop a set of baseline indicators on the gender digital divide, which they will promote amongst research institutions and government stakeholders. This will build on existing recommendations for gender-specific indicators and methodologies taking into consideration previous efforts and guidelines produced by ITU and the Partnership on Measuring the ICTs for Development Task Group on Gender. Work on these indicators will start immediately and is intended to be finished by the third quarter of 2017.
- USAID agreed to publish its gender digital divide survey toolkit, which supports the collection of subnational disaggregated data. It has also agreed to encourage its field missions to use any standardised metrics and tools that are developed by the Working Group.
- ITU agreed to continue to collect and publish gender disaggregated data on Internet penetration and Internet users, as well as to estimate the digital gender gap in Internet use. This follows efforts of ITU and other Members of the Partnership on Measuring the ICTs for Development to collect internationally comparable gender-disaggregated ICT statistics.

• **APC** is undertaking a global mapping of actors and initiatives working on gender and ICT to identify key issues and gaps, which includes a focus on access.

Besides these commitments, the Working Group has identified the need for stakeholders to work collectively in pursuit of the following actions:

- To recommend a set of questions and indicators that can be collected and monitored at global, regional and national levels to measure access and use from a gender perspective, based on existing recommendations for genderspecific indicators as well as proposed new indicators.
- To use the ongoing work started in 2012 by the Partnership on Measuring the ICTs for Development and its Task Group on Gender (TGG), which has defined gender-related ICT indicators and TGG recommendations to continue the collection of ICT data at the individual level and sexdisaggregated ICT data as key to obtaining gender-related ICT statistics.
- To support the development and maintenance of platforms for storing and sharing gender-disaggregated data on Internet access and use.
- To develop a gender ICT index which enables regular comparisons between countries and over time.

Integrate a gender perspective in strategies, policies, plans and budgets

The challenge

Strategies, policies, plans and budgets that explicitly address women's needs, circumstances, capabilities and preferences are essential if governments, businesses and other stakeholders are to tackle the digital gender gap effectively.²⁵ Such policies must reflect the diverse contexts of different countries and localities, and women's needs must be at the heart of policy and programme design, not incidental or supplementary to it.

Stakeholders have often neglected to develop adequate or holistic strategies that ensure gender equality in ICTs.²⁶ Gender-related policies, strategies and action plans frequently fail to acknowledge the importance of ICTs and broadband as enabling tools and are often disconnected from ICT-related policies.²⁷ At the same time, strategies, policies and plans aimed at promoting broadband adoption and access often do not have a gender dimension and fail to address women's needs, circumstances, capabilities and preferences.²⁸

Institutions too, often lack the capacity and/or mechanisms to develop and deliver gender-responsive policies and strategies efficiently. Women and relevant communities are often not consulted, and relevant structures for ensuring accountability or effective cooperation amongst stakeholders may not exist. Institutions may also not be sufficiently flexible to meet the needs of fast-changing ICT environments, as well as of effective implementation and enforcement.²⁹

- c.f. Web Foundation, 2015:42.
- ²⁶ GSMA, 2015a:62.
- ²⁷ Broadband Commission Working Group on Broadband and Gender, 2013:28.
- ²⁸ A4AI, 2016:34.
- ²⁹ c.f. Cummings & O'Neil, 2015:14.

Recommendations to stakeholders

The Working Group's recommended actions are intended to help ensure that an explicit focus on gender equality is integrated effectively in strategies, policies, plans and budgets, and that these policies and strategies meet women's needs, circumstances, capabilities and preferences. The Working Group's proposed actions include:

- Establishing gender equality targets for Internet and broadband access and use: The integration of gender equality targets and key performance indicators across all Internet-related strategies, policies, plans, projects and budgets is vital to addressing the gender digital divide effectively. The Working Group calls on stakeholders to ensure that ICT/broadband access targets are included in gender equality and other related strategies, policies, plans and budgets. To ensure consistent action and progress, it further recommends that stakeholders should implement clear accountability structures to ensure targets are delivered and women are supported in accessing and using the Internet and broadband.
- Assessing strategies, policies, plans and budgets for gender equality considerations: Outdated and/or ill-conceived strategies, policies, plans and budgets may hamper initiatives promoting access for women. The Working Group recommends that stakeholders use gender analysis tools to assess and develop strategies, policies, plans and budgets to ensure that gender equality considerations are sufficiently reflected and prioritised.
- Consulting and involving women as well as relevant local communities and experts: Women's needs must be at the heart of policy and programme design to overcome all aspects of the digital gender divide. To ensure that policy development is centred on women and their needs in diverse contexts, the Working Group recommends that stakeholders consult and involve women and local communities, gender equality advocates and experts, as well as researchers and relevant NGOs, from the outset in the development of strategies, policies, plans and budgets.

The recommended actions for each stakeholder group are set out in the table below

m

F

Ð

policy-makers

Include gender equality targets Ensure ICT/ across all ICT/broadband strategies. broadband access policies, plans and budgets to targets are included ensure they support women and in gender equality girls in accessing and using the and other related Internet and broadband; along with strategies, policies, clear accountability structures to plans and budgets ensure targets are delivered (e.g. education)

B

Private sector

Ð

9,

Ē

Make women part of the business strategy including setting targets and key performance indicators to ensure appropriate focus on women and girls accessing and using the Internet; along with clear accountability structures to ensure targets are delivered

Ð

Non-Governmental Organizations

 $\mathfrak{O}_{\mathfrak{Q}}$

 \mathbf{M}

Include gender equality targets and key performance indicators across all Internetrelated projects and plans to ensure they support women and girls in accessing and using the Internet: along with clear accountability structures to ensure targets are delivered

strategies, policies and budgets $\mathfrak{G}_{\mathfrak{Q}}$

III

Assess business strategies, policies and plans

to ensure that a focus on women customers is

customers in the future development of all

sufficiently reflected and prioritised, and establish

processes for ensuring a consideration of women

strategies, policies, plans and budgets (including

those related to products, services and marketing)

Use gender analysis tools to assess projects

and implementation plans and ensure that

reflected and prioritised, and establish

processes for ensuring gender analysis is

included in the future development of all

gender equality considerations are sufficiently

Use gender analysis tools to **assess**

strategies, policies and implementation

plans and ensure that gender equality

considerations are sufficiently reflected

and prioritised, and establish processes

for ensuring gender analysis is included

strategies, policies, plans and budgets

in the future development of all

Academia/research

institutions

Inter-Governmental Organizations

Encourage and support Member States to include gender equality targets across all ICT/broadband and other related strategies, policies, plans and budgets to ensure they support women and girls in accessing and using the Internet and broadband; along with clear accountability structures to ensure targets are delivered

Include a gender

perspective in academic research programmes focused on ICT/broadband access and use

Analyse gender considerations in policies

related to ICT

Share findings

proactively in formats easily accessible and usable for other stakeholder groups

and cooperation between academic and research

ΠÎ.

Consult and involve women and local communities, as well as gender equality advocates and experts, from the outset in the development of strategies, policies and budgets to ensure policy development is centred on women

A

Ð

Consult and involve women and local communities as well as researchers and NGOs involved in gender equality and/ or women's rights in ICT from the outset in the development of products, services and pricing strategies to drive uptake amongst women customers

implement policies to assure gender equality across the business and its activities

Promote and

r-T

Ð Advocate for mainstreaming gender equality in all strategies, policies, plans and budgets by all stakeholders

Consult and involve women and local communities as well as researchers and NGOs involved in gender equality and/or women's rights in ICT from the outset in the development of projects and plans to ensure strategy development centred on women and their needs in different contexts

30

Consult and involve gender equality advocates and experts from the outset in the development of strategies, policies and budgets to ensure policy development centred on women

Promote exchange centres, policy-makers

Use gender analysis tools to assess strategies,

policies and implementation plans and ensure

that gender equality considerations are sufficiently

reflected and prioritised, and establish processes for

ensuring gender analysis is included in the future development of all strategies, policies and budgets.

and the private sector

A number of members of the Broadband Commission Working Group on the Digital Gender Divide have made commitments to take forward some of the recommended actions specified above:

- A4AI and the Web Foundation agreed to develop a genderresponsive ICT policy curriculum to train policy-makers across regions in key policy areas to address the digital gender gap. They have already started the development of this curriculum with the input of several partners who are being interviewed to gather perspectives on important elements of effective gender-responsive policies. They intend to pilot the first draft of the curriculum during an upcoming workshop for West Africa policymakers in May 2017 in Senegal. The curriculum will be made available to partners, and will integrate the Baseline Gender Indicators (discussed in Recommendation 1 above) and other guidance on how to integrate gender considerations across all policy themes covered in national ICT policies and broadband plans.
- **GSMA** agreed to take forward the Working Group's recommendations for government stakeholders by developing them into a practical training course for government officials and regulators. This course will help participants develop a plan to implement the Working Group's recommended policy/regulatory actions in their respective countries. To achieve scale, it will be rolled out through GSMA's Capacity Building partner network and on GSMA's online portal for remote learning (www.gsmatraining.com).
- **ITU** agreed to work closely with its Member States to measure and promote progress towards ITU's Connect 2020 Agenda, and specifically Goal 2, which is concerned with bridging the digital

divide and providing broadband for all, and Target 2.5.A, which sets a target that "Gender equality among Internet users should be reached by 2020". The assessment of progress toward this target is and will continue to be done through the ITU performance management system, using data from the ITU's annual Measuring the Information Society Report.

- **ITU** agreed to strengthen the reporting and monitoring of gender equality within the ITU with the support of the ITU Gender Dashboard, a reporting and monitoring tool that supports analysis processes. The tool aims to ensure that gender equality is included in the future development of ITU's strategy, policies and budgets by gathering data including on ICT connectivity indicators disaggregated by gender. It has also agreed to continue to support the ITU Women in Standardization Expert Group (WISE) to further encourage the inclusion of a gender perspective in the work of all ITU-T activities and groups as well as to expand the Network of Women for the World Radiocommunication Conference (NOW4WRC) to grow women's participation and contribution at those events.
- VimpelCom agreed to integrate a gender perspective into a number of its plans and programmes, particularly those related to financial inclusion and entrepreneurship. The company will launch financial services in Algeria, Kyrgyzstan, and Tajikistan and will aim to include women as a target segment of these services, while also measuring uptake by women.
- UNESCO has developed Media and Information Literacy (MIL) Policies and Strategies Guidelines with gender equality perspectives, aimed at policy-makers of all countries. Through this tool, UNESCO agreed to partner with Members States in

order to integrate MIL with gender perspectives in formal and informal education.

- **USAID** agreed to release and share its gender digital divide staff training module, which supports the integration of gender into policies and sharing of good practices and lessons.
- The United Nations Foundation's Digital Impact Alliance (DIAL) is developing toolkits on the Principles for Digital Development to help implementing organizations and

donors integrate and operationalize the Principles into their digital development programmes. These toolkits will incorporate a gender lens to ensure that all resources, including recommendations, guidance and case studies, are inclusive.

Besides these commitments, the Working Group has identified the need for stakeholders to work collectively to provide substantive guidance on how to integrate gender into Broadband Plans by recommending approaches which might be replicated effectively in other contexts.



Address the barriers

Studies of the gender gap in Internet access and use show that women face a number of inter-related barriers that inhibit access to and use of the Internet.³⁰ These barriers impede women from realising the full social and developmental value of the Internet and technologies for their lives, with consequential impacts not just on themselves but also on their communities and the wider economy. These barriers include (the lack of) affordable access, issues around safety, digital literacy and confidence, as well as the availability of relevant content, applications and services.

It is important to recognise that the digital gender divide is driven by a complex set of social, economic and cultural barriers. The complexity of this range of barriers requires a holistic approach if it is to be effectively addressed. Strategies should, importantly, also seek to confront the structural inequalities between men and women in societies.

3a: Affordable access

The challenge

Connectivity and device costs have a significant effect on women's ability to benefit from the Internet, as women often have lower incomes, less financial independence, and limited access to external sources of finance.³¹ As a result, women in many countries are more

likely to have access to poorer quality devices and to obtain these later than their male peers.³² While device sharing and borrowing might provide women with a certain level of access, it fails to provide them with the privacy to access important (and potentially controversial) information, for instance information pertaining to sexual or maternal health. It can also limit the ability of borrowers to gain technical literacy skills and to use life-enhancing services.³³

Women may find the Internet particularly difficult to access in areas where it may be predominantly available outside the home or in locations that are unsafe or inaccessible, and/or where social or cultural norms and safety concerns may constrain women's freedom of movement and ability to visit, for example, public access facilities. Public access facilities at schools, libraries and/ or other community anchor institutions are particularly important for those who cannot afford their own devices or data. and can provide further opportunities for training and capacity development.³⁴ But while models of public access can offer simple yet effective means for promoting broader access, a number of factors limit the success of such facilities'. These include funding difficulties, operating hours, the location, safety and even name of the facility.³⁵

It will be difficult to achieve universal access in countries and districts where there is poor telecommunication network deployment, where electrical power is expensive or in short supply, and/or where un(der)competitive

³⁰ e.g., IGF BPF, 2016; GSMA & LIRNEasia, 2015:15.

AAAI, 2016:38; APC, 2015d; GSMA, 2015a:44; Broadband Commission Working Group on Broadband and Gender, 2013:21.
 A4AI, 2016:19.

³³ GSMA, 2015:44.

³⁴ IGF. 2017.

^{35 - 6} A 4 A L

³⁵ c.f. A4AI, 2016:25; APC, 2015d; Cummings & O'Neil, 2015:9; Broadband Commission Working Group on Broadband and Gender, 2013:40; ITU, 2013.

markets and inefficient spectrum allocation policies reduce availability, increase cost, and limit quality of service. A lack of competition and conservative spectrum allocation policies also restrict the entry of new and small providers and their ability to use new technologies, while cumbersome licensing requirements, high taxes, and royalty stacking³⁶ can also inhibit access.³⁷

Recommendations to stakeholders

The Working Group's recommended actions to ensure affordable access address these different aspects of women's ability to gain access. These not only require that the cost of devices and services should be reduced, but also that network capacity, quality, and coverage should be improved. The Working Group's proposed actions include:

- **Improved understanding of affordability issues:** The Working Group recommends that stakeholders investigate the ways in which men and women from diverse population segments are impacted by affordability issues and develop strategies for achieving affordable access based on this understanding.
- Innovating to reduce the cost of devices and services: The Working Group recommends that stakeholders work to reduce the cost of devices for accessing the Internet, and of data, so that access becomes more affordable to women, particularly those with lower incomes. This can be supported through policy and regulatory measures, the design of products and services, and technical and/or market innovation.
- Improving network coverage, capacity and quality: The Working Group recommends that stakeholders should collaborate and support efforts to increase network coverage, capacity and quality, particularly in underserved areas where a significant proportion of the population are women. Steps towards achieving this should include improving access to existing capacity, promoting infrastructure sharing, releasing spectrum at affordable cost, and considering the use of public finances and/or Universal Service Funds (USFs) to incentivise the rollout of, or access to, infrastructure.
- **Providing public access facilities**: The Working Group recommends that stakeholders should support and invest in the provision of safe and accessible public access facilities to serve women.

30

³⁶ Royalty stacking occurs when a company must pay multiple royalties because its device, or components within its device (e.g. a smartphone), may infringe on an existing patent (A4AI, 2016:19).

⁷ A4AI, 2016:12, 19; APC, 2015d & 2015b; Broadband Commission Working Group on Broadband and Gender, 2013:40.

The recommended actions for each stakeholder group are set out in the table below

Î

m

Ð

Private

sector

Ð

policy-makers

Develop strategies Implement policy and for achieving regulatory measures affordable Internet to help ensure that and broadband access providers can offer for women and girls data and devices for that are based on an accessing the Internet understanding of at prices that are the ways in which affordable to women population segments and girls, particularly for those with lower are impacted by affordability issues incomes

III

Design products and services at

price points that help ensure that

the cost of data for accessing the

Internet is affordable to women and

girls, particularly for those with lower

Support approaches that help ensure

that the cost of data and devices for

accessing the Internet is affordable

to women and girls, particularly for

those with lower incomes

incomes (e.g. through pricing plans

and promotional offers)

Ð

Encourage increases in **network coverage**, capacity and quality, particularly in underserved areas where a significant proportion of the population are women and girls, by among other things facilitating access to **measures to encourage innovation** that reduces the cost of available capacity, promoting infrastructure sharing, releasing spectrum at affordable cost and considering the use' of public finances/ Universal Service Funds to incentivise the rollout of, or access to, infrastructure in underserved rural areas

E

Design solutions that

devices for accessing

and girls (e.g. through

financing mechanisms

and/or low-cost devices)

Æ

women and girls.

the Internet for women

reduce the cost of

H

a significant proportion of the population are

Support and invest in the provision of safe and accessible public access facilities to serve women and girls

Î Implement measures to

encourage innovation that reduces the cost of broadband and Internet access and use for women and girls, while also meeting their needs (e.g. by establishing a predictable, equitable and transparent regulatory environment for stakeholders and investors)

Support and invest in the provision of safe and accessible customer access facilities to serve women and girls

Support the provision of safe and accessible public access facilities to serve women and girls

Ð Support efforts to increase network coverage, capacity and quality as well as access to existing capacity, particularly in underserved areas where

Ð Develop initiatives for achieving affordable Internet access for women and Non-Governmental girls that are based on an **understanding** of the ways in which population segments are impacted by affordability issues

Develop strategies for

access for women and

girls that are based on an

achieving affordable Internet

understanding of the ways in

which population segments are

impacted by affordability issues

0,

Organizations

Inter-Governmental Organizations

 $\mathfrak{S}_{\mathfrak{Q}}$ Encourage and support Member States to develop strategies for achieving for women and girls which are based on an understanding of the ways in which population segments are impacted by affordability issues

30 Encourage Member States to support efforts to ensure that the cost of data and devices for accessing the Internet is affordable to women and girls, particularly for those with lower incomes; to increase network coverage, capacity and quality, particularly in underserved areas where a significant population are women and girls; and to provide safe and accessible public access facilities to serve women and girls

0 Encourage Member States to invest in approaches and innovation that reduce the cost of, or increase access to,

Increase network coverage, capacity and

particularly in underserved areas where a

(e.g. through infrastructure sharing and

energy-efficient and renewable energy

networks in off-grid regions)

significant population are women and girls

quality as well as access to existing capacity,

broadband and Internet access and use for women and girls, while also meeting their needs

Academia/research institutions

Research and document the ways in which men and women from diverse population segments are impacted by affordability issues and publish the findings in policy-maker and user-friendly formats

affordable Internet and broadband access

Recommendations for action: bridging the gender gap in Internet and broadband access and use

A number of members of the Broadband Commission Working Group on the Digital Gender Divide have made commitments to take forward some of the recommended actions specified above:

- **GSMA** has made a commitment to help take forward some of the recommended actions specified above by supporting the Connected Women Commitment Initiative. This initiative enables mobile operators to drive an effort to reduce the gender gap in mobile Internet and mobile money by making formal commitments to increase the proportion of women in their mobile Internet and/or mobile money customer base by 2020.
- **APC**'s Global Information Society Watch 2017 will be focused on community access networks, which will include a gender perspective. This edition is expected to contain 60 country reports and five thematic reports on various aspect of access and development and will be published during IGF 2017.
- **APC** is developing a local connectivity access project, with research and advocacy components, that will include a gender perspective to understand barriers, opportunities and best practices to foster the growth of new models for the provision of local access which address affordability and coverage barriers.

Besides these commitments, the Working Group has also identified the need for stakeholders to work collectively to ensure affordable broadband access and use specifically for women.

3b: Addressing threats that prevent access and use

The challenge

Studies show that fears concerning safety and harassment are significant barriers that inhibit some women from benefitting from or even wanting to access the Internet. Women can face concerns of physical violence in respect of devices they own or borrow, including vulnerability to theft.³⁸ They may struggle to access public access facilities due to unsafe roads or because facilities are in some way considered unsuitable for women. Social or cultural norms and safety concerns may further constrain women's freedom of movement; while access may be limited to 'walled gardens' containing only a limited selection of websites.³⁹

Once online, women can face fears of intimidation, harassment, violence, surveillance, and/or illegal data retention (among other things). While the Internet can give women access to empowering information, access can also provoke an online or offline reaction that increases women's vulnerability, especially if women are considered to transgress gender norms. Patriarchal and/or regressive groups may use digital ICTs to subordinate women and/or to dishonour and criticize their characters in public, while some women's families or communities may also feel uncomfortable with them accessing the Internet or using certain devices.⁴⁰ Safety concerns and a generalised perception of threat pertaining to Internet access and use should not, however, be used as an excuse for denying women access. Instead, the Internet's ability to empower women should be emphasised.⁴¹

e.g., APC, 2015a & d; Cummings & O'Neil, 2015:11; GSMA, 2015a:66; GSMA & LIRNEasia, 2015; IGF BPF 2015; Broadband
 Commission Working Group on Broadband and Gender, 2013:6.

³⁹ *ibid.*

⁴⁰ Cummings & O'Neil, 2015:10; IGF BPF, 2015.

⁴¹ IGF BPF, 2016:30.

Threats may inhibit women from using and benefitting from the Internet, may impact on how women use ICTs, discourage them from expressing their creativity, prevent them from expanding their social capital or seeking political expression, and may lead to general self-censorship.⁴² Despite these potentially serious consequences for women's rights, addressing and preventing online forms of abuse is not prioritised in many countries' policy or development agendas, while mechanisms and institutions to monitor and prosecute threats that arise from online abuse and violence are often largely absent.⁴³ Many women – irrespective of the level of digital literacy skills they possess – also struggle to navigate the complex manners in which they can report online abuse, while online platforms are often criticised for taking unreasonably long to respond to queries and complaints.

Recommendations to stakeholders

The Working Group's recommendations to address threats are aimed both at promoting better understanding and awareness of the ways in which women experience threats, and ensuring that stakeholders help to make the Internet and its use safer for women. Access to Internet-enabled services and device ownership can be used in ways that actually enhance women's personal security. The Working Group's recommendations support innovative approaches to safety tools, reporting, and response mechanisms. Proposed actions include:

- **Researching and understanding threats**: Before threats that women face in accessing and using the Internet can be addressed and prevented, they have to be better understood. The Working Group recommends that stakeholders conduct research on the threats pertaining to women's ICT use, as well as cultural and social norms, that prevent women from accessing and using the Internet in different regions and social and cultural contexts.
- Increasing awareness of threats and how they can be addressed or reduced: The Working Group recommends that stakeholders make use of awareness campaigns, digital literacy programmes and/or formal education programmes/ curricula to raise awareness of the threats that prevent women from accessing and using the Internet, and how they can be addressed or reduced. These awareness and education activities should target both men and women and should seek to promote increased awareness of behavioural changes that can help address social and cultural norms that prevent women and girls from accessing and using the Internet.
- **Developing safety applications and services**: The Working Group recommends that stakeholders invest in applications and services that make it safer for women to access and use the Internet, while addressing issues of harassment, abuse and violence.
- **Strengthening protection measures and reporting procedures :** The Working Group recommends that stakeholders strengthen measures to protect women against ICT-mediated abuse and harassment; including through legal and policy frameworks that recognise and address ICT-mediated abuse, harassment and fraud, and through measures that promote and simplify access to justice. It is important that women are able to report online abuse easily and safely and that the response to their reports is expeditious and effective, without infringing fundamental rights and freedoms.

33

⁴² Web Foundation, 2016; IGF BPF, 2015; Broadband Commission Working Group on Broadband and Gender, 2013:24.

⁴³ IGF BPF, 2015:38-39; Web Foundation, 2015.

The recommended actions for each stakeholder group are set out in the table below

m

policy-makers

Support and conduct research on the threats, as well as cultural and social norms, that prevent women and girls from accessing and using the Internet in different social and cultural contexts, including those enabled through the use of ICTs as well as those that women and girls face online

Increase **awareness** of the threats that prevent women and girls from accessing and using the Internet and how they can be addressed or reduced through awareness campaigns, digital literacy programmes and in formal education programmes/curriculum (targeting both men and women in education and awareness activities)

III

Strengthen measures to protect women and girls against ICT-mediated abuse and harassment; including through legal and policy frameworks that recognise and address ICT-mediated abuse, harassment and fraud, and through measures that promote access to justice

Invest in and/or encourage the development of applications and services that make it safer for women and girls to access and use the Internet, addressing issues of harassment, abuse and violence, while ensuring that other fundamental freedoms and rights are upheld

m

Make it easy and safe for women and girls to **report** online abuse (and ensure that such reports are responded to quickly and effectively)

Private sector

[**H**]

Ð

B Conduct consumer insights

research to better understand the threats, as well as cultural and social norms, that prevent women and girls from accessing and using the Internet in each market

F

Participate actively in industry, government and NGO initiatives established to **protect** women and girls against ICT-mediated abuse and harassment

E

Develop applications and services that make it safer for women and girls to access and use the Internet, addressing issues of harassment, abuse and violence

6

Increase **awareness** of the threats that

(targeting both men and women in

education and awareness activities)

prevent women and girls from accessing

and using the Internet and how they can be

addressed or reduced through awareness

campaigns and digital literacy programmes

H

Make it easy and safe for women and girls customers to report online abuse (and ensure that such reports are responded to quickly and effectively) while ensuring that other fundamental freedoms and rights are upheld

Ð Support and invest in applications, services and other measures that make it safer for women and girls to access and use the Internet, addressing issues of harassment, abuse

Ð

Make it easy and safe for women and girls to **report** online abuse (and ensure that such reports are responded to guickly and effectively) while ensuring that other fundamental rights and freedoms are upheld

Conduct **research** on the threats, as well as cultural and social norms, that prevent women and girls from accessing and using the Internet in different social and cultural contexts, including those enabled through the use of ICTs as well as those that women and girls face online

 $\mathfrak{S}_{\mathfrak{A}}$

Ð

0, Inter-Governmental **Organizations**

Non-Governmental

Organizations

Conduct **research** on the threats, as well as cultural and social norms, that prevent women and girls from accessing and using the Internet in different social and cultural contexts, including those enabled through the use of ICTs as well as those that women and girls face online

$\mathfrak{S}_{\mathfrak{A}}$

Promote increased awareness of behaviour changes that can help address social and cultural norms that prevent women and girls from accessing and using the Internet and how the threats can be addressed or reduced through awareness campaigns and digital literacy programmes (e.g. through advocacy efforts)

Encourage Member States to strengthen measures at the national level to protect women and girls against ICT-mediated abuse and harassment; including through legal and policy frameworks that recognise and address ICT-mediated abuse, harassment and fraud, and through measures that promote access to justice

Academia/research institutions



Conduct **research** on the threats, as well as cultural and social norms, that prevent women and girls from accessing and using the Internet in different social and cultural contexts and how to prevent them as well as that women face when using the Internet and their impact. This includes those enabled through the use of ICTs as well as that women and girls face online and share findings with stakeholders

Motivate and train women and men to do research on the opportunities and threats related to their access to and use of the Internet

and violence

Recommendations for action: bridging the gender gap in Internet and broadband access and use

 \mathbb{N}

A number of members of the Broadband Commission Working Group on the Digital Gender Divide have made commitments to take forward some of the recommended actions specified:

- **ITU** agreed to continue its ongoing work on child online protection as guided by the Council Working Group on Child Online Protection, which includes the protection of girls and young women online.
- Commissioner Speranza Ndege • agreed to prepare an instrument and administer it to sample female students in her University. She also committed to interviewing female staff (both teaching and nonteaching), to analyse the data, and to share the findings.

Besides these commitments, the Working Group has identified the need for stakeholders to work collectively in pursuit of the following actions:

- To audit violence against women/ gender-based violence laws for inclusion of ICT-enabled violence/ abuse: and
- To specify measures to protect women against ICT-mediated abuse and harassment and promote access to justice (e.g., training of legal staff, etc.).

3c: Digital literacy and confidence

The challenge

Although the Internet and other ICTs may offer ways to overcome traditional barriers, gender disparities still prevent women benefiting from opportunities that the Internet can offer, and constrain their ability to gain more advanced online skills.⁴⁴ In many countries, a higher proportion of women than men are illiterate or have experienced lower levels of education.⁴⁵ Research studies suggest that women with such disadvantages often lack the digital skills or confidence needed to use the Internet, leading to them failing to gain access or restricting their use to a limited number of services and applications.46

Lower levels of technical literacy and confidence can compound other challenges. For instance, a lack of awareness of privacy and safety settings might make certain women more susceptible to threats online.⁴⁷ To learn how to use applications and services, women often rely heavily on social and family networks which may not only lack relevant digital skills themselves, but can even discourage women from learning due to negative perceptions of women using the Internet.⁴⁸ These factors may also contribute to women feeling that they lack the necessary control over technology.49

The barriers and challenges women face in building digital capacities differ substantially between regions, making 'one-size-fits-all' solutions across

c.f. GSMA, 2015b:11; Web Foundation, 2015;

- ⁴⁵ UNESCO, 2015:20.
- ⁴⁶ c.f. GSMA & LIRNE*asia*, 2015:15, 66; GSMA, 2015b:4; Web Foundation, 2015:4.
 ⁴⁷ GSMA & LIRNE*asia*, 2015:66.

48

- ihid 3 49
- World Bank, 2016:134.

geographies unfeasible.⁵⁰ However, the relevance of the curricula to women, women's ability to access ICT-related resources, and stereotypes that compel girls to self-select out of technology courses are all factors that impact women's ability to gain the skills needed to benefit from safe Internet access.⁵¹

Recommendations to stakeholders

The Working Group's recommendations to overcome barriers related to women's lack of digital skills and confidence are designed to help ensure that women become active Internet users. The Working Group's proposed actions include:

- **Understanding women's needs**: The Working Group recommends that stakeholders ensure that digital literacy and capacity-building initiatives consider women's needs, interests and local contexts in order to encourage strategic and meaningful use of the Internet.
- **Investing in education and capacity-building initiatives**: The Working Group recommends that stakeholders invest in public education and capacity-building initiatives that pay particular attention to increasing women's digital literacy and confidence, including women across all levels of education, income, and familiarity with ICTs and the Internet. Digital skills training should also be integrated in education (especially primary schools), with particular attention being paid to meeting the interests and advancement of women and girls.
- **Developing skills and confidence**: Women should be provided with ample opportunity to develop their digital skills and build confidence through different channels, including by accessing public facilities, leveraging existing initiatives and networks, and being supported to learn independently. The Working Group recommends that stakeholders should support the development of online content and services that are accessible to women with limited literacy, language and ICT-related skills, and confidence; and should ensure that women with lower literacy levels are included in the pilots and user testing of these services, including online government content and services.
- **Supporting educators**: The Working Group recommends that educators, teachers and local leaders should be trained to use tools and understand the benefits of delivering digital skills training to women in their communities; that stakeholders should invest in pre- and in-service training of teachers and educators to support their ongoing learning and development; and that the number of female teachers of ICT across all levels of education should be increased.
- **Supporting and promoting female role models**: The Working Group recommends that female role models should be promoted as leaders and Internet users within communities and amongst staff in decision-making positions.

50 UNESCO & Intel, 2014:3

⁵¹ Cummings & O'Neil, 2015:10; UNESCO & Intel, 2014:2.
The recommended actions for each stakeholder group are set out in the table below

m

policy-makers

Invest in public education

Ensure that digital literacy and education initiatives consider women and girls' needs, interests and local contexts in order to encourage strategic and women and girls across all meaningful use of the levels of education, income Internet which maximises and familiarity with ICT and its value to women and girls and minimises risks

Ð

3

<u>ا</u>

Train teachers, educators and other local leaders to use tools and understand the benefits of delivering digital skills training to women and girls in their communities, and support their ongoing learning and development

Provide women and girls with opportunities to develop their digital skills and confidence through different channels, including by accessing public facilities, leveraging existing initiatives and networks and supporting women and girls to learn on their own

III

Take steps to **make online** government content and services more accessible to women with limited literacy, language and ICT-related skills and confidence and ensure that women with lower literacy levels are included in the pilots/ models and user testing of these services

Develop and offer online

content and services that are

accessible to women with limited

literacy, language and ICT-related

skills and confidence and ensure

levels are included in the pilots and

that women with lower literacy

user testing of these services

m

m

Support and

female role

models as

Internet

leaders and

users within

communities

Π

promote

Integrate ICT technical/literacy skills and digital skills in education (especially primary schools), with particular attention being paid to meeting the interests and advancement of women and girls

Support and promote female role

(e.g. in marketing communications,

models as Internet users

making positions)

through women engaged in

customer outreach activities,

and the promotion of gender equality in staff and decision-

THE

initiatives that pay

the Internet

Ð

particular attention to

increasing women and

girls' digital literacy and

confidence, including for

Private sector

H

Ð

0,

Non-Governmental

Organizations

Invest in customer education initiatives that pay particular attention to increasing women and girls' digital literacy and confidence, including for women and girls across all levels of education, income and familiarity with ICT and the Internet (e.g.in marketing activities and through customer service representatives and retail outlets)

Ensure that digital literacy and capacity-building initiatives consider women and girls' needs, interests and local contexts in order to encourage strategic and meaningful use of the Internet which maximises its value to women and girls and minimises risks

Ensure that digital literacy and capacity-

building initiatives consider women

and girls' needs, interests and local

strategic and meaningful use of the

Internet which maximises its value to

women and girls and minimises risks

contexts in order to encourage

Encourage Member States

to ensure digital literacy and

capacity-building initiatives

girls and minimises risks

consider women and girls' needs,

order to encourage strategic and

meaningful use of Internet which

maximises its value to women and

interests and local contexts in

6

Ð

Provide women and girls with opportunities to develop their digital skills and confidence through different channels (e.g. at retail outlets, by accessing public facilities, by leveraging existing initiatives and networks and by supporting women and girls to learn on their own)

Œ

opportunities to develop their digital skills and confidence through different channels, including by accessing public facilities, leveraging existing initiatives and networks and supporting women testing of these services

Support approaches that make online content and services more accessible to women with limited literacy, language and ICT-related skills and confidence and ensure that women with lower literacy levels are included in the pilots and user

3

Support and

role models

and Internet

users within

communities

as leaders

promote female

Ð promote female

Support and role models as leaders and Internet users within communities

Inter-Governmental Organizations

Θ_{0} Invest in Member State capacitybuilding initiatives which pay particular attention to increasing

Invest in capacity-building

initiatives that pay particular

attention to increasing women and

girls' digital literacy and confidence,

all levels of education, income and

familiarity with ICT and the Internet

including for women and girls across

women and girl citizens' digital literacy and confidence, including for women and girls across all levels of education, income and familiarity with ICT and the Internet

Academia/research institutions

Research digital literacy barriers to using the Internet by women and girls' and approaches to increasing digital literacy and confidence in actively using the Internet including among women and girls across all levels of education, income and familiarity with ICT and the Internet and share findings with stakeholders

Support pre and in-service education of teachers and training of educators and the development of educational curricula to improve digital skills among women and girls

31 Support efforts to provide women and girls with opportunities to develop their digital skills and **confidence** through different channels, including by accessing public facilities, leveraging existing initiatives and networks and supporting women and girls to

learn on their own

Provide women and girls with

and girls to learn on their own

Increase the number of female teachers education

3 Support steps to make online content and services more accessible to women with limited literacy, language and ICT-related skills and confidence and ensure that women with lower literacy levels are included in the pilots and user testing of these services

of ICT across all levels of

Recommendations for action: bridging the gender gap in Internet and broadband access and use

37

A number of members of the Broadband Commission Working Group on the Digital Gender Divide have made commitments to take forward some of these recommended actions:

- Commissioner **Gloria Bonder** agreed to conduct research on girls' and boys' techno-biographies in order to gather more qualitative information on access to different applications, uses, meanings, and impact in learning and social relations. She hopes that this work will help produce recommendations for meaningful and relevant digital literacy in primary schools.
- ITU has a range of initiatives that include a focus on digital literacy, including its Digital Literacy Toolkit which supports Member States and sector members with assessment, design and implementation of policy pillars pertaining to digital inclusion; its collaboration with Telecentre. org; its Girls in ICT initiative; and its GEM-TECH Awards, an annual special achievement award for outstanding performers and role models in gender equality and mainstreaming in the area of ICTs.
- Microsoft is undertaking a range of activities focused on diversity and inclusion, including education and the development of skills.
 Examples of initiatives particularly aimed at work and girls include the programme YouthSpark and one of its activities, DigiGirlz.
- UNESCO has launched the MIL Massively Open Online Course (MOOC) for young girls and boys to empower them with necessary competence in media and information literacy (MIL), currently available in English and Arabic.

UNESCO agrees to support capacitybuilding for youth organizations to integrate MIL in the policy and operation of their strategy irrespective of their mandate. This includes youth organizations involved in promoting gender equality and women's empowerment.

 Through its YouthMobile initiative, UNESCO aims to encourage young people to fully participate in the digital world by developing their skills and confidence to develop mobile applications that address local issues of sustainable development. It pays particular attention to the gender gap in the access to the Internet and ICTs by developing specific projects in partnership with relevant existing local or global initiatives.

Besides these commitments, the Working Group has identified the need for stakeholders to work collectively to promote digital literacy and confidence.

3d: Relevant content, applications, and services

The challenge

Some women who are not connected to the Internet feel that they will gain little value from Internet access or content, while others cite the lack of relevant content as a reason for not making more extensive use of the Internet.⁵² Although the development of meaningful content and services is therefore a prerequisite for stimulating demand for ICT services by women, few organizations focus on producing content and services which are explicitly focused on women.⁵³ Many products have been developed and

⁵² c.f. Web Foundation, 2015; Broadband Commission Working Group on Broadband and Gender, 2013:25,

⁵³ Broadband Commission Working Group on Broadband and Gender, 2013:36; Microsoft, UNESCO, UN Women & ITU, 2014:6.

designed without sufficient attention being paid to women's circumstances, needs, capabilities, and preferences.⁵⁴ A better understanding of how women use the Internet should help policymakers and other stakeholders improve the relevance of services and content to women's needs.

Mobile money, e-government, agricultural market information, mobile learning and health are all services that could make the Internet more relevant to women. For example, ICTs offer governments ways of delivering public services in ways that are more targeted, allow better collection of data, and may enable women to overcome some barriers like physical distance. ICTs can provide farmers, many of whom are women, with easier access to some of the information that is vital to improving agricultural productivity, whether for subsistence or income.⁵⁵

However, there is often a lack of focus on potential female users in the design, testing and implementation of applications and services, and as a result many fail to benefit women. E-governance services and digital tools that aim to support citizens, for instance, are generally not designed with women's specific needs in mind, limiting their potential benefit to women's empowerment.⁵⁶

Recommendations to stakeholders

The Working Group's recommended actions seek to help increase Internet access and use among women by increasing awareness of the availability of beneficial content, applications, and services relevant to them. The Working Group therefore recommends action by all stakeholders to encourage the production of more relevant content, applications, and services by taking the following steps:

- **Building awareness:** Since a lack of perceived value can be a barrier to Internet access and use, the Working Group recommends that stakeholders help raise awareness of the potential benefits that can be achieved through women's access to and use of Internet-enabled content, applications, and services.
- **Developing relevant content and services:** To ensure women can benefit from the development of relevant content and services, and can also participate in their production, the Working Group recommends that stakeholders encourage and participate in the development of an ecosystem of quality, non-stereotypical services, applications, and content relevant to women which are designed with an understanding of women's wants and needs.
- **Consulting and engaging women:** A better understanding of the wants and needs of diverse groups of women, as distinct from men, will help stakeholders improve the relevance of content, applications, and services to women's needs. The Working Group recommends that stakeholders involve women from diverse backgrounds, including those in low income groups and those who do not currently make use of ICTs, in the design, testing and iteration of content, applications, and services.

⁵⁴ Cummings & O'Neil, 2015:5 & 10; UNESCO & Intel, 2014:2.

⁵⁵ Cummings & O'Neil, 2015:18; World Bank, 2015:ix & 37.

⁵⁶ APC, 2015c; Cummings & O'Neil, 2015:6; World Bank, 2015:15.

The recommended actions for each stakeholder group are set out in the table below

M

Government/ policy-makers

Build awareness of the potential **benefits** that can realistically be achieved through women and girls' access to and use of Internet-enabled content, applications and services that are available

III

Private sector

Ð

G

Ð

Build awareness of the potential benefits that can realistically be achieved through women and girls' access to and use of Internet-enabled content, applications and services that are available (e.g. through marketing activities)

Non-Governmental Organizations

Build awareness of the potential benefits that can realistically be achieved through women and girls' access to and use of Internetenabled content, applications and services that are available

Develop quality, non-stereotypical services, applications and content relevant to women and girls

Ð

and girls

Encourage the **development**

of an ecosystem of quality,

non-stereotypical services,

applications and content

relevant to women

and needs

30

Encourage the

development of an

ecosystem of quality,

non-stereotypical services,

relevant to women and girls

applications and content

Involve women from diverse

Develop quality, non-stereotypical

services, applications and

content relevant to women

understanding of their wants

Œ

and girls, designed based on an

backgrounds, including those in low income groups and those who do not currently make use of ICTs, in the design, testing and iteration of content, applications and services

 $\mathfrak{S}_{\mathfrak{g}}$

Inter-Governmental Organizations

and girls' access to and use of Internetenabled content, applications and services that are available

9

Academia/research institutions

40

understand the wants and needs of diverse groups of women versus men, and the different types of female users in each market. and share this with relevant stakeholders

Conduct research to better

Build awareness among Member States

realistically be achieved through women

of the potential benefits that can

Involve women from diverse

backgrounds, including those in low income groups and those who do not currently make use of ICTs, in the design, testing and iteration of government content, applications and services



Involve women from diverse

backgrounds, including those in low income groups and those who do not currently make use of ICTs, in the design, testing and iteration of content, applications and services

A number of members of the Broadband Commission Working Group on the Digital Gender Divide have committed to taking forward some of the recommended actions specified above:

- Commissioner Speranza Ndege agreed to prepare an instrument and administer it to a sample of male and female students in her university. The participants will be divided into two categories, those who are taking ICTrelated courses and those who are studying non-ICT related courses. She will also interview male and female staff members (both teaching and non-teaching), will analyse the data and publish or share the findings.
- UNESCO agreed to continue raising awareness of the potential benefits and uses of the Internet for women through ongoing media outreach. Examples include UNESCO's capacity-building workshops for

media managers and practitioners, its projects which help provide local radio stations' audiences with quality programming on issues of local concern as well as its work on Media and Information Literacy (MIL) Policies and Strategies Guidelines and on Gender-Sensitive Indicators for Media (GSIM).

• VimpelCom agreed to increase the availability of relevant applications by making its pregnancy app available in more of its markets and continuing the development of its mobile literacy programme in Pakistan by collaborating with more development partners in the country.

These actions could also be supported by stakeholders working collectively to conduct big data analysis of existing gender research on the wants and needs of women, including specific types of users (e.g. refugees and female migrant workers). Working together and sharing good practice and lessons

The challenge

The barriers preventing women from accessing and using the Internet are complex, varied, diverse, and interrelated.⁵⁷ Addressing the digital gender gap requires an approach that is located within economic, social, political and cultural contexts; that considers the interplay of various factors that impact whether women are able to access and benefit from ICTs; and that requires action by many different stakeholders.⁵⁸

As a result, addressing the digital gender gap requires action on various levels

and by many different stakeholders working together – governments and intergovernmental agencies concerned with ICTs and with development; businesses involved in the provision of handsets, networks and services; technical experts in ICTs, gender, development and statistical analysis; and the women and men who are directly concerned and the civil society organizations that support them. Cooperation between these stakeholders will be crucial in enabling the development of policies and business models that are targeted effectively towards women's needs.

Recommendations to stakeholders

The Working Group's final set of recommendations recognise the need for cooperation between all stakeholders to enable the development of policies and business models that are targeted effectively to meet women's needs; along with the need for effectively sharing lessons learned and good practice.

The Working Group recommends that all stakeholders:

- Develop and share tools, guidelines, case studies and other materials which can support national and international efforts to address the digital gender gap; and
- **Support and encourage multi-stakeholder cooperation** and sharing of expertise in national and international efforts to address the digital gender gap.

⁵⁷ c.f preceding sections; GSMA, 2015a:40; Broadband Commission Working Group on Broadband and Gender, 2013:21.

⁵⁸ c.f. A4AI, 2016:6; APC, 2015a; GSMA, 2015a:42; IGF BPF, 2015.

These actions could also be supported by stakeholders working collectively to organize regional and national meetings or workshops with diverse stakeholders to assess context-based needs, experiences, and resources in overcoming gender inequalities in access and uses of ICT and to mobilise stakeholders to implement concrete policies and programmes with that aim.

Relevant existing forums and events should be used to increase awareness, prioritisation and action on this issue as well as to share best practice, facilitate cooperation and explore how activities in this area can be scaled up. This could include at forums such as Mobile World Congress, the Commission on the Status of Women, World Economic Forum and the G20 Summits.

A number of members of the Broadband Commission Working Group on the Digital Gender Divide have committed to taking forward the recommended actions specified above, including:

• Through the Global Partnership for Gender Equality in the Digital Age (EQUALS) which is a global multistakeholder initiative to track and scale up initiatives and programmes to ensure that women and girls are equal participants in the digital technology revolution. Achieving equal access to digital technologies is a key action area of this partnership.

- Through the Partnership on Measuring ICT for Development, which brings together a number of United Nations and other international agencies, and is committed to improving the availability and quality of ICT data and indicators, particularly in developing countries, with gender lenses.
- **APC** is co-coordinating the IGF Gender Best Practice Forum's (BPF) work on integrating a gender perspective into multi-stakeholder discussions on access.
- The **ITU** will undertake further research and collect evidence on the gender and ICTs and SDG5 relevant references in ICT and broadband policies worldwide.
- **UNESCO** notes that various of its initiatives continue to foster global coordination and collaboration in areas of research, advocacy and visibility. Examples include the Global Alliance for Media and Gender (GAMAG) and the University Twinning and Networking Programme (UNITWIN) Network for Gender. Media and ICTs. UNESCO also agrees to emphasize inter-sectoral and inter-agency work in line with UNESCO's priorities; particularly in implementing gender equality, media and information literacy, and youthrelated activities.

Bibliography and further reading

This resource was compiled following successive rounds of input and invaluable contributions from Working Group members. The Working Group also considered analyses from other international organizations including the Council of Europe, the European Commission, various UN organizations, including UN Conference on Trade and Development (UNCTAD), UN Department of Economic and Social Affairs (UNDESA), and the Internet Governance Forum (IGF).

For the sake of transparency, a summary of the publically available resources received and used from these and other stakeholders is provided below:

A4AI. The 2015-2016 Affordability Report (2016). Available: http://1e8q3q16vyc81g8l3h3md6q5f5e. wpengine.netdna-cdn.com/wp-content/uploads/2016/04/A4AI-2015-16-Affordability-Report.pdf.

APC. Ending digital exclusion: Why the access divide persists and how to close it (2016). Available online: https://www.apc.org/en/pubs/issue.

APC. *Women's rights, gender and Internet governance* (2015a). Available online: http://www.genderit.org/sites/default/upload/issue_womenrights_digital.pdf.

APC. Unlocking broadband for all: broadband infrastructure sharing policies and strategies in emerging markets (2015b). Available online: https://www.apc.org/en/system/files/Unlocking%20 broadband%20for%20all%20Full%20report.pdf.

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

APC. Policy Options for Connecting the Next Billion: APC Submission to the 2015 IGF Intersessional (2015d). Available: https://www.apc.org/en/pubs/policy-options-connecting-next-billion-apc-submiss.

Broadband Commission. *Joint Statement: Working together to provide Internet access to the next 1.5 billion by 2020* (2016). Available: http://www.broadbandcommission.org/Documents/publications/ davos-statement-jan2016-en.pdf.

Broadband Commission. *Executive Summary: Cyberviolence against women and girls: a worldwide wake-up call* (2015). Available: http://www.broadbandcommission.org/Documents/reports/bb-wg-gender-discussionpaper2015-executive-summary.pdf.

Broadband Commission. *Doubling Digital Opportunities: Enhancing the Inclusion of Women & Girls in the Information Society* (2013). Available: http://www.broadbandcommission.org/documents/working-groups/bb-doubling-digital-2013.pdf.

Council of Europe. *Internet Governance – Council of Europe Strategy 2016-2019* (2016). Available: https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=09000016805c1b60.

Ericsson ConsumerLab: Women in ICT Latin America: ICT helps women have an easier work life (2016). https://www.ericsson.com/res/region_RLAM/press-release/2016/2016-03-07-iwd-en.pdf.

European Commission. *Women active in the ICT sector* (2013). Available: http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublication-Start?PublicationKey=KK0113432.

GSMA. *Bridging the gender gap: Mobile access and usage in low- and middle-income countries* (2015a). Available: http://www.gsma.com/connectedwomen/wp-content/uploads/2015/02/GSM0001_02252015_GSMAReport_FINAL-WEB-spreads.pdf.



GSMA. Accelerating digital literacy: empowering women to use the mobile Internet (2015b). Available: http://www.gsma.com/connectedwomen/wp-content/uploads/2015/06/DigitalLiteracy_v6_WEB_ Singles.pdf.

GSMA. *Mobile phones, Internet, and gender in Myanmar* (Joint GSMA Connected Women-LIRNEasia study) (2015). Available: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/02/GSMA_Myanmar_Gender_Web_Singles.pdf.

IGF. Best Practice Forum Gender: Gender and Access (2016). *Overcoming barriers to enable women's meaningful Internet access*. Output available at: http://www.intgovforum.org/multilingual/index.php?q=filedepot_download/3406/437.

IGF. *Policy Options for Connecting and Enabling the Next Billion(s)* – Phase II (2016). Output available at: http://www.intgovforum.org/multilingual/index.php?q=filedepot_download/3416/412.

IGF. Best Practice Forum Gender: Online Abuse and Gender-Based Violence Against Women (2015). Output available at: http://www.intgovforum.org/cms/documents/best-practice-forums/623-bpf-online-abuse-and-gbv-against-women/file.

INTEL. *Towards Gender Equality in Education Policies and ICTs: An Action Brief and Toolbox* (with UNESCO). (2014) Available: http://www.intel.nl/content/dam/www/public/us/en/documents/ corporate-information/gender-equality-education-ict-unesco-girl-rising.pdf.

INTEL. *Women and the Web* (2013). Available: http://www.intel.com/content/dam/www/public/us/en/ documents/pdf/women-and-the-web.pdf.

ITU. *ICT Facts and Figures 2016*. (2016). Available: http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2016.pdf.

ITU. Action Plan to Close the Digital Gender Gap (with UN Women) (2015). Available: https://www.itu. int/en/action/gender-equality/Documents/ActionPlan.pdf.

ITU. *Measuring the Information Society Report* (2015a). Available: http://www.itu.int/en/ITU-D/ Statistics/Documents/publications/misr2015/MISR2015-w5.pdf.

ITU. Connect 2020 for Global Telecommunication/ICT Development (2014). Available: http://www.itu. int/en/connect2020/Pages/default.aspx.

ITU. Connect a School, Connect a Community (toolkit) (2011). Available: http://connectaschool.org.

Cummings, C. & O'Neil, T. (2015). ODI: *Do digital information and communication technologies increase the voice and influence of women and girls? A rapid review of the evidence*. Available: https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9622.pdf.

ITU. Universal service funds and digital inclusion for all (2013). Available: http://www.itu.int/en/ITU-D/ Digital-Inclusion/Documents/USF_final-en.pdf.

Lee, H & Pollitzer, E. (2016, January 13). The Role of Gender-based Innovations for the UN Sustainable Development Goals.

Microsoft. *Girls in STEM and ICT Careers: The Path toward Gender Equality* (with UNESCO, UN Women, ITU) (2014). Available: http://www.unescobkk.org/education/ict/online-resources/databases/ ict-in-education-database/item/article/girls-in-stem-and-ict-careers-the-path-toward-gender-equality/.

Web Foundation. *Women's Rights Online: Translating Access into Empowerment* (2015). Available: http://webfoundation.org/wp-content/uploads/2015/10/womens-rights-online21102015.pdf

WIPO. Women and intellectual property (initiative). Available: http://www.wipo.int/women-and-ip/en/.

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

World Bank. Supporting women's agro-enterprises in Africa with ICT: A feasibility study in Zambia and Kenya (2015). Available: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/ IB/2015/04/29/090224b082c25eb5/1_0/Rendered/PDF/Supporting0wom00in0Zambia0and0Kenya.pdf.

UN. *The Sustainable Development Goals Report* (2016). Available: http://unstats.un.org/sdgs/report/2016/The%20Sustainable%20Development%20Goals%20Report%202016.pdf.

UNESCO. Mobile Phones & Literacy: Empowerment in Women's Hands – A Cross-Case Analysis of Nine Experiences (2015). Available: http://unesdoc.unesco.org/images/0023/002343/234325E.pdf.

UNESCO. *CONNECTing the dots: Options for Future Action. Outcome document* (2015). Available: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/outcome_document.pdf.

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

UNGA. 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 (A70.L33). (2015a, December 13). Available online: http://workspace.unpan.org/sites/Internet/Documents/UNPAN95735.pdf.

UNGA. Resolution adopted by the General Assembly on 25 September 2015: Transforming our world: the 2030 Agenda for Sustainable Development (A/Res/70/1). (2015b, October 21). Available online: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

UNCTAD. *Implementing WSIS Outcomes: A Ten-Year Review* (2015). Available: http://unctad.org/en/PublicationsLibrary/dtlstict2015d3_en.pdf.

UNCTAD. *Empowering Women Entrepreneurs through ICT: A practical guide* (2014). Available: http://unctad.org/en/PublicationsLibrary/dtlstict2013d2_en.pdf.

UNCTAD. *Measuring ICT and gender* (2014). Available: http://www.uis.unesco.org/Communication/ Documents/measuring-ict-and-gender.pdf.

UNDESA. Millennium Development Goals Report (2015). Available: http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf.



