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**Submissions from entities in the United Nations system, international
organizations and other stakeholders on their efforts in 2022 to
implement the outcomes of the WSIS**

Submission by

Association for Progressive Communications

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Flow of information for the follow-up to the World Summit on the Information Society (WSIS)

Report to CSTD October 31 2022

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1. Executive summary

APC's activities over the past year have covered a variety of elements relating to the achievement of WSIS goals. Assessing the potential impact on digital rights resulting from the Covid-19 pandemic, APC's flagship annual publication, Global Information Society Watch (GISWatch) 2022 focused on digital responses to issues emerging from the pandemic, aiming to inform civil society's advocacy around ICT and its potential to shape future horizons.¹ APC also continued to address key issues faced by civil society, in particular, digital exclusion, digitally mediated threats to the expression of human rights, and the role of ICT in responses to the environmental crisis.

It has become apparent that several of the fundamental notions that were taken for granted by civil society have been transformed by the COVID-19 pandemic, with different impacts, in both the online and offline spheres. The pandemic also highlighted the tensions between the connected and the unconnected, leading to even greater urgency to address vital needs for affordable, safe and reliable connectivity as means of working, learning, communicating and transacting. The relationship between the local and the global has taken on even greater significance, prompting reconsideration of strategies for advocacy at both local and global levels. Likewise, the impact of the pandemic continues to highlight the need to limit internet blackouts as well as measures to counter the spread of online misinformation facilitated by social media.

While levels of awareness of the potential impacts of the internet on climate change have clearly increased, there are continued concerns over the slow pace of responses. Renewed efforts by all stakeholders will be needed to take advantage of digital opportunities for achieving carbon neutrality if targets are to be met. In climate-change related efforts, the increasing availability of low-cost IoT sensors offers significant potential to improve identification and measurement of air and water quality, and other types of pollution, as well as natural resource extraction. Considering that connectivity is necessary to be able to report the data generated by IoT devices, these developments further amplify needs for more universal connectivity to support efforts to monitor climate change, environmental degradation and its sources.

1 <https://www.apc.org/en/pubs/giswatch-2021-2022-sneak-peek-read-selection-full-length-reports-our-digital-futures-post>

In summary, in the digital sphere, four key tensions that affect action toward achievement of the WSIS goals can be observed:

1. The importance of digital as a cross-cutting tool across all areas of social and economic endeavour in support of the Sustainable Development Goals is increasingly well recognised, however at the same time, growing social and information infrastructure inequalities limit universal progress toward the SDGs.
2. In helping to address the climate crisis - digital's carbon footprint needs to be addressed while leveraging the technology's potential positive impact on energy savings and managing carbon emissions elsewhere in socio-economic activity, which is likely to have even greater impact on carbon emissions. Similarly, there is increasing importance being placed on finding pathways to fully incorporate a holistic approach to rights and climate justice.
3. In considering digital's role in helping to cope with growing global economic uncertainty (partly resulting from the pandemic as well as other factors) it is evident that the likelihood of more poverty and more migration needs to be mitigated as far as possible by leveraging the potential for digital to create more opportunities for remote work from people living in low-income communities, and leveraging digital infrastructure for promoting other means of wealth creation more generally. This consideration also creates further imperatives for improving the 40% of the world's population without any connectivity, and the billion people or more enduring unaffordable connectivity.
4. In helping to minimise the impact of increasing geopolitical uncertainty and strife it is evident that responses to growing levels of polarization supported by misinformation and disinformation are unlikely to be effective simply by making more or better information available through digital technologies. Concerted strategies will also need to be developed to improve levels of digital information literacy in society and to address the gender dimension of disinformation, which requires an understanding as a specific phenomenon, separate from gender-based online violence.

A number of more systemic and concerning challenges in the digital sphere have also been receiving greater attention recently. The most important of these are increasing levels of:

- State surveillance using hacking techniques, as typified by the Pegasus revelations
- Corporate surveillance of customers to improve revenue generation, often based on advertising supported infrastructure deployments by the big tech platforms
- State-level censorship and internet shutdowns which infringe on basic rights to communications and information access, and inhibiting free flow of information through strict penalties for free speech
- Global silicon chip supply chain issues triggered by the pandemic, combined with technology export restrictions related to various geopolitical conflicts which is creating shortages and high prices for the many basic integrated circuit components used in digital devices
- Deployment of cybersecurity strategies at national levels without enough human rights and gender considerations., which do not enable an understanding of the extent to which cybersecurity frameworks take on board hierarchical systems of power that socially separate human beings, both in terms of the design of strategies and the effects of attacks. There is a need to ensure that cybersecurity responds to the complex and differentiated needs of people when systems of oppression such as gender, sexual orientation, race, ethnicity, ability, class, among others, intersect.

2. Trends and Experiences in the Implementation of WSIS outcomes

As indicated in the previous section, the post pandemic prospects of an economically and climatically uncertain future have strongly reinforced priorities in the WSIS action lines relating to connectivity infrastructure. However, although the need for a rapid increase in the number of internet users now appears to be universally recognised, this has not so far been reflected in the required growth in the numbers of those who are actually connected. Current estimates² indicate that while over 95 per cent of the world's population live within coverage of mobile broadband, only about 55 per cent use it, which means about three and a half billion people are still completely offline.

In addition many of those that are connected can only afford limited use of metered mobile broadband, and many more cannot afford the smart devices that provide access to multimedia learning, financial services, e-government or even to verify their identity in return for access. Of additional concern for efforts to universalise access are the recent increases in the cost of connectivity for people in lower income countries. Between 2020 and 2021, the median cost of 1GB of data as a percentage of average monthly income increased 13% in a survey of 93 countries³. This increase in cost reinforces the need for renewed efforts towards achieving the current UN Broadband Commission target for internet affordability – defined as 1GB for no more than 2% of average monthly income. It is particularly noteworthy that the nations most affected by worsening affordability levels are also the most fragile. For example, the cost increased by 12% in the Least Developed Countries (LDCs), but in the group of low-income countries, the cost only increased by 5% (noting that this average is still six times more costly than for people living in upper-middle-income countries). On the basis of the cost target of 2% of GNI for personal connectivity, prices remain unaffordable in 52 of the 95 low and middle income countries surveyed, which means that about one billion people live in countries where prices are unaffordably high.

Coverage and affordability issues continue to be addressed through the deployment of more connectivity infrastructure, ranging from extension of 4/5G mobile networks, to submarine cable projects and new high powered satellite links. Of particular note is that Low Earth Orbit (LEO) satellite operators have now begun service, which is lowering the cost of broadband internet access, especially in rural areas uncovered by mobile signal. Satellite connections are also expected to ultimately build demand for terrestrial infrastructure, because is more able to service the growing needs for high capacity links at a more affordable cost when provided on a competitive basis.

More pervasive connectivity and more extensive use is also resulting in increasing levels of cybercrime and cybersecurity breaches. The COVID-19 pandemic pushed much more commercial activity online which in turn has created many new opportunities cybercriminals which have adapted to these changes, tailoring their tactics to the new reality. As a result 2020 and 2021 were exceptional years for cyberattacks, and there is little indication that things will return to lower levels in 2022. Strong gender imbalances are evident among cybersecurity practitioners, and APC has been developing a resource guide to help address this issue. Similarly, the avoidance of effective oversight by big tech platforms' implicated in promoting the spread of misinformation and hate speech is increasingly coming to the attention of policy makers encouraged by awareness raising from civil society.

These developments underscore that the WSIS goals which rely on extension of the internet to address the unconnected will also need to be accompanied by sufficient measures from governments and the private sector to ensure that the internet is free from security threats, exploitation and abuses to personal privacy, online gender based violence, discrimination and other human rights abuses. This further reinforces the

² <https://www.gsma.com/newsroom/press-release/mobile-internets-usage-gap-is-almost-eight-times-the-size-of-the-coverage-gap-gsma-research-reveals/>

³ <https://a4ai.org/news/mobile-data-cost-have-increased-making-internet-connectivity-unaffordable-for-many/>

importance of WSIS Action line C10 relating to the Ethical dimensions of the Information Society.

The unprecedented levels of climate change now taking place with relatively little response from the private sector and state actors is pushing many civil society organisations to support protests and other drastic actions to avoid further lasting damage to the natural environment. This is also leading to greater attention to circular economy strategies for the use of digital technology hardware and applications which aim to leverage cloud computing, big data and artificial intelligence, along with the expanding roll-out of 5G, because such technologies are having ever greater environmental impacts. On the other hand, ICTs are also being used in a growing range of solutions for cutting domestic and organisational energy-use as well as monitoring and predicting environmental disasters, and addressing systemic threats such as pollution and deforestation. At the same time, the internet continues to be a powerful organising tool for environmental activists, and for raising public awareness on the climate crisis and environmental threats. In response to this APC and other civil society organisations have been working together to investigate the relationship between digital technologies and environmental justice, along with ways to bring more resources into this area.

3. Outlook and Proposals

3.a Innovative policies, programmes and projects

The IGF dynamic coalitions on community connectivity, and net neutrality, along with the best practice forums on gender and access and on local content have continued to make significant progress in identifying innovative approaches and practices to help move forward in enabling complementary models of connectivity that address digital exclusion. APC has been at the forefront of this work, directly engaging with policy makers and regulators, such as at the ITU World Telecommunications Development Conference (WTDC) and many national events, to promote awareness of the potential for complementary infrastructure providers and alternative business models in addressing the digital divide. The need for new approaches to the connecting the unconnected is typified by the comment of the ITU's incoming Secretary General, Doreen Bogdan-Martin, who cogently observed; "Connecting the first 53% wasn't so hard. Connecting the remaining 47% is a different ball-game, and 'business as usual' will not work."⁴

Building on earlier work on cybersecurity and gender, APC recently designed a toolkit to support policymakers and civil society organisations to provide practical guidance for developing gender-responsive cybersecurity policies, laws and strategies. The toolkit seeks to provide concrete recommendations so that, depending on the stage of maturity of national policies in each country, stakeholders can find inspiration for concrete suggestions to help deploy the transformative power of a gender perspective in cybersecurity.

After two years of negotiations, the Open-ended Working Group (OEWG) on developments in the field of information and telecommunications in the context of international security has adopted its final report. The OEWG, established by the UN General Assembly's First Committee, explored the issue of responsible behaviour of states in cyberspace by discussing existing and potential cyber threats and how to address them; cyber norms, rules and principles; confidence-building measures; how international law applies to cyberspace; capacity building on cybersecurity; and the possibility of establishing regular institutional dialogue to address these issues. The [final report](#) referred to some of the concerns regarding gender and cybersecurity and its recommendations may end up having a significant influence on trends and policies in cybersecurity globally, with implications for human rights.

In relation to addressing abuses to the expression of human rights online, last year APC co-organised a series of regional and global meetings to collect inputs to the Human Rights Council resolution on the internet and human rights. APC led the activities in Latin America, where invited regional members Derechos Digitales, Intervozes and TEDIC co-organised a survey and a workshop to share information on previous resolutions and collect regional priorities. Participants in the global workshop included diplomats and mission

4 <https://www.itu.int/en/ITU-D/bdt-director/Pages/Speeches.aspx?ItemID=244>

representatives⁵.

Artificial intelligence (AI) technologies are increasingly being used in both the public and private spheres, which can have irreparable consequences if they are implemented without fundamental human rights considerations. Within the framework of the project "[Artificial Intelligence and Inclusion in Latin America](#)", APC Member Derechos Digitales has worked on case studies, reports, trainings and awareness-raising campaigns, identifying spaces for improvement and good practices. In that context, Derechos Digitales presented the document "[A Latin American perspective on the use of AI systems by the State](#)", their contribution on the right to privacy in the digital age to the United Nations. The recommendations made were echoed in the report "[The right to privacy in the digital age](#)" published in September 2021 by the UN High Commissioner for Human Rights. There, the High Commissioner discusses how automated decision-making and machine-learning technologies impact the right to privacy and other associated rights. It also criticises the use of AI in remote biometric recognition, a practice that puts at risk the exercise of rights such as freedom of expression, association, movement and peaceful assembly.

As part of ongoing interventions to support women human rights defenders, APC organised three sessions at the 2022 Stockholm Internet Forum in which APC convened its networks so that they were able to bring first-hand accounts of their experiences online and demands for more safe and secure online spaces for their activism. These sessions and [other initiatives](#) consolidated a partnership with the UN Special Rapporteur on Freedom of Expression, which led to APC's support to the drafting of a report on [Freedom of Expression and Gender Justice](#). Following the launch of the report, APC co-organised with the Special Rapporteur a [side event to the UN General Assembly in November 2022](#), attended by more than 150 people and with the presence of UN Women, UNESCO, CEDAW, several high level diplomats and government representatives, as well as leading women's rights and digital rights civil society organisations.

In the area of digital rights and environmental justice, APC developed [four issue briefs](#) on the subject which aimed at better equipping digital rights funders to craft grant-making strategies that maximise impact on these issues. Also of note have been APC and other organizational initiatives around supporting the circular economy and addressing e-waste - such as design, recovery and repair strategies which are critical for achieving net zero carbon and reducing e-waste globally. APC recently published a [guide to the circular economy of digital devices](#), and the recent ITU-T Symposium on ICT, Environment, Climate Change and Circular Economy⁶ provided real-world case studies on the successes of circular economy approaches and highlight the role of standards in the transition to a circular economy.

In the area of environmental monitoring, APC is continuing to leverage its member network to support the spread of knowledge on the use of low-cost air and water quality measurement devices (see for example the work of APC member MAJI in Nigeria to [address air quality issues](#) resulting from the oil industry).

3.b Future Actions and Recommendations

Communications Infrastructure: Support the right of people to meaningfully shape and use the internet and digital technologies to meet their specific needs and realities, which includes supporting unconnected communities and groups to build technical infrastructure of communications. This requires addressing the policy and regulatory issues which limit the opportunities complementary communications providers such as [community networks](#) to deploy infrastructure. Currently, access to radio spectrum is insufficient, and operator licensing, interconnection requirements and fees are not adjusted for small networks. Similarly the development community needs to provide support for this process while ensuring that strategies to overcome digital exclusion focus on the groups that been traditionally excluded and marginalised.

5 <https://www.apc.org/en/news/advocating-human-rights-online-and-offline-2021>

6 <https://www.itu.int/en/ITU-T/climatechange/symposia/202210/Pages/programme.aspx>

Internet Governance and Digital Rights: The IGF and its associated regional and national forums should be made the centerpiece of the development of the UN Digital Global Compact being devised to promote digital cooperation in the UN system and more widely. The IGF has been a unique space to place global digital cooperation issues at the top of the political agenda and a more empowered IGF would be well positioned as a platform for identifying viable ways to shape, sustain and strengthen global digital cooperation not only for universalising digital inclusion, but to mobilise collective intelligence to respond to the persistent and emerging challenges in the digital age, including the environmental crisis.

In this respect APC continues to be committed to defending the digital commons and counteracting securitisation of the digital space by facilitating engagement of civil society voices and actors from the global South in policy processes at all levels, particularly those aimed at catalysing truly effective, accountable, inclusive, transparent, participatory global digital cooperation. APC also plans to expand its human rights work by reinforcing the use of the internet for empowering and increasing capacities in civil society actors to monitor, analyse and advocate towards holding governments and companies accountable for their commitments. Similarly, APC will continue to strengthen the capacity of civil society organisations and activists to effectively use human rights mechanisms and instruments to advance human rights online.

Environmental sustainability and digital transformation. Addressing the twin challenges of the environmental crisis and digital transformation has inherent tensions that need to be more explicitly addressed in developing an effective approach that satisfies both needs. Clearly the ICT sector needs to reduce carbon intensity, and the other negative environmental and socioeconomic impacts of digital technologies while leveraging the constructive role ICTs can play in confronting the crises. This includes by disrupting the normative understanding of technology and innovation being the panacea to the planet's environmental challenges by proposing that a nuanced and contextual use of technology is necessary for real sustainability to be achieved.

Of particular importance and often overlooked in these environmental strategies is the importance of recycle and repair initiatives – i.e. the role circular economies in addressing carbon footprints and e-waste. Here, greater investments are needed in awareness raising, capacity building and policy development. In addition support for repair and recycle venues is needed, including mobile and fixed repair and maker spaces, see for example the excellent work of Restart.org and Africamakerspace.net

Similarly, greater support for deployment of environmental monitoring tools based on low-cost connected sensors is needed to identify priorities and evidence-based policy making around protection of the environment. This includes support for awareness raising in this area and the potential for citizen science approaches, along with adoption of standards for devices and provision of connectivity, such as through approval for advanced LoRA low bandwidth long distance networks that can support attachment of devices nationwide.

In this respect APC is committed to continue to support awareness raising about these issues and to increase the technical skills available for employing innovative approaches to monitoring environmental degradation using low-cost devices, such as for air and water quality monitoring.