



Internet shutdowns and human rights

Submission in response to the call for comments by the Office of the High Commissioner for Human Rights as input for the report on internet shutdowns and human rights to the fiftieth session of the Human Rights Council in June 2022

*Association for Progressive Communications (APC)¹
Derechos Digitales*

February 2022

¹ APC would like to thank TEDIC for its contributions to this submission.

Table of contents

- 1. Introduction.....3
- 2. The occurrence of mandated disruptions of communications.....3
 - Africa.....3
 - Asia and Pacific5
 - Latin America.....7
 - Middle East and North Africa 13
- 3. The impact of mandated communications disruptions 13
 - The gender impact of internet shutdowns 14
 - The impact of shutdowns on media and journalism 16
 - The economic impact of internet shutdowns 17
 - Education 18
 - Social and psychological impacts 18
 - Impact on human rights 20
- 4. Initiatives promoting internet connectivity and bridging the digital divides..... 21
- 5. Conclusion and recommendations 27

1. Introduction

The Association for Progressive Communications (APC) is an international network and non-profit organisation working to empower and support organisations, social movements and individuals in and through the use of information and communication technologies (ICTs). Formed in 1990, APC was granted category one consultative status to the United Nations Economic and Social Council (ECOSOC) in 1995. APC currently has 62 organisational members and 29 individual members active in 74 countries, mostly in the global South.

APC welcomes the call of the Office of the High Commissioner for Human Rights to comment on the human rights impacts of internet shutdowns and appreciates the opportunity to provide a few comments below.²

2. The occurrence of mandated disruptions of communications

Governments impose internet shutdowns for various reasons, ranging from precautionary and preventive measures to curb the spread of rumours during volatile situations, to safeguard national security and to maintain law and order.³

The disruptions take various forms: complete national internet shutdowns, regional internet shutdowns, social media shutdowns, and even an internet access curfew. The disruptions are usually initiated around election times, public protests, and also during national exams.⁴ The accounts below are based on the work and reports of APC members and refer to the past five years.

Africa

In Africa, many of these shutdowns have occurred during elections and other moments of political tension, at a time when access to information is critical for

² This document is structured around the specific information requested in the call for inputs.

³ Mawii, Z., Srivastava, R., Lal, S., & Abraham, B. P. (2018). *Kept in the dark: Social and psychological impacts of network shutdowns in India*. Digital Empowerment Foundation. <https://www.apc.org/sites/default/files/Internet-Shutdown-Primer.pdf>

⁴ CIPESA. (2017). *The Economic Impact of Internet Disruptions in Sub-Saharan Africa*. https://cipesa.org/?wpfb_dl=249

people to make informed decisions. Work by one APC member, the Collaboration on International ICT Policy for East and Southern Africa (CIPESA),⁵ maps how in recent years, disruptions to the internet and social media applications have emerged as a common trend of digital repression in Africa. In 2019, says CIPESA, internet shutdowns in Africa grew by 47%, with at least 25 confirmed incidents in 10 countries, up from the 17 recorded in seven countries in 2018.

The countries affected in 2019 included Algeria, Benin, Cameroon,⁶ Chad, Côte d'Ivoire, the Democratic Republic of Congo (DRC), Gabon, Mali, Nigeria, Sierra Leone, Sudan and Togo. In 2020, internet disruptions were reported in Ethiopia, Burundi, Chad, Guinea, Mali, Tanzania and Zimbabwe. This report from CIPESA also describes telecom companies' responses to government-mandated shutdowns. For example, in some countries such as Cameroon, Zimbabwe and Uganda, operators have confirmed internet disruptions and disclosed to the public that the orders were from a specific government entity. These disclosures, in the same cases, have been made via the same platforms the internet service providers (ISPs) had been instructed to restrict.⁷

On Wednesday 13 January 2021, the eve of Uganda's general elections, Uganda's communications regulator UCC ordered telecoms operators and ISPs in the country to suspend all internet gateways until further notice. Ugandans reported difficulties accessing the internet via mobile devices and wireless connections on Wednesday evening, and internet monitor NetBlocks said on Twitter that the country was experiencing a nationwide blackout from 7 p.m. (1600 GMT). The president's

⁵ CIPESA. (2021). *How Telecom Companies in Africa Can Respond Better to Internet Disruptions*. https://cipesa.org/?wpfb_dl=435

⁶ On 17 January 2017, the government of Cameroon ordered the suspension of internet services in the North West and South West regions that lasted for 93 days. After a brief resumption of services, the government shut down social media platforms like Twitter, Facebook and WhatsApp on 30 September 2017. Announcing the lifting of the ban, the government said it reserved the right to "take measures to stop the internet once again becoming a tool to stoke hatred and division among Cameroonians." The second round of suspensions only ended in April 2018. These two regions went without an internet connection and access to social media platforms for more than 270 days in 2017 and 2018. Please see: https://www.apc.org/sites/default/files/CESCR_Submission_Cameroon_January_2019.pdf

⁷ CIPESA. (2019). *Despots and Disruptions: Five Dimensions of Internet Shutdowns in Africa*. https://cipesa.org/?wpfb_dl=283

justification for the internet shutdown was in retaliation for Facebook taking down some pro-government accounts, which APC member Unwanted Witness called “frivolous and vexatious.”⁸

In August 2021, Zambia restricted citizens’ access to social media platforms including Facebook, Twitter and WhatsApp, as the country went to the polls. Citing the need to stop the spread of election misinformation, the Zambian government disrupted the internet in an election that saw an opposition politician defeat the incumbent president.⁹

Asia and Pacific

In what was defined as the longest internet shutdown in the history of any democracy, the government of India imposed a total communications ban in Kashmir on 5 August 2019.¹⁰ This severe communications blackout included all digital and non-digital modes of communication, internet via broadband and mobile communications, and also phone or landlines, along with a curfew that imposed severe restrictions on mobility within the region. This lockdown and shutdown was put into effect after days of build-up, when non-Kashmiris were asked to leave Kashmir and army troops were flown into Kashmir, which is already the most militarised zone in the region. The government also asked social media companies to block independent accounts from Kashmir. The Supreme Court of India, in its judgment on 10 January 2020, declared the indefinite imposition of internet shutdowns to be unconstitutional and directed the Indian government to review all orders relating to internet shutdowns, as well as requiring the government to put in the public domain all orders of internet shutdowns, including the material facts

⁸ Unwanted Witness (2021, 25 January). Uganda 2021 general elections: The internet shutdown and its ripple effects. *APC*. <https://www.apc.org/en/news/uganda-2021-general-elections-internet-shutdown-and-its-ripple-effects>

⁹ Lirri, E. (2021, 16 November). How Weaponization of Network Disruptions During Elections Threatens Democracy. *CIPESA*. <https://cipesa.org/2021/11/how-weaponization-of-network-disruptions-during-elections-threatens-democracy>

¹⁰ APC. (2020, 14 January). A step closer to realising internet freedoms in India: Supreme Court rules indefinite internet shutdowns are unconstitutional. <https://www.apc.org/en/node/35992>

forming the basis upon which such orders were passed.¹¹ The Indian government also cut mobile internet in Kashmir during Republic Day in January 2021 and blocked access to the internet in the context of the Farmers Protests in February 2021.¹² These frequent network disruptions, which follow the prolonged shutdown in Jammu and Kashmir, are characterised by the Special Rapporteur on freedom of expression and other UN experts as a “collective punishment” inconsistent with the principles of necessity and proportionality.¹³

In the Philippines, APC member the Foundation for Media Alternatives (FMA) expressed concerns regarding the National Telecommunications Commission’s decision to approve the Philippine National Police’s request to shut down mobile services in time for the Dinagyang Festival in January 2018. This request was similar to network shutdown orders, using the argument of public safety, that were carried out at the Feast of the Black Nazarene, and at the Sinulog and Ati-atihan Festivals held in Cebu and Aklan, respectively.¹⁴

During 2019, according to APC member EngageMedia, the government of Indonesia repeatedly banned access to the internet in Papua and West Papua, as well as implementing a number of internet throttling and blocking measures in the country – particularly in accessing social media services such as Facebook, WhatsApp, Twitter and Instagram. In the case of Papua and West Papua, there were at least two incidents that laid the ground for internet access restriction during this period. One was the raid on a student dormitory and arrest of students in Surabaya¹⁵ and other racist acts in Malang, and the second was the increased tension in anti-racism demonstrations in Papua and West Papua, which was met with excessive force

¹¹ Foundation for Media Alternatives. (2018, 25 January). #KeepItOn: Signal jamming and the myth of public security. <https://fma.ph/2018/01/25/internet-shutdowns-myth-security-public-safety>

¹² ARTICLE 19, Access Now, & APC. (2021). *HRC47: Joint oral statement on internet shutdowns in the context of protests*. <https://www.apc.org/en/pubs/hrc47-joint-oral-statement-internet-shutdowns-context-protests>

¹³ APC & others. (2021). *End the wave of digital censorship in India*. <https://www.apc.org/en/pubs/end-wave-digital-censorship-india>

¹⁴ Foundation for Media Alternatives. (2018, 25 January). Op. cit.

¹⁵ Islam, R. (2019, 19 September). On Recent Internet Blocking and Throttling in West Papua. *EngageMedia*. <https://b.engagemedia.org/2019/internet-blocking-throttling-west-papua>

carried out by the security apparatus.¹⁶ The Indonesian Ministry of Communication and Informatics and the Cabinet Secretary, in 11 press releases, stated that the internet access blocking¹⁷ was a way to quell “the spread of hoaxes and provocations.”¹⁸ This internet throttling was also preceded by a previous incident: on 22 May 2019, the Ministry of Communication and Informatics came out with a press release titled “Throttling of Some Social Media and Instant Messaging Platforms”.¹⁹ The head of the ministry, Rudiantara, stated that the throttling was done based on the Electronic Information Transaction Law, specifically on content management. This internet throttling was triggered by the announcement of the 2019 presidential election results in April 2019.²⁰

Latin America

Latin America has not been characterised by widespread wholesale internet shutdowns. Geographically localised shutdowns, however, have been documented in several countries, particularly in contexts of protests. Other forms of disruption of specific services at a technical level have been more common and raised concerns over the manner in which information flows can be controlled by states and private entities.

In Brazil, service providers temporarily blocked WhatsApp in 2015 and 2016 three times due to judicial orders. In 2018, a new order threatened to block Facebook, but it was finally not implemented. In 2019, a report evidenced that the abortion rights website Women on Waves was likely blocked in several networks, including

¹⁶ AFP. (2019, 30 August). Papua protests: 5 things to know about the unrest in Indonesian province. CNA. <https://www.channelnewsasia.com/news/asia/papua-protests-5-things-know-indonesia-unrest-11858328>

¹⁷ <https://setkab.go.id/kondisi-sudah-kondusif-menko-polhukam-beri-peluang-buka-blokir-akses-internet-di-papua>

¹⁸ <https://setkab.go.id/tekan-hoaks-menkominfo-pemulihan-jaringan-internet-di-papua-dilakukan-bertahap>

¹⁹ https://www.kominfo.go.id/content/detail/18868/siaran-pers-no-106hmkominfo052019-tentang-pembatasan-sebagian-fitur-platform-media-sosial-dan-pesan-instan/0/siaran_pers

²⁰ Potkin, F. (2019, 22 May). Indonesia curbs social media, blaming hoaxes for inflaming unrest. *Reuters*. <https://uk.reuters.com/article/uk-indonesia-election-socialmedia/indonesia-curbs-social-media-blaming-hoaxes-for-inflaming-unrest-idUKKCN1SS1MM>

those of two of the main ISPs operating in the country.²¹ The website has been censored in different countries since 2017, negatively impacting the exercise of sexual and reproductive rights. In 2019, the Brazilian telecommunications authority authorised the use of “jammers” in areas where the president and vice-president are located until 2022.²² The alleged purpose of their use is to prevent the remote activation of explosive devices. However, since the acquisition of such equipment during the 2016 Olympic Games, suspicion was raised regarding their use to block cellphone signals, since the documents authorising their use to block drones were never made public.²³ No case of mobile phone jamming has been reported until the moment.

In Chile, websites associated with the domain name “riseup.net” were not accessible for users of the ISP VTR in May 2017.²⁴ According to the company, the blocking resulted from an incident response measure to a ransomware attack with Wannacry. Services that were unavailable included private wikis, group collaboration platforms, instant messaging and file uploading as well as access to email services and other services provided by Riseup. Upon the expiration of the malware incident threat alert, VTR decided not to raise the blocking for more than three months.

In Colombia, a report identified the blocking of unlicensed gambling websites after the country became the first in Latin America to regulate such services and impose a blocking list to ISPs in 2016 and 2017.²⁵ During a massive national strike marked

²¹ Coding Rights. (2019, 29 October). On the blocking of pro-choice websites: Women on Waves and Women on Web. <https://medium.com/codingrights/on-the-blocking-of-pro-choice-websites-women-on-waves-and-women-on-web-505ed6f17b63>; Braga, N. (2019, 12 December). NET, Claro e Vivo bloqueiam acesso a site com informações sobre aborto seguro. *The Intercept*.

<https://theintercept.com/2019/12/12/net-claro-e-vivo-bloqueiam-site-aborto-seguro/>

²² <https://freedomhouse.org/country/brazil/freedom-net/2021>

²³ Payão, F. (2016, 12 July). Forças Armadas podem bloquear seu celular durante as Olimpíadas 2016. *TecMundo*. <https://www.tecmundo.com.br/olimpiadas/107157-forcas-armadas-bloquear-celular-durante-olimpiadas-2016.htm>

²⁴ Ververisa, V., Khrustaleva, O., & Quiroz, E. (2017). *Network interference in Latin America: Evaluating network measurements to detect information controls and internet censorship*. <https://lavits.org/wp-content/uploads/2018/04/32-Vasilis-Ververis-Olga-Khrustaleva-e-Eliana-Quiroz.pdf>

²⁵ Ibid.

by a series of protests in 2021, besides the documentation of several human rights violations by police authorities, a partial internet shutdown was reported by NetBlocks in May in the city of Cali, where most of the protests were concentrated.²⁶ At the same time, several organisations reported the use of signal jammers in different parts of the country during the protests. An example is the case of the city of Barranquilla.²⁷ The use of jammers is prohibited in Colombia except for state security forces, which can use them without government authorisation in public security-related cases.²⁸ During the protests, blockings of the domains archive.org and ghostbin.co were also reported.²⁹ The domains were blocked by two local ISPs in compliance with a state resolution issued after a data leak affecting government and police agents was identified.

In Ecuador, APC and partners documented that in the context of a national political crisis and social mobilisation in October 2019, temporary shutdowns and disruptions of certain social networks, mobile communications, websites and internet connections occurred throughout the days of protests. The information collected and reported even by one of the operating companies suggests that the difficulties experienced were not related to slow down or collapse due to the intensity of use.³⁰ Identified disruptions included the temporary unavailability of social media platforms, websites, mobile communications and internet connections. NetBlocks also reported that social media (including Facebook and WhatsApp) backend image and CDN servers were disrupted by state-run operator Corporación Nacional de Telecomunicaciones (CNT) during one day, following the death of a protester in

²⁶ NetBlocks. (2021, 5 May). Internet disrupted in Colombia amid anti-government protests. <https://netblocks.org/reports/internet-disrupted-in-colombia-amid-anti-government-protests-YAEvMvB3>

²⁷ <https://twitter.com/DefenderLiberta/status/1392601992292405251?s=20>

²⁸ https://normograma.mintic.gov.co/mintic/docs/pdf/resolucion_mintic_2774_2013.pdf

²⁹ <https://twitter.com/jroadev/status/1395574186383482883/photo/1>

³⁰ APC, Digital Defenders Partnership, LaLibre.net Tecnologías Comunitarias, & Taller de Comunicación Mujer. (2019). *Derechos digitales en el contexto de las protestas y movilización social en Ecuador en octubre de 2019*.

https://www.apc.org/sites/default/files/Ecuador_Informe_bloqueos_e_interrupciones_red_octubre2019_CIDH_1.pdf

October 2019.³¹ The government denied the restrictions.³² A second disruption was identified affecting the multinational operator Claro: a short one that affected the whole country and another affecting only the city of Quito that lasted almost eight hours.³³ Beyond the context of protests, in June 2019, several websites were blocked due to alleged copyright infringement.³⁴ Copyright violations were a common argument for restricting critical content in Ecuador, as noted by several human rights organisations, during the government of Rafael Correa.³⁵

In Nicaragua,³⁶ internet disruptions were registered during the massive protests of 2018. According to NetBlocks, temporary shutdowns were localised in specific regions and lasted no more than one day. Mobile access was also affected and the government blocked Wi-Fi signals in parks where people would connect to report on the national situation.³⁷ A new law on cybercrime came into effect in late 2020, and according to critics inside the country, it could allow state agencies to take control of the internet.³⁸

In Paraguay, APC member TEDIC documented that in the northern area of Paraguayan that has been militarised for several years, the Coordinadora de Derechos Humanos del Paraguay (CODEHUPY),³⁹ a network that brings together

³¹ NetBlocks. (2019, 9 October). Evidence of social media disruptions in Ecuador as crisis deepens. <https://netblocks.org/reports/evidence-of-social-media-disruptions-in-ecuador-as-crisis-deepens-oy9RN483>; <https://freedomhouse.org/country/ecuador/freedom-net/2021>

³² <https://twitter.com/CNTinforma/status/1182699792499130368>;
<https://www.elcomercio.com/actualidad/michelena-censura-internet-protestas-ecuador.html>

³³ NetBlocks. (2019, 13 October). Mobile internet disrupted in Quito as Ecuador political crisis escalates. <https://netblocks.org/reports/mobile-internet-disrupted-in-quito-as-ecuador-political-crisis-escalates-eBOgkJBZ>

³⁴ Primicias. (2019, 6 June). Ecuador bloquea cinco páginas web por vulnerar derechos de autor. <https://www.primicias.ec/noticias/tecnologia/ecuador-bloquea-cinco-paginas-web-por-vulnerar-derechos-de-autor>

³⁵ Sutton, M. (2014, 15 May). State Censorship by Copyright? Spanish Firm Abuses DMCA to Silence Critics of Ecuador's Government. *Electronic Frontier Foundation*.

<https://www.eff.org/deeplinks/2014/05/state-censorship-copyright-spanish-firm-abuses-dmca>

³⁶ NetBlocks. (2018, 19 July). Regional internet disruptions in Nicaragua amid protests. <https://netblocks.org/reports/nicaragua-regional-internet-disruptions-amid-protests-gdAmMvA9>

³⁷ El Urbano. (2018, 24 April). Bloquean WiFi en los parques de Nicaragua.

<https://elurbano.news/hemeroteca/bloquean-wifi-en-los-parques-de-nicaragua>

³⁸ EFE. (2020, 30 December). Entra en vigencia la "Ley Mordaza" del orteguismo. *Confidencial*.

<https://www.confidencial.com.ni/politica/entra-en-vigencia-la-ley-mordaza-del-orteguismo>

³⁹ <https://codehupy.org.py>

social and non-governmental organisations for the defence and promotion of human rights, conducted an observation mission that, among numerous findings of human rights violations, reported potential internet shutdowns in the area through testimonies of people living in the intervened regions. Concretely, the observation mission reported that mobile phone communications are affected in the area every time an intervention from the Paraguayan Joint Task Force⁴⁰ approaches. Testimonies documented that in the days leading up to a military intervention, all users in one area were left without any service coverage. None of the lines worked until the end of the intervention. Only then was communication restored.⁴¹

In Peru, Supreme Decree No. 035-2019-MTC enables the Ministry of Transportation and Commerce (MTC) to order the blocking of applications or websites that offer public transportation services on motorcycles. Because of that, 18 Facebook pages, three Android apps, as well as the Heroku and Amazon Web Services (AWS) servers associated to the company Picap and others were blocked with no court order on November 2019.⁴² Although most of them have been restored and at least one of these actions has been the object of a lawsuit, the regulations that enable these actions are currently in place.⁴³ Separately, since 2016, Legislative Decree No. 822 enables the national authority in charge of competition and intellectual property protection to grant precautionary measures to cease any activity infringing national copyright law. Based on a wide interpretation of the Decree, it has required ISPs to block IP addresses of streaming websites for copyright violation. Such blockings can

⁴⁰ The Joint Task Force is a unit of the Paraguayan Armed Forces. It is composed of the Paraguayan Armed Forces, the Paraguayan National Police, and the National Anti-Drug Secretariat (SENAD) agents. This unit operates in San Pedro, Concepción and Amambay. The Joint Task Force seeks to end the strategic plan of the guerrilla group Paraguayan People's Army (EPP), mainly in the north of the country. More information at https://es.wikipedia.org/wiki/Fuerza_de_Tarea_Conjunta_de_Paraguay

⁴¹ Coordinadora de Derechos Humanos del Paraguay. (2021). *Misión de observación sobre la situación de los derechos humanos en la zona norte (22 al 26 de febrero de 2021). Informe final.* <https://codehupy.org.py/mision-de-observacion-sobre-la-situacion-de-los-derechos-humanos-en-la-zona-norte>

⁴² <https://hiperderecho.org/error404>

⁴³ Morachimo, M. (2019, 17 December). ¿Nos hemos vuelto locos al demandar al MTC por bloquear una aplicación? *Hiperderecho*. <https://hiperderecho.org/2019/12/nos-hemos-vuelto-locos-al-demandar-al-mtc-por-bloquear-una-aplicacion>

only be done for limited periods of time or last until the administrative process is finished.⁴⁴

In Venezuela a general disinvestment in the telecommunications sector in the past years has resulted in a sharp network deterioration for the population.⁴⁵ At the end of 2016, 4G networks only reached 42% of the national territory, 3G reached 28% and 2G reached 30%, but connectivity was highly restricted for 3G and 4G networks due to the scarcity and high cost of terminal equipment. Additionally, from June 2016 to November 2017, a number of possibly politically motivated blocking incidents were detected and national and international news media websites were blocked and filtered via domain name system (DNS) hijacking. A total number of 35 domain names were censored within two ISPs in the same period.⁴⁶ The National Constituent Assembly, which was formally installed among protests in mid-2017, approved the “Constitutional Law against Hate, for Peaceful Coexistence and Tolerance” in the same year to punish those who “incite hatred, discrimination or violence” with up to 20 years in prison. The law creates liability for intermediaries if they do not remove content considered infringing within six hours and paves the way for the revocation of concessions to radio, television or internet service providers. Since 2017, the NGO Venezuela Inteligente has been implementing a project called Vesinfiltro that reports on internet shutdowns in the country on an ongoing basis.⁴⁷ The organisation promotes citizen reporting of disruptions with the use of a mobile application from OONI and a form, and also provides information on how to use circumvention tools to escape censorship.

⁴⁴ La República. (2019, 6 August). Siete páginas para ver fútbol online fueron bloqueadas para siempre. <https://larepublica.pe/tecnologia/2019/08/06/siete-paginas-para-ver-futbol-online-fueron-bloqueadas-para-siempre-fotos-indecopi-internet-roja-directa>

⁴⁵ Urribarrí, R., & Díaz, M. (2018). Políticas públicas para el acceso a internet en Venezuela: inversión, infraestructura y el derecho al acceso entre los años 2000-2017. Derechos Digitales. https://www.derechosdigitales.org/wp-content/uploads/CPI_venezuela.pdf

⁴⁶ Ververisa, V., Khrustaleva, O., & Quiroz, E. (2017). Op. cit.

⁴⁷ <https://vesinfiltro.com>

Middle East and North Africa

During 2020, governments in the Middle East and North Africa shut down and throttled the internet during elementary and secondary school examinations; these included the governments in Jordan, Syria, Algeria and Sudan. According to APC member SMEX, this phenomenon began in 2015, when Syria and Iraq shut down the internet during end-of-the-year baccalaureate exams. Algeria followed suit in 2016, and Mauritania joined the group just one year later. According to SMEX, “These states justify the shutdowns as a method to prevent cheating, but exam questions still get leaked and offline cheating methods are widespread. Moreover, these disruptions hurt the economy and restrict people’s right to communicate freely.”⁴⁸

The devastating explosion in Beirut, Lebanon that took place on 4 August 2020 and killed hundreds of people and injured around 5,000 others sparked a series of social protests against the government that were severely repressed by police. This situation was exacerbated by the implementation of internet shutdowns that posed serious threats to the Lebanese people’s rights to protest and freedom of assembly, offline and online.⁴⁹

3. The impact of mandated communications disruptions

Research shows that internet shutdowns harm communities, affect economic development, and violate a range of human rights, including by restricting access to information, inhibiting access to education and health and other services such as banking, as well as restricting the possibility for social actors to organise in protests, dissent and organise themselves in times of social and political unrest. Shutdowns also restrict people’s ability to work. Internet disruptions severely hinder the work of journalists, and undermine electoral transparency by denying

⁴⁸ SMEX. (2020, 22 September). #NoExamShutdown: 4 MENA countries shut down the internet so far “to fight cheating”! <https://smex.org/noexamshutdown-4-mena-countries-shut-down-the-internet-so-far-to-fight-cheating>

⁴⁹ APC. (2020). *Lebanon: APC calls for internet access restrictions to be lifted and for human rights online and offline be protected*. <https://www.apc.org/en/pubs/lebanon-apc-calls-internet-access-restrictions-be-lifted-and-human-rights-online-and-offline-be>

citizens' access to information. Shutdowns also have psychological impacts, affect people's access to leisure activities and negatively impact on well-being. "It is like being cut off from the world," said a digital rights activist from the Democratic Republic of Congo.⁵⁰

Internet shutdowns hit entire communities; however, because of power differentials in society and the specific ways that women use the internet, the gendered impacts of internet shutdowns should also be taken into account and further explored.

Below we feature relevant work by APC and APC members on some of these topics.

The gender impact of internet shutdowns

Research by APC and the Women's International League for Peace and Freedom (WILPF)⁵¹ showed how gender impacted women's experiences of internet shutdowns in terms of personal safety, professional/economic impact, emotional well-being, education and connectivity.

For example, the research showed that when the government shuts down the internet during protests, women are left without the ability to be in contact if anything happens to them.

During partial internet shutdowns, people may not have access to the full range of communication channels that they rely on. For people who rely on secure communications channels because of their sexual orientation or gender identity, for example, being cut off from encrypted communications can be a threat to their safety.

In terms of economic and professional impact, a number of interviews from this study identified a negative impact on the financial well-being of women who make use of e-commerce when the internet is shut down. As for women working in the

⁵⁰ APCNews. (2019, 16 January). Internet shutdowns in Africa: "It is like being cut off from the world". APC. <https://www.apc.org/en/news/internet-shutdowns-africa-it-being-cut-world>

⁵¹ Brown, D., & Pytlak, A. (2020). *Why Gender Matters in International Cyber Security*. Women's International League for Peace and Freedom & Association for Progressive Communications. <https://www.apc.org/en/pubs/why-gender-matters-international-cyber-security>

formal economy, especially in sectors dominated by men, they expressed feeling their work and professional achievement was compromised because of internet shutdowns. In fact, both women who expressed this in interviews ultimately decided to leave where they were living, in part because of the impact of the disruptions on their professional life.

Interview respondents in this study also reported emotional distress at not being able to be in touch with their relatives, especially their female relatives, during times of social/political unrest.

Finally, in cases where the shutdown is partial – for example, only covering mobile data – people go to public spaces, universities and hotels and pay in order to use those services. Women in some contexts may be less likely to have cash to be able to pay for a coffee in a cafe that also offers access, or it may not be safe for them to carry it. In some contexts, due to cultural or security factors, going to a public space, particularly alone, might not be so possible for women.

Beyond impacts on safety, work and emotional well-being, the research found that there was a gendered dimension to education during shutdowns. For example, an interviewee in Pakistan's Federally Administered Tribal Areas (FATA) noted that the shutdown affected people similarly, but because of patriarchy and cultural issues, there are/were differential effects. For example, women do not have much access to education throughout Pakistan, and in the tribal regions in particular. The internet helps women access education, and when it is off, men still have access to schools, but women do not. Women had to drop out of schools/colleges

Shutdowns have been shown to disproportionately affect already marginalised groups such as women, especially during the vulnerable periods that occasion them, and they affect rural women at the intersections of poverty and gender. Ethnic minorities also feel a keen sense of exclusion during shutdowns.

The impact of shutdowns on media and journalism

Research by APC member Unwanted Witness explored the impact of internet shutdowns in Uganda in 2021 on journalists during the election period.⁵² The report sought to establish the impact of this internet shutdown on the media's role in covering and relaying information to citizens in an electoral process and further captures specific journalist experiences of the shutdown on their work.

The study shows that effective media coverage of the general elections in Uganda was curtailed by the internet shutdown. According to surveys carried out in the context of this study, the shutdown had a negative impact on both the quality and quantity of the news output, affecting timely delivery of the news. Journalists that participated in this study, expressed that it was difficult to research and reference other news items and that they were not able to share and fully document information. Access to news was also affected because of the delayed delivery. 80% of the journalists that participated in this research, pointed out that they did not cover the presidential and parliamentary elections effectively.

The report also addresses the economic impact of the shutdown in media and journalists since they counted losses during the internet and social media shutdown because they had to incur more costs in making phone calls, writing messages and also transporting themselves from the field to the stations. "This caused financial problems for both the journalists and the media houses leading to closure and pay cuts which made it difficult for the journalists to earn and also work effectively".

The study says that this internet shutdown was accompanied by military operations making it difficult for documentation by citizen journalists and reporters. This, says the report, led to the emergence of "internet refugees" as journalists endangered their safety by taking hazardous journeys to areas with internet access. This mainly

⁵² Unwanted Witness. (2021). *Journalism Blocked, Information Seized: A tale of how internet shutdown crippled media work in Uganda*. <https://www.apc.org/en/pubs/journalism-blocked-information-seized-tale-how-internet-shutdown-crippled-media-work-uganda>

happened in border districts where journalists crossed to countries like Tanzania, Congo and Kenya to access the internet.

The economic impact of internet shutdowns

APC member organisation CIPESA developed a framework to estimate the cost of internet shutdowns in Sub-Saharan Africa.⁵³ This framework calculates the direct loss of earnings in the ICT sector's contribution to GDP, plus the quantitative effects of loss of confidence in the digital economy stemming from government-perpetuated disruptions and the resultant loss of cost savings by businesses that are deprived of internet access. The framework can be used to estimate the cost of a complete internet disruption (national or regional), and a partial disruption targeting social media.

CIPESA applied the framework to estimate the cost of internet shutdowns in 10 African countries. According to CIPESA, overall, the internet and social media shutdowns studied cost Sub-Saharan African countries an estimated USD 237 million between 2015 and 2017.

This report indicates that the economic costs of an internet disruption persist far beyond the days on which the disruption occurs. "Indeed, the negative effects of a disruption on the economy may extend for months, because network disruptions unsettle supply chains and have systemic effects harming efficiency throughout the economy. These longer-term effects are not limited to the immediate ICT ecosystem: factors such as investor confidence and risk premiums can affect a country's broader economy long after the disruption has been lifted."

The study concludes that "African governments should desist from ordering shutdowns because they have a high economic impact at micro and macro levels, adversely affecting the livelihoods of citizens, undermining the profitability of

⁵³ CIPESA. (2017). Op. cit.

business enterprises, and reducing the GDP and competitiveness of countries that implement them”.

Education

In times of network shutdowns, education takes a major hit, although this is rarely reported in the media. Diminished access to education is an inadvertent effect of internet shutdowns. Countless students are unable to submit forms required to apply to universities or school-leaving examinations.

In a distinctive case in India, district collectors in Gujarat asked to ban mobile internet services between 10 a.m. and 2 p.m. on 13 October 2016, so that mobile internet services would not be used by candidates to cheat and use unfair means for the written examination test for the post of class IV non-secretariat clerks and office assistants. Asit Vora, chairman of the Gujarat Subordinate Service Selection Board (GSSSB), said, “We are taking all precautionary measures to ensure that the examination is held without use of unfair means.”⁵⁴ It is interesting to see that while on the one hand, state authorities felt that mobile internet services would be used to cheat, on the other, students need it to access education-related information. The problem of cheating could have been addressed by disallowing mobile phones into exam centres instead of banning services in the state and inconveniencing more people than necessary.

Social and psychological impacts

Research by APC member Digital Empowerment Foundation (DEF) focused on the social and psychological impacts of internet shutdowns in India,⁵⁵ where the internet is shut down with increasing regularity, either partially or completely. This paper documents on-ground stories and experiences to build a strong and effective

⁵⁴ Press Trust Of India. (2016, 14 October). Mobile Internet To Remain Shut In Gujarat For Clerk Exam On Sunday. *NDTV*. <https://www.ndtv.com/india-news/mobile-internet-to-remain-shut-in-gujarat-for-clerk-exam-on-sunday-1473938>

⁵⁵ Mawii, Z., Srivastava, R., Lal, S., & Abraham, B. P. (2018). Op. cit.

case against network shutdowns, with specific focus on the social and psychological impact.

This study identifies how such shutdowns impact the lives of people at the micro level. It concerns itself with the psychological and social impact that network shutdowns have on those affected. By analysing media reports and conducting interviews with citizens living under dire conditions, this paper seeks to identify the impact that network shutdowns have on various social and cultural rights, such as access to education and amenities, impact on livelihood, and psychological impact of social exclusion due to restricted access to the internet.

These measures create disproportionate inconvenience as residents have restricted access to e-banking services and communication tools. Shutdowns adversely affect commerce and access to essential services leading to disruptions in daily life.

This was found to be the case in Darjeeling, where internet services had been suspended since June 2017. The entire state had been in shutdown mode and schools had been closed. Children and teens were left with little to do since many of their social activities and recreational activities take place online. With internet services switched off too, they had no respite from idleness or access to the means to socialise, leading to feelings of listlessness and frustration.

People's access to leisure and well-being were under critical threat in Darjeeling during the shutdown. Social exclusion, both individual exclusion and group exclusion from society or other groups, has become a major consequence of network shutdowns. It results in denial of access to opportunities, public goods, public information, and self-respect in the public sphere.

By monitoring media reports of network shutdowns and conducting interviews with residents in affected areas, the study delves into the ways that network shutdowns impact citizens' access to education, essential services and emergency services; the adverse effect on small business owners; and the psychological distress that shutdowns cause as a result of communication blackouts.

In Kashmir, on the other hand, the sentiments expressed were grimmer. Since internet shutdowns in the region are common and usually prolonged, lasting from a few days to several weeks, their impact on livelihood is profound. Prolonged shutdowns have adversely affected small businesses and the way medical personnel carry out their work. The ill effects of shutdowns are reflected in citizens' distrust of the government, their isolation from the rest of the country and the suffocation they feel when communication lines are cut.

The paper shows how shutdowns exclude entire communities from fully participating in social, political and economic self-determination. The research also concludes that all that these bans achieve is to alienate residents from the rest of the country and increase mistrust in state authorities.

Impact on human rights

Internet disruptions not only directly infringe on people's fundamental right to receive and impart information or the right to express themselves, but also prevent them from associating and assembling with like-minded individuals or groups online and offline.

Another paper by DEF focuses on highlighting the existing and emerging threats to fundamental human rights on account of arbitrary, unnecessary and disproportionate usage of internet and network shutdowns in India by the state.⁵⁶

The paper shows the adverse effects of internet shutdowns in India on free speech, expression, and ability to associate and assemble. It explains that most of these shutdowns occur in the name of national security and to maintain social stability and people's security. However, the paper argues, through internet disruptions, governments end up restricting access to emergency health services and impeding

⁵⁶ Srivastava, R., & Abraham, B. P. (2017). *Anatomy of virtual curfews: Human rights vs. national security*. Digital Empowerment Foundation. <https://www.apc.org/en/node/34559>

people from getting in touch with security forces or making sure that family and friends are safe during emergency situations.

4. Initiatives promoting internet connectivity and bridging the digital divides

Devastating structural inequalities across the world continue to be laid bare by the COVID-19 crisis. Access to the internet is vital for an informed, cooperative and people-centred global response to the pandemic, including during the “building back” process. Access to the internet plays a crucial role in enabling a flow of information and sustaining communities in times of crisis, and is integral to any disaster management and recovery plan. Because of this, it needs to be protected, more than ever, as a public good.

The internet is a critical resource that enables individuals to exercise their right to speak, impart opinions, share ideas, build knowledge, gain skills and access information. Access to the internet enables people to participate in the information economy, exercise human rights, get access to health information and services, form communities, engage in formal and informal processes to determine our social, cultural and political life, and more.

For disadvantaged groups and those in situations of marginalisation, who experience multiple forms of discrimination and oppression, the internet has become an important space in the struggle for fundamental rights and freedoms. Equitable, affordable and reliable internet connectivity is paramount in empowering people to exercise a wide range of rights. That is why authoritarian regimes have sought to limit access to it.

A radical change of policy, logic and strategy is necessary to address the needs of the billions of people who still suffer from digital exclusion and constant network

disruptions.⁵⁷ This is required both to truly advance the internet as a public good and to counteract the growing practice of internet shutdowns.

The first step is to provide alternatives for infrastructure deployment, expanding coverage and addressing affordability. Governments should create enabling ecosystems to allow small-scale networks and locally owned telecommunications infrastructure to emerge and expand. Decentralised community-built and owned networks are the most effective way to overcome digital exclusion in areas that are still isolated from the social and economic dynamics of the digital era.

Limited private-sector interest in rural areas, for example, has resulted in various national policy strategies for addressing the usage gap, often in the form of universal access funds designed to incentivise investment in rural areas. However, many of these have met with limited success because they have centred around subsidising the capital costs for national commercial operators to provide coverage in these areas, while usage has not proved sufficient to sustain the operating costs of mobile network operators.

The problem is that telecommunications policy and regulatory frameworks have traditionally taken a “one size fits all” approach. Conventional views of the universal access challenge treat the economy as a single entity but, in reality, the economies of the rural poor are significantly different from comparatively wealthy urban economies.

One important solution for this situation is to promote diversity of types and sizes of operators that complement each other. Not all local operators are driven by the market economy. There are also social-purpose operators that have a significant role to play in filling the “underserved” spaces. Examples of these are consumer cooperatives, community-owned networks, and even municipal networks whose

⁵⁷ <https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>

interest is to meet the communication needs of their communities in geographies where commercial services are either unavailable or unaffordable.

APC has long promoted community networks as alternatives to address the digital divide. They are collectively owned and managed communications networks, not for profit, and community goals oriented. They are built as commons of either Indigenous, Afrodescendant or tribal communities, as well as civil society organisations, as an expression of their rights to communication, under principles of self-determination, democratic participation, equality, gender equality, diversity and pluralism.⁵⁸

The information about the network design and management is open and accessible, allowing for its expansion by users. Community networks promote local services and content, net neutrality and the execution of interconnection and transit agreements free of charge with other such networks that offer reciprocity.

Below, we mention some initiatives at the national level that exemplify how governments can provide direct support to enable community networks:

- Direct provision of resources: The Roberto Arias Connectivity Programme in Argentina

The Roberto Arias Connectivity Programme seeks to respond to the connectivity needs of rural communities and Indigenous peoples, promoting self-management through community networks. Argentina's national communications regulator, ENACOM, finances 100% of the projects with resources from the Universal Service Trust Fund (Fondo Fiduciario del Servicio Universal), and in addition to the implementation of the necessary infrastructure work, it also establishes the internet

⁵⁸ Labardini Inzunza, A., & Zanolli, B. (2021). *Policy brief and recommendations for an enabling environment for community networks in Brazil*. APC.
https://www.apc.org/sites/default/files/policy_brief_brazil_eng_final.pdf

service bonus for six months until the network is firmly established and its sustainability is guaranteed from an economic and organisational point of view.⁵⁹

- Facilitating licensing procedures: The norms adopted by the Kenyan regulator

The Communications Authority of Kenya (CA) formulated a Licensing and Shared Spectrum Framework for Community Networks,⁶⁰ with contributions from APC member KICTANet, the community and other partners, including APC and the University of Strathclyde, Glasgow, Scotland, and supported by the United Kingdom's Digital Access Programme. The Communications Authority released the guidelines, application forms and compliance forms for operators to apply for the community network licence under the Unified Licensing Framework in late 2021. The framework integrates a new licensing category for community networks within the Unified Licensing Framework. The licence will be exclusively for community-based organisations or other forms of non-profit collectives. This is aimed at encouraging members of the community to participate in the governance, design and operationalisation. The licence application fee is KES 1,000, with an annual renewal fee of KES 5,000. The licence is valid for 10 years. The community network will be limited to a subcounty. This is considered affordable compared to the lowest fee for a Network Facilities Provider licence, where the initial licence fee is KES 200,000.⁶¹

⁵⁹ https://enacom.gob.ar/redes-comunitarias-roberto-arias_p5049#contenedorSite

⁶⁰ <https://www.ca.go.ke/wp-content/uploads/2021/10/Application-Form-For-Community-Network-and-Service-Provider-License-1-TL-8-0.pdf>

⁶¹ For more information see: Kivuva, M. (2021, 9 November). Kenya adopts the community networks licensing framework. *KICTANet*. <https://www.kictanet.or.ke/kenya-ratifies-the-community-networks-licensing-framework>

- Engaging in multistakeholder collaboration to universalise internet access: The partnerships carried out by the Brazilian National Telecommunications Agency

In October 2021, APC, with the collaboration of Brazil's National Telecommunications Agency (Anatel) and a varied group of experts who work with communities on universalisation of internet access in the country, launched recommendations to create a more enabling regulatory environment for community networks by taking into account national contextual factors around connectivity barriers and geographic and demographic challenges. The recommendations were compiled in a policy brief that was also complemented by a manual and a video introducing what community networks are and how people who are interested can start one. The project also received support from the UK government's Digital Access Programme.

The project identified barriers, challenges and opportunities to facilitate the emergence and sustainability of community networks in the country, based on extensive research in the Brazilian and global contexts, and on the latest innovations from small non-profit actors. It was also rooted in the discoveries and experiences of more than 40 people who were interviewed or who contributed directly to the preparation of the materials, all of them related in some measure to the field of community networks in Brazil, internet access, spectrum management, digital exclusion or research in information and communication technology projects.⁶²

Other examples can be mentioned of projects supported by international aid and development assistance that seek to promote the creation, maintenance and strengthening of community networks and which provide direct support to communities:

⁶² All the related materials can be found here: <https://www.apc.org/en/news/multistakeholder-collaboration-build-enabling-environment-community-networks-brazil>

- Connecting the Unconnected: Supporting community networks and other community-based connectivity initiatives

This is a project implemented by APC in partnership with Rhizomatica that aims to directly support the development of community networks, with funds from the Swedish International Development Cooperation Agency (Sida). The ultimate aim of this two-phased project is to contribute to an enabling ecosystem for the emergence and growth of community networks and other community-based connectivity initiatives in developing countries. It is part of a multi-year, multi-donor initiative envisaged to address the human capacity and sustainability challenges, along with the policy and regulatory obstacles, that limit the growth of community-based connectivity initiatives.⁶³

As part of this project, 16 community network organisations (six in Africa, four in Asia and six in Latin America) were selected and granted funding towards activities that create and foster a peer learning community.⁶⁴

- Supporting Community-led Approaches to Addressing the Digital Divide

The project provides technical assistance, capacity building, policy and regulatory advice and community mobilisation in five priority countries: Brazil, Indonesia, Kenya, Nigeria and South Africa. It focuses on building the technical, organisational and business capacity of community network actors and facilitators at different levels. The intervention will ensure that the organisational and business models needed for sustainability are enhanced, it will enable their integration into the context of public and private sectors, and it will catalyse access to connectivity for excluded or underserved communities and vulnerable populations.⁶⁵

⁶³ <https://www.apc.org/en/project/connecting-unconnected-supporting-community-networks-and-other-community-based-connectivity>

⁶⁴ <https://www.apc.org/en/node/35438/>

⁶⁵ <https://www.apc.org/en/project/supporting-community-led-approaches-addressing-digital-divide>

5. Conclusion and recommendations

Temporary internet disruptions and shutdowns pose serious challenges to the exercise of a wide range of rights and therefore cannot be justified under any pretext, whether these relate to preservation of national security, safeguarding the public order, or countering disinformation, among others. Any measure that restricts people's ability to connect to the internet should be strictly justified through the principles of proportionality and necessity.

The notion of network disruptions should thus take into account that partial disruptions can take place and have almost as much a deleterious effect on human rights as internet shutdowns. In fact, mandated disruptions of communications can take various forms and a concerning trend of selective blocking of applications or websites due to administrative or judicial orders has been identified in some regions, as well as a widespread use of judicial mechanisms to take down online content and platforms, in several cases with apparent political motivations.

In addition to calling on states to refrain from engaging in this practice, it is crucial to promote measures that address underlying problems that make these disruptions so impactful. These problems refer to the concentration in ownership of services and applications and their business models, as well as the models of infrastructure ownership and expansion. Centralised and for-profit models cannot respond to the full challenge of bridging the digital gaps and promoting meaningful access.

The occurrence of mandated disruptions of access to social media and messaging platforms brings attention to the issue of concentration of ownership of these services that is part of a data-harvesting business model of big tech companies. For instance, Facebook and its subsidiaries have 2.8 billion users worldwide who use its services for different purposes, from running businesses to social engagement, community outreach and personal communication. Especially in the global South, free services like Facebook and WhatsApp are integral for small businesses and critical for daily communications between families and friends, even more so in the context of the COVID-19 pandemic. While addressing internet shutdowns,

responses by different stakeholders to decentralise critical services on the internet cannot wait further.⁶⁶

Private infrastructures from such companies are not exempt from failure, as became evident when Facebook, Instagram and WhatsApp went offline globally for more than seven hours in October 2021.⁶⁷ Errors in their operations can leave billions of people disconnected and lead to the same human rights impacts that mandated disruptions cause. Cases like these further evidence the need to advance the urgent need to promote decentralised alternatives for online communications and place limits on market concentration, including on zero-rating agreements.

In the case of disruptions targeting infrastructure, the decentralised and community-led model represented by community networks provides a critical alternative to internet connectivity centrally provided by the government in partnership with large operators, which renders national networks much more susceptible to broad-scale attacks and disturbances.

In view of this, measures should be taken to restrict the concentration of digital service provision and networking spaces by a few companies that have led to internet centralisation. This can be done, for instance, by developing competition and antitrust regulations that make it harder for technology companies to buy out competitors and to compel companies to divest parts of their business that results in the creation of monopolies.

Similarly, states and the international community should support the realisation of the right of people to meaningfully shape and use the internet and digital technologies to meet their specific needs and realities. This includes supporting unconnected communities and groups to build technical infrastructure for

⁶⁶ APC. (2021). *Facebook and the monetisation of hate: The way forward for holding platforms accountable*. <https://www.apc.org/en/pubs/facebook-and-monetisation-hate-way-forward-holding-platforms-accountable>

⁶⁷ Isaac, M., & Frenkel, S. (2021, 4 October). Gone in minutes, out for hours: Outage shakes Facebook. *The New York Times*. <https://www.nytimes.com/2021/10/04/technology/facebook-down.html>

communications that is not entirely dependent on the government and corporations.

States should also reform policy and regulatory environments so they are favourable to the coexistence of different models for connectivity provision, including community networks and medium-sized and small cooperative service providers or operators.