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Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development

Internet shutdowns: trends, causes, legal implications and impacts on a range of human rights


*Summary*

In the present report, submitted pursuant to Human Rights Council resolution 47/16, the Office of the United Nations High Commissioner for Human Rights provides an overview of trends in Internet shutdowns. It contains an analysis of their causes and the legal implications and the impact on human rights thereof, the roles of companies, the existing efforts to promote Internet connectivity and provide development aid, and the relevance of such efforts for detecting, preventing and responding to shutdowns, as well as a set of recommended measures for ending shutdowns and minimizing their impact.

* Agreement was reached to publish the present report after the standard publication date owing to circumstances beyond the submitter’s control.
I. Introduction

1. Hospitals being unable to contact their doctors in cases of emergency, voters being deprived of information about candidates, handcraft makers being cut off from customers, and potentially facing imminent economic ruin, peaceful protesters who fall under violent attack being unable to call for help, students missing entrance exams for academic programmes and refugees being unable to access information on the risks that they face owing to the coronavirus disease (COVID-19) pandemic are just some of the situations confronted when an Internet and telecommunications services shutdown occurs. However, many Governments have ordered shutdowns, unaware of, or oblivious to, the harsh impacts that they can cause or calculating that the factors motivating the shutdown outweigh those harms. The dramatic real-life effects of shutdowns on the lives and human rights of millions of people are vastly underappreciated and deserve much greater attention from States, international organizations, businesses and civil society.

2. The present report is aimed at shedding much-needed light on the phenomenon of Internet shutdowns. It contains information on the circumstances in which they are carried out and their often unsettling consequences. It contains suggestions for reversing the current trend towards a greater frequency of shutdowns in some regions, given the inherent tension between shutdowns and international commitments to ensuring universal Internet access, and recommendations anchored in applicable human rights law, including the key principles of legality, necessity, proportionality and non-discrimination.

3. The report is submitted pursuant to Human Rights Council resolution 47/16, in which the Council requested the Office of the United Nations High Commissioner for Human Rights to study the trend in Internet shutdowns, analysing their causes, their legal implications and their impact on a range of human rights, including economic, social and cultural rights, through robust consultations with stakeholders. The report is built upon previous work, and reflects insights gained through a series of virtual stakeholder consultations and from 80 submissions received from States, international organizations and civil society organizations in response to a call for input.1 It is also aimed at contributing to the implementation of action points set out by the Secretary-General on ending Internet shutdowns, as identified in his report on a road map for digital cooperation2 and in his report, entitled “Our Common Agenda”.3

II. Scope: defining Internet shutdowns

4. Internet shutdowns are measures taken by a government, or on behalf of a government, to intentionally disrupt access to, and the use of, information and communications systems online. They include actions that limit the ability of a large number of people to use online communications tools, either by restricting Internet connectivity at large or by obstructing the accessibility and usability of services that are necessary for interactive communications, such as social media and messaging services.4 Such shutdowns inevitably affect many users with legitimate pursuits, leading to enormous collateral damage beyond the scope of their intended purposes.

5. Shutdowns often include complete blocks of Internet connectivity or accessibility of the affected services. However, governments increasingly resort to throttling bandwidth or limiting mobile service to 2G, which, while nominally maintaining access, renders it extremely difficult to make meaningful use of the Internet. In particular, bandwidth throttling interferes with the ability to share and watch video footage and live streams. Another intervention is to limit the availability of some websites and services, restricting access to certain communications channels while continuing to shutdown access to the rest of the

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1 See www.ohchr.org/en/calls-for-input/calls-input/call-comments-report-internet-shutdowns-and-human-rights-fiftieth for the call for input and the submissions received, apart from those whose authors requested anonymity.
2 A/74/821.
3 A/75/982.
4 A/HRC/35/22, para. 8; and A/HRC/47/24/Add.2, para. 7.
Internet. Some governments have also blocked the use of virtual private networks to prevent people from circumventing shutdown measures.\(^5\) In some cases, shutdowns of entire telephone networks accompany Internet shutdowns, leaving no channel of direct electronic communication.

6. Internet shutdowns can affect all Internet connections in a country or region, but are often limited to certain forms of Internet access, in particular mobile networks. In countries where the Internet is overwhelmingly accessed through mobile devices and broadband Internet is affordable only for the affluent, this may amount to a complete Internet blackout for the majority of the population. As technology develops, the modalities for disrupting access to, and the use of, online space will evolve, and the definition of shutdowns and responses to them must change as well.

### III. Legal framework

#### A. International human rights law

7. Access to the Internet is widely recognized as an indispensable enabler of a broad range of human rights.\(^6\) It is not only essential for freedom of expression, but, as digitalization advances, it is also central to the realization of the rights to education, to freedom of association and assembly, to participate in social, cultural and political life, to health, to an adequate standard of living, to work and to social and economic development, to name just a few.

8. Given the positive obligation of States to promote and facilitate the enjoyment of human rights, States should take all steps necessary to ensure that all individuals have meaningful access to the Internet. On the same grounds, States should refrain from interfering with access to the Internet and digital communications platforms unless such interference is in full compliance with the requirements of the applicable human rights instruments.

9. While Internet shutdowns deeply affect many human rights, they most immediately affect freedom of expression and access to information – one of the foundations of free and democratic societies and an indispensable condition for the full development of the person.\(^7\) It is a touchstone for all other rights guaranteed in the International Covenant on Civil and Political Rights\(^8\) and other human rights instruments. Any restriction on freedom of expression constitutes a serious curtailment of human rights.\(^9\)

10. Article 19 (2) of the Covenant, echoing article 19 of the Universal Declaration of Human Rights, protects everyone’s right to freedom of expression, which includes the freedom seek, receive and impart information of all kinds, regardless of frontiers. States have the obligation to respect and ensure the right to freedom of expression, without distinction of any kind.

11. Restrictions on the right to freedom of expression are only permissible when they meet the requirements set out in article 19 (3) of the Covenant. Any restrictions must be provided by law. The law must be precisely formulated to enable an individual to regulate her or his conduct accordingly, and it must be made publicly available. When States impose Internet shutdowns or disrupt access to communications platforms, the legal foundation for their actions is often unstated. When laws are invoked, the applicable legislation can be vague or overly broad, which would fail to meet the requirements of article 19 (3). For example,

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\(^5\) For an order by the Uganda Communications Commission to Internet services providers to block virtual private networks, see www.ugstandard.com/ucc-lists-over-100- vpns-directs-Internet-service-providers-to-block-them/. See also Supreme Court of India, Foundation of Media Professionals v. Union Territory of Jammu and Kashmir & Anr, judgment of 11 May 2020.

\(^6\) Human Rights Council resolution 47/16; and A/66/290, para. 12.

\(^7\) Human Rights Committee, general comment No. 34 (2011), para. 2; and Human Rights Council resolution 44/12.


a law referring to public order or national security that does not more specifically address the surrounding circumstances and conditions for Internet shutdowns is likely not sufficiently precise.

12. Any restriction on freedom of expression, and other rights protected under the Covenant, must also pursue a legitimate goal in line with the grounds specified in article 19 (3) and be necessary and proportionate to achieve that goal. The restriction must also be the least intrusive option available and must not impair the essence of the right. Those requirements apply to all restrictions of rights protected under the Covenant. Restrictions must not be discriminatory. The onus to show that restrictions comply with those conditions is on the State seeking to restrict rights.

13. Internet shutdowns, as detailed below, generally do not meet those requirements. Given their indiscriminate and widespread impacts, Internet shutdowns very rarely meet the proportionality test. Any form of Internet shutdown impairs countless legitimate and beneficial activities. Shutdowns also directly put people’s safety and well-being at risk, for example, when they make it impossible to warn people against impending danger or for people to call for vital services. Whereas blanket shutdowns have severe consequences and can never be justified, other forms of network and communications disruptions are also likely to have indiscriminate adverse effects, rendering them disproportionate. Targeted shutdowns of a communications service provided through the Internet may be deemed proportionate and justifiable only in the most exceptional circumstances, as a last resort when necessary to achieve a legitimate aim, as defined by article 19 (3) of the Covenant, such as national security or public order, and when no other means are effective to prevent or mitigate those harms (see paras. 66–67 below).

14. Internet shutdowns also by nature have a negative impact on the enjoyment of economic, social and cultural rights. Under article 4 of the International Covenant on Economic, Social and Cultural Rights, any limitations to the enjoyment of those rights are permissible only insofar as they are compatible with the nature of those rights and solely for the purpose of promoting the general welfare in a democratic society.

15. The Secretary-General, his report entitled “Our Common Agenda”, noted that it might be time to reinforce universal access to the Internet as a human right. In addition to calling for accelerated efforts to connect those without Internet access, the Secretary-General emphasized that the United Nations would work with Governments, business and civil society to reduce disruptions to Internet services.

B. Views of international and regional human rights mechanisms and experts

16. Since the emergence of the first Internet shutdowns, human rights experts and bodies have denounced them with ever-growing urgency. Beginning in 2016, the Human Rights Council has unequivocally and strongly condemned Internet shutdowns. The High Commissioner has repeatedly expressed her concerns about Internet shutdowns and has urged States to avoid implementing such measures, in particular during assemblies. The Human Rights Committee has taken a very critical stance on shutdowns; in its general comment No. 34 (2011), the Committee indicated that generic bans on the operation of certain sites and systems were not compatible with article 19 (3) of the International Covenant on Civil and Political Rights. It also emphasized that State parties to the Covenant must not block or

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11 A/HRC/44/24, para. 21.
12 A/75/82, para. 35.
13 See, e.g. the Human Rights Council resolutions on the promotion, protection and enjoyment of human rights on the Internet, 32/13, 38/7 and 47/16, and Council resolution 44/12, on freedom of opinion and expression.
14 See A/HRC/44/24.
15 Human Rights Committee, general comment No. 34 (2011), para. 43.
hinder Internet connectivity in relation to peaceful assemblies. Various special procedure mandate holders and their peers from regional organizations have urged States to refrain from Internet shutdowns, emphasizing their incompatibility with human rights law. The African Commission on Human and Peoples’ Rights has called upon States not to engage in or condone any disruption of access to the Internet or other digital technologies for segments of the public or an entire population.

C. Other relevant international frameworks

17. The Sustainable Development Goals reinforce States’ human rights obligations to work towards universally available and accessible Internet, free from unjustified restrictions. In target 9.e of the Goals, States committed to significantly increasing access to information and communications technology and striving to provide universal and affordable access to the Internet in least developed countries by 2020. In target 5.b of the Goals, States also pledged to enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

18. Founded to facilitate international connectivity in communications networks, the International Telecommunication Union (ITU) works on the adoption of standards that ensure that networks and technologies interconnect, and strives to improve access to the Internet. As noted by the Special Rapporteur on the rights to freedom of peaceful assembly and of association, articles 34 and 35 of the ITU Constitution have been invoked by some States as granting legal authority to block communications, including to implement Internet shutdowns. These provisions must, however, be applied together with and subject to the additional obligations that States have assumed under international human rights law to respect the right to freedom of expression and other applicable human rights. States members of ITU may therefore wish to consider revising those provisions in order to align them explicitly with international human rights standards. The Special Rapporteur has also recommended that ITU issue guidance clarifying that those provisions should never be understood as authorizing Internet shutdowns.

IV. Trends in Internet shutdowns and the main impacts thereof

19. Despite global commitments to promote Internet connectivity, governments continue to order Internet shutdowns, in some cases repeatedly. Between 2016 and 2021, the #KeepItOn coalition reported 931 Internet shutdowns in 74 countries. Notably, 12 countries implemented more than ten shutdowns respectively during that period. Globally, all regions have experienced multiple shutdowns, but the majority reported occurred in Asia and Africa.

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16 Human Rights Committee, general comment No. 37 (2020), para. 34.
17 The Special Rapporteur on the rights to freedom of peaceful assembly and of association stated that shutdowns are in clear violation of international law and cannot be justified in any circumstances (A/HRC/41/41, para. 52). Three holders of the mandate of Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression have declared that shutdowns could not be justified under article 19 (3) of the International Covenant on Civil and Political Rights. See A/HRC/17/27, para. 78; A/HRC/35/22, paras. 14–15; and A/HRC/47/25, para. 51. This view is shared by experts of regional organizations. See e.g. www.osce.org/files/f/documents/a/0/154846.pdf; and www.achpr.org/pressrelease/detail?id=8.
20 Ibid., para. 67.
21 The #KeepItOn coalition is comprised of over 244 civil society organizations that have systematically recorded episodes of Internet shutdowns in a public database after corroboration. Several members of the coalition also submitted information for the present report. The count of reported shutdowns incidents and contexts associated with the episodes provided as examples throughout the report correspond to the aggregation of data displayed in the coalition’s public database for the years between 2016 and 2021, as displayed in April 2022. See www.accessnow.org/keepiton/#coalition.
20. Challenges in detecting and obtaining information about shutdowns lead to underestimations of their frequency, scope and impact. Authorities often do not publish information on shutdowns, refuse to acknowledge disruptions altogether or deny having ordered interventions. Confirming that a State has ordered a shutdown, and the determination of its precise scope, requires the documentation of communication anomalies and clarification of the exact circumstances of the events.

21. The modalities of shutdowns have evolved from blanket interventions to more targeted approaches, following the increased penetration of communications platforms and the emergence of new tools that have enabled targeted disruptions. After blanket disruptions of broadband and mobile connections, the most common interventions are the blocking of mobile services,22 the targeted disruption of certain services and throttling. The increasing affordability of surveillance technologies that enable the covert blocking of certain platforms is also likely to lead to more targeted disruptions. As 5G networks are adopted, enabling increased network segmentation and differentiation, there are risks that new, geographically specific shutdowns will emerge. 23 Institutional and legal frameworks governing telecommunications, in particular licensing agreements and national legal frameworks establishing the scope of authority to order interventions, are determinants for the risk of recurrent interventions.

22. The scope and duration of disruptions can vary greatly, with some interventions lasting long periods of time and combining different modalities of disruption. While some shutdowns affect entire countries, many target certain regions, towns or even neighbourhoods. The duration of shutdowns ranges from a few hours to many months – and even years.24 Prolonged shutdowns or extended periods of repeated shorter shutdowns, sometimes fittingly called “digital sieges”,25 have particularly severe repercussions, including for independent reporting, the viability of health-care and public services, businesses and employment. In several cases, temporary disruptions of certain social media platforms appear to have been converted into indefinite blocking measures.26

23. In parallel, countries with comprehensive technological, legal and institutional capacities in place to efficiently control their information infrastructure can exert systematic censorship without ever resorting to temporary disruptions. Accordingly, the extent of Internet shutdowns should never be used on its own to determine the scope of online freedoms in a given location.

A. Context of shutdowns

24. Shutdowns are powerful markers of deteriorating human rights situations. Over the past decade, they have tended to occur in particular contexts, including during periods of conflict or heightened political tensions, such as the periods surrounding elections or during large-scale protests.

25. Almost half of all shutdowns recorded by civil society groups between 2016 and 2021 were carried out in the context of protests and political crisis, with 225 shutdowns recorded during public demonstrations. Generally, those shutdowns appeared to be aimed at quelling demonstrations relating to a vast range of social, political or economic grievances. Additional repressive measures often accompanied such protests. By undermining the possibility to mobilize large groups effectively and quickly, and severely restricting the visibility of protests, such shutdowns interfere with the right of peaceful assembly. One of the first shutdowns that captured global attention took place in Egypt in 2011, implemented alongside hundreds of arrests and killings. Shutdowns to quell protests have also been implemented by military leaders seizing power through coups against elected leadership.

26. Shutdowns affected at least 52 elections between 2016 and 2021. In 2019 alone, 14 African countries disrupted access to the Internet during electoral periods, with some countries limiting Internet access during two different elections. Such disruptions undermine or eliminate access to digital tools that are critical for campaigning, promoting public discussion, conducting voting and overseeing the electoral processes. Ultimately, shutdowns create significant obstacles that damage democratic electoral processes and the free flow of information, which may in turn erode trust in electoral processes and increase the likelihood of hostilities and violence. Disruptions are particularly problematic for opposition groups with fewer resources, which may be particularly dependent on online channels to campaign and mobilize. Disruptions severely inhibit the work of journalists and the media in general, a key element of fair elections. In Uganda, for example, shutdowns undermined media coverage of the elections in 2021, amid reports of violent repressive measures. Shutdowns following protests during electoral periods were also reported in countries such as Belarus and the Niger.

27. Shutdowns were also frequently reported when governments carried out armed operations, severely restricting reporting and human rights monitoring. Both in the context of armed conflict and in other circumstances, the inability to access tools to document and rapidly report abuses seems to contribute to further violence, including atrocities. Some shutdowns may even be implemented with the deliberate intent of covering up human rights violations. The information on serious abuses was reportedly impeded, for example, by

29. For example, the Sudan and Myanmar. See https://www.ohchr.org/en/statements/2021/10/statement-coup-detat-sudan; and A/HRC/49/72.
30. See www.accessnow.org/keepiton#coalitionwww.accessnow.org/keepiton#coalition.
31. See A/HRC/35/22.
shutdowns in Myanmar\textsuperscript{38} and the Sudan\textsuperscript{39} and during the repression of protests in the Islamic Republic of Iran.\textsuperscript{40}

28. Several States have disrupted communications during periods of school examinations, with the apparent aim of deterring potential cheating through use of digital devices. Civil society organizations reported 38 such episodes between 2016 and 2021.\textsuperscript{41} Almost all the disruptions recorded were country-wide, with several extending for periods going well beyond the period of examinations, undermining political and economic activities. That type of disruption was reported most frequently in the Middle East and North Africa region.\textsuperscript{42}

B. Limited transparency

29. When implementing shutdowns, governments often fail to acknowledge them or provide minimal or no explanation for the measures, including their legal basis and underlying grounds. The official justification for the shutdowns was unknown in 228 episodes recorded by civil society groups across 55 countries between 2016 and 2021.\textsuperscript{43} In 138 cases, the authorities ordering the disruptions were not identified.

30. In other cases, orders for shutdowns are either published much later or governments exert significant pressure on companies both to comply with disruption orders and to not publicly share information about the measures taken.\textsuperscript{44} In such cases, national laws and licensing agreements may be invoked to prevent companies from disclosing information relating to shutdowns. Companies also reported having received threats against their employees and infrastructure, should they fail to comply with such requests.

C. Official justifications

31. When shutdowns are based on legal orders, they generally rely on vaguely formulated laws that offer a large scope of discretion to authorities. Official justifications of a large majority of shutdowns have been focused on public safety and national security or the need to restrict the circulation of information deemed illegal or likely to cause harm. According to data compiled by civil society groups,\textsuperscript{45} 189 shutdowns between 2016 and 2021 were justified by public safety concerns, whereas 150 were based on national security grounds. Many of those shutdowns were followed by spikes in violence, which seems to demonstrate that those interventions often fail to achieve their officially stated safety and security objectives. Moreover, as noted by the Human Rights Committee, national security cannot be used as a justification where the very reason that national security has deteriorated is the suppression of human rights.\textsuperscript{46}

32. Between 2016 and 2021, 132 of the shutdowns recorded by civil society groups\textsuperscript{47} were officially justified by the need to control the spread of hate speech, disinformation or other forms of content deemed illegal or harmful. Countering disinformation was often used as a justification for disruptions prior to elections, whereas hate speech concerns were more commonly raised in shutdown orders aiming at promoting public safety and national security. The ambiguity of many legal instruments relating to hate speech and disinformation creates


\textsuperscript{39} Submission by the OHCHR office in the Sudan.


\textsuperscript{41} See www.accessnow.org/keepiton/#coalition.

\textsuperscript{42} See www.accessnow.org/keepiton/#coalition.

\textsuperscript{43} See www.accessnow.org/keepiton/#coalition.

\textsuperscript{44} A/HRC/35/22 para. 31.

\textsuperscript{45} See www.accessnow.org/keepiton/#coalition.

\textsuperscript{46} Human Rights Committee, general comment No. 37 (2020), para. 42.

\textsuperscript{47} See www.accessnow.org/keepiton/#coalition.
D. Impact on economic activities

33. Given the increasing reliance of businesses and trade on digital technologies, mandated disruptions of communications services have serious repercussions for all economic sectors. Shutdowns may lead to the disruption of financial transactions, commerce, industry, labour markets and the availability of platforms for the delivery of services.49 Moreover, shutdowns create a climate of uncertainty for investment, which can prove disastrous for companies and for start-up ecosystems in particular.50 Shutdowns can also undermine the flow of remittances to low-income and middle-income countries.51 Economic shocks provoked by shutdowns are felt over long periods of time, greatly exacerbating pre-existing social economic inequalities.

34. Several studies have estimated the economic impacts of shutdowns in various settings, however, there is still a considerable gap in reliable data, and existing studies expressly concede that they underestimate economic impacts. In a recent estimate, 52 Brookings calculated that shutdowns in 19 countries had cost at least $2.4 billion in gross domestic product globally in 2016. In another study, it was suggested that shutdowns in 46 countries between 2019 and 2021 had led to losses amounting to $20.54 billion.53 The World Bank recently calculated that Internet shutdowns in Myanmar alone had cost nearly $2.8 billion between February and December 2021, reversing economic progress made over the previous decade. Over a third of the companies surveyed for that report indicated that limited Internet access had severely constrained their business operations.

E. Impact on access to education, health and humanitarian assistance

35. Essential services that provide education, health care and social assistance increasingly rely on digital tools and communications. Consequently, drastic disruptions or slowdowns of communications services negatively affect the enjoyment of economic, social and cultural rights, with immediate and long-term repercussions.

36. Researchers have captured shutdowns’ negative impact on schools, given that they undermine pedagogical outcomes and interfere with education planning and communication among teachers, school administrators and families.54 In India-administered Kashmir, for example, longstanding restrictions on connectivity undermined the education of students relying on remote education, due to restricted access to pedagogical materials and online classes.55 Similar concerns were reported in Bangladesh and Myanmar.56

37. Communication delays and impediments provoked by shutdowns also compromise the effectiveness of health-care and public health policies, with impacts that accumulate over time. Studies have shown the significant impacts of shutdowns on health systems, including on mobilizing urgent medical care, disrupting the delivery of essential medicines and

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48 A/HRC/47/25, para. 51.
49 Jan Rydzak, “Disconnected”, p. 15.
50 Ibid.
51 Ibid., p. 16.
53 See https://top10vpn.com/research/cost-of-internet-shutdowns/.
56 See www.ncbi.nlm.nih.gov/pmc/articles/PMC8083513/#tcaub019-B7.
maintenance of equipment, limiting the exchange of health information between medical personnel and disrupting essential mental health assistance.58 The imposition of shutdowns in some locations reportedly prevented communities from accessing essential guidance for their protection from the coronavirus disease (COVID-19) pandemic and contributed to the spread of misinformation.59

38. Shutdowns also undermine access for women and girls to critical support and protection, exacerbating the gender divide.60 For example, shutdowns can hamper access to emergency health support and to information for reproductive health.61 Lack of Internet connections during COVID-19 lockdowns were also associated with exacerbated gender-based violence risks among women.62

39. Internet shutdowns have a profound effect on the ability of humanitarian actors to provide assistance.63 Supply chains and the flow of information critical to the delivery of goods and services can be disrupted. In Somalia, for example, aid workers reported that shutdowns affected data collection and the monitoring of assistance delivery.64 In Myanmar, Internet shutdowns reportedly put local aid organizations at peril, including because they prevented them from seeking and receiving funds.65

V. Detecting, preventing and responding to shutdowns

A. International aid for connectivity

40. Despite the commitment under the 2030 Agenda for Sustainable Development to enhance connectivity, by 2021, only 2 of 46 least developed countries had met the Sustainable Development Goal target on universal and affordable Internet access.66 Inequalities in Internet access often mirror inequalities within societies and globally. For example, only 19.1 per cent of the population in least developed countries have Internet access, compared with 86.6 per cent of those living in developed countries. Expanding access requires significant investment in communications infrastructure. The Broadband Commission for Sustainable Development calculated that about $100 billion was needed for African countries to reach their Internet connectivity targets.

41. Various development finance institutions have recently adopted strategic plans for improving digital infrastructure and services.67 Almost all such projects include some digital components,68 and digital technologies are particularly prevalent in projects in the areas of

61 See https://reliefweb.int/sites/reliefweb.int/files/resources/e006564.full_.pdf.
63 See also submission by ALTSEAN-Burma. The Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression denounced Internet shutdowns during a pandemic as an affront to the right of everyone to access health information (A/HRC/44/49, para. 28).
65 See the conference room paper containing the detailed findings of the Independent International Fact-Finding Mission on Myanmar, paras. 459–461.
infrastructure, health, education, finance and public administration. However, human rights safeguards that are currently being used by development finance institutions may not be adequate to address human rights risks related to the digital space.69

42. The promotion of Internet connectivity often requires the establishment of partnerships between financing agencies, States and the telecommunications industry. Development aid actors play an important role in the establishment and reform of telecommunications systems and related legal and institutional frameworks, yet development actors have not to date paid sufficient attention to the potential risks and impact of shutdowns in the design and assessment of cooperation agreements.

43. Such limited engagement by development actors is even more problematic, given that priority countries for international connectivity assistance are often the same ones that resort to shutdowns. Since 2016, shutdowns were recorded in 27 of 46 least developed countries, with some engaging in repeated shutdowns. Five of them implemented at least 10 shutdowns each.70 At least eight countries receiving World Bank support for connectivity expansion have implemented shutdowns, including during electoral periods.71

B. Measuring Internet access

44. Several studies about the digital divide indicate that measurements of connectivity tend to overestimate access levels and neglect the openness and quality of connections. Traditional indicators of connectivity are focused on infrastructure and the proportion of access by households and individuals measured through administrative data from Internet service providers and household surveys, including data on frequency of Internet use by individuals.72

45. Those means of measurement struggle to capture the lived experience of connectivity and neglect the impact of imposed restrictions. To address those concerns, new measurement initiatives are being promoted to expand and diversify information collection and refine understanding of the digital divide. In its Internet Universality Indicators, the United Nations Educational, Scientific and Cultural Organization (UNESCO) expressly includes the incidence, nature and basis for shutdowns, or other restrictions on Internet connectivity, as part of their measurements. The proposal for measuring meaningful connectivity73 also creates the scope for more detailed information on the quality of access on a daily basis.

46. Research on the prevalence and impact of shutdowns has greatly evolved in recent years through multiple collaborative efforts.74 Based on those efforts, insights into Internet connectivity from multiple perspectives are now available with greater frequency and geographical precision. In addition, the understanding of shutdowns has expanded with increased availability of data, including on communication anomalies in access to specific platforms and services. However, corroboration and attribution of State-ordered Internet disruptions are still rarely captured by a single measurement or single organization, and doing so requires collaboration among various entities. It is also important to ensure that methods for recording and compiling data on shutdowns do not expose Internet users to additional risks through potential identification and targeting.

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69 OHCHR study of development finance institutions’ safeguard policies.
70 See www.accessnow.org/keepiton/#coalition.
71 According to an internal OHCHR study.
73 See https://a4ai.org/meaningful-connectivity/.
74 Organizations and initiatives regularly compiling information on mandated disruptions include: Open Observatory of Network Interference, Internet Outage and Detection Analysis project of the Georgia Institute of Technology Internet Intelligence Lab, NetBlocks, Kentik, Monash IP Observatory, Access Now and #KeepItOn coalition. A number of companies also provide important data, such as Google and Meta, in their transparency reports.
C. Companies’ responsibilities in preventing and responding to shutdowns

47. Given that telecommunications and Internet service providers often operate communications channels, governments frequently turn to them to implement Internet disruptions, through orders or extralegal pressure.

48. The Guiding Principles on Business and Human Rights establish companies’ responsibilities when faced with requests for disruptions, relating to both prevention of human rights infringements and addressing adverse human rights impacts that they have caused. Because shutdowns have a direct impact on the human rights of all those deprived of communications channels, it is vital that companies’ human rights policies address shutdowns by anticipating risks through due diligence processes before entering markets and by adopting mitigation and transparency measures. Companies should explore all lawful measures to challenge the implementation of disruptions. Transparency is critical to stopping shutdowns and limiting their harmful consequences. Companies implementing or affected by restrictions are often the first, and sometimes the only, ones able to share accurate information on the nature of a shutdown and its scope. Therefore, clearly established practices for documenting and escalating demands within companies are vital to ensuring that information is quickly and effectively assessed. State-owned enterprises are bound by even higher standards, given their direct obligation to protect. 75 Where possible, companies should collaborate with local and international stakeholders to mitigate harms. 76

49. Faced with recurrent demands over the years for implementing communications disruptions, private companies have created voluntary initiatives aimed at improving responses to such pressure. One example is the Global Network Initiative, which issued statements in 2016 and 2020 calling for far greater transparency by governments ordering shutdowns and for prompt steps to inform users of shutdowns and enhanced dialogues between companies, governments, civil society and academia. 77

50. Numerous telecommunications companies do not actively provide information on their practices related to shutdowns, 78 however, or engage in alliances oriented towards prevention. Only 2 of 15 companies operating in Africa responded to a recent survey 79 on their practices regarding shutdowns, and most of the telecommunications companies participating in another assessment reportedly lacked protocols for disclosing information about shutdowns. 80

51. Disruptions, in particular the targeted blocking of access to platforms, often require the use of additional technology to monitor traffic and disrupt access to specific channels. In particular, researchers have documented the frequent use of deep packet inspection technology to conduct surveillance and block access to communications channels in support of repressive measures. Even if those tools may be used for legitimate purposes, such as restricting access to illegal content, abuses of deep packet inspection for conducting surveillance and implementing shutdowns are well documented, 81 with some tools being marketed explicitly with indications on their effectiveness in selectively blocking access to applications such as virtual private networks or social media. 82 Technology companies should reflect such concerns in their human rights and other policies.

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75 A/HRC/17/31, para. 4.
76 Submission by the Global Network Initiative.
77 Ibid.
78 Submission by Ranking Digital Rights.
79 See www.business-humanrights.org/documents/37471/2022_Africa_Internet_Shutdowns_Briefing_EN_v3.pdf.
80 See www.rankingdigitalrights.org/index2020/indicators/F10.
82 See www.top10vpn.com/research/Internet-shutdown-tech-allot/.
D. Increasing resilience to shutdowns

52. International and local organizations, researchers and companies have forged alliances to map risk factors, identify early warning signs, devise mitigation strategies and promote tools and strategies to directly support communities affected by shutdowns to increase their resilience. Such alliances must be strengthened, and new efforts to support affected communities should be established and consistently supported.

53. Such support should include improved coordination among the communities likely to be affected by shutdowns, civil society organizations and companies ahead of and during periods of elevated risks to ensure prompt exchange of information and implementation of mitigation measures. Internet users should be equipped to use circumvention strategies and tools, such as virtual private networks and mesh networks, which should be made easily available, affordable and safe. Efforts to improve digital media literacy should be expanded, and international partners should invest in digital literacy, including access to basic digital security skills. Decentralized models of online communications, such as community networks, may contribute to minimizing vulnerability to Internet shutdowns.

E. Judicial redress

54. An independent judiciary is crucial for enabling victims and civil society to seek accountability for human rights violations caused by shutdowns. In recent years, cases have been brought before numerous national and regional courts against government agencies, officials and companies carrying out shutdowns, with a growing number of courts expressing concerns relating to shutdowns. Courts have found past shutdowns illegal, ordered the reinstatement of Internet connectivity in cases of ongoing shutdowns, enjoined an authority from imposing shutdowns in the future and granted compensation. The Supreme Court of India has demanded the publication of all shutdown orders and established review mechanisms.

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83 Internews provides a valuable collection of resources and tools, including a compilation of new and existing resources, guides, methodologies, to assist individuals and activists before, during and after an Internet shutdown. See https://internews.org/resource/optimashutdownworkflow/.

84 See https://carnegieendowment.org/2022/03/31/government-Internet-shutdowns-are-changing.-how-should-citizens-and-democracies-respond-pub-86687.

85 Submission by the United Nations Educational, Scientific and Cultural Organization.

86 See Economic Community of West African States Community Court of Justice, Amnesty International et al. v. Togolese Republic, judgment of 25 June 2020; Islamabad High Court of Pakistan, CM Pak Limited v. Pakistan Telecommunication Authority, case No. 42/2016, judgment of 26 February 2018 (overturned by the Supreme Court of Pakistan, M/O Information Technology and Telecommunications, Islamabad, and The Pakistan Telecommunications Authority, Islamabad v. Pakistan (case Nos. C.A 977–978/2018, judgment of 22 April 2020); State Administrative Court of Jakarta, Aliansi Jurnalis Independen (AJI) and Others v. The Ministry of Communication and Information (Kominform) and The President of the Republic of Indonesia, case No. 230/GTF/2019/PTUN-JKT, judgment of 3 June 2020 (overturned by the Constitutional Court of Indonesia (case No. 81/PUU/XVIII/2020) on 27 October 2021).

87 For example, the Khartoum District Court in the Sudan; see www.jurist.org/news/2021/11/sudan-court-orders-end-to-Internet-shutdown/; and High Court of Zimbabwe, Zimbabwe Lawyers for Human Rights and Media Institute for Southern Africa v. The Minister of State in the President’s Office Responsible for National Security and others, case No. HC 265/19, judgment of 21 January 2019.


89 See Economic Community of West African States Community Court of Justice, Amnesty International et al. v. Togolese Republic.

90 See Supreme Court of India, Anuradha Bhasin v. Union of India, judgment of 10 January 2020. It should be noted, however, that the review mechanism is subject to criticism because of its lack of independence from the Executive branch of the Government; see submission by the Internet Freedom Foundation and the Software Freedom Law Center.
55. The Economic Community of West African States Community Court of Justice has issued two rulings against shutdowns. In 2020, the Court held that a three-day long Internet shutdown in Togo in September 2017 had violated the right to freedom of expression, and it ordered the Government to pay compensation to the petitioner. In 2021, various organizations brought a lawsuit before the Court asking for an order to end a ban on access to Twitter in Nigeria and to determine the legality of the ban. As an interim measure, the Court ordered, in June 2021, that the authorities should refrain from prosecuting, harassing or otherwise sanctioning anyone using Twitter, including through virtual private networks, also stating that any interference with Twitter was viewed as interference with human rights.

56. The European Court of Human Rights found an infringement of freedom of expression in a case where access to a lawfully run website was rendered impossible as a side effect of a blocking measure against an illegal website. The Court noted the following: “when exceptional circumstances justify the blocking of illegal content, a State agency making the blocking order must ensure that the measure strictly targets the illegal content and has no arbitrary or excessive effects, irrespective of the manner of its implementation. Any indiscriminate blocking measure which interferes with lawful content or websites as a collateral effect of a measure aimed at illegal content or websites amounts to arbitrary interference with the rights of owners of such websites.”

57. However, many petitioners face practical problems in seeking effective judicial review of shutdowns. Delays in, and the often slow pace of, court proceedings are a typical problem, with some cases drawn out over years, straining resources and diminishing the impact of the court decisions. In addition, some judges may deems cases moot once a shutdown ends and refrain from issuing final decisions, and limited digital expertise among members of the judiciary may also undermine some cases. The broad discretion in matters of national security granted to the executive branch in many jurisdictions can be another obstacle to successful judicial challenges of shutdowns.

VI. Conclusions and recommendations

58. Too often, major communications channels or entire communications networks are slowed down or blocked, sometimes without official recognition or justification, depriving thousands or even millions of their only means of reaching their loved ones, continuing their work or participating in political debates or decision-making.

59. Given their indiscriminate reach and broad impacts, Internet shutdowns very rarely meet the fundamental requirements of necessity and proportionality. Their adverse impacts on numerous rights often extend beyond the areas or periods of their implementation, rendering them disproportionate, even when they are meant to respond to genuine threats. As digitalization advances, the impact of shutdowns will only increase: the longer a channel is used and popularized, the more significant the impact of a disruption will be.

60. Shutdowns run directly counter to efforts to close the digital divide, and the promise of the accelerated economic and social development that closing the divide would bring, threatening the realization of the Sustainable Development Goals. They undermine the ability of people to participate in the discussions and decisions that shape

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91 Economic Community of West African States Community Court of Justice, Amnesty International et al. v. Togolese Republic.
93 European Court of Human Rights, Vladimir Khartitonov v. Russia (application No. 10795/14), judgment of 23 June 2020, para. 46. See also Cengiz and others v. Turkey (applications No. 48226/10 and No. 14027/11), judgment of 1 December 2015; and Ahmet Yikdirim v. Turkey (application No. 3111/10), judgment of 18 December 2012.
their lives and to contribute to building secure and prosperous societies.\textsuperscript{94} Shutdowns effectively deepen digital divides between and within countries.

61. The emergence and spread of Internet shutdowns must be seen in the context of an evolving digital landscape that has presented immense challenges for human rights and contributed to democratic backsliding in all regions of the world. Shutdowns complement other digital measures used to suppress dissent, such as intensified censorship, systematic content filtering and mass surveillance, as well as the use of government-sponsored troll armies, cyberattacks and targeted surveillance against journalists and human rights defenders.

62. Acknowledging the profound adverse impacts of shutdowns on human rights, many States have become increasingly vocal in their condemnation of such measures. International organizations, companies, national human rights institutions and members of civil society have engaged in initiatives to prevent shutdowns and soften the blow when they occur. However, even if blanket shutdowns were to become less frequent, targeted interferences, such as bans of certain platforms or channels, seem likely to expand. In some circumstances, such bans may have impacts almost as extensive as a blanket shutdown, given the digital footprint of some platforms.

63. Internet shutdowns, by their very nature, restrict human rights. Although human rights law does not foreclose entirely the possibility of State-mandated restrictions on communications, it does set very clear and substantial limits to the exercise of such authority. The results of the review conducted for the present report have illustrated that those limits are almost invariably exceeded when shutdowns are imposed.

64. States bear the primary responsibility for ensuring human rights compliant approaches to shutdowns. Fundamentally, they should refrain from imposing shutdowns, maximize Internet access and remove the multiple obstacles standing in the way of communication. Companies, international organizations and development agencies and civil society also have a role to play in ending shutdowns and minimizing their impact. Businesses should prevent disruptions to the extent possible and undertake due diligence to assess and act upon the human rights risks thereof. Whenever development agencies and donors seek to expand communications networks and close the global digital divide, it is critical that they integrate human rights considerations into their efforts, bearing in mind the possibility of State-mandated disruptions of digital services. Civil society, national human rights institutions and academia should continue their efforts in advocating against shutdowns.

65. One of the greatest obstacles to reversing the trend towards a greater frequency of Internet shutdowns is the limited visibility of those measures and their impacts. With that in mind, establishing a collaborative mechanism for the systematic collection of information on mandated disruptions in which States, civil society and companies all contribute could make an enormous difference. This could include, for example, work to establish a comprehensive and publicly accessible database of orders to limit access to the Internet or digital communications platforms, their underlying reasons and their scope. OHCHR stands ready to support discussions on the development of such a mechanism.

A. Recommendations to States

66. Given their indiscriminate and disproportionate impacts on human rights, States should refrain from the full range of Internet shutdowns. Blanket shutdowns in

\textsuperscript{94} Representatives at the first phase of the World Summit on the Information Society, held at Geneva in 2003, adopted a declaration of principles, detailing what they envisioned for building a people-centred, inclusive and development-oriented information society, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights. The General Assembly, in its resolution 70/125, reaffirmed its commitment to the declaration of principles.
particular inherently impose unacceptable consequences for human rights and should never be imposed.

67. Should States nevertheless consider implementing or implement shutdowns, they should in all cases strictly adhere to the following six essential requirements. Any Internet shutdowns must be:

(a) Clearly grounded in unambiguous, publicly available law;

(b) Necessary to achieve a legitimate aim, as defined in human rights law;

(c) Proportional to the legitimate aim and the least intrusive means to achieving that end; accordingly, they should be as narrow as possible, in terms of duration, geographical scope and the networks and services affected;

(d) Subject to prior authorization by a court or another independent adjudicatory body, to avoid any political, commercial or other unwarranted influence;

(e) Communicated in advance to the public and telecommunications or Internet service providers, with a clear explanation of the legal basis for the shutdown and details regarding its scope and duration;

(f) Subject to meaningful redress mechanisms accessible to those whose rights have been affected by the shutdowns, including through judicial proceedings in independent and impartial courts; court proceedings should be carried out in a timely fashion and provide the possibility to obtain a declaration of unlawfulness of shutdowns carried out in violation of applicable law, even after the end of the shutdown in question.

68. States should always provide thorough public information, in a timely manner, regarding any Internet shutdowns that they may impose, including bandwidth throttling, limiting access to certain communication services, platforms or virtual private network blocking. In addition, States should not ban, block or criminalize the use of encryption or circumvention tools or particular communications channels, such as virtual private networks, and should instead provide access to those tools.

B. Recommendations to companies

69. In line with their responsibilities to respect human rights, Internet service providers and telecommunications companies should:

(a) Take all possible lawful measures to prevent a shutdown that they have been asked to implement from proceeding and, if the shutdown should nevertheless proceed, prevent or mitigate to the extent possible adverse human rights impacts; exhaust domestic remedies to challenge shutdown requests and implement shutdown requests narrowly, in the most human rights-preserving way, with the goal of keeping communications channels as open as possible; and take all lawful measures to enable the full disclosure of information about the interferences;

(b) Carry out adequate human rights due diligence in order to identify, prevent, mitigate and account for how they address their adverse human rights impacts, including in relation to Internet shutdowns, in particular by thoroughly assessing the risks of ordered Internet shutdowns, when they enter and leave markets;

(c) Include in their public human rights policy statement their commitment to preventing and mitigating adverse human rights impacts in the context of Internet shutdowns; and establish operational policies and procedures in order to be adequately prepared for responding to shutdown requests even in high pressure situations;
(d) Reinforce engagement and collaboration with all stakeholders working to prevent and reverse communications disruptions, in particular affected communities and civil society, in particular by systematically sharing relevant information about communications anomalies and mandated disruptions in a timely manner.

C. Recommendations to development agencies, regional organizations and international organizations

70. One of the central findings in the present report relates to the need to bridge work relating to digital connectivity with efforts relating to Internet shutdowns. With that in mind, development agencies, regional organizations and international organizations should help to make those connections by taking the following steps:

(a) Ensure that the risks of Internet shutdowns are considered when designing and implementing cooperation programmes relating to Internet connectivity;

(b) Include reference to human rights standards when supporting the development of legal and institutional frameworks and seek commitments to limit interferences with digital communications consistent with those obligations;

(c) Consider including initiatives to provide access to encryption and other circumvention tools, and to promote digital literacy in efforts to expand connectivity;

(d) Review existing systems of data collection relating to Internet access, including regarding the monitoring of the implementation of target 9.c of the Sustainable Development Goals, to ensure that they reflect occurrences of State-ordered disruptions and their impact on the achievement of meaningful connectivity.

D. Recommendations to civil society

71. The indispensable role of civil society in addressing Internet shutdowns should be emphasised and merits additional technical and financial support. Civil society has already played a crucial role in collecting information on such measures, challenging disruption orders in court and advocating to end Internet shutdowns. Going forward, civil society is encouraged to:

(a) Reinforce collaborative efforts to prevent, detect, study and respond to Internet shutdowns;

(b) Further develop and promote preventive strategies prior to events likely to trigger disruptions of communications services;

(c) Support increased digital literacy and promote access to circumvention tools, paying due attention to their safety, accessibility and affordability.