

Impact Report 2022

Safeguarding the Network of Networks



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Introduction

As people around the world face issues like war, the refugee crisis, natural disasters, financial inequality, along with racial or social disparities, we see the increasing need for social connection, reliable information, and opportunities for self-determination.

The Internet, in part, makes these possible.

That's why, with our members and partners, we work to grow and protect this vital resource. We address important issues related to safety and security, fragmentation, and connecting underserved populations.

We do this so that people don't lose out on life-changing and lifesaving resources. We do this so that they can tend to their families and their communities—and participate fully in the pursuits that bring them meaning.



Securing the Internet

The Internet is based on trust. No matter who you are or where you are, when you connect to the Internet you should expect a reliable experience. It’s what has enabled the Internet to flourish, and how it has become such an important resource to the people worldwide who depend on it.



Keeping Information Confidential on the Internet Fosters Trust



Global Encryption Day



Keeping the Internet Working Means Protecting It from Harmful Policy



Protecting the Internet from Harmful Policy Is Never “One and Done”



Protecting the Internet and Everyone Who Uses It with Routing Security



Helping Courts Understand How Their Decisions Impact the Internet and People



Keeping Information Confidential on the Internet Fosters Trust

Encryption saves livelihoods—and lives. For each of us to participate in the world with confidence, we have to know our digital information is safe and secure. This matters to everyone, and it's vital to vulnerable groups like children and LGBTQ+ communities and for those whose professions require confidentiality, like journalists and human rights defenders.

[Afsaneh Rigot](#), an LGBTQ+ activist from the Middle East and North Africa region who participated in Global Encryption Day, says, “These moves to erode encryption and create back doors in places like the EU and U.S. They spread. They spread, and similar regressive policies will be applied and copied even, including in the Middle East and North Africa region. So it’s fundamental we protect the right to encryption when it comes to marginalized communities who are over-policed and surveilled. When those most impacted are kept safe and secure, everyone broadly is kept safe and secure.”



Global Encryption Day

Global Encryption Day is an annual worldwide event when the Internet Society and fellow Global Encryption Coalition (GEC) partners and members share a unified call to action to protect end-to-end encryption and defeat any proposals that undermine it. It’s one of the many ways we campaign to stop the bypassing end-to-end encryption—and to protect our online privacy.

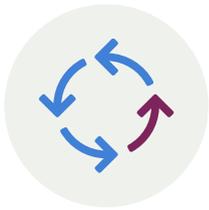
- Second annual Global Encryption Day held on 21 October, 2022
- 60 events worldwide, like signing open letters, directly advocating to governments, hosting encryption trainings, and reaching out to media
- Supported by 2 GEC members
- 11.2 million people reached
- Resulted in 12 policymakers or government entities making pro-encryption statements, including the Austrian Parliament, German Justice Minister, and Czech digital minister
- Another 16 elected officials making pro-encryption statements, including members of the UK, U.S., and EU legislatures



Keeping the Internet Working Means Protecting It from Harmful Policy

Each year, several policies and proposals sprout up that jeopardize our private and secure communications. We must challenge these before they can take root, so that everyone can use a secure Internet, and reap the benefits. We do so through partnerships across multiple channels—group advocacy with the GEC, Global Encryption Day, direct government relations, workshops, and Internet Impact Briefs.

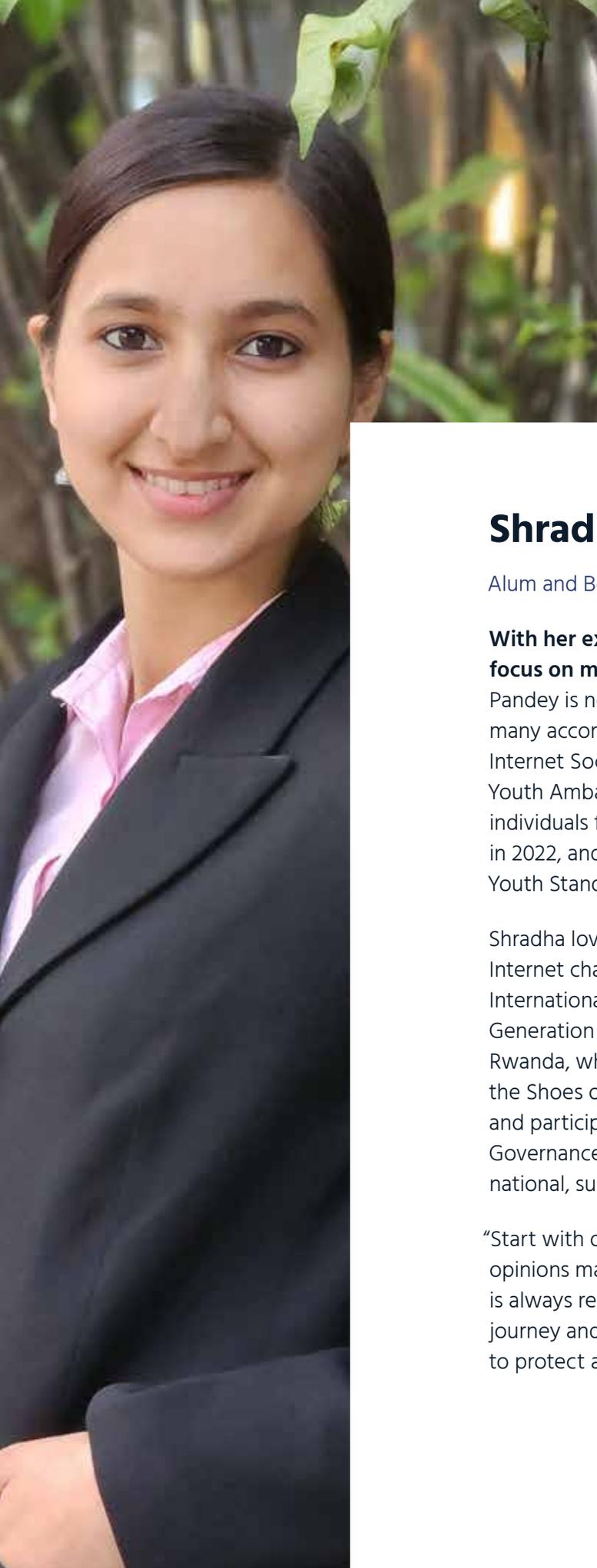
Several legislative threats to encryption failed to pass in 2022. These include the misleadingly named [Kids Online Safety Act](#) (U.S.) and [EARN IT Act](#) (U.S.), both aimed squarely at encryption. If passed, they would have had a devastating impact to our online security, and they threatened to fracture the Internet itself.



Protecting the Internet from Harmful Policy Is Never “One and Done”

Policies that are bad for the Internet are proposed all the time, and they often inspire more bad policies across the world.

Bills like EU Regulation on Child Sexual Abuse, Draft Indian Telecommunication Bill, and UK Online Safety Bill persist into 2023, and we expect to see more on the horizon in 2024.



Shradha Pandey

Alum and Board Member, Youth Standing Group

With her extraordinary energy and relentless focus on meaningful youth engagement, Shradha Pandey is nothing short of inspiring. Among her many accomplishments, Shradha was named an Internet Society Internet Governance Forum (IGF) Youth Ambassador in 2020, was selected as one of 12 individuals for the Kofi Annan Changemakers program in 2022, and currently serves as a board member of our Youth Standing Group (SG).

Shradha loves helping other young people become Internet champions. She collaborated with the International Telecommunications Union on the Generation Connect Global Youth Summit held in Kigali, Rwanda, where she presented a Masterclass called “In the Shoes of a Digital Policymaker,” and both organized and participated in the Youth Dialogue on Internet Governance (DIG), followed by EuroDIG and other national, subregional, and regional IGF initiatives.

“Start with one step at a time, always remember your opinions matter, and know the youth community is always ready to help you along as you start your journey and to empower you to become a great leader to protect and defend the Internet,” she said.



Protecting the Internet and Everyone Who Uses It with Routing Security

Over the past few challenging years, the Internet has supported people in ways we never could have imagined. Unfortunately, this increased online activity has also increased the potential for cyberattacks and vulnerabilities. Ensuring data goes where it's supposed to, via secure pathways, is now more important than ever.

Mutually Agreed Norms for Routing Security (MANRS) addresses this challenge. It outlines best routing practices for network operators, Internet exchange points (IXPs), and content delivery network and cloud providers, resulting in fewer routing incidents.

MANRS continues to grow, now with more than 1,000 participants and 20 partners. A secure Internet is more important to our society than ever. MANRS helps make this possible.

In 2022, the Federal Communications Commission issued a Notice of Inquiry on the matter of "Secure Internet Routing." MANRS was mentioned 40 times throughout the document, cementing its reputation as the industry standard for routing security in the U.S.



Helping Courts Understand How Their Decisions Impact the Internet and People

In 2022, we filed an amicus curiae brief in a case brought to the 9th Circuit Court of Appeals in the United States. The outcome of the case could have had a profound impact on how we use the Internet. In *Hunley v. Instagram*, photographers sued Instagram, claiming that Instagram was guilty of copyright infringement by allowing users to embed photographers' work on other websites.

In our brief, we challenged the potential for sweeping copyright liability laws across the Internet. These kinds of laws could make content-hosting providers reluctant to permit embedding altogether, compel creators to buy additional servers to host their content or stop creating content altogether, or force dramatic changes to the Internet way of networking—the building blocks that make the Internet work.

In February 2023, the court ruled as we had hoped, in favor of Instagram. As courts become the new battleground over our online future, our Amicus Program will continue to give the Internet, and the people who rely on it, a voice.



Lily Edinam Botsyoe

Alum and Member, Internet Society Ghana Chapter

Visionary, innovative Internet champions like Lily Edinam Botsyoe are rallying to safeguard the Internet.

During her role as the Ghana Chapter's Chair of the Women and Youth Committee, Lily played a pivotal role in encouraging and advocating for women's participation in various Internet activities. She says she loves working with other young people for their ideas and what she calls "out-of-the-roof energy!"

Lily also served as the youth representative on the Ghana Internet Governance Forum (IGF) steering committee. On the global stage, Lily was selected to represent youth at the IGF Expert Group Meeting in New York and represented youth voices at the opening ceremony of the annual IGF in Addis Ababa, Ethiopia. She was also an ardent contributor to the processes that led to the creation of the Youth Summit at the 2022 IGF.

"No contribution is little in this space. It starts little but has ripple effects. You can create change from where you are, [then] seize the opportunity of the Internet Society community to extend your work to many other people."



Protecting the Internet from Fragmentation

Politicizing decisions about the Internet’s inner workings isn’t new, but it’s on the rise. The term “splinternet” gained mainstream attention in 2022, an indication of its growing relevance. If this Internet fragmentation happens—an Internet artificially carved up along geographical, political, commercial, or technological boundaries—it will undermine the very trust and way of networking that has enabled people to thrive.

In 2022, as part of our ongoing pursuit against fragmentation, we launched an advocacy campaign and issued a call to action to chapters, partners, organizations, and individual members to help protect the open, globally connected Internet.

The Internet works because it’s a network of networks—a neutral resource available to everyone. It shouldn’t become a geopolitical battleground.

Internet Society members and partners shared this important message through letters to lawmakers, raising awareness with governments and network providers, and posting on social media with the hashtags [#ProtectTheInternet](#) and [#StopTheSplinternet](#).



Russia: How Global Events Are Interconnected with the Internet

Following Russia’s invasion of Ukraine, many governments called for Russia to be disconnected from the Internet as part of broader economic sanctions. This is a perilous path, one that harms individual citizens more than state actors and isolates them from the rest of the world—at a time they need information the most.

We challenged language in countries’ proposed sanctions that, if successful, would relegate Russian citizens solely to RuNet, Russia’s domestic online network. Using our Internet Impact Assessment Toolkit, we analyzed the risks of splitting off Russia from the one true global Internet, formed an advocacy strategy, and engaged with chapters and organization members to show what was at stake, mobilizing them to take action. We then called on countries to exclude Internet access from sanctions and refrain from politicizing the Internet. The U.S., EU, and G7 committed to exempt telecommunications that support Internet access and the flow of information from their sanctions against Russia.



The End of the Internet as We Know It

Internet Society organization member Surfshark hosted a podcast featuring Internet Society staff: Natalie Campbell, Senior Director, North American Government and Regulatory Affairs, and Neeti Biyani, Senior Advisor, Policy, and Advocacy. The episode, titled “The End of the Internet as We Know It,” and the companion explainer video amplified our message against fragmentation and reached more 61,000 people.

[Listen to the podcast.](#)



Esther Mwema and Uffa Modey

Esther Mwema (Left): Alum and Member, Internet Society Zambia Chapter

Uffa Modey (Right): Alum and Member, Internet Society Nigeria Chapter and Youth Standing Group

Esther Mwema and Uffa Modey began their Internet governance journey as Internet Society’s 2017 Youth@IGF fellows to attend the Internet Governance Forum (IGF) in Geneva. During the IGF, they collaborated with other Internet Society youth fellows—all under the age of 25—to start Digital Grassroots (DIGRA), a youth and female-led nonprofit that engages youth in Internet governance and addresses the digital needs of underserved communities.

All these years later, DIGRA continues its mission to engage youth on important Internet topics. In 2022, Esther and Uffa hosted two cohorts of a six-week Digital Rights Learning Exchange. The online program brought together 40 human rights defenders, lawyers, journalists, researchers, Internet Governance activists, and others from 14 countries, all of whom are now equipped with critical knowledge on the topics of Internet access and affordability; freedom of expression; Internet shutdowns; and digital privacy and surveillance.

And DIGRA’s ongoing Digital Grassroots Ambassadors online program has also proven to be a powerful tool, having trained a total of more than 170 ambassadors in over 30 countries, who are today engaging in digital activism that brings its impact across dozens of communities.



Bridging the Digital Divide

At least 2.7 billion people lack Internet access. This digital divide is multifaceted. It reflects gaps not just in availability, but also affordability; gender and racial inequality; and digital literacy. We work with our members, chapters, and partners to bring affordable, sustainable, and secure Internet access to the people who need it most, in some of the hardest places to reach, to make connections that last.



Cape Verde, the Maldives, and Suriname



United States: Economic Empowerment with the Jesup Cyber Wagon



Keeping the Internet on in Critical Times



Cape Verde, the Maldives, and Suriname

Small Island Developing States are a distinct group of developing countries that are often challenged by their remote geography and frequent natural disasters.

Combining small populations, low economies of scale, and the high cost of crossing open seas results in higher Internet connectivity costs, which means most residents lack access. Those who do find connections often find access to be slow, expensive, and unreliable.

In 2022, we supported three new IXPs in Cape Verde, the Maldives, and Suriname, setting the foundation for less expensive, faster, and more resilient Internet connections. These IXPs also reduced the need for international bandwidth and fostered the development and hosting of local content.



Spotlight on Maldives Internet Exchange (MVIX)

A group of network operators in the Maldives came together to form MVIX, the Maldives' first IXP. We joined APNIC, APNIC Foundation, and APIX in supporting MVIX on their mission to reduce costs and improve Internet user experience in the area.

"It was a challenge to provide each island with good Internet connectivity. [There was] limited bandwidth," says Mohamed Azim, Core & IP infrastructure Manager with Raajje Online, who helped launch the Maldives IXP (MVIX).

Fellow supporter Mohamed Anas, a System Administrator for Medianet, agreed, saying, "Our biggest challenge? How we carry Internet services to our customers through multiple Internet Service Providers. By joining MVIX we will be able to reduce operational costs."



Nepal: Scaling Up Internet Access near Mount Everest

The journey to Internet access for the residents of Nepal villages of Khunde and Khumjung, near Mount Everest, began in part with the actions of one person: Chhepal. Chhepal, a Sherpa entrepreneur and local resident, gathered the community together to build the Internet connection themselves. These community members began with a wireless network, and the Internet Society covered technological support and infrastructure costs.

This initial connectivity makes it possible for people in these communities to access educational resources and economic opportunities. A new Wi-Fi hotspot at the local school means the children of Khunde, Khumjung, and several other nearby villages have access to improved education. Chhepal can reach more potential visitors with his Sherpa homestay business and drive local tourism. And others in Chhepal's community can explore alternative ways to earn income thanks to Internet access.

And while this progress has already made such a positive difference for people living in these communities, work continues so that soon every home in Khunde and Khumjung will have access to the Internet.



Osei Manu Kagya

Alum and Member, Internet Society Ghana Chapter

The Internet can only benefit our society when it reflects the people who live in it. Osei Manu Kagya, a member of the Institute of ICT Professionals Ghana communications team, calls his background “a fine blend of technical and civil society advocacy.” He was appointed in 2022 as a representative for the Internet Society Ghana Chapter and joined the Steering Committee of the Youth and Women Committee. He separately joined a leading business and financial newspaper to write articles and opinion pieces about Internet-related issues.



United States: Economic Empowerment with the Jesup Cyber Wagon

Internet connectivity is also a challenge in rural Tuskegee, Alabama, in the U.S.

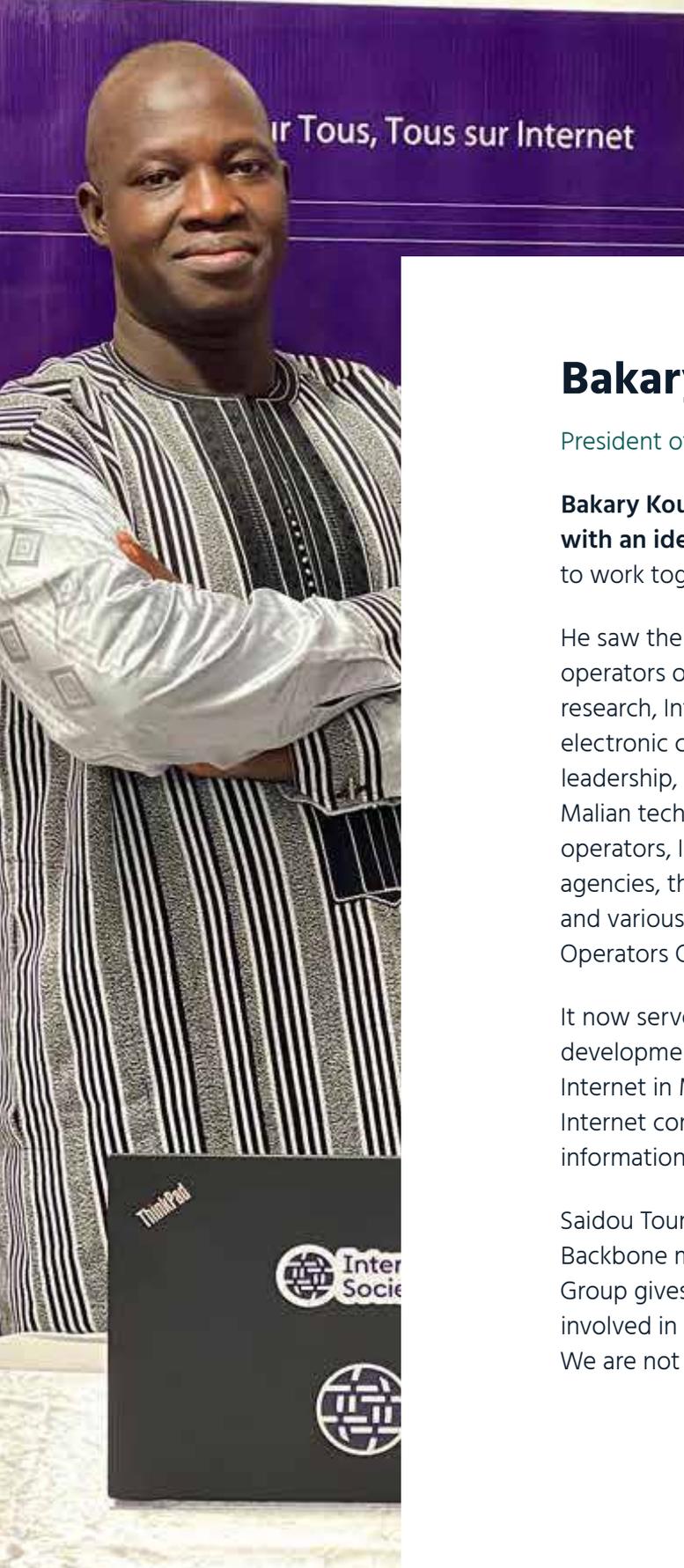
This is especially true in low-income Black communities, a reflection of ongoing racial inequalities. Having to seek out reliable Internet access has hindered real-time access to health, education, and other human services.

Alabama entrepreneur Boyd Stephens and a team of volunteers built a physical infrastructure and laid fiber to bring broadband access to Tuskegee and the surrounding areas.

Known as the Jesup Cyber Wagon—a callback to a mule-drawn “movable school” that traveled to rural Black farmers in the early 1900s—the community network project was made possible through a partnership of the Tuskegee Housing Authority, an agency that provides affordable housing, along with an Expanding Potential in Communities grant sponsored by the Internet Society and Truist Financial. Jesup Cyber Wagon was awarded nearly USD \$180,000 to make Stephens’ vision a reality.

The project features an after-school training and tutorial facility, plus a technical training facility. Through a mentoring program, high school students receive training about computing as well as the philosophical areas of technology. People of all ages are learning how the Internet works and acquiring business and entrepreneurial skills.

“The compelling drive is to empower people, both economically and socially, to give them a voice. Because no one can tell your story the way you can tell your story, and this wonderful network of networks, the Internet, allows you to do a pretty good job of that,” says Stephens.



Bakary Kouyate

President of the Mali Chapter and Founder of MaliNOG

Bakary Kouyate, Mali Chapter president, started with an idea. He rallied his local technical community to work together to make it a reality.

He saw there was no unified forum in Mali for network operators or service providers to share technical research, Internet development information, or electronic communications data. Under Bakary's leadership, Mali Chapter members collaborated with Malian technical professionals, including telecoms operators, Internet service providers, governmental ICT agencies, the Regional CISCO academy, the university, and various associations, to create the Mali Network Operators Group (MaliNOG).

It now serves as an open platform for the further development of network engineering and the Internet in Mali, where any member of the Malian Internet community can exchange and share technical information and expertise.

Saidou Toure, network engineer and Afribone Backbone manager, says, "This Network Operators Group gives us the power to train all the actors involved in networking....This was a very good idea. We are not represented enough."



Keeping the Internet on in Critical Times

When is it a good idea to disconnect a country, region, or group of people from the Internet? Never.

Yet shutdowns persist. In 2022, shutdowns cost the global economy roughly USD \$24 billion, with the majority attributed to Russia (USD \$21.59 billion), followed by Iran (USD \$773 million), and Kazakhstan (USD \$410.7 million).

There are human rights at risk, too. In some countries, Internet shutdowns are used by the government during elections which keeps citizens from receiving up-to-date, accurate information.

Benin

Following a successful campaign to keep the Internet on during the 2021 election, the Benin Chapter ran another campaign in 2022 to protect against Internet shutdowns ahead of their country's January 2023 legislative elections.

It's not just a matter of keeping the Internet on. Strong Internet infrastructure facilitates election transparency.

Kenya

During the 2022 election, Kenya's electoral commission used the Internet to digitally transmit election results from more than 46,000 polling stations countrywide to central servers in Nairobi, where they could be verified and officially tallied. Media and other stakeholders could conduct independent tallying of the results, increasing the transparency of the election process.

People in Kenya could download the election results as they were transmitted without any interruptions thanks in part to the Kenya Internet Exchange Point (KIXP), which the Internet Society has helped to strengthen for more than 10 years with training, technical, and infrastructure support.

The Internet is a Force for Good

Let's keep it that way.

As a seamless, trusted resource, the Internet is vital to humanity. As we face threats and manage crises across the world, we must come together to defend and protect the Internet.

We can't do it without you. Here's how you can get involved:

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[Become an Internet Society member.](#)

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