Amid Global Rise in Internet Shutdowns, Internet Society Launches ‘NetLoss’ Calculator to Measure Economic Impact

The groundbreaking NetLoss calculator uses a unique econometric framework to give a new level of precision in estimating the impact of Internet shutdowns worldwide.

Washington, D.C. - 28 June 2023- The Internet Society today launched the NetLoss calculator, a revolutionary tool that measures the economic impact of Internet shutdowns around the world. Hosted on the Internet Society’s Pulse Platform that tracks and analyzes shutdowns, NetLoss uses a groundbreaking econometric framework to understand the impacts of shutdowns and provides an unprecedented level of rigor and precision in estimating their economic damage.

Internet shutdowns globally reached a record high in 2022, with governments around the world ordering Internet access and services to be restricted or blocked during civil unrest, school exams, and during elections, which resulted in major economic consequences.

According to the NetLoss calculator:
- The shutdown in Sudan in April 2023 is estimated to have cost the country more than $3 million USD as well as the loss of 560 jobs.
- The shutdown in Pakistan in May 2023 is estimated to have cost more than $13 million USD as well as increased unemployment.
- The shutdown in Guinea in June 2023 is estimated to have cost the country nearly half a million USD and job losses.

Governments often mistakenly believe that Internet shutdowns will quell unrest, stop the spread of misinformation, or reduce harm from cybersecurity threats. But shutdowns are extremely disruptive to economic activity: they halt e-commerce, generate losses in time-sensitive transactions, increase unemployment, interrupt business-customer communications, and create financial and reputational risks for companies. They also hurt a country’s growth as research shows Internet adoption positively impacts Gross Domestic Product (GDP).

The Internet Society has long opposed the practice of Internet shutdowns, and urges all governments to refrain from implementing them due to the damage they inflict on a nation’s economy, civil society, and Internet infrastructure. With NetLoss, organizations and advocates can demonstrate to governments and regulators how a shutdown will negatively impact their nation’s economy.

In addition to the estimated cost of an Internet shutdown (i.e. the loss in GDP), the Internet Society NetLoss calculator also estimates:
- The change in the unemployment rate due to a shutdown.
- The amount of Foreign Direct Investment (FDI) lost due to a shutdown.
- Risk of a shutdown: the probability that a country will experience a shutdown.
“The global rise in Internet shutdowns shows that governments continue to ignore the negative consequences of undermining the open, accessible, and secure nature of the global Internet,” said Andrew Sullivan, President and CEO of the Internet Society. “The calculator is a major step forward for the community of journalists, policymakers, technologists, and other stakeholders who are pushing back against the damaging practice of Internet shutdowns. Its groundbreaking and fully transparent methodology will help show governments around the world that shutting down the Internet is never a solution.”

Methodology

The calculator considers a wide range of economic impacts beyond traditional measures of economic output, such as GDP, to demonstrate the financial impact of an Internet shutdown. It also includes the change in the unemployment rate, the amount of Foreign Direct Investment (FDI) lost, and the risk of a future shutdowns.

In addition to its primary indicators, the NetLoss calculator’s methodology also takes into account other factors that can impact country-specific economic outcomes, including the age dependency ratio (percentage of working 18-65 years old to total population), the fraction of the population residing in urban areas, and the percentage of the labor force with basic education.

By using the following open data sets, the NetLoss calculator’s methodology is reproducible and transparent:

- **Shutdown data**: Includes detailed event-level data on government-mandated shutdown events.
- **Protests and civil unrest**: Includes detailed event-level data on various events, their start and end dates, involved parties, and associated fatalities.
- **Elections**: The Constituency-Level Elections Archive maintained by Yale University provides elections data from 150 countries since 1960.
- **Socioeconomic indicators**: The World Bank provides data on economic indicators including GDP per capita, employment, inflation, and foreign investment.

The framework used in the NetLoss calculator builds on the Internet Society’s long standing research and advocacy on this issue via the Pulse Platform. Launched in December 2020, Internet Society Pulse consolidates trusted third-party Internet measurement data from various sources into a single platform to examine Internet trends and tell data-driven stories so that policymakers, researchers, journalists, network operators, civil society groups and others can better understand the health, availability and evolution of the Internet.

The source of data for NetLoss is the World Bank’s World Development Indicators, which typically corrects for minor statistical changes. Data used in the calculator is updated quarterly.

The NetLoss calculator can be found at: [https://pulse.internetsociety.org/netloss](https://pulse.internetsociety.org/netloss).

**Media resources**: [https://pulse.internetsociety.org/media](https://pulse.internetsociety.org/media).
About the Internet Society
Founded in 1992 by Internet pioneers, the Internet Society is a global non-profit organization working to ensure the Internet is for everyone. Through its community of members, special interest groups, and 130+ chapters around the world, the organization defends and promotes Internet policies, standards, and protocols that keep the Internet open, globally connected, and secure. For more information, please visit internetsociety.org.

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