Andrew Sullivan, President & CEO, ISOC

Executive summary: The Internet Society's vision, since our inception in 1992, is that the Internet is for Everyone. In other words, connectivity and opportunity are for everyone. In this context, the Internet Society's mission, to support an open, globally connected, trustworthy, and secure Internet has never been so critical. Our efforts are aimed at not only increasing the reach and reliability of the Internet in the short term, but also ensuring the foundations for continued growth are solidly in place for the long term.

The COVID crisis has shed light on the importance of connectivity in a way that we never could have imagined. The question is no longer whether we need connectivity, but how fast we can extend connectivity for business to continue, for children to learn, and for families and people to stay in touch. In a matter of weeks, millions of school children that have connectivity are learning from home online vs. in physical school buildings. People who have connectivity are working online from home and turning to tele-health solutions, overnight. In a world where social distancing and isolation are the new "normal", never before has the critical role of connectivity been brought into our homes and every aspect of our lives.

The very nature of the Internet - a layered architecture, a common protocol, a global routing system, and an architecture that supports innovation - has proven its importance. The Internet has become a lifeline for those that have it, and it no longer is an option. This is why The Internet Society has been deploying efforts over the years to grow the Internet and make it stronger.

Resilient connectivity

Initiatives:

1. To help build the Internet, **the Internet Society has been a strong supporter of Internet exchange points (IXPs)** since 2008. IXPs are core local Internet infrastructure that help improve local Internet traffic exchange, drive down local costs, and improve local quality of service. We are actively talking to local communities about their current needs, and working with them to provide guidance and to shift our local capacity building online.

2. Tracking the impact to the Internet of increased remote work has also been highlighted as an area of interest to the Internet measurement community. **"Measuring the Internet"**, can help identify emerging issues and also help develop solutions. Measurements done by RIPE Atlas and Oracle Internet Intelligence can help gauge changes in latency, and Internet Exchange Point (IXP) traffic data (for example, from Kenya's IXP) can help illustrate local changes in traffic levels. We will provide information about the resiliency of the Internet and working with network and content providers to get more data out to the public and policymakers.

Lessons learned:

Our experience has tough us several lessons, notably that it is important to:

Support Internet exchange points (IXPs): Because IXPs help keep traffic local, giving local network providers a place to interconnect and exchange traffic with one another, as well as interconnecting with major content providers. Like community networks, IXP development is dependent on training local technical experts, building communities of interest, and working with policymakers and regulators to support their development.

Voice support for infrastructure providers and limit restrictions on them: Over the past few weeks, some have been wondering if the Internet could handle the strain of rapid traffic growth and increased latency. Will it cause a catastrophic failure of the Internet? The answer is that such a failure is not likely to happen. Core Internet infrastructure providers have been able to absorb the increases in traffic and demand, and should continue to be able to do so over the coming days, weeks, and months. Cloud infrastructure providers should also have sufficient additional compute, storage, and bandwidth capacity to enable their customers, including the e-learning, messaging, and videoconferencing tool providers, to scale their systems as necessary. Content delivery infrastructure deployed in many last-mile networks, from companies including Akamai, Cloudflare, Google, Netflix, and Apple, is helping keep traffic local. This said, with the COVID crisis, **now is the time for Commissioners to call for more aggressive closure of the digital divide** - increasing the availability of affordable high-speed broadband connectivity to un-served and under-served users.

Keep cross-communication channels and the Internet "on" and call on policy-makers to allow providers to keep networks up and fully operational: Now is the time to anticipate short-term and long-term policy and regulatory changes that are, and will be, required in the aftermath of the COVID-19 crisis. Some may be tempted to challenge the open and globally connected Internet model that we know. We would suggest that UN BBC members **issue a call to resist the temptation to close networks**. Keeping cross-border communication channels open is critical. Indeed, the Internet can only offer its full potential if it is locally and globally connected, and available, accessible, and affordable to all.

Affordable Access

Initiatives:

1. **We have also supported Community Networks** since 2010. Community Networks are networks that some consider to be "last-mile" networks in urban, rural, remote, and unserved/underserved locations. Over the last month, some Community Networks have become a lifeline for many in urban and remote communities. We know that Community Networks are not the "only" solution for connecting the next and final billions, but they are providing affordable complementary connectivity around the world where traditional connectivity options have not. We are currently working with local urban, remote and rural communities across the world to support changes that can be made by regulators and policy-makers to expand capacity for Community Networks by opening up more spectrum to local providers, and to increase the ability of schools and libraries to serve as nodes in mesh networks, or to boost their Wi-Fi signals so that people have access to connectivity.

Lessons Learned:

Our work has taught us several lessons, based on which we invite policymakers to :

Support Alternative Funding Models: Provide Universal Service funding or other emergency funds to networks that are in need of immediate funding, in innovative ways, to support network build-out including Community Networks.

Consider providing immediate funding in smaller increments to local and community network providers. This builds network management skills and sustainability at the local level. Universal Service Funds (USF) could be provided in smaller increments over time to smaller networks, that have much greater reach.

Make Spectrum innovations. Governments can ease or eliminate barriers through common sense reforms by:

- Easing regulatory requirements: Streamlining or Eliminating Onerous Regulatory Requirements, especially those that are not applicable to small, community-based networks.
- Providing Tax and fee exemptions: These fees and duties are difficult for community network operators to afford and can delay or prevent their development.
- Enhancing transparency : Regulators should provide clear, public guidance on the specific policies and regulatory requirements (and exemptions) for community networks.

Create simpler licensing regimes by:

- Simplifying requirements for Community Networks. The FCC has done this with tribal communities
- Creating social purposes licenses to allow for Community Networks to fast-track bureaucratic processes.
- Consider 2.5 and 5 GHz Wi-Fi spectrum as unlicensed vs licensed to speed up network build out and deployment.

Make innovative use of Spectrum. This covers spectrum sharing and dynamic spectrum allocations (with DataBases).