

IEEE Position Statement

**The Role of Public Internet Connectivity in  
Advancing Universal Access to the Internet**

*Approved by the IEEE  
Board of Directors  
(18 November 2018)*

Revised and renewed by the IEEE Board of Directors  
as an Addendum to the IEEE Position Statement entitled  
**“Universal Access to the Internet”**  
*(21 November 2021)*

IEEE endorses the goal of universal access to the internet and supports national initiatives and international collaborations designed to expand access to the billions of people in both developed and developing countries around the world who do not have access to the internet.<sup>1</sup>

Public internet connectivity can be an important element in helping to expand internet access and enabling individuals and communities to reap the benefits of the internet. IEEE recognizes the impact public internet connectivity can have on addressing current universal internet access challenges.

Public internet connectivity can take the form of free wireless connectivity in public squares, parks, town halls, libraries, transportation stations, and individual businesses. This option for wireless connectivity can be funded by governments, public-private partnerships, or businesses.<sup>2</sup>

Public internet connectivity can also be provided through telecenters. Telecenters can be separate spaces or part of public institutions, such as libraries. Also called Public Access Centers (PACs), Community Access Program sites (CAPs), and multi-purpose centers, telecenters are places where community members can use networked computers and other information and communication technologies (ICTs) for free. Their financing can come from governments, development agencies, or non-governmental organizations (NGOs).<sup>3</sup>

Public internet connectivity providers may need training and other resources for the implementation of technical and procedural safeguards so that public internet connectivity can be used lawfully, ethically, safely, and with respect for community norms.

- **Public internet connectivity can offer economic benefits to individuals and their communities.** Public internet connectivity can be essential for people who have no other means of being part of the information society, including the use of employment and business-related resources, government information and services, email, e-learning, and social media. Public internet connectivity is also important for communities, helping businesses to connect with local customers and visitors, to provide up-to-date information on local events, transportation, and other amenities, and to disseminate information and organize activities in emergencies.<sup>4</sup>
- **Public internet connectivity provided through telecenters offers an opportunity to increase basic digital literacy.** Some telecenters, including those hosted by libraries and other public institutions, offer free training in the use of the internet, computers and peripherals, e-readers, various software applications, and supportive technologies for users with disabilities.
- **Public internet connectivity through telecenters can help individuals develop a variety of skills useful in the digital economy.** Depending on the community, telecenters can provide training ranging from the basics of finding information online and safe and ethical use of the internet, to learning about specialized software and equipment. Some telecenters provide free access to hardware and software that people may not be able to afford individually, such as specialized photo editing software or 3D printing. Telecenters can also provide training and experience in maintaining software, hardware, and networks, and in providing user support.
- **Public internet connectivity points can serve as anchor points for community networks.** Community networks<sup>5</sup> can provide internet access in areas where commercial internet service is not available, offer alternatives to commercial internet service, encourage the creation and distribution of local content, and offer other benefits.
- **Public internet connectivity offers benefits even to those who have private internet access.** Many individuals continue to use public internet connectivity even though they have private internet access, including access via mobile phone. Some users with private access use public internet

connectivity for resource-intensive tasks so as not to use their limited data plans. Some use desktop computers in telecenters for tasks that are not easily performed on mobile devices. In some communities, telecenters serve as gathering places where community members obtain needed training, share knowledge and experience, meet new people, and increase their social connections by helping each other use the internet and ICTs.

IEEE supports public internet connectivity because it can provide a variety of benefits to individuals and their communities and plays an important role in providing universal access to the internet.

## **ABOUT IEEE**

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<sup>1</sup> According to Internet World Stats, in March 2021 there were 5.1 billion active internet users worldwide (accessed 27 August 2021). See <https://www.internetworldstats.com/stats.htm>.

According to the International Telecommunications Union *Measuring Digital Development: Facts and Figures* report, globally, about 72 per cent of households in urban areas had access to the internet at home in 2019, almost twice as much as in rural areas (nearly 38 per cent). The urban-rural gap was small in developed countries, but in developing countries urban access to the internet was 2.3 times as high as rural access. See <https://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx>.

<sup>2</sup> See, for example, WiFi4EU Initiative at [http://europa.eu/rapid/press-release\\_MEMO-17-1536\\_en.htm](http://europa.eu/rapid/press-release_MEMO-17-1536_en.htm); and LinkNYC at <https://www.link.nyc>.

<sup>3</sup> See discussion in Uys, C., Pather, S. (2016), "Government Public Access Centres (PACs): a beacon of hope for marginalised communities," *The Journal of Community Informatics*, 12(1), 21-52.

<sup>4</sup> See, for example, <https://vtrural.org/programs/digital-economy/updates/benefits-of-public-internet-access>; and <https://www.dw.com/en/the-untapped-potential-of-wifi-in-emergencies/a-16183453>.

<sup>5</sup> "Community networks are IP-based computer networks that are operated by a community as a common good." (Christian Fuchs, "Sustainability and Community Networks", *Telematics and Informatics* 34 (2): 628-639, 2017, available at <https://www.sciencedirect.com/science/article/pii/S0736585316303203>).