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Marion Planning Board
Report of the SRPEDD Board of Commissioners
March 27, 2019

RE: Municipal Broadband Networks

Jeff Christensen of EntryPoint Networks delivered a PowerPoint presentation focusing on Municipal Broadband Networks for - Cities | Counties | States | Co-Ops.

Broadband is no longer a luxury, but has become a necessity; rural/town/city residents are losing ground on education, business, economic development, and much more. Some communities are approving \$million bonds to build their own network enabling automatic meter reading and other “smart grid” capabilities. (The term broadband is a type of data transmission in which a single medium (wire) can carry several channels at once, for example, Cable TV, whereas, baseband data transmission allows only one signal at a time.)

The high-speed networks being built by local governments generally start at 100 megabytes per second, which gives users reliable video conferencing and a host of other services only available to residents and businesses with faster connections.

EntryPoint Networks provides a Network Management platform designed for municipal networks aligned for municipal network operators in that the separation between infrastructure and services makes it easy for network operators to focus on maintaining infrastructure. The Open Access platform is designed for all municipal operators including city/town networks, municipal utility districts, rural utility cooperatives, and county networks. (Open access (OA) refers to free, unrestricted online access to research journal articles and books. OA content is open to all, with no access fees).

Mr. Christensen talked about redefining the meaning of open access networks that separates the broadband infrastructure from the services running over that infrastructure creating a marketplace of services for municipal subscribers. Christensen said the internet has flourished because of its open nature.

The internet is open to competition, open to innovation, provides open access to goods, services, information, and ideas. Ironically, the dominant model to access the internet in North America is to overlay the openness of the internet with a closed system of Internet Service Provider’s (ISP’s). This leads to a lack of competition. Suppressed competition leads to artificially high prices and innovation which is throttled. The idea/concept that EntryPoint presents is to restore the benefits of open networks by breaking up the existing monopoly on services currently held by incumbent ISP’s by putting all services (including ISP) into a dynamic marketplace to spur competition and innovation.

EntryPoint’s next generation Open Access control uses software defined networking and network virtualization. This gives all network stakeholders the unique advantages of automation, self-service provisioning, pay-as-you-go services, and new opportunities for Smart City and Internet of Things solutions.

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Implications for IoT: Proponents of the Internet of Things (IoT) anticipate a future where devices, systems, and services around the world are interconnected across a common network (typically the Internet) and are able to interact in ways that fundamentally enhance the way we live our lives. Far beyond current concepts of machine to machine communications, the IoT is expected to offer advanced connectivity of devices, systems, and services that span all industry sectors and communities. From heart monitoring implants, to smart energy grids, and emergency services that assist firefighters and police officers in search and rescue, the IoT has transformative potential. Many believe these IoT “things” should be connected to the public internet, and automated Open Access platform makes it possible to deploy automated private networks that look and feel like the internet but have unique privacy and security advantages and control over reliability that is relevant for many commercial and residential IoT applications.

Implications for Smart Cities: The majority of the global population now lives in cities and this trend is expected to continue. The challenges faced by cities will continue to escalate as the concentration of people living in cities increases. Among the many challenges faced by cities is the necessity to remain economically viable and attractive to residents because of high quality broadband connectivity. A growing number of cities globally view broadband infrastructure as an essential utility. The automated Open Access platform provides new flexibility and control to manage broadband infrastructure - including connected City Infrastructure.

In conclusion, some see this open-access-friendly technology as paving the way for a future in which all devices are connected—everything from a blender to heavy machinery to operating-room robots—in what experts call the “internet of things.” It means 15 years from now, we could have doctors in sophisticated urban medical centers using robotics to do surgeries in remote rural areas, and the technology would also allow a subscriber to switch between service providers with the click of a mouse.

Respectfully submitted,

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