

Streetlight Small Cells

Overview

With city and utilities digitizing their services and moving billing, general communication and emergency alerts online, access to the internet has become a necessity and a 'human right'. However, a May 2022 report states that "24 million Americans lack access to high-speed internet and many more cannot connect due to gaps in digital equity and literacy" showing that in this digitally critical age, a large portion of Americans are still underserved by unavailable or unreliable connectivity.

Providing a working digital economy is a key part of ensuring cities maintain competitiveness and flourish in the 20th century. The digital divide is significant and this became even more evident with the pandemic of the last couple of years. Many of those underserved citizens only have access via a cellular service.



New Pole Construction for Small Cell Deployments

VS

Ericsson Street Radio



Broadly speaking, everyone wants a flawless experience using and consuming their favourite apps and content both indoors and out. Mobile Service Providers want to build out cellular coverage and capacity to ensure exceptional service everywhere, but no one wants their unsightly equipment to be obvious nor spoil the environment. Furthermore, radio equipment is complex and complicated and takes a long time to install and deploy.

A new approach is needed to provide cellular internet services quickly whilst overcoming public objections and maintaining the beauty of many of our cities and towns.

Great cellular service, virtually unseen

The Ericsson Street Radio was specifically developed to solve these challenges. It is an innovative solution for simplified and virtually unseen installation of 5G radios to provide fast, efficient, and ubiquitous cell coverage and capacity. It was developed by Ubicquia in conjunction with Ericsson for hot pluggable insertion into the photocell socket of a streetlight.

It takes less effort to approve to code, less disruption to deploy and gives residents great cell service. There is also a nominal recurring attachment fee for the streetlight owner, depending on whether that is the utility or the city.

Streetlight Small Cells



Permitting Process

- 12 - 24 months
- Ability to accelerate with pre-approvals

Time to Deploy

- 6 - 12 months
- Fiber construction, power, footings, etc.

Total Cost of Ownership

- High and complex
- Components: Poles, cables, antenna, utility meter, etc.

The benefits of beautiful, simple and fast

Ericsson Street Radio brings great cellular service that seamlessly integrates to the landscape with less disruption and effort. It provides internet services for everyone and helps cities be their best by accelerating program digitization.

Better served population

Most people want better cell service, but without the obtrusive and unsightly installation many traditional systems provide. Ericsson Street Radio brings that.

Simplify working practices

Installation is provided by plugging in to existing infrastructure and can be achieved in minutes (excluding fiber). This means very minor road obstruction –performed by a single bucket truck parked on the verge for a very short time.

Overcome local objections

Many objections from city residents are due to the unsightly nature of traditional cells affecting the view from their house. Objections are expensive and repermitting and consultation can take many months with considerable cost. The Ericsson Street Radio blends smoothly into the existing infrastructure, incorporating all radio items required (antenna, power supply and housing) into a virtually unseen installation to address those objections.

Virtually unseen

When installed, the Ericsson Street Radio's slim and small design make the system virtually unseen and ensuring clean blending into the landscape, maintaining city aesthetics and ensuring the usual local objections are overcome.

No power trenching required

No digging up the road for power. Trenching for power is a complex and often costly process, both for the utility and the city, involving traffic disruption, complex approvals and considerable time. The Ericsson Street Radio hot plugs directly into a streetlights photocell socket, autosenses the power and enables the radio for the commissioning process, removing the need for any power provision outside of what is already at the streetlight.

Simpler approval process whilst maintaining control

It's a lightweight system that is fully certified to stringent safety and telecom standards. Due to it's standardised and simple design, the site engineering package can be approved just once per light type and reused many times. This results in a lower internal cost a city must spend to approve 5G deployments.

No new construction

Ericsson Street Radio fully utilizes existing streetlight infrastructure, so apart from connecting with fiber, there is nothing else to do.

Attachment fee revenue

Simple recurring nominal attachment fee for all Ericsson Street Radio sites for the streetlight owner, enabling speed of approval and deployment.

Simpler consensus

It's simple design, installation and stringent certification ensures easy consensus between authorizing bodies and the public alike.



Winning Partnership

- Developed with Ericsson
- Piloted with AT&T
- Sold as Ericsson Street Radio
- Award-winning innovation



Faster Deployments

- Accelerates site acquisition
- Uses existing streethlights
- Near zero footprint
- Installs in minutes



Improved Economics

- 70% lower cost of ownership
- No new construction
- Complete small cell solution
- Integrated utility grade meter



Multiple Use Cases

- Network coverage & capacity
- Rapid 5G expansion
- Fixed wireless access
- IoT & public safety