

## **The Importance of Reliable Mobile Coverage for EV Charging**

The EV (Electric Vehicle) market is thriving and the growth in EV sales is huge.

According to [Zapmap](#), a leading provider of EV charging point information, at the end of 2020 there were 205,770 electric vehicles on UK roads, at the end of August 2024 there were 1,200,000. An astounding increase.

In 2024 to date, 213,544 electric vehicles have been sold, capturing a 17.2% share of the market for all new cars registered this year.

As sales of EV's continue to increase, the number of EV charge points is understandably growing fast. By the end of August 2024, Zapmap reported that there were over 68,273 EV charge points across the U.K. This is an impressive 41% year-on-year growth in public charging points since the start of 2023. This does not account for the many charge points installed at homes or at workplaces.

However, whilst the growth of EV charge points sounds impressive, due to poor mobile connectivity their functionality leaves much to be desired.

According to a report from the independent research body, [RAC](#) Foundation, approximately two-thirds of Britain's most common type of public charge points are suffering limited mobile signal connectivity. The RAC Foundation found that only 33.4% of the Type-2 chargers (the most common type of charger) analysed are in locations where there is acceptable mobile coverage.

The report also revealed that 66.4% are in spots where a signal from one, two, three or even all the providers is absent, or too weak to work.

As the number of EVs increases, so does the demand for charging infrastructure. EV sales are expected to account for 46% of light vehicles sales by 2025, making it imperative that mobile coverage can handle this demand.

## **Why is a Reliable Mobile Signal Essential for EV drivers?**

Many charging stations require users to download an app to access and pay for their charging session, all of which necessitates a reliable mobile signal. Furthermore, access to a charge point relies on the MNO (mobile network operator) providing service to that specific area. If the MNO lacks coverage, the phone will not connect, making it impossible to use the charge point.

Limited connectivity is impacting the user experience and causing delays in getting drivers back on the road.

A reliable mobile signal is essential, not only to access the necessary app and to facilitate the charging session, but also for the following reasons:

### **Charging Station Information**

Mobile apps are indispensable for EV drivers. They offer valuable information about charging stations; from real-time availability and status, to payment options, and compatibility. These apps help drivers make informed decisions about where to charge their vehicles. A robust mobile connection ensures that drivers can access this information seamlessly.

### **Payment and Billing**

Many EV charging stations require mobile payments through apps. A reliable mobile connection is essential for completing these transactions smoothly and efficiently. Without a strong signal, drivers may face delays or difficulties in paying for their charging sessions.

### **Authentication and Access**

Some charging stations use mobile authentication to verify the user's identity, and grant access to the charging point. This can be particularly useful for preventing unauthorised use of the station. A reliable mobile signal is essential for this authentication process to work correctly.

## **Remote Monitoring and Diagnostics**

Some EVs offer remote monitoring and diagnostic capabilities through mobile apps. This allows for diagnostics to be carried out remotely to identify any potential issues, and can also allow for software updates. Furthermore, many modern charging stations allow drivers to track their vehicle's performance, battery status, and charging history. However, to access these features, a reliable mobile connection is necessary.

## **Safety**

Lack of reliable mobile coverage can make users feel unsafe particularly in dimly lit areas.

## **Indoor Charging Points**

While outdoor charging stations are becoming increasingly common, there is also a growing demand for indoor charging points, particularly in areas such as basement car parks, which utilise space without taking away valuable surface parking areas. Additionally, you can find indoor charging points in residential areas, workplaces, shopping centres, and other public spaces.

These indoor stations offer convenience, and protection from weather conditions, making them attractive to EV drivers.

## **Conclusion**

To ensure both accessibility and functionality, it is essential to have reliable indoor mobile signal coverage within these spaces. This can be achieved through the use of repeaters.

At Simpli-Fi we offer OFCOM compliant repeaters that provide all UK MNO's (Mobile Network Operator) services to EV charging areas. This solution can be strategically deployed to provide indoor coverage to targeted areas, offering a more cost-effective solution compared to covering the entire building.

As the number of EVs continues to grow, it is essential to invest in robust mobile signal coverage to ensure that drivers have a seamless and hassle-free charging experience.

For more information on how we can improve your indoor mobile connectivity, contact our team of experts today to arrange a consultation.

[Get in touch today](#)