

Text on screen: If there are 5G radio base stations on smart lampposts...

Scene: The father and son are leaving the stadium. There are many people in the background and the son raises his phone.

Son: I wanted to watch the highlights of the match just now, but the video download met with frequent interruptions!

Father: It may be because too many people are using the mobile network at the same time! It would be better if you connect to a 5G network now, because the bandwidth of 5G is wider than 3G and 4G, so more people can surf the Internet at the same place at the same time smoothly!

Son: I also know that the peak download speed of 5G services can reach 20Gbps, and the entire match review can be downloaded in less than 10 seconds!

(Father and Son approaching a smart lamppost.)

Father: Do you know that smart lampposts can be used to install 5G radio base stations and are an important street facility to facilitate the roll-out of 5G mobile networks?

Son: I know! Space has been reserved on the top of the smart lamppost for the installation of 5G radio base stations.

One of the possible applications is vehicle-to-everything (V2X) technology. Vehicles connected to the network can obtain traffic data on the road (such as traffic signals), and share information of location, speed, direction, brake operations, etc. with nearby vehicles to reduce traffic accidents and improve road safety.

These data can also be fed back to the backend system to assist in implementing real-time strategies to alleviate local traffic congestion or special traffic arrangements.

These data must be transmitted and processed in real time, which can be fulfilled by 5G mobile network characterised by high transmission speed, low latency and capability to make large number of simultaneous connections. As one of the street facilities, installing radio base stations on smart lampposts can enhance mobile network coverage and capacity, providing a better 5G mobile network!

Father: You seem to be very interested!

Son: Of course! I am looking forward to the advent of the Internet of Vehicles and self-driving cars. I wonder if we still need to take the driving test?