

Telefónica and Atlético Madrid develop immersive 5G experience

Objective: Telefónica and the La Liga side Atlético de Madrid have implemented a new immersive way of enjoying matches via 5G and in Virtual Reality (VR).

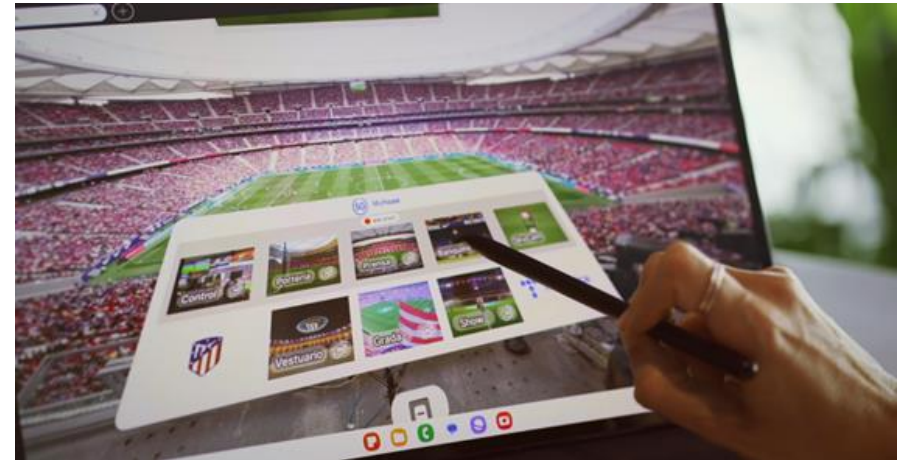
Description:

The experience allows viewers to enjoy games from different angles thanks to tablets or Meta Quest Pro VR glasses that receive, via 5G, the images captured in real time by four 360 degree cameras located at various points on the field, combined with an HD image of the game and of the SkyCam.

One of the great challenges of the project has been visualisation in real time. Since the experience is enjoyed from the Cívitas Metropolitano stadium itself, it is necessary for the participants to be able to see and hear the goals at the same time as the spectators. To make this happen, it has been possible to send video from the 360 degree cameras to their processing in the cloud and subsequent display in VR glasses in less than 500 milliseconds.

Various technologies have been used in this innovative way of watching a football match. On the one hand, 5G and its capabilities (low latency, higher speed, increase in connected devices) allow the transmission of a large stream of 4K quality video to VR glasses at high speed with minimal latency. Likewise, fibre optics is essential to send these 12Gpbs video streams from the 360 degree cameras to the server. The immersive experience is completed by computing and combining the video streams in the cloud.

In this pilot project, Telefónica has worked with mSurgery, a leading start-up in virtual reality and high-quality video distribution in real time.



[Video](#)