

KQI evaluation for 360-Video services over mobile networks

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ABSTRACT

New generation services have become the pillars and basis for the development of cutting-edge mobile networks as 5G and 6G. These technologies are intended to provide high-quality services which currently are not available, for instance, VR (Virtual reality). This paper presents a framework for LTE and 5G that aims to assess the performance of the 360-video service through Key Quality Indicators (KQI). This proposal integrates the immersive experience of omnidirectional video using an HMD (Head Mounted Device) while the performance measurement is done along the user session. The video content uses DASH (Dynamic Adaptive Streaming over HTTP) from a video server located in the cloud. Finally, a performance comparison is provided making use of the data collected through an iterative experiment. The results obtained show the potential of the mobile networks and encourage their use for a high-quality VR service deployment.

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