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# Q4Health Optimization of Real Time Video for Emergency Services over LTE

The Q4HEALTH project is an Innovation Action focused on the optimization of real time video for emergency services over LTE (Long Term Evolution) networks.

The project is implemented as a set of experiments conducted over the FIRE platforms PerformNetworks (formerly PerformLTE) and OpenAirInterface. The motivation is to study and improve video performance on LTE-A, in scenarios comprising wearable live video for first responders, with a particular innovation focus on 3GPP release 12.

## How does it work?

To achieve this goal, six different experiments will be performed focused on resolving a set of six challenges, as well as addressing a range of Key Performance Indicators (KPIs). Q4HEALTH faces different challenges, such as the inability of applications to negotiate a Quality of Service (QoS) agreement with the network, the delays introduced on live video, the appropriate scheduling algorithms on the access nodes, the service availability in indoor scenarios and the communication between geographically correlated entities.

These challenges will be approached from different perspectives. The applications will be extended to provide information to the EPC and the scheduler in the RAN (Radio Access Network) regarding the type of traffic as well as their traffic requirements; the radio access where different scheduling strategies will be explored for emergency video; and the core network where mechanisms to perform QoS reservation, techniques for seamless mobil-

ity between heterogeneous access technologies and SDN techniques to improve communication will be studied.

## Key objectives

Q4HEALTH has defined 20 KPIs and these will be formulated as a baseline at the start of the project. At the end of the project we will measure the KPIs on an integrated optimized experiment in order to validate the project's success.

Q4HEALTH will participate in the EIT KIC (The European Institute of Innovation and Technology Knowledge and Innovation Communities) as well as FIRE and 5G PPP events in order to disseminate the results to the wider innovation ecosystem. All the project results and extensions will be showcased to maximize the exposures to other companies that might also exploit the outcomes of the project.

## Project Facts

**CALL:** Collaborative Projects Call 2 - ICT12 | **EXECUTION:** From January 2016 to December 2018

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