

Quality of Service and prioritisation for emergency services in the LTE RAN stack

Q4HEALTH



The Concept

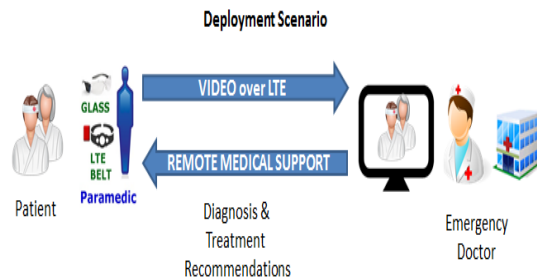
- ▲ BlueEye is a Live Interactive Video Platform for First Responders.
- ▲ BlueEye is a wearable video system which streams live interactive point of view video to be streamed to a command center to provide real time interactive support.

The Challenge

- ▲ Optimization of real time video for emergency services over LTE
- ▲ Enhance video performance in scenarios with wearable live video for first responders.
- ▲ During the 'golden hour' after the incident, pre-hospital actions taken are crucial and potentially lifesaving.

The Project

- ▲ Project duration: 2 years Started: 1st Jan 2016
- ▲ Three partners: 1 Industrial, 2 Academia
- ▲ Q4HEALTH project is an innovation action focused on the optimization of real time video for emergency services over LTE.
- ▲ The project is implemented as a set of 6 experiments conducted over the FIRE platforms PerformLTE and OpenAirInterface
- ▲ Evaluation of 20 KPIs for wearable video
- ▲ Contact dmorris@redzinc.net



The Experiments

	Experiment	Experiment Name
EPC	Experiment A	Application to EPC Service Control <i>Evolution of the Rx interface using OpenFlow</i>
	Experiment B	Application Controlled In Building Handover. <i>Between LTE pico cells, small cells and Wi-Fi</i>
	Experiment C	Group Video over OpenFlow at Adjacent Macro Cell. <i>OpenFlow to support group sharing of video/audio directly to adjacent eNodeB without trombone to EPC</i>
Access	Experiment D	Scheduling Optimisation for Priority Video. <i>Scheduling programmability through API allowing application-specific resource allocation</i>
	Experiment E	UE Antenna evaluation. <i>Comparison of belt mounted wearable antenna</i>
Showcase	Experiment F	Integrated Experiment to showcase optimal features. <i>Validation of all features with end to end validation and showcase</i>