

Nowadays the Telecommunication sector is suffering a big development. That is because the demand of the society and the competence between the companies in the same sector which want to provide their clients with the best service. The costumers day by day, ask for a better service and improvement of the quality. That the reason why lots of people are hardly and daily working to offer the best quality and the best services.

In the Telecommunications we can see one technology that is always improving to be able to give the best service to the costumers. We are talking about the FHOOXODU_ technology. This new technology is everyday trying to give the best service. With this technology we can have in only one device and integrated, voice, images and data.

The technology which is able to combine these three services in one and with a very high velocity is the UMTS, Universal Movile Telecommunication System, which is the third generation of wireless telephones and is an evolution of technologies like GSM and GPRS.

After the increase of this technology some people is studying the possibility of unifying the IP with the UMTS. That's the reason why a mechanism to unify them called 3gpp has been created.

The UMTS works with services such as the communication of packets and also with circuits. The only different between these services appears when we arrive to the Core Network, where this information is treated in different ways because the devices which work with this information are different between them. That means that if the packets to be treated are a part of the circuits the information will go through the MSC to also go to the PSTN red, and if it is information if the packets this is going to be treated by the GPRS red using the GGSN as an interface with the outside red, which in this case is the IP.

Both, the UMTS and the IP red, need quality and service to be able to give a stable efficiency to the costumers which have asked for that. The UMTS red has one problem which is associate the traffic of the 4 services and the way of communicating to the outside red the quality of each service to permit that this goes as faster as possible for his red.

That produces that the IP red to give %HWV_HIIRUW_VHUYLFHV_ without being able to guarantee them. The way the architecture of the integrated services is the best to give a good quality and good service to some specific IOXMRV where a different treatment is required.

The aim of this project is to study the behaviour, in the sense of its quality, of the IP network specifically in the moment of unifying the UMTS traffic with the best-effort traffic.