

**EVEREST****EVEREST IST-2002-001858**

D23

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This deliverable constitutes the final report of the project IST-2002-001858 EVEREST. After its successful completion, the project presents this document that firstly summarizes the context, goal and the approach objective of the project. Then it presents a concise summary of the major goals and results, as well as highlights the most valuable lessons derived from the project work. A list of deliverables and publications is included in the annex.

For more detailed technical results please consider the public deliverables, available at <http://www.everest-ist.upc.es>

Keyword list: Co-operation with other Projects, Concertation Activities

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EXECUTIVE SUMMARY

This report summarises the main achievements of the EVEREST Project, an IST research and technological development project carried out between January 2004 and December 2005 by Universitat Politècnica de Catalunya (UPC); King's College London (KCL); Portugal Telecom Inovação (PTIN); Telecom Italia Lab (TILAB); Telefónica Investigación y Desarrollo (TID), TeliaSonera (TEL).

The most important technical achievements of the project cover many different aspects related to Radio Resource and QoS Management and Common Radio Resource Management (CRRM). Different algorithms related to Admission Control, Congestion Control as well as on Packet Scheduling procedures have been proposed and evaluated for the envisaged Radio Access Technologies, namely GERAN, UMTS, WLAN. Moreover issues related to the end-to-end QoS architecture have been also studied and evaluated.

The Performance evaluation of the proposed architecture and RRM/CRRM techniques was completed by means of a set of laboratory tests carried out using a Demonstrator developed in the project. This Demonstrator is a SW/HW flexible tool, which provides a realistic real time emulation of an evolved B3G radio access system able to manage multimedia IP based applications. Finally, significant dissemination policy, based on publications on high quality magazines and conferences, was carried out. Moreover, several standards contributions were also generated and presented to the pertinent 3GPP technical committees.