EVEREST

EVEREST IST-2002-001858

D13

Target Scenarios specification: vision at project stage 2

Contractual Date of Delivery to the CEC:	**31-01-2005**
Actual Date of Delivery to the CEC:	**11-02-2005**
Editor: Peter Karlsson (TEL)	
Author(s): see list	
Participant(s): UPC, KCL, PTIN, TI, TID, TEL	
Workpackage: WP2	
Est. person months: 13	
Security: PU	
Nature: Report	
Version: 001	
Total number of pages: 97	

Abstract:

This deliverable provides and up-dated version of the selected scenarios in order to consider the latest evolutions of the 3GPP and IETF specs as well as any other outstanding technical information coming from the standardisation bodies.

The scenario descriptions are focusing on those parameters that are relevant for the common Radio Resource management in cellular heterogeneous networks. The heterogeneous network comprises evolved 2G and 3G cellular systems as well as wireless local area networks (WLANs).

Keyword list: Scenarios, Mobility and Propagation models, Layouts, Traffic Characterization, Traffic mix, QoS parameters

DISCLAIMER

The work associated with this report has been carried out in accordance with the highest technical standards and the EVEREST partners have endeavoured to achieve the degree of accuracy and reliability appropriate to the work in question. However since the partners have no control over the use to which the information contained within the report is to be put by any other party, any other such party shall be deemed to satisfied itself as to the suitability and reliability of the information in relation to any particular use, purpose or application.

Under no circumstances will any of the partners, their servants, employees or agents accept any liability whatsoever arising out of any error or inaccuracy contained in this report (or any further consolidation, summary, publication or dissemination of the information contained within this report) and/or the connected work and disclaim all liability for any loss, damage, expenses, claims or infringement of third party rights.

DOCUMENT HISTORY

Date	Version	Status	Comments
25-01-2005	0.5	Int	For comments and additions
27-01-2005	0.6	Int	Some further updates from inputs
31-01-2005	0.7	Int	Final draft
04-02-2005	0.9	Int	Final draft for revision
11-02-2005	001	Apr	Approved final version

Authors List

Andres ALAYON (TEL)
Andrea BARBARESI (TI)
Fernando CASADEVALL (UPC)
Filipe CABRAL-PINTO (PTIN)
Anders DAHLEN (TEL)
Robert FAROTTO (TI)
Ramon FERRUS (UPC)
Antoni GELONCH (UPC)
Alvaro GOMES (PTIN)
Beatriz GONZALEZ (TID)
Hector GONZALEZ (TID)
Paolo GORIA (TI)
Peter KARLSSON (TEL)
Deepack LIMANI (UPC)
Richard LJUNG (TEL)
Nima NAFISI (KCL)
Jordi PEREZ-ROMERO (UPC)
João REBELO (PTIN)
Oriol SALLENT (UPC)
Avelina VEGA (TID)
Lin WANG (KCL)

EXECUTIVE SUMMARY

The scope of this document is to update the target scenarios to be addressed during the second stage of the EVEREST project. The scenario descriptions are focusing on those parameters that are relevant for the common Radio Resource management in cellular heterogeneous networks. The heterogeneous network comprises evolved 2G and 3G cellular systems as well as wireless local area networks (WLANs).

Four target scenarios from stage one and one additional multi floor building scenario are given in this deliverable based on the requirements of the four operators in the project. They are described by four main items, which are considered most relevant for RRM strategies. The selected five target scenarios and the corresponding evaluation procedures are compliant with 3GPP specifications in order to facilitate the impact of the project result in 3GPP. The scenario vision encompasses a heterogeneous network supporting end-to-end QoS for users with multimode mobile terminals in the time frame of 2009-2010.

The document gives a short introduction in section 2 and overview of the scenarios that will be used within EVEREST stage two. Section 3 presents new items relevant for the reference QoS architecture assumed. The architecture is aligned with the evolution carried out in 3GPP and IEEE 802.11. Section 4 addresses the updated service and traffic characterization. The main characteristics of the environments to be assumed in EVEREST: Dense Urban; Urban; Suburban and Indoor “Hot Spot”, are described and the corresponding propagation characteristics are identified. The most important characterization of the Radio Access Technologies (RAT) for simulation and evaluation of heterogeneous radio access network is done in section 6. The description of the final five selected target scenarios is done in section 7. A conclusion about the scenarios and descriptions in this deliverable is given in section 8.

Table of Contents

