

TSG-SA Working Group 1 (Services) meeting #2  
Edinburgh, Scotland 9<sup>th</sup>-12<sup>th</sup> March 1999

***TSGS1#2(99)135***

**Agenda Item:** 7.3.9

**Source:** Coordinator

**Title:** Handover Requirements between UMTS and GSM or Other Radio  
Systems

**Document for:** Information & Discussion

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## Title

Handover Requirements between UMTS and GSM or Other Radio Systems

## Intended Output

Technical Specification

## Impact on Other Technical Specifications and Technical Reports

ETSI TS 22-29 ( Handover Requirements between UMTS and GSM or Other Radio Systems ) will be used as the basis for this specification. Any other agreed requirements defined by the other partners or individual members will be captured in this specification.

## Technical Scope

The scope of this document includes service requirements for handover and roaming (terms that are defined below) within UMTS systems and between UMTS, other IMT-2000 family members and 2<sup>nd</sup> generation systems. Particular emphasis has been placed on the description of requirements for handover between UMTS and GSM but requirements specific to other systems are incorporated as required.

UMTS is a "third generation" mobile cellular radio telecommunications system which provides telecommunication and information services to wireless terminals. Mobile cellular systems have the defining characteristic that they are capable of maintaining continuity of service to a wireless terminal as it moves between the radio coverage area, or "cells", associated with different base station sites . This functionality is called "handover". Handover can also occur due to change of radio resource providing a service without necessarily any change of the base stations involved. In particular, when the radio resources providing a service change from one of the UTRA modes to the other (UTRA-FDD and UTRA-TDD), this is regarded as handover.

It is a key requirement of UMTS that it allows for dual or multi-mode (e.g. UMTS/GSM) terminals to handover traffic from UMTS to other radio systems such as GSM and visa versa. This document describes the service requirements for intra- and inter- system handover that shall be used by other SMG STCs to guide the implementation of UMTS-to-(e.g.) GSM handover specifications. It defines requirements for the enhancement of the GSM specifications to allow GSM-to-UMTS handover.

## Impact on Other 3GPP Work Items

This specification will define the services and service requirements which the architecture, networks, terminals etc will have to support.

## Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Review of requirements from other partners input papers	22/2/99	5/3/99
Members and partners input and e-mail discussion	22/2/99	5/3/99
Review and resolution of issues at WG1 meeting	9/3/99	12/3/99
Presentation to other groups for comments	16/3/99*	12/4/99
Ad hoc meeting to resolve any final problems	14/4/99*	16/4/99
Submission to TSG SA for approval	30/4/99	30/4/99

**Note:** \* These dates are a guess at present

## Supporting Individual Members

All WG1 members

**Rapporteur**

David Cooper (NEC)

Tel: +44 1372 804 800

Mobile: +44 468 914 572

FAX: +44 1372 804 804

E-mail [david.cooper@nectech.co.uk](mailto:david.cooper@nectech.co.uk)