ETSI TC SMG#29   *TSG S#4 (99) 228*

Miami, Florida, USA 21st – 23rd June, 1999

Agenda Item: 5.1

Source: S1

Title: CR on User control of target network preference for handover affecting 3G 22.129

Document for: Approval

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SA_Tdoc	Doc	Spec_	CR#	R	Vers	C	New	Topic	Title
SP-99228	342	22.129	A001		3.0.0	B	3.1.0	HandOver	To ensure the user has control over the potential destination networks used for handover, for example to limit roaming costs.

CHANGE REQUEST No :	**A001**	*Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.*

Technical Specification / Report UMTS   22.129   Version: 3.0.0

Submitted to   SA#4   for approval ☐   without presentation ("non-strategic") **X**
TSG_SA
list TSG plenary meeting no. here ↑   for information ☐   with presentation ("strategic") ☐

PT SMG CR cover form is available from: http://docbox.etsi.org/tech-org/smg/Document/smg/tools/CR_form/crf28_1.zip

Proposed change affects: USIM ☐   TE ☐   Network ☐
(at least one should be marked with an X)

Work item: GSM UMTS Handover

Source: TSG-S1   **Date:** May 12, 1999

Subject: User control of target network preference for handover

Category:

				Release:		
F	Correction		☐		Phase 2	☐
A	Corresponds to a correction in an earlier release		☐		Release 96	☐
B	Addition of feature		**X**		Release 97	☐
C	Functional modification of feature		☐		Release 98	☐
D	Editorial modification		☐		UMTS 99	**X**

(one category and one release only shall be marked with an X)

Reason for change: To ensure the user has control over the potential destination networks used for handover, for example to limit roaming costs.

Clauses affected:

Other specs affected:

Other releases of same spec	☐	→ List of CRs:	
Other core specifications	☐	→ List of CRs:	
MS test specifications / TBRs	☐	→ List of CRs:	
BSS test specifications	☐	→ List of CRs:	
O&M specifications	☐	→ List of CRs:	

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

4.2.2   Inter Operator Handover Issues

Handovers between GSM and UMTS networks operated by different operators should remain an optional feature to implement. It is envisaged that handover would take place due to changing radio conditions caused eg by movement of the terminal causing it toleave the coverage area of a network.

The following networks may be involved with an inter-network handover procedure. These concepts are illustrated in Annex A:

- the user's *home network,* i.e. the operator where the user's subscription may be found;

- the user's *visited network* where the subscriber user is currently registered, i.e. the network where the subscriber user has performed the last successful update location procedure. As long as the subscriber user is roaming roams within the home network, home and visited network are identical.

- the user's *serving network* covering the cell that serves the subscriber. After successful completion of the update location update procedure, the serving network is identical with the visited network. After an inter-network handover, the visited network is different from the serving network until a location update procedure has been successfully completed (excepted the case that the subscriber returns into the visited network).

- the *target network* covering candidate target cell(s) for inter-network handover. The target network has overlapping radio coverage with the serving network but not necessarily with the visited network.

The minimum requirements for inter network HO are:

- continuity of an *active call* across the handover procedure, where this would be possible for intra-operator handover;

- charging, billing and accounting for inter-network handover should be according to the principles defined in UMTS 22.15. For R'99 the mechanisms currently used in GSM should be provided as a minimum (charging for handover leg is based on vistited network tariff, etc., settlement between operators is based on bulk metering, etc.);

- the ability to check with the home network whether the user is permitted to handover from the visited network to a target network;

- the decision whether the handover request is accepted must be taken by the target network;

- invocation of the handover procedure only occurs if the target network provides the radio channel type required for the respective call;

- the avoidance of "network hopping", i.e. successive handover procedures between neighbouring networks for the same call;

- the possibility of user notification of inter network HO (eg possible tariff change) when it occurs

-   The standards shall permit the possiblity for the user to prevent inter network HO or for the user to control target network preferences of inter network HO.