

3GPP TSG RAN2#41
Malaga, Spain, 16-20 February 2004

R2-040733

Title: Reply to: LS on Use of UTRAN for I-WLAN [S1-040190]
Release: Rel-6
Work Item: Interworking WLAN
Source: RAN2
To: SA1
Cc: SA, SA2, CN1, GERAN2
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1. Introduction

RAN2 would like to thank SA1 for their liaison "LS on Use of UTRAN for I-WLAN".

2. Response

During RAN2#41, RAN2 has discussed the issue of providing WLAN information via the UMTS radio interface in order to facilitate a WLAN UE in finding/accessing WLAN Access Points.

RAN2 confirms that it would in principle be possible to add in release-6 information to the UMTS broadcast information which could assist WLAN UE's to find I-WLAN Access Points as long as this information is limited in size.

While discussing possible solutions, several questions were raised in RAN2:

- 1) It is RAN2's understanding that when the UE is performing RAN access based on a SIM, there is the obligation to always look for the Home-PLMN. How would such a requirement be translated in a mixed I-WLAN/UMTS environment ? E.g:
 - a) Is a Class WB WLAN UE required to camp on the WLAN Access Point (AP) when such an AP provides access to the Home-PLMN even if UMTS access via a visited network is available ?
 - b) Could the answer to question a) vary depending on the scenarios that are supported ? E.g. if scenario 6 is supported the UE should camp on the I-WLAN (cell reselection functionality), but if only e.g. scenario 3 is supported, the UE should anyway continue to camp on the UMTS RAN ?
- 2) It is RAN2's understanding that in the I-WLAN case, it will often be so that an I-WLAN will provide access to many HPLMN's. E.g. a "Starbucks WLAN PLMN" could provide access to many H-PLMN's present in other parts of the world. Assume the following scenario:
 - subscriber-A of operator-A is in a foreign country registered on the UMTS network of operator-B;
 - operator-A does not provide UMTS/GSM access in this country, but the operator-A H-PLMN can be accessed via the "Starbucks WLAN PLMN" present in this visited country;
 - the CN services from operator B can not be reached via the "Starbucks WLAN PLMN" since operator B has its own I-WLAN AP's in this country.

In this scenario, it is probably unlikely that the operator-B network will provide information regarding the presence of "Starbucks WLAN APs" via the operator B UMTS network ? This means that

irrespective of the information provided via the operator-B network, the WLAN-capable UE will have to scan for the presence of WLAN AP's on which it can obtain access to its H-PLMN ?

Depending on the scenarios that need to be covered, the solution for WLAN AP selection support via UMTS can vary from very simple (e.g. 1 bit "IWLAN scanning required" indicator) to very complex (full cell reselection functionality). In order to understand the scope of such solutions, RAN2 would like to understand the requirements that would need to be supported by a UTRAN solution:

- 1) E.g. which scenarios would need to be supported by the UTRAN in the release-6 timeframe ? Can a release-6 UTRAN solution be limited to the scenarios currently targetted for Rel-6 (scenarios 2 & 3), or should a release-6 UTRAN already support later release UMTS-IWLAN scenarios ?
- 2) Is there anywhere a more detailed description of the requirements for the UMTS support for I-WLAN in Release-6, e.g. is there a stage-1 related to this functionality ?

3. Actions

To SA1 group.

ACTION: RAN2 would kindly like to ask SA1 to answer the indicated questions.

4. Date of Next TSG-RAN2 Meetings:

TSG RAN WG2 #42	10-14 May 2004	Montreal, Canada
TSG RAN WG2 #43	16-20 Augustus 2004	Prague, Czech Republic