Technical Specification Group Services and System Aspects   *TSGS#25(04)0506*
Meeting #25, Palm Springs, USA

Source: **SA1**

Title: **Various CRs to 22.234 (Rel-6)**

Document for: **Approval**

Agenda Item: **7.1.3**

Meeting	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Current	Vers New	SA1 Doc
SP-25	SP-040506	22.234	005	-	Rel-6	F	Clarification to WLAN PLMN Selection	6.1.0	6.2.0	S1-040710
SP-25	SP-040506	22.234	006	-	Rel-6	F	Use of the SSID List at WLAN PLMN Selection	6.1.0	6.2.0	S1-040711
SP-25	SP-040506	22.234	007	-	Rel-6	F	Clarification of Interworking between PLMN and WLANs clause 5.1.7.1	6.1.0	6.2.0	S1-040712
SP-25	SP-040506	22.234	008	-	Rel-6	F	Clarification of the relationship between different levels of WLAN interworking	6.1.0	6.2.0	S1-040715
SP-25	SP-040506	22.234	009	-	Rel-6	F	Clarification on the WLAN identities lists for I-WLAN selection	6.1.0	6.2.0	S1-040726

CR-Form-v7

CHANGE REQUEST

⌘   **22.234** CR **005**   ⌘**rev** **-** ⌘   Current version: **6.1.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME **X** Radio Access Network ☐   Core Network ☐

Title: ⌘	Clarification to WLAN PLMN Selection
Source: ⌘	SA1 (Orange)
Work item code: ⌘	WLAN ***Date:*** ⌘ 17/06/2004

Category: ⌘ **F**	***Release:*** ⌘ Rel-6

Use one of the following categories:
     F *(correction)*
     A *(corresponds to a correction in an earlier release)*
     B *(addition of feature),*
     C *(functional modification of feature)*
     D *(editorial modification)*
Detailed explanations of the above categories can
be found in 3GPP TR 21.900.

Use one of the following releases:
   2   *(GSM Phase 2)*
   R96   *(Release 1996)*
   R97   *(Release 1997)*
   R98   *(Release 1998)*
   R99   *(Release 1999)*
   Rel-4   *(Release 4)*
   Rel-5   *(Release 5)*
   Rel-6   *(Release 6)*

Reason for change: ⌘	The text refers to WLAN APs, which are actually inside of the I-WLAN ~~AN~~, which is a black box from 3GPP perspective. The selection of a specific WLAN AP is out of the scope of 3GPP speicifications.

Summary of change: ⌘	1- WLAN AP is replaced by I-WLAN ~~AN~~ 2- UE is replaced by WLAN UE to align with the existing terminology.

Consequences if not approved: ⌘	The terminology of this TS will be misleading.

Clauses affected: ⌘	6.1.1.1

	Y	N	
Other specs affected: ⌘		X	Other core specifications ⌘
		X	Test specifications
		X	O&M Specifications

Other comments: ⌘	

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm.
Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

6.1.1.1 PLMN selection procedures

General

For the purpose of selecting a PLMN two lists may be present in the UICC: the "User Controlled PLMN Selector list for I-WLAN" and the "Operator Controlled PLMN Selector list for I-WLAN". It is not mandatory for the UICC to support these lists, however if the "Operator Controlled PLMN Selector list for I-WLAN" is supported then the "User Controlled PLMN Selector list for I-WLAN" shall also be present. Both the lists contain the preferred PLMNs for I-WLAN in priority order, and the User Controlled PLMN Selector list for I-WLAN has higher priority than the Operator Controlled PLMN Selector list for I-WLAN.

The purpose of the procedure is to enable the WLAN UE to find an I-WLAN, however, in case no PLMN is found to be supported by any of the available WLANs, the behaviour of the UE is not specified.

For the purpose of selecting the preferred I-WLAN in case multiple I-WLANs can support the connection to the desired PLMN and for optimising the PLMN selection, the UICC may contain a WLAN identities' preference lists provisioned by the operator.

A) Automatic selection mode

In the automatic mode the WLAN UE shall perform the following procedure:

1. For each of the WLANs available the WLAN UE shall attempt to discover the PLMNs available via the particular WLAN. If the WLAN UE receives a list of available PLMNs, then

   1a) If the HPLMN is found then the procedure is stopped and the HPLMN is selected.

   1b) If the HPLMN is not found, the UE creates a list of PLMNs accessible over the particular WLAN

2. Among all the PLMNs obtained in step 1b), select a PLMN following this order:

   i)   PLMNs contained in the "[0] User Controlled PLMN Selector list for I-WLAN" data file in the USIM in priority order, if the list is available;

   ii) PLMNs contained in the "Operator Controlled PLMN Selector list for I-WLAN " data file in the USIM in priority order, if the list is available;

   iii) PLMNs contained in the "User Controlled PLMN Selector list with access technology", if available;

   iv) PLMNs contained in the "Operator Controlled PLMN Selector list with access technology", if available;

   v)   PLMNs contained in the optional "[0]User Controlled PLMN Selector list for I-WLAN " in the ME in priority order, if the list is available;

   vi) PLMNs contained in the optional "Operator Controlled PLMN Selector list for I-WLAN " in the ME in priority order, if the list is available;

   vii) any other PLMN not included in the lists (randomly)

3. Attempt association with the I-WLAN AP providing connection to the PLMN selected in step 2 and attempt authentication with the selected PLMN.

B) Manual selection mode

In manual selection mode the WLAN UE shall perform the following procedure:

1. For each of the available WLANs the WLAN UE shall attempt to discover the PLMNs available via the particular WLAN.

2. If the WLAN UE receives a list of available PLMNs, then the WLAN UE presents the available PLMNs in the following order:

i) HPLMN;

ii) PLMNs contained in the "[0] User Controlled PLMN Selector list for I-WLAN " data file in the USIM in priority order, if the list is available;

iii) PLMNs contained in the "Operator Controlled PLMN Selector list for I-WLAN " data file in the USIM in priority order, if the list is available;

iv) PLMNs contained in the "User Controlled PLMN Selector list with access technology", if available;

v) PLMNs contained in the "Operator Controlled PLMN Selector list with access technology", if available;

vi) PLMNs contained in the optional "[0]User Controlled PLMN Selector list for I-WLAN " in the ME in priority order, if the list is available;

vii) PLMNs contained in the optional "Operator Controlled PLMN Selector list for I-WLAN " in the ME in priority order, if the list is available;

viii) any other PLMN not included in the lists (in random order)

In case more than one I-WLAN AP gives access to the same PLMN, an indication of the I-WLAN identity should also be presented to the user.

NOTE: it is possible to have repetitions of the same PLMN in the list presented to the user

3. Upon user selection of the desired PLMN the WLAN UE shall attempt to register on this PLMN. If more than one I-WLAN access point offers connection to the selected PLMN[0], then the WLAN UE shall attempt registration via the selected I-WLAN access point. To do so, the WLAN UE associates with the I-WLAN AP supporting the PLMN selected by the user and attempt authentication.

CR-Form-v7

CHANGE REQUEST

⌘ **22.234** CR **006** ⌘**rev** **-** ⌘ Current version: **6.1.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME **X** Radio Access Network ☐   Core Network ☐

Title: ⌘	Use of the SSID List at WLAN PLMN Selection	
Source: ⌘	SA1 (Orange)	
Work item code: ⌘	WLAN	**Date:** ⌘ 17/06/2004
Category: ⌘ **F**		**Release:** ⌘ Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can
be found in 3GPP TR 21.900.

Use one of the following releases:
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R96   *(Release 1996)*
R97   *(Release 1997)*
R98   *(Release 1998)*
R99   *(Release 1999)*
Rel-4   *(Release 4)*
Rel-5   *(Release 5)*
Rel-6   *(Release 6)*

Reason for change: ⌘	Currently, when 2 I-WLANs are connected to the best PLMN found at I-WLAN PLMN selection, there is no way for the WLAN UE to select the best I-WLAN according the WLAN identities' preference list (when it is present). Moreover, the I-WLAN PLMN selection process is not optimal as the available I-WLAN are checked in an arbitrary order, whereas using the SSID list could help the user to find the HPLMN quicker.
Summary of change: ⌘	It is proposed to use the I-WLAN identities' preference list (when it is present) at I-WLAN PLMN selection to check the I-WLANs in an optimal order. However, this CR does not make this list mandatory, and the behaviour is unchanged for operators who do not implement the WLAN identities' preference list.
Consequences if not approved: ⌘	The I-WLAN PLMN selection procedure will not be optimised in terms of time to access the network. Moreover, there will be situations where the user will not use the right I-WLAN to connect to the best PLMN, which may lead to additional inter-operator connections even if the home operator has his own hotspot.

Clauses affected: ⌘	6.1.1.1

Other specs affected: ⌘	Y	N		⌘	
		X	Other core specifications	⌘	
		X	Test specifications		
		X	O&M Specifications		

Other comments:	⌘	

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6.1.1.1 PLMN selection procedures

General

For the purpose of selecting a PLMN two lists may be present in the UICC: the "User Controlled PLMN Selector list for I-WLAN" and the "Operator Controlled PLMN Selector list for I-WLAN". It is not mandatory for the UICC to support these lists, however if the "Operator Controlled PLMN Selector list for I-WLAN" is supported then the "User Controlled PLMN Selector list for I-WLAN" shall also be present. Both the lists contain the preferred PLMNs for I-WLAN in priority order, and the User Controlled PLMN Selector list for I-WLAN has higher priority than the Operator Controlled PLMN Selector list for I-WLAN.

The purpose of the procedure is to enable the UE to find a I-WLAN, however, in case no PLMN is found to be supported by any of the available WLANs, the behaviour of the UE is not specified.

For the purpose of selecting the preferred I-WLAN in case multiple I-WLANs can support the connection to the desired PLMN and for optimising the PLMN selection, the UICC may contain a I-WLAN identities' preference lists provisioned by the operator.

A) Automatic selection mode

In the automatic mode the UE shall perform the following procedure:

1. For each of the WLANs available the UE shall attempt to discover the PLMNs available via the particular I-WLAN. If the UICC contains an I-WLAN identities' preference list, this initial step shall be done in the order of this list. For each I-WLAN, iIf the WLAN UE receives a list of available PLMNs, then

    1a) If the HPLMN is found then the procedure is stopped and the HPLMN is selected.

    1b) If the HPLMN is not found, the UE creates a list of PLMNs accessible over the particular WLAN

2. Among all the PLMNs obtained in step 1b), select a PLMN following this order:

    i)   PLMNs contained in the "[0] User Controlled PLMN Selector list for I-WLAN" data file in the USIM in priority order, if the list is available;

    ii)   PLMNs contained in the "Operator Controlled PLMN Selector list for I-WLAN " data file in the USIM in priority order, if the list is available;

    iii) PLMNs contained in the "User Controlled PLMN Selector list with access technology", if available;

    iv)   PLMNs contained in the "Operator Controlled PLMN Selector list with access technology", if available;

    v)   PLMNs contained in the optional "[0]User Controlled PLMN Selector list for I-WLAN " in the ME in priority order, if the list is available;

    vi)   PLMNs contained in the optional "Operator Controlled PLMN Selector list for I-WLAN " in the ME in priority order, if the list is available;

    vii) any other PLMN not included in the lists (randomly)

3. Attempt association with the highest priority I-WLAN AP in the I-WLAN identities' preference list (if available) providing connection to the PLMN selected in step 2 and attempt authentication with the selected PLMN.

B) Manual selection mode

In manual selection mode the UE shall perform the following procedure:

1. For each of the available WLANs the UE shall attempt to discover the PLMNs available via the particular WLAN.

2. If the UE receives a list of available PLMNs, then the UE presents the available PLMNs in the following order:

i)   HPLMN;

ii) PLMNs contained in the "[0] User Controlled PLMN Selector list for I-WLAN " data file in the USIM in priority order, if the list is available;

iii) PLMNs contained in the "Operator Controlled PLMN Selector list for I-WLAN " data file in the USIM in priority order, if the list is available;

iv) PLMNs contained in the "User Controlled PLMN Selector list with access technology", if available;

v)   PLMNs contained in the "Operator Controlled PLMN Selector list with access technology", if available;

vi) PLMNs contained in the optional "[0]User Controlled PLMN Selector list for I-WLAN " in the ME in priority order, if the list is available;

vii) PLMNs contained in the optional "Operator Controlled PLMN Selector list for I-WLAN " in the ME in priority order, if the list is available;

viii) any other PLMN not included in the lists (in random order)

In case more than one WLAN AP gives access to the same PLMN, an indication of the WLAN identity should also be presented to the user.

NOTE: it is possible to have repetitions of the same PLMN in the list presented to the user

3. Upon user selection of the desired PLMN the UE shall attempt to register on this PLMN. If more than one WLAN access point offer connection to the selected PLMN[0], then the UE shall attempt registration via the selected WLAN access point. To do so, the UE associates with the AP supporting the PLMN selected by the user and attempt authentication.

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CHANGE REQUEST

⌘   **TS 22.234** CR **007**   ⌘**rev**   **-**   ⌘   Current version: **6.1.0**   ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME **X** Radio Access Network ☐   Core Network ☐

Title: ⌘	Clarification of Interworking between PLMN and WLANs clause 5.1.7.1
Source: ⌘	SA1 (Research In Motion)

Work item code: ⌘	WLAN	***Date:*** ⌘	28/06/2004

Category: ⌘	**F**	***Release:*** ⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
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R96   *(Release 1996)*
R97   *(Release 1997)*
R98   *(Release 1998)*
R99   *(Release 1999)*
Rel-4 *(Release 4)*
Rel-5 *(Release 5)*
Rel-6 *(Release 6)*

Reason for change: ⌘	The text is not clear, regarding corporate WLANs
Summary of change: ⌘	Clarify text by explicitly defining access to corporate intranets as being accesses through general internet service access, for Rel-6.
Consequences if not approved: ⌘	May result in additional work being done to access corporate intranets directly.

Clauses affected: ⌘	5.1.7.1

		Y	N		
Other specs affected:	⌘		X	Other core specifications ⌘	
			X	Test specifications	
			X	O&M Specifications	

Other comments: ⌘	

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downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
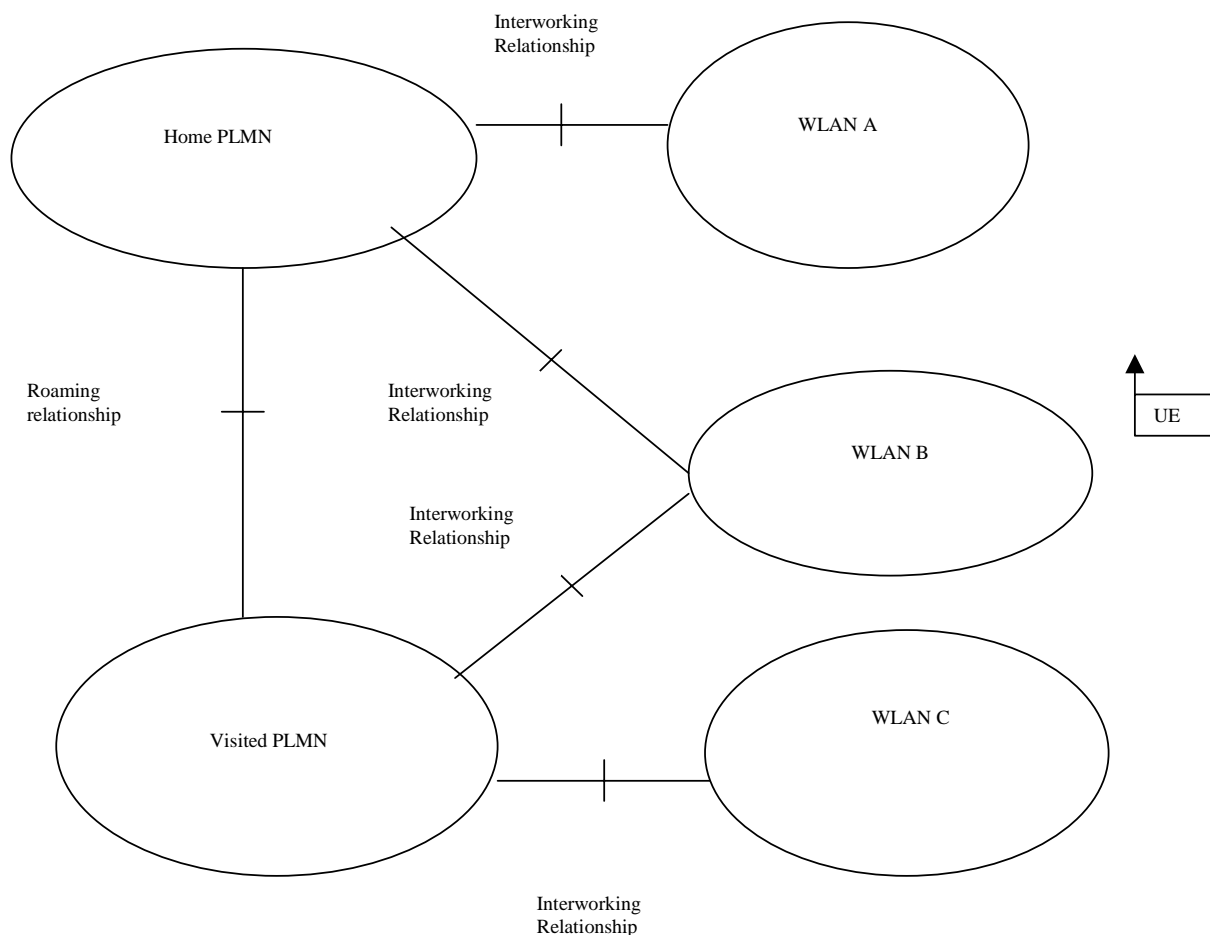
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

5.1.7 Interworking between PLMN and WLANs

5.1.7.1 General

WLAN-3GPP system interworking is defined as a wireless IP connectivity service where the user obtains access via a Wireless LAN technology. It shall be possible to deploy the WLAN as an integral part of the 3GPP system or the two systems can be separate.

The 3GPP system shall be capable of interworking with one or more WLANs and a WLAN shall be capable of interworking with one or more 3GPP systems see figure 2.

Figure 2: WLAN-3GPP system interworking relationships

The service is subject to a 3GPP system subscription (see clause 15). Both IPv4 and IPv6 connectivity via a Wireless LAN (WLAN) shall be supported.

It is an operator decision as to the level of interworking supported. This can be broadly grouped as:

- 3GPP based access control and charging. The user shall be able to access general internet services and/or corporate intranets. (Scenario 2 of TR 22.934 [2])

- Access to 3GPP PS based services, e.g. IMS. (Scenario 3 of TR 22.934 [2])

- Access to 3GPP PS based services with service continuity. The user may or may not notice a disruption in service, depending upon the level of service continuity supported. This is further defined in TS 22.129 [5]. (Scenarios 4 and 5 of TR 22.934 [2])

   NOTE: Further information on these levels of interworking and the use cases supported can be found in TR 22.934 [2].

In addition to the general requirements on I-WLAN defined in the present document, the following requirements apply:

- When enabling access to 3GPP services that require separate authentication and access control, such as IMS, the service authentication and access control mechanisms for those services shall be used.

- It should be possible to provide access via I-WLAN on deployed WLAN devices.

5.1.7.2 Simultaneous connection to I-WLANs and 3GPP systems

5.1.7 Interworking between PLMN and WLANs

5.1.7.1 General

WLAN-3GPP system interworking is defined as a wireless IP connectivity service where the user obtains access via a Wireless LAN technology. It shall be possible to deploy the WLAN as an integral part of the 3GPP system or the two systems can be separate.

The 3GPP system shall be capable of interworking with one or more WLANs and a WLAN shall be capable of interworking with one or more 3GPP systems see figure 1.
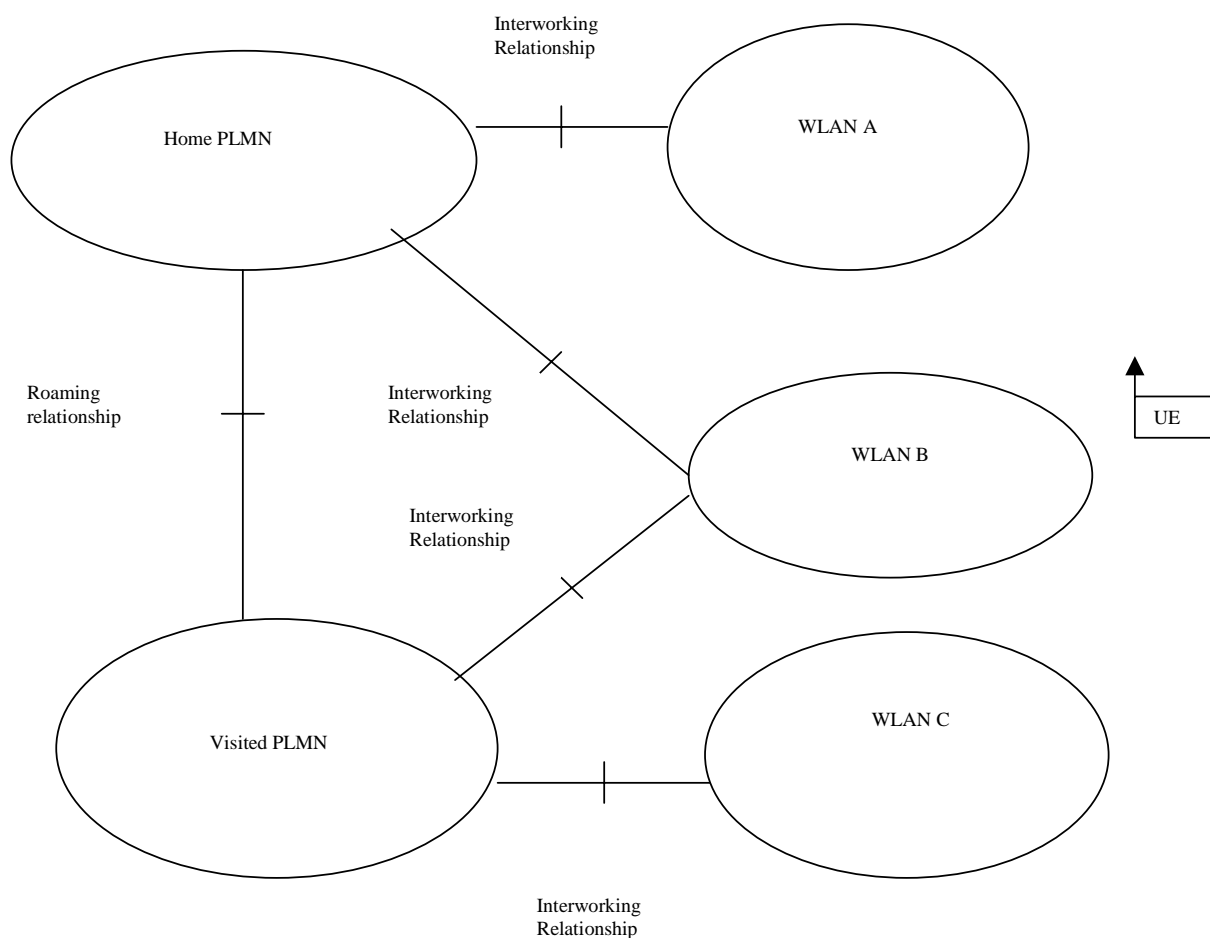

Figure 1: WLAN-3GPP system interworking relationships

The service is subject to a 3GPP system subscription (see clause 15). Both IPv4 and IPv6 connectivity via a Wireless LAN (WLAN) shall be supported.

It is an operator decision as to the level of interworking supported. This can be broadly grouped as:

- 3GPP based access control and charging only. ~~The user shall be able to access general internet services and/or corporate intranets.~~ (Scenario 2 of TR 22.934 [2])

- Access to 3GPP PS based services, e.g. IMS. (Scenario 3 of TR 22.934 [2])

- Access to 3GPP PS based services with service continuity. The user may or may not notice a disruption in service, depending upon the level of service continuity supported. This is further defined in TS 22.129 [5]. (Scenarios 4 and 5 of TR 22.934 [2])

NOTE: Further information on these levels of interworking and the use cases supported can be found in TR 22.934 [2].

In addition to the general requirements on I-WLAN defined in the present document, the following requirements apply:

- When enabling access to 3GPP services that require separate authentication and access control, such as IMS, the service authentication and access control mechanisms for those services shall be used.

- It should be possible to provide access via I-WLAN on deployed WLAN devices.

5.1.7.2 Simultaneous connection to I-WLANs and 3GPP systems

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CHANGE REQUEST

⌘　　　　**22.234** CR **008** 　⌘**rev** 　**-**　⌘　Current version: **6.1.0** 　⌘

For **HELP** *on using this form, see bottom of this page or look at the pop-up text over the* ⌘ *symbols.*

Proposed change affects:　UICC apps⌘ **X**　　　ME **X** Radio Access Network ☐ 　Core Network **X**

Title: ⌘	Clarification of the relationship between different levels of WLAN interworking
Source: ⌘	SA1 (NTT DoCoMo Inc.)
Work item code: ⌘	WLAN　　　　　　　　　　　***Date:*** ⌘　28/6/2004
Category: ⌘ **F**	***Release:*** ⌘　Rel-6

Use one of the following categories:
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 R97　(Release 1997)
 R98　(Release 1998)
 R99　(Release 1999)
 Rel-4　(Release 4)
 Rel-5　(Release 5)
 Rel-6　(Release 6)

Reason for change: ⌘	TS 22.234 describes several levels of interworking between the 3GPP system and WLAN. These scenarios are described without stating that each of the levels of interworking are independent. This has lead to confusion when standardising the architecture for 3GPP-WLAN Interworking.
Summary of change: ⌘	Text is added to chapter 5.1.7 to clarify that the levels of interworking between the 3GPP system and WLAN are independent and that it shall be possible for a network operator to provide a level of interworking described above without it being necessary to provide the preceding level of interworking.
Consequences if not approved: ⌘	The independence of the WLAN Interworking scenarios will not be recognised resulting in incorrect Stage 2 and 3 standardisation for 3GPP-WLAN Interworking.

Clauses affected: ⌘	5.1.7

	Y	N		
Other specs affected: ⌘		X	Other core specifications ⌘	
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘	CR based on LS received from SA2 in S1-040562.

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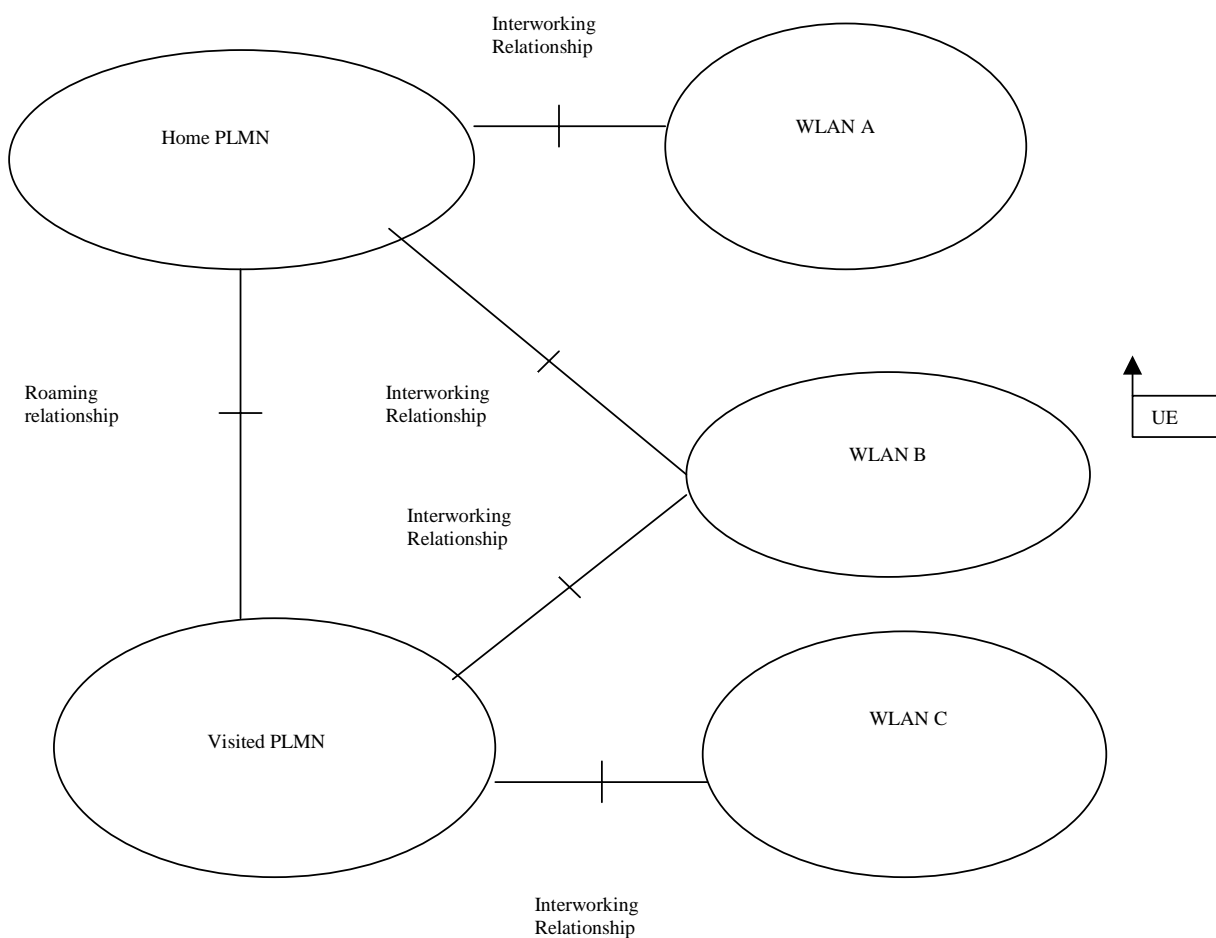
1st Modified Section

5.1.7   Interworking between PLMN and WLANs

5.1.7.1   General

WLAN-3GPP system interworking is defined as a wireless IP connectivity service where the user obtains access via a Wireless LAN technology. It shall be possible to deploy the WLAN as an integral part of the 3GPP system or the two systems can be separate.

The 3GPP system shall be capable of interworking with one or more WLANs and a WLAN shall be capable of interworking with one or more 3GPP systems see figure 2.

Figure 2: WLAN-3GPP system interworking relationships

The service is subject to a 3GPP system subscription (see clause 15). Both IPv4 and IPv6 connectivity via a Wireless LAN (WLAN) shall be supported.

It is an operator decision as to the level of interworking supported. This can be broadly grouped as:

-   3GPP based access control and charging. The user shall be able to access general internet services and/or corporate intranets. (Scenario 2 of TR 22.934 [2])

-   Access to 3GPP PS based services, e.g. IMS. (Scenario 3 of TR 22.934 [2])

- Access to 3GPP PS based services with service continuity. The user may or may not notice a disruption in service, depending upon the level of service continuity supported. This is further defined in TS 22.129 [5]. (Scenarios 4 and 5 of TR 22.934 [2])

NOTE: Further information on these levels of interworking and the use cases supported can be found in TR 22.934 [2].

The different levels of interworking supported are defined to be independent. Hence, it shall be possible for a network operator to provide a particular level of interworking independently to other levels of interworking.

NOTE: For example, it is possible for a network operator to provide a level of interworking to provide access to 3GPP PS based services (Scenario 3 of TR 22.934 [2]) without needing to provide the level of interworking for 3GPP based access control and charging (Scenario 2 of TR 22.934 [2]). In this case 3GPP USIM based authentication of the user is still needed before accessing 3GPP PS based services.

In addition to the general requirements on I-WLAN defined in the present document, the following requirements apply:

- When enabling access to 3GPP services that require separate authentication and access control, such as IMS, the service authentication and access control mechanisms for those services shall be used.

- It should be possible to provide access via I-WLAN on deployed WLAN devices.

End of changes

CR-Form-v7

CHANGE REQUEST

⌘   **22.234** CR **009**   ⌘**rev**   **-**   ⌘   Current version: **6.1.0**   ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ **X**   ME☐   Radio Access Network ☐   Core Network ☐

Title: ⌘	Clarification on the WLAN identities lists for I-WLAN selection

Source: ⌘	SA1 (SA1)		
Work item code:⌘	WLAN	***Date:*** ⌘	17/06/2004

Category: ⌘	**F**	***Release:*** ⌘	Rel-6

	Use one of the following categories:
	   F *(correction)*
	   A *(corresponds to a correction in an earlier release)*
	   B *(addition of feature),*
	   C *(functional modification of feature)*
	   D *(editorial modification)*
	Detailed explanations of the above categories can
	be found in 3GPP TR 21.900.
			Use one of the following releases:
			  2 *(GSM Phase 2)*
			  R96 *(Release 1996)*
			  R97 *(Release 1997)*
			  R98 *(Release 1998)*
			  R99 *(Release 1999)*
			  Rel-4 *(Release 4)*
			  Rel-5 *(Release 5)*
			  Rel-6 *(Release 6)*

Reason for change: ⌘	In some scenarios the user will benefit from having customized I-WLAN selection when more than one I-WLAN offers access to the same PLMN. This case can be solved introducing appropriate WLAN identities' preferred lists.
Summary of change:⌘	Two WLAN identities' lists are to be optionally present on the UICC, managed respectively by the user and the operator.
Consequences if not approved: ⌘	Poor user experience and customized selection of I-WLAN not possible. Slower and unpredictable I-WLAN selection.

Clauses affected: ⌘	6.1.1.1

	Y	**N**		
Other specs affected: ⌘	X		Other core specifications ⌘	TS 24.234
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘	

6.1.1.1 PLMN selection procedures

General

For the purpose of selecting a PLMN two lists may be present in the UICC: the "User Controlled PLMN Selector list for I-WLAN" and the "Operator Controlled PLMN Selector list for I-WLAN". It is not mandatory for the UICC to support these lists, however if the "Operator Controlled PLMN Selector list for I-WLAN" is supported then the "User Controlled PLMN Selector list for I-WLAN" shall also be present. Both the lists contain the preferred PLMNs for I-WLAN in priority order, and the User Controlled PLMN Selector list for I-WLAN has higher priority than the Operator Controlled PLMN Selector list for I-WLAN.

The purpose of the procedure is to enable the UE to find a I-WLAN, however, in case no PLMN is found to be supported by any of the available WLANs, the behaviour of the UE is not specified.

~~For the purpose of selecting the preferred I-WLAN in case multiple I-WLANs can support the connection to the desired PLMN and for optimising the PLMN selection, the UICC may contain a WLAN identities' preference lists provisioned by the operator.~~

For the purpose of selecting the preferred I-WLAN in case multiple I-WLANs can support the connection to the desired PLMN and for optimising the PLMN selection, two lists may be present in the UICC: the "User Controlled WLAN identities list for I-WLAN" and the "Operator Controlled WLAN identities list for I-WLAN". It is not mandatory for the UICC to support these lists, however if the "Operator Controlled WLAN identities list for I-WLAN" is supported then the "User Controlled WLAN identities list for I-WLAN" shall also be present. Both the lists contain the preferred WLAN identities in priority order, and the "User Controlled WLAN identities list for I-WLAN" has higher priority than the "Operator Controlled WLAN identities list for I-WLAN".