

TSG RAN Meeting #25
Palm Springs, USA, 07 - 09 September 2004

RP-040297

Title CRs (Rel-5 and Rel-6 Category A) to TS 25.401, TS 25.414, TS 25.426 on IP-ALCAP
Source TSG RAN WG3
Agenda Item 7.4.5

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	CR	Rev	Cat	Rel	Title	Work item
R3-041108	25.401	5.8.0	5.9.0	90	-	F	Rel-5	Terminology correction of IP ALCAP CR	ETRAN-iptrans
R3-041109	25.401	6.3.0	6.4.0	91	-	A	Rel-6	Terminology correction of IP ALCAP CR	ETRAN-iptrans
R3-041110	25.414	5.6.0	5.7.0	82	-	F	Rel-5	Terminology correction of IP ALCAP CR	ETRAN-iptrans
R3-041111	25.414	6.1.0	6.2.0	83	-	A	Rel-6	Terminology correction of IP ALCAP CR	ETRAN-iptrans
R3-041114	25.414	6.1.0	6.2.0	84	-	F	Rel-6	Correction of implementation of IP ALCAP CR081	ETRAN-iptrans
R3-041112	25.426	5.5.0	5.6.0	43	-	F	Rel-5	Terminology correction of IP ALCAP CR	ETRAN-iptrans
R3-041113	25.426	6.2.0	6.3.0	44	-	A	Rel-6	Terminology correction of IP ALCAP CR	ETRAN-iptrans

CHANGE REQUEST

25.401 CR 090 # rev **-** # Current version: **5.8.0**

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 Radio Access Network Core Network

Title:	# Terminology correction of IP ALCAP CR		
Source:	# RAN3		
Work item code:	# ETRAN-iptrans	Date:	# 09/08/2004
Category:	# F	Release:	# Rel-5
	<p>Use <u>one</u> of the following categories:</p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>Ph2 (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) Rel-7 (Release 7)</p>

Reason for change:	# At TSG RAN #24 the final open issue in Rel-5 WI on IP transport in UTRAN was closed. The 25.401 CR085 however introduced a terminology that was new to 25.401.
Summary of change:	# Usage of the term "RAN" is replaced by the term "UTRAN".
	<p><u>Impact assessment towards the previous version of the specification (same release):</u></p> <p>This CR has isolated impact on the previous version of the specification (same release) because only one optional function is impacted.</p> <p>This CR has an impact under protocol point of view.</p> <p>The impact can be considered as isolated as it affects only the IP-ATM Interworking function.</p>
Consequences if not approved:	# The terminology used in 25.401 is not consistent.

Clauses affected:	# 11.1.3.3						
Other specs	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> </table>	Y	N	X		Other core specifications	# CR091 25.401 Rel-6 CR082 25.414 Rel-5
Y	N						
X							

affected:

	X
	X

Test specifications
O&M Specifications

CR083 25.414 Rel-6
CR043 25.426 Rel-5
CR044 25.426 Rel-6

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.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be 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.

11.1.3 Vertical Planes

11.1.3.1 Control Plane

The Control Plane Includes the Application Protocol, i.e. RANAP, RNSAP or NBAP, and the Signalling Bearer for transporting the Application Protocol messages.

Among other things, the Application Protocol is used for setting up bearers for (i.e. Radio Access Bearer or Radio Link) in the Radio Network Layer. In the three plane structure the bearer parameters in the Application Protocol are not directly tied to the User Plane technology, but are rather general bearer parameters.

The Signalling Bearer for the Application Protocol may or may not be of the same type as the Signalling Protocol for the ALCAP. The Signalling Bearer is always set up by O&M actions.

11.1.3.2 User Plane

The User Plane Includes the Data Stream(s) and the Data Bearer(s) for the Data Stream(s). The Data Stream(s) is/are characterised by one or more frame protocols specified for that interface.

11.1.3.3 Transport Network Control Plane

The Transport Network Control Plane does not include any Radio Network Layer information, and is completely in the Transport Layer. It includes the ALCAP protocol(s) that is/are needed to set up the transport bearers (Data Bearer) for the User Plane. It also includes the appropriate Signalling Bearer(s) needed for the ALCAP protocol(s).

The Transport Network Control Plane is a plane that acts between the Control Plane and the User Plane. The introduction of Transport Network Control Plane is performed in a way that the Application Protocol in the Radio Network Control Plane is kept completely independent of the technology selected for Data Bearer in the User Plane. Indeed, the decision to actually use an ALCAP protocol is completely kept within the Transport Network Layer.

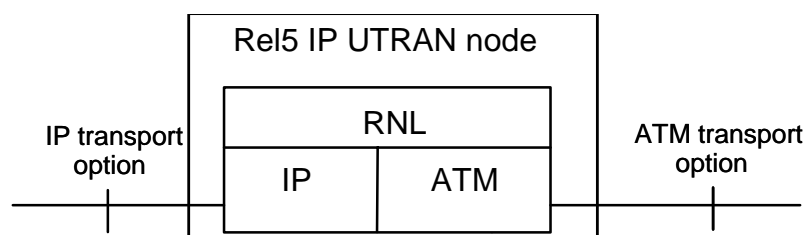
It should be noted that ALCAP might not be used for all types Data Bearers. If there is no ALCAP signalling transaction, the Transport Network Control Plane is not needed at all. This is the case when pre-configured Data Bearers are used or when the IP UTRAN option is used between two IP UTRAN nodes or between an IP UTRAN node and an IP CN node.

When Transport Network Control Plane is used, the transport bearers for the Data Bearer in the User Plane are set up in the following fashion. First there is a signalling transaction by the Application Protocol in the Control Plane, which triggers the set up of the Data Bearer by the ALCAP protocol that is specific for the User Plane technology.

The following interworking alternatives are specified for the IP-ATM interworking:

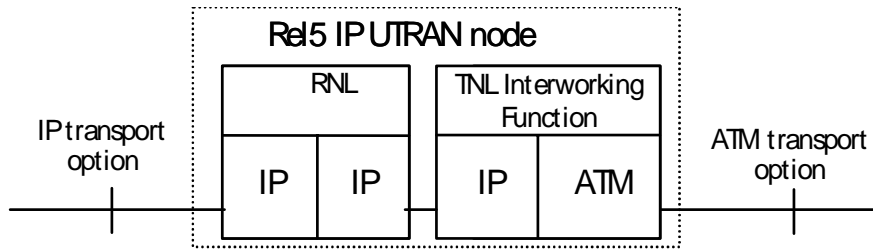
- 1) ATM/IP Dual Stack supported in the IP UTRAN node. When an ATM/IP dual stack is implemented in the IP UTRAN node, support of an IP ALCAP protocol is not required.

Annex A of [9] shows an example of protocols for the case the ATM&IP UTRAN/CN-node has no ATM connectivity.



- 2) An Interworking Function (IWF), either internal or external to the UTRAN/CN node.

Annex A of [9] shows an example of a protocol stack for the case when the IWF is an external unit to the UTRAN/CN node. Other protocol stacks for this case are not precluded.



11.1.3.4 Transport Network User Plane

CHANGE REQUEST

25.401 CR 091 # rev **-** # Current version: **6.3.0**

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 Radio Access Network Core Network

Title:	# Terminology correction of IP ALCAP CR		
Source:	# RAN3		
Work item code:	# ETRAN-iptrans	Date:	# 09/08/2004
Category:	# A	Release:	# Rel-6
	<p>Use <u>one</u> of the following categories:</p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>Ph2 (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) Rel-7 (Release 7)</p>

Reason for change:	# At TSG RAN #24 the final open issue in Rel-5 WI on IP transport in UTRAN was closed. The 25.401 CR085 however introduced a terminology that was new to 25.401.
Summary of change:	# Usage of the term "RAN" is replaced by the term "UTRAN".
	<p><u>Impact assessment towards the previous version of the specification (same release):</u></p> <p>This CR has isolated impact on the previous version of the specification (same release) because only one optional function is impacted.</p> <p>This CR has an impact under protocol point of view.</p> <p>The impact can be considered as isolated as it affects only the IP-ATM Interworking function.</p>
Consequences if not approved:	# The terminology used in 25.401 is not consistent.

Clauses affected:	# 11.1.3.3				
Other specs	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </table> Other core specifications # CR090 25.401 Rel-5 CR082 25.414 Rel-5 CR083 25.414 Rel-6	Y	N	X	
Y	N				
X					

affected:

	X
	X

Test specifications

O&M Specifications

CR043 25.426 Rel-5

CR044 25.426 Rel-6

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.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be 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.

11.1.3 Vertical Planes

11.1.3.1 Control Plane

The Control Plane Includes the Application Protocol, i.e. RANAP, RNSAP or NBAP, and the Signalling Bearer for transporting the Application Protocol messages.

Among other things, the Application Protocol is used for setting up bearers for (i.e. Radio Access Bearer or Radio Link) in the Radio Network Layer. In the three plane structure the bearer parameters in the Application Protocol are not directly tied to the User Plane technology, but are rather general bearer parameters.

The Signalling Bearer for the Application Protocol may or may not be of the same type as the Signalling Protocol for the ALCAP. The Signalling Bearer is always set up by O&M actions.

11.1.3.2 User Plane

The User Plane Includes the Data Stream(s) and the Data Bearer(s) for the Data Stream(s). The Data Stream(s) is/are characterised by one or more frame protocols specified for that interface.

11.1.3.3 Transport Network Control Plane

The Transport Network Control Plane does not include any Radio Network Layer information, and is completely in the Transport Layer. It includes the ALCAP protocol(s) that is/are needed to set up the transport bearers (Data Bearer) for the User Plane. It also includes the appropriate Signalling Bearer(s) needed for the ALCAP protocol(s).

The Transport Network Control Plane is a plane that acts between the Control Plane and the User Plane. The introduction of Transport Network Control Plane is performed in a way that the Application Protocol in the Radio Network Control Plane is kept completely independent of the technology selected for Data Bearer in the User Plane. Indeed, the decision to actually use an ALCAP protocol is completely kept within the Transport Network Layer.

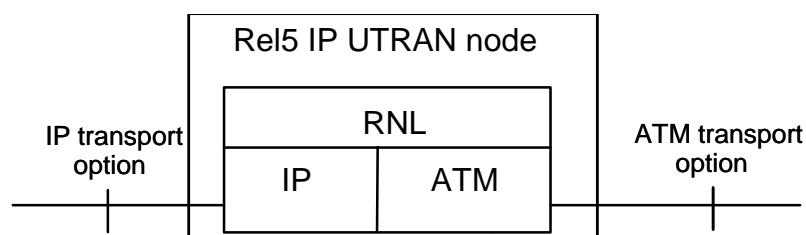
It should be noted that ALCAP might not be used for all types Data Bearers. If there is no ALCAP signalling transaction, the Transport Network Control Plane is not needed at all. This is the case when pre-configured Data Bearers are used or when the IP UTRAN option is used between two IP UTRAN nodes or between an IP UTRAN node and an IP CN node.

When Transport Network Control Plane is used, the transport bearers for the Data Bearer in the User Plane are set up in the following fashion. First there is a signalling transaction by the Application Protocol in the Control Plane, which triggers the set up of the Data Bearer by the ALCAP protocol that is specific for the User Plane technology.

The following interworking alternatives are specified for the IP-ATM interworking:

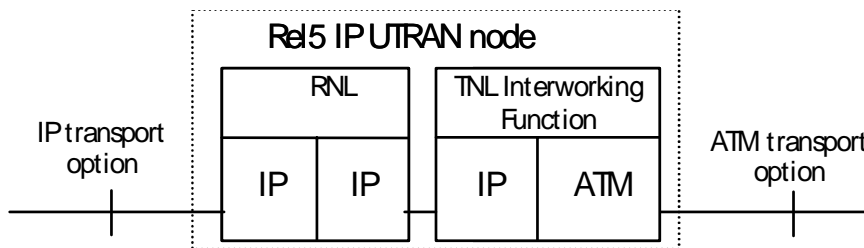
- 1) ATM/IP Dual Stack supported in the IP UTRAN node. When an ATM/IP dual stack is implemented in the IP UTRAN node, support of an IP ALCAP protocol is not required.

Annex A of [9] shows an example of protocols for the case the ATM&IP UTRAN/CN-node has no ATM connectivity.



- 2) An Interworking Function (IWF), either internal or external to the UTRAN/CN node.

Annex A of [9] shows an example of a protocol stack for the case when the IWF is an external unit to the UTRAN/CN node. Other protocol stacks for this case are not precluded.



11.1.3.4 Transport Network User Plane

The Data Bearer(s) in the User Plane, and the Signalling Bearer(s) for Application Protocol, belong also to Transport Network User Plane. As described in the previous subclause, the Data Bearers in Transport Network User Plane are directly controlled by Transport Network Control Plane during real time operation, but the control actions required for setting up the Signalling Bearer(s) for Application Protocol are considered O&M actions.

CHANGE REQUEST

25.414 CR 082 # rev **-** # Current version: **5.6.0**

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 Radio Access Network Core Network

Title:	# Terminology correction of IP ALCAP CR		
Source:	# RAN3		
Work item code:	# ETRAN-iptrans	Date:	# 09/08/2004
Category:	# F	Release:	# Rel-5
	<p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>Ph2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p> <p>Rel-7 (Release 7)</p>

Reason for change:	# At TSG RAN #24 the final open issue in Rel-5 WI on IP transport in UTRAN was closed. The 25.414 CR080 (CR081) however introduced a terminology that was new to 25.414.
Summary of change:	# Usage of the term "RAN" is replaced by the term "RNC" to align with the terminology used in 25.414.
	<p><u>Impact assessment towards the previous version of the specification (same release):</u></p> <p>This CR has isolated impact on the previous version of the specification (same release) because only one optional function is impacted.</p> <p>This CR has an impact under protocol point of view.</p> <p>The impact can be considered as isolated as it affects only the IP-ATM Interworking function.</p>
Consequences if not approved:	# The terminology used in 25.414 is not consistent.

Clauses affected:	# 5.3.2, Annex A						
Other specs	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> </table>	Y	N	X		Other core specifications	# CR083 25.414 Rel-6 CR090 25.401 Rel-5 CR091 25.401 Rel-6
Y	N						
X							

affected:

X	
X	

Test specifications

O&M Specifications

CR043 25.426 Rel-5

CR044 25.426 Rel-6

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.

5.3 Interworking between ATM and IP Transport Options

5.3.1 Introduction

This clause specifies the interworking between IP and ATM transport options. An RNC/CN-node supporting IP transport option shall provide interworking to a CN-node/RNC supporting only ATM transport option.

5.3.2 Interworking Alternatives

For interworking with a CN-node/RNC supporting only ATM transport option, the RNC/CN-node supporting IP transport option shall additionally support at least one of the following interworking mechanisms:

- 1) ATM&IP dual stack. An IP-ALCAP protocol is not required in this interworking solution.

Annex A of this technical specification shows an example of protocols for the case the ATM&IP ~~RAN~~RNC/CN-node has no ATM connectivity.

- 2) An Interworking Function (IWF), either internal or external to the ~~RAN~~RNC/CN node.

Annex A of this technical specification shows an example of a protocol stack for the case when the IWF is an external unit to the ~~RAN~~RNC/CN node. Other protocol stacks for this case are not precluded.

Annex A (informative): IP-ATM Interworking

A.1 Application of IP tunnelling in IP-ATM interworking alternative 1 in case of no direct ATM connectivity at the IP&ATM dual stack RNC/CN-node

One possibility of enabling ATM connectivity to the IP&ATM dual stack RNC/CN-node in the IP-ATM interworking alternative 1 scenario specified in chapter 5.3.2 is to use any ATM emulation over IP protocol from the IETF standards e.g. via tunnelling techniques.

A.2 Application of IP-ALCAP in IP-ATM interworking alternative 2

One example scenario of IP-ATM interworking alternative 2 of section 5.3.2 is to use IP-ALCAP as specified in ITU-T Recommendation Q.2631.1 (10/2003) as the bearer control protocol between the [UTRAN RNC](#)/CN Node and its external IWF. The following figure shows the corresponding protocol stack.

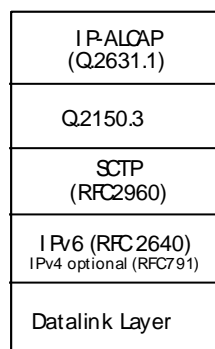


Figure A.1. Protocol stack for IP-ALCAP in IP-ATM interworking alternative 2

CHANGE REQUEST

25.414 CR 083 # 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 Radio Access Network Core Network

Title:	# Terminology correction of IP ALCAP CR		
Source:	# RAN3		
Work item code:	# ETRAN-iptrans	Date:	# 09/08/2004
Category:	# A	Release:	# Rel-6
	Use <u>one</u> 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 <u>one</u> of the following releases: Ph2 (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) Rel-7 (Release 7)

Reason for change:	# At TSG RAN #24 the final open issue in Rel-5 WI on IP transport in UTRAN was closed. The 25.414 CR080 (CR081) however introduced a terminology that was new to 25.414.
Summary of change:	# Usage of the term "RAN" is replaced by the term "RNC" to align with the terminology used in 25.414. <u>Impact assessment towards the previous version of the specification (same release):</u> This CR has isolated impact on the previous version of the specification (same release) because only one optional function is impacted. This CR has an impact under protocol point of view. The impact can be considered as isolated as it affects only the IP-ATM Interworking function.
Consequences if not approved:	# The terminology used in 25.414 is not consistent.

Clauses affected:	# 5.3.2, Annex A				
Other specs	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> </table> Other core specifications # CR082 25.414 Rel-5 CR090 25.401 Rel-5 CR091 25.401 Rel-6	Y	N	X	
Y	N				
X					

affected:

X	
X	

Test specifications

O&M Specifications

CR043 25.426 Rel-5

CR044 25.426 Rel-6

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.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be 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.

5.3 Interworking between ATM and IP Transport Options

5.3.1 Introduction

This clause specifies the interworking between IP and ATM transport options. An RNC/CN-node supporting IP transport option shall provide interworking to a CN-node/RNC supporting only ATM transport option.

5.3.2 Interworking Alternatives

For interworking with a CN-node/RNC supporting only ATM transport option, the RNC/CN-node supporting IP transport option shall additionally support at least one of the following interworking mechanisms:

- 1) ATM&IP dual stack. An IP-ALCAP protocol is not required in this interworking solution.

Annex A of this technical specification shows an example of protocols for the case the ATM&IP ~~RAN~~RNC/CN-node has no ATM connectivity.

- 2) An Interworking Function (IWF), either internal or external to the ~~RAN~~RNC/CN node.

Annex A of this technical specification shows an example of a protocol stack for the case when the IWF is an external unit to the ~~RAN~~RNC/CN node. Other protocol stacks for this case are not precluded.

- 3) Interworking Unit (IWU) as a logically separate unit. An IP-ALCAP protocol shall be used in the interface between the RNC/CN-node supporting IP transport option and the Interworking Unit.

Annex A (informative): IP-ATM Interworking

A.1 Application of IP tunnelling in IP-ATM interworking alternative 1 in case of no direct ATM connectivity at the IP&ATM dual stack RNC/CN-node

One possibility of enabling ATM connectivity to the IP&ATM dual stack RNC/CN-node in the IP-ATM interworking alternative 1 scenario specified in chapter 5.3.2 is to use any ATM emulation over IP protocol from the IETF standards e.g. via tunnelling techniques.

A.2 Application of IP-ALCAP in IP-ATM interworking alternative 2

One example scenario of IP-ATM interworking alternative 2 of section 5.3.2 is to use IP-ALCAP as specified in ITU-T Recommendation Q.2631.1 (10/2003) as the bearer control protocol between the [UTRAN RNC](#)/CN Node and its external IWF. The following figure shows the corresponding protocol stack.

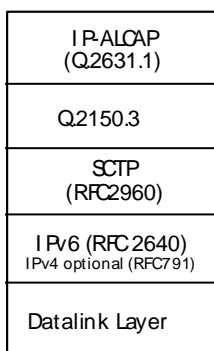


Figure A.1. Protocol stack for IP-ALCAP in IP-ATM interworking alternative 2

CHANGE REQUEST

25.414 CR 084 # 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 Radio Access Network Core Network

Title:	# Correction of implementation of IP ALCAP CR081		
Source:	# RAN3		
Work item code:	# ETRAN-iptrans	Date:	# 09/08/2004
Category:	# F	Release:	# Rel-6
	Use <u>one</u> 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 <u>one</u> of the following releases: Ph2 (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) Rel-7 (Release 7)

Reason for change:	# CR081 is not correctly implemented in 25.414 Rel-6. The 3 rd interworking option in the list of section 5.3.2 was not removed even though it was supposed to be removed according to the approved CR.
Summary of change:	# Remove the 3 rd list element in section 5.3.2. <u>Impact assessment towards the previous version of the specification (same release):</u> This CR has isolated impact on the previous version of the specification (same release) because only one optional function is impacted. This CR has an impact under protocol point of view. The impact can be considered as isolated as it affects only the IP-ATM Interworking function.
Consequences if not approved:	# CR081 not correctly implemented in 25.414 Rel-6..

Clauses affected:	# 5.3.2								
Other specs affected:	<table style="display: inline-table; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">Y</td> <td style="border: 1px solid black; padding: 2px;">N</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">#</td> <td style="border: 1px solid black; padding: 2px;">X</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">#</td> <td style="border: 1px solid black; padding: 2px;">X</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">#</td> <td style="border: 1px solid black; padding: 2px;">X</td> </tr> </table> Other core specifications # Test specifications # O&M Specifications #	Y	N	#	X	#	X	#	X
Y	N								
#	X								
#	X								
#	X								

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.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be 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.

5.3 Interworking between ATM and IP Transport Options

5.3.1 Introduction

This clause specifies the interworking between IP and ATM transport options. An RNC/CN-node supporting IP transport option shall provide interworking to a CN-node/RNC supporting only ATM transport option.

5.3.2 Interworking Alternatives

For interworking with a CN-node/RNC supporting only ATM transport option, the RNC/CN-node supporting IP transport option shall additionally support at least one of the following interworking mechanisms:

- 1) ATM&IP dual stack. An IP-ALCAP protocol is not required in this interworking solution.

Annex A of this technical specification shows an example of protocols for the case the ATM&IP RAN/CN-node has no ATM connectivity.

- 2) An Interworking Function (IWF), either internal or external to the RAN/CN node.

Annex A of this technical specification shows an example of a protocol stack for the case when the IWF is an external unit to the RAN/CN node. Other protocol stacks for this case are not precluded.

- ~~3) Interworking Unit (IWU) as a logically separate unit. An IP-ALCAP protocol shall be used in the interface between the RNC/CN node supporting IP transport option and the Interworking Unit.~~

CHANGE REQUEST

25.426 CR 043 # rev - # Current version: 5.5.0

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 Radio Access Network Core Network

Title:	# Terminology correction of IP ALCAP CR		
Source:	# RAN3		
Work item code:	# ETRAN-iptrans	Date:	# 09/08/2004
Category:	# F	Release:	# Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		Ph2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)
			Rel-7 (Release 7)

Reason for change:	# At TSG RAN #24 the final open issue in Rel-5 WI on IP transport in UTRAN was closed. The 25.426 CR041 (CR042) however introduced a terminology that was new to 25.426.
Summary of change:	# Usage of the term "RAN"/CN node" is replaced by the term "UTRAN node" since 25.426 is just an interface between two UTRAN nodes. Usage of the term "RAN" in references to 25.414 Annex A is replaced by the term "RNC" to align with the corrected terminology used in 25.414. <u>Impact assessment towards the previous version of the specification (same release):</u> This CR has isolated impact on the previous version of the specification (same release) because only one optional function is impacted. This CR has an impact under protocol point of view. The impact can be considered as isolated as it affects only the IP-ATM Interworking function.
Consequences if not approved:	# The terminology used in 25.426 is not consistent.

Clauses affected:	# 9.2				
Other specs	# <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> </table> Other core specifications # CR044 25.426 Rel-6	Y	N	X	
Y	N				
X					

affected:	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Test specifications
	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	O&M Specifications
Other comments:	⌘	

CR090 25.401 Rel-5
 CR091 25.401 Rel-6
 CR082 25.414 Rel-5
 CR083 25.414 Rel-6

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.

9 Interworking between ATM and IP Transport Options

9.1 Introduction

This clause specifies the interworking between IP and ATM transport options. A UTRAN node supporting IP transport option shall provide interworking to a UTRAN node supporting only ATM transport option.

9.2 Interworking Alternatives

For interworking with a UTRAN node supporting only ATM option, the UTRAN node supporting IP option shall additionally support at least one of the following interworking mechanisms:

- 1) ATM&IP dual stack. An ALCAP protocol is not required in this interworking solution.

Annex A of [38] shows an example of protocols for the case the ATM&IP ~~RAN~~RNC/CN-node has no ATM connectivity.

- 2) An Interworking Function (IWF), either internal or external to the ~~RAN~~CNUTRAN node. AAL2 signalling protocol Capability Set 2 [22] shall be supported as ALCAP protocol between the Interworking Function and the UTRAN node supporting ATM transport option.

Annex A of [38] shows an example of a protocol stack for the bearer control protocol between the ~~RAN~~RNC/CN IP Node and its IWF for the case when the IWF is an external unit to the ~~RAN~~RNC/CN node. Other protocol stacks for this case are not precluded.

CHANGE REQUEST

№ **25.426 CR 044** № rev - № Current version: **6.2.0** №

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 Radio Access Network Core Network

Title:	№ Terminology correction of IP ALCAP CR		
Source:	№ RAN3		
Work item code:	№ ETRAN-iptrans	Date:	№ 09/08/2004
Category:	№ A	Release:	№ Rel-6
	<p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>Ph2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p> <p>Rel-7 (Release 7)</p>

Reason for change:	№ At TSG RAN #24 the final open issue in Rel-5 WI on IP transport in UTRAN was closed. The 25.426 CR041 (CR042) however introduced a terminology that was new to 25.426.
Summary of change:	<p>№ Usage of the term "RAN"/CN node" is replaced by the term "UTRAN node" since 25.426 is just an interface between two UTRAN nodes.</p> <p>Usage of the term "RAN" in references to 25.414 Annex A is replaced by the term "RNC" to align with the corrected terminology used in 25.414.</p> <p><u>Impact assessment towards the previous version of the specification (same release):</u></p> <p>This CR has isolated impact on the previous version of the specification (same release) because only one optional function is impacted.</p> <p>This CR has an impact under protocol point of view.</p> <p>The impact can be considered as isolated as it affects only the IP-ATM Interworking function.</p>
Consequences if not approved:	№ The terminology used in 25.426 is not consistent.

Clauses affected:	№ 9.2						
Other specs	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> </table>	Y	N	X		Other core specifications	№ CR043 25.426 Rel-5
Y	N						
X							

affected:	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Test specifications
	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	O&M Specifications
Other comments:	⌘	

CR090 25.401 Rel-5
 CR091 25.401 Rel-6
 CR082 25.414 Rel-5
 CR083 25.414 Rel-6

How to create CRs using this form:

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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.

9 Interworking between ATM and IP Transport Options

9.1 Introduction

This clause specifies the interworking between IP and ATM transport options. A UTRAN node supporting IP transport option shall provide interworking to a UTRAN node supporting only ATM transport option.

9.2 Interworking Alternatives

For interworking with a UTRAN node supporting only ATM option, the UTRAN node supporting IP option shall additionally support at least one of the following interworking mechanisms:

- 1) ATM&IP dual stack. An ALCAP protocol is not required in this interworking solution.

Annex A of [38] shows an example of protocols for the case the ATM&IP ~~RAN~~RNC/CN-node has no ATM connectivity.

- 2) An Interworking Function (IWF), either internal or external to the ~~RAN~~CNUTRAN node. AAL2 signalling protocol Capability Set 2 [22] shall be supported as ALCAP protocol between the Interworking Function and the UTRAN node supporting ATM transport option.

Annex A of [38] shows an example of a protocol stack for the bearer control protocol between the ~~RAN~~RNC/CN IP Node and its IWF for the case when the IWF is an external unit to the ~~RAN~~RNC/CN node. Other protocol stacks for this case are not precluded.