

TSG RAN Meeting #22
Maui, USA, 9 - 12 December 2003

RP-030685

Title CRs (Rel-5 only) to TS 25.414, TS 25.424 and TS 25.434 on Diffserv marking is configurable
Source TSG RAN WG3
Agenda Item 7.4.6

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-031814	25.414	5.4.0	5.5.0	REL-5	071	1	F	Diffserv marking is configurable	ETRAN-IPtrans
R3-031812	25.424	5.2.0	5.3.0	REL-5	026	1	F	Diffserv marking is configurable	ETRAN-IPtrans
R3-031813	25.434	5.2.0	5.3.0	REL-5	028	1	F	Diffserv marking is configurable	ETRAN-IPtrans

CHANGE REQUEST

25.414 CR 071 # rev 1 # Current version: 5.4.0

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:	# Diffserv marking is configurable		
Source:	# RAN3		
Work item code:	# ETRAN-IPtrans	Date:	# 19/11/2003
Category:	# F	Release:	# Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(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)

Reason for change:	# It is not clear enough how a node marks IP packets with Diffserv.
Summary of change:	# It is made explicit that Diffserv marking can be configured by the operator. Rev1: re-wording <u>Impact Analysis</u> This CR has isolated impact on the previous version of the specification (same release) because only one function is impacted. This CR has an impact under the functional point of view. The impact can be considered as isolated as it affects only one function, namely marking of IP packets.
Consequences if not approved:	# If the marking is not controllable by the operator, it is very likely that the marking be not adapted to the transport network or to the evolution of the transport network (e.g. addition of new PHBs in the transport network).

Clauses affected:	# 5.1.3.5, 6.1.3.4, 7.1.3.4										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;">X</td> <td style="width: 20px;"></td> </tr> <tr> <td style="width: 20px;"></td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"></td> <td style="width: 20px;">X</td> </tr> </table>	Y	N	X			X		X	Other core specifications	# TS 25.424 CR#026 Rel-5 TS 25.434 CR#028 Rel-5
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 Circuit switched domain

5.1 Transport network user plane

<<<<<<<<<< [some text is skip] >>>>>>>>

5.1.3 IP Transport Option

<<<<<<<<<< [some text is skip] >>>>>>>>

5.1.3.5 Diffserv code point marking

IP Differentiated Services code point marking [19] shall be supported. The mapping between traffic categories and Diffserv code points shall be configurable by O&M for each traffic category. ~~The Diffserv code point~~ Traffic categories are implementation-specific and may be determined from the application parameters.

<<<<<<<<<< next change >>>>>>>>>>>>

6 Packet switched domain

6.1 Transport network user plane

<<<<<<<<<< [some text is skip] >>>>>>>>

6.1.3 IP Transport Option

<<<<<<<<<< [some text is skip] >>>>>>>>

6.1.3.4 Diffserv code point marking

IP Differentiated Services code point marking [19] shall be supported. The mapping between traffic categories and Diffserv code points shall be configurable by O&M for each traffic category. ~~The Diffserv code point~~ Traffic categories are implementation-specific and may be determined from the application parameters.

<<<<<<<<<< next change >>>>>>>>>>>>

7 Broadcast Domain

7.1 Transport network user plane

<<<<<<<<<< [some text is skip] >>>>>>>>

7.1.3 IP Transport Option

<<<<<<<<<< [some text is skip] >>>>>>>>

7.1.3.4 Diffserv code point marking

IP Differentiated Services code point marking [19] shall be supported. The mapping between traffic categories and Diffserv code points shall be configurable by O&M for each traffic category. ~~The Diffserv code point~~ Traffic categories are implementation-specific and may be determined from the application parameters.

CHANGE REQUEST

25.424 CR 026 # rev **1** # Current version: **5.2.0**

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:	# Diffserv marking is configurable		
Source:	# RAN3		
Work item code:	# ETRAN-IPtrans	Date:	# 19/11/2003
Category:	# F	Release:	# Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(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)

Reason for change:	# It is not clear enough how a node marks IP packets with Diffserv.
Summary of change:	# It is made explicit that Diffserv marking can be configured by the operator. Rev1: re-wording. <u>Impact Analysis</u> This CR has isolated impact on the previous version of the specification (same release) because only one function is impacted. This CR has an impact under the functional point of view. The impact can be considered as isolated as it affects only one function, namely marking of IP packets.
Consequences if not approved:	# If the marking is not controllable by the operator, it is very likely that the marking be not adapted to the transport network or to the evolution of the transport network (e.g. addition of new PHBs in the transport network).

Clauses affected:	# 5.3										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;">X</td> <td style="width: 20px;"></td> </tr> <tr> <td style="width: 20px;"></td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"></td> <td style="width: 20px;">X</td> </tr> </table>	Y	N	X			X		X	Other core specifications	# TS 25.414 CR#071 Rel-5 TS 25.434 CR#028 Rel-5
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 IP Option

UDP [18] over IP shall be used as the transport for DCH data streams on Iub and Iur interfaces. The data link layer is as specified in subclause 4.2.

An IP UTRAN Node shall support IPv6 [16]. The support of IPv4 [17] is optional.

Note: This does not preclude single implementation of IPv4.

IP dual stack support is recommended for the potential transition period from IPv4 to IPv6 in the transport network.

The transport bearer is identified by the UDP port number and the IP address (source UDP port number, destination UDP port number, source IP address, destination IP address).

IP Differentiated Services code point marking [18] shall be supported. The mapping between traffic categories and Diffserv code points shall be configurable by O&M. ~~The Diffserv code point~~ Traffic categories are implementation-specific and may be determined from the application parameters.

CR-Form-v7

CHANGE REQUEST

25.434 CR 028 # rev **1** # Current version: **5.2.0**

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:	# Diffserv marking is configurable		
Source:	# RAN3		
Work item code:	# ETRAN-IPtrans	Date:	# 19/11/2003
Category:	# F	Release:	# Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (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)

Reason for change:	# It is not clear enough how a node marks IP packets with Diffserv.
Summary of change:	# It is made explicit that Diffserv marking can be configured by the operator. Rev1: re-wording <u>Impact Analysis</u> This CR has isolated impact on the previous version of the specification (same release) because only one function is impacted. This CR has an impact under the functional point of view. The impact can be considered as isolated as it affects only one function, namely marking of IP packets.
Consequences if not approved:	# If the marking is not controllable by the operator, it is very likely that the marking be not adapted to the transport network or to the evolution of the transport network (e.g. addition of new PHBs in the transport network).

Clauses affected:	# 5.3								
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </table> Other core specifications # TS 25.414 CR#071 Rel-5 TS 25.424 CR#026 Rel-5 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 IP Transport Option

UDP [12] over IP shall be supported as the transport for RACH, CPCH [FDD], FACH, PCH, DSCH and USCH [TDD] data streams on Iub Interface. The data link layer is as specified in chapter 4.2

An IP UTRAN node shall support IPv6 [13]. The support of IPv4 [14] is optional.

NOTE: This does not preclude single implementation and use of IPv4.

IP dual stack is recommended for the potential transition period from IPv4 to IPv6 in the transport network.

The transport bearer is identified by the UDP port number and the IP address (source UDP port number, destination UDP port number, source IP address, destination IP address).

IP Differentiated Services code point marking [15] shall be supported. The mapping between traffic categories and Diffserv code points shall be configurable by O&M for each traffic category. ~~The Diffserv code point~~ Traffic categories are implementation-specific and may be determined from the application parameters.