

Source: SA1

Title: CRs to 22.024 on AoC in SCUDIF (Rel-5, Rel-6)

Document for: Approval

Agenda Item: 7.1.3

Meeti ng	SA Doc	TS No.	CR No	Re v	Rel	Cat	Subject	Vers Curren t	Vers New	SA1 Doc
SP-28	SP-050211	22.024	002	-	Rel-5	F	AoC in SCUDIF for 22.024	5.0.0	5.1.0	S1-050396
SP-28	SP-050211	22.024	003	-	Rel-6	A	AoC in SCUDIF for 22.024	6.0.0	6.1.0	S1-050397

CR-Form-v7.1

CHANGE REQUEST

⌘ **22.024 CR 002** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

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: ⌘ AoC for SCUDIF

Source: ⌘ SA1 (NEC)

Work item code: ⌘ TEI

Date: ⌘ 30/03/2005

Category: ⌘ **F**

Release: ⌘ Rel-5

Use one of the following categories:

Use one of the following releases:

- F** (correction)
- A** (corresponds to a correction in an earlier release)
- B** (addition of feature),
- C** (functional modification of feature)
- D** (editorial modification)

- 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)

Detailed explanations of the above categories can be found in 3GPP [TR 21.900](#).

Reason for change: ⌘ TS 23.172 specifies stage 2 SCUDIF, under N3 responsibility, does not specify anything related to interactions with the AoC supplementary service. A new clause of AoC for SCUDIF needs to be added to TS22.024. Should the treatment follow suit, this can cause a significant amount of difference between the cost being presented to the customer and the actual bill calculated in the network because the time when the ME (MS) starts using new AoC values gets behind the time when the network starts using them by amount of CDUR left for a timer interval approximately each time the bearer change occurs upon SCUDIF modification during a call.

Summary of change: ⌘ On receipt of new AoC values for SCUDIF following the Mode Modify procedure to change its bearer, for instance from Audio to Video and vice versa, ME (MS) shall reset CDUR consumed for a current charge meter so far and start over estimating the cost for a new bearer. In this estimation, the ME (MS) shall add initial units to CCM and measure units on a time basis using the new values.

Consequences if not approved: ⌘ The more SCUDIF is requested during a call the more the cost ME (MS) indicates would misalign with the actual bill calculated by the network. Although an exact one-to-one relation with the bill cannot be guaranteed due to a delay in signalling, the discrepancy due to Mode Modify procedure can affect an accuracy on CAI and this cannot be avoided.

Clauses affected: ⌘

☐ Y ☐ N

Other specs	⌘	<input checked="" type="checkbox"/>	Other core specifications	⌘	TS22.086, TS23.086, TS24.086, TS23.172
affected:		<input type="checkbox"/>	Test specifications		
		<input type="checkbox"/>	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.
- 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.

****** First set of changes ******

1.1 References

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.086: "Advice of Charge (AoC) Supplementary Services - Stage 1".
- [3] 3GPP TS 23.172: "Technical realization of Circuit Switched (CS) multimedia service; UDI/RDI fallback and service modification; Stage 2"

****** Second set of changes ******

4.4 Interactions with SCUDIF supplementary service

When the ~~ME-(MS)~~ requires a bearer change, e.g. from Audio to Video or vice versa, the SCUDIF Mode modify procedure is performed as described in TS 23.172 [3]. Depending on the operator's policy ~~T~~the success of the procedure may trigger a Facility message to convey new values for the CAI parameters. On receipt of new CAI values triggered by a service change based on the SCUDIF supplementary service, the ~~ME-(MS)~~ shall reset CDUR and continue incrementing the CCM using the new CAI parameters as stated in subclause 4.3 of this specification. The ~~ME-(MS)~~ shall add initial units to the CCM and measure units on a time basis using the new values.

****** End of changes ******

CR-Form-v7.1

CHANGE REQUEST

⌘ **22.024 CR 003** ⌘ rev **-** ⌘ Current version: **6.0.0** ⌘

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: ⌘ AoC for SCUDIF

Source: ⌘ SA1 (NEC)

Work item code: ⌘ TEI

Date: ⌘ 30/03/2005

Category: ⌘ **A**

Release: ⌘ Rel-6

Use one of the following categories:

Use one 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: ⌘ TS 23.172 specifies stage 2 SCUDIF, under N3 responsibility, does not specify anything related to interactions with the AoC supplementary service. A new clause of AoC for SCUDIF needs to be added to TS22.024. Should the treatment follow suit, this can cause a significant amount of difference between the cost being presented to the customer and the actual bill calculated in the network because the time when the ME (MS) starts using new AoC values gets behind the time when the network starts using them by amount of CDUR left for a timer interval approximately each time the bearer change occurs upon SCUDIF modification during a call.

Summary of change: ⌘ On receipt of new AoC values for SCUDIF following the Mode Modify procedure to change its bearer, for instance from Audio to Video and vice versa, ME (MS) shall reset CDUR consumed for a current charge meter so far and start over estimating the cost for a new bearer. In this estimation, the ME (MS) shall add initial units to CCM and measure units on a time basis using the new values.

Consequences if not approved: ⌘ The more SCUDIF is requested during a call the more the cost ME (MS) indicates would misalign with the actual bill calculated by the network. Although an exact one-to-one relation with the bill cannot be guaranteed due to a delay in signalling, the discrepancy due to Mode Modify procedure can affect an accuracy on CAI and this cannot be avoided.

Clauses affected: ⌘

☐ Y ☐ N

Other specs	⌘	<input checked="" type="checkbox"/>	Other core specifications	⌘	TS22.086, TS23.086, TS24.086, TS23.172
affected:		<input type="checkbox"/>	Test specifications		
		<input type="checkbox"/>	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.
- 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.

****** First set of changes ******

1.1 References

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.086: "Advice of Charge (AoC) Supplementary Services - Stage 1".
- [3] 3GPP TS 23.172: "Technical realization of Circuit Switched (CS) multimedia service; UDI/RDI fallback and service modification; Stage 2"

****** Second set of changes ******

4.4 Interactions with SCUDIF supplementary service

When the ~~ME-(MS)~~ requires a bearer change, e.g. from Audio to Video or vice versa, the SCUDIF Mode modify procedure is performed as described in TS 23.172 [3]. Depending on the operator's policy ~~T~~the success of the procedure may trigger a Facility message to convey new values for the CAI parameters. On receipt of new CAI values triggered by a service change based on the SCUDIF supplementary service, the ~~ME-(MS)~~ shall reset CDUR and continue incrementing the CCM using the new CAI parameters as stated in subclause 4.3 of this specification. The ~~ME-(MS)~~ shall add initial units to the CCM and measure units on a time basis using the new values.

****** End of changes ******