3GPP TSG CN Plenary Meeting #21 **NP-030362**
17th - 19th September 2003. Frankfurt, Germany.

Source: TSG CN WG2

Title: CRs on Release 99 Work Item CAMEL3

Agenda item: 7.1

Document for: APPROVAL

Introduction:

This document contains a CR on **Rel-99 Work Item CAMEL3** and corresponding mirror CRs for Rel –4and Rel-5. These CRs have been agreed by TSG CN WG2 and are forwarded to TSG CN Plenary meeting for approval.

WG_tdoc	Title	Spec	CR	Rev	Cat	Rel	C_Ver
N2-030416	Correction in handling of Start-Delta and Stop-Delta operations.	23.078	621		F	R99	3.17.0
N2-030417	Correction in handling of Start-Delta and Stop-Delta operations.	23.078	600	2	A	Rel-4	4.9.0
N2-030425	Correction in handling of Start-Delta and Stop-Delta operations.	23.078	622		A	Rel-5	5.4.0

3GPP TSG CN WG2 Meeting #30 ***N2-030416***
Sophia Antipolis, France, 25th – 29th August 2003

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CHANGE REQUEST

⌘ **23.078** **CR** **621** ⌘**rev** ⌘ Current version: **3.17.0** ⌘

*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 in handling of Start-Delta and Stop-Delta operations.
Source:	⌘	Hughes Software Systems
Work item code:	⌘	CAMEL3
Date:	⌘	26/08/2003
Category:	⌘	**F** (essential correctiona)
Release:	⌘	Release 1999

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: ⌘

There are few problems in handling of Start-Delta and Stop-Delta operations in the SDLs.
Firstly , in the SDL "procedure Handle_ACR", the "Start Delta" operation is always executed, even in cases when charging of call is not required. E.g. in scenerios where "procedure Handle_ACR" is executed as a result of events like O/T-Busy, O/T-No Answer and Route Select Failure, delta timer would be running after sending Apply Charging Report to SCP. Now if service logic at SCP decides to follow-on the call (i.e by sending new Apply Charging, Connect,etc), there would be miscalculation of duration of call period (i.e Tcp – DELTA) at gsmSSF and thus leading to improper charging. Hence a decision box "CallActive" in the Handle_ACR procedure should be introduced which will insure that the "Start Delta" operation is executed only when the call (or connection) is active.
Secondly, in a scenerio where "procedure Handle_ACR" is executed (say due to events like O/T-Disconnect) while delta timer was already running, decision box "AC pending = TRUE" will exit "NO" and thus delta timer will continue to run. Thus call has been released with delta timer still running at gsmSSF and now if service logic at SCP decides to follow-on the call, there would be miscalculation of duration of call period at gsmSSF. Hence a judge should be added in "procedure Handle_ACR" to stop delta timer before checking "AC pending = TRUE".
This is an essential correction for Release 1999.

Summary of change: ⌘

1. In the SDL, "procedure Handle_ACR", a decision box "CallActive" is to be introduced above the "Start Delta" task box. If "CallActive == TRUE", then only the "Start Delta" operation is executed.
2. In the SDL "procedure Handle_ACR" , a judge "Stop Delta" is to be introduced above "AC pending = TRUE" decision box. Delta timer should be

		stopped if it is already running.
Consequences if not approved:	⌘	Miscalculation of duration of call period at gsmSSF will lead to improper charging in case of services having logic of follow-on call.

Clauses affected:	⌘	4.5.6.4			
		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:

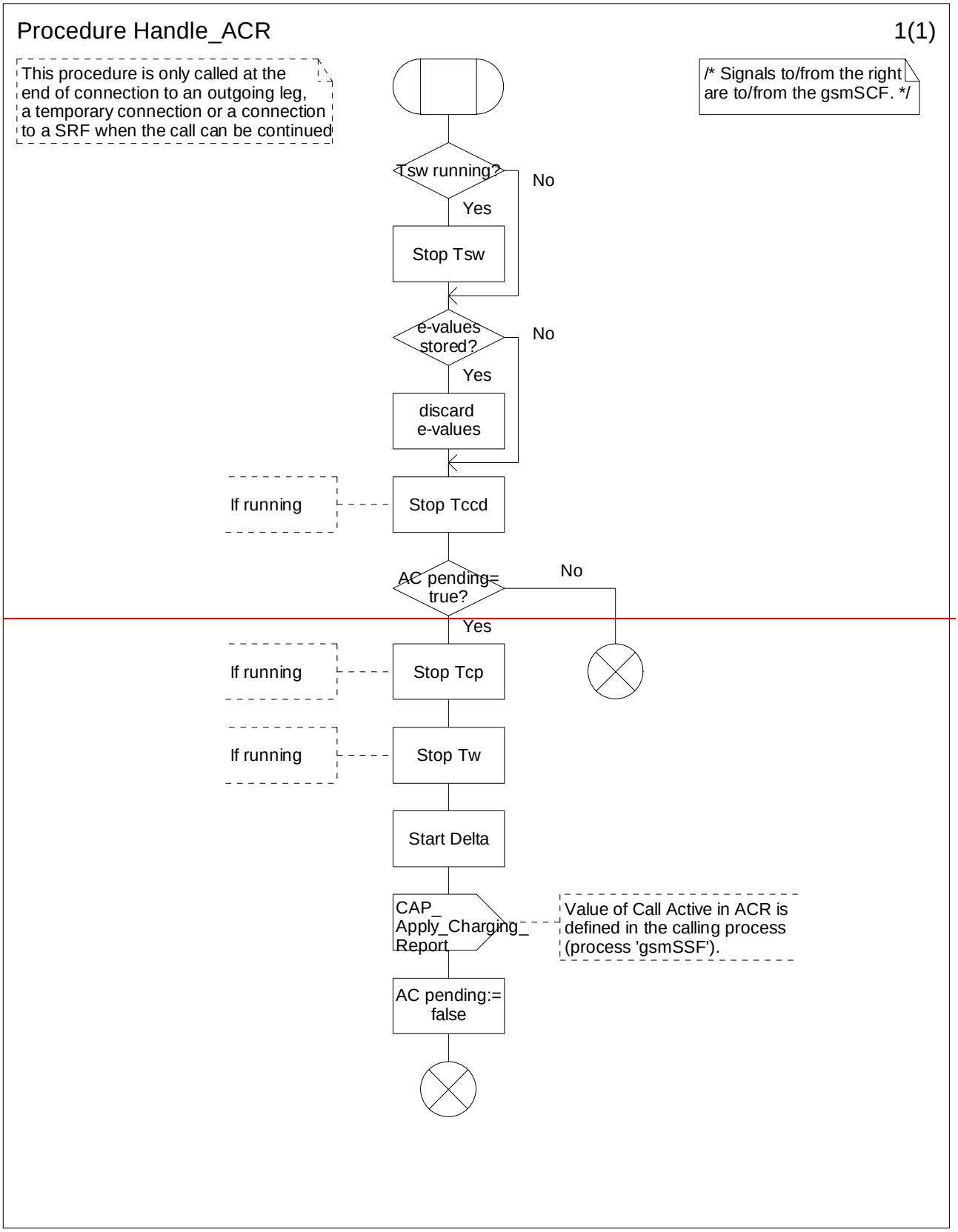
1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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 Modified Section ******

4.5.6.4 Process gsmSSF and procedures



~~Figure 4.70: Procedure Handle_ACR (sheet 1)~~

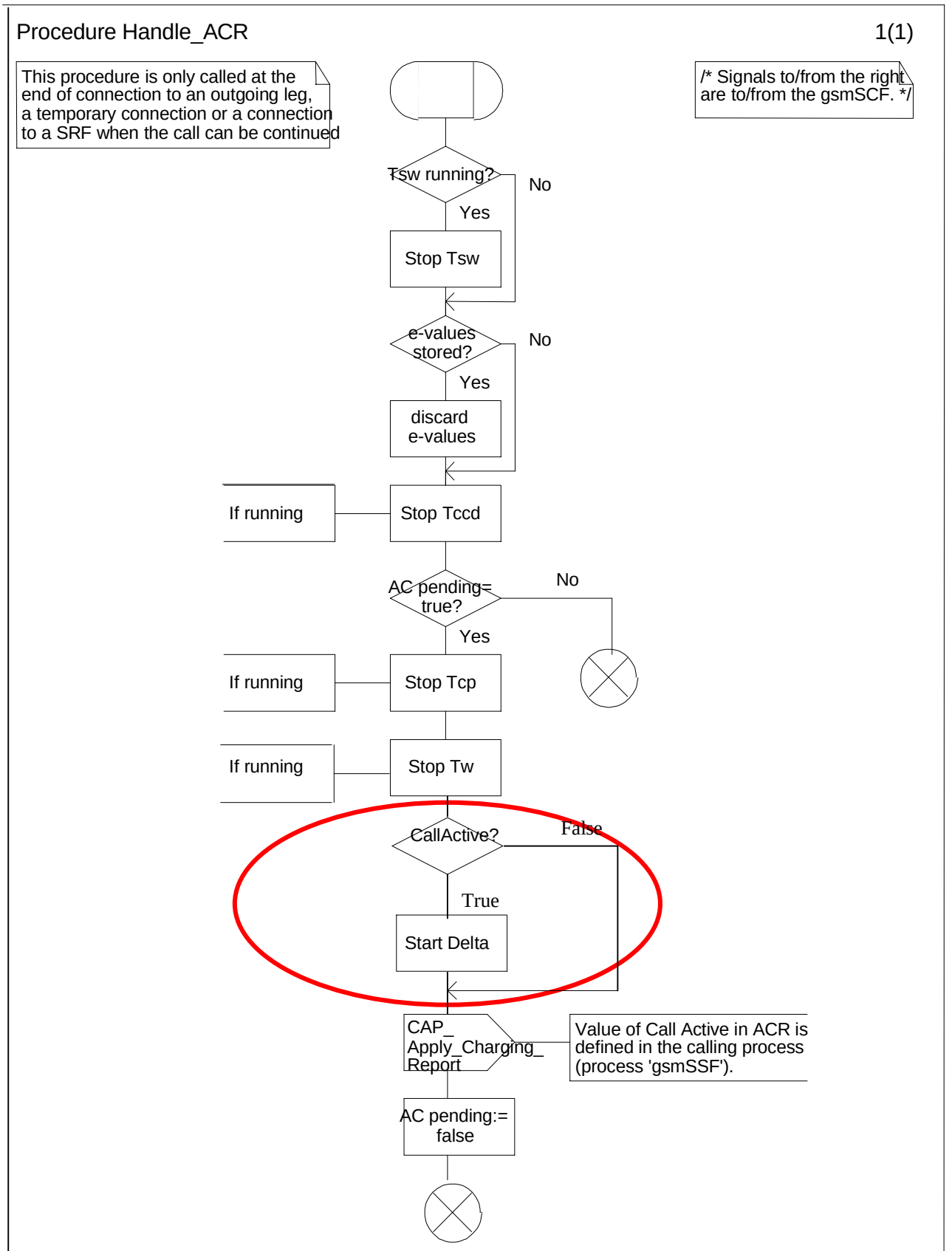
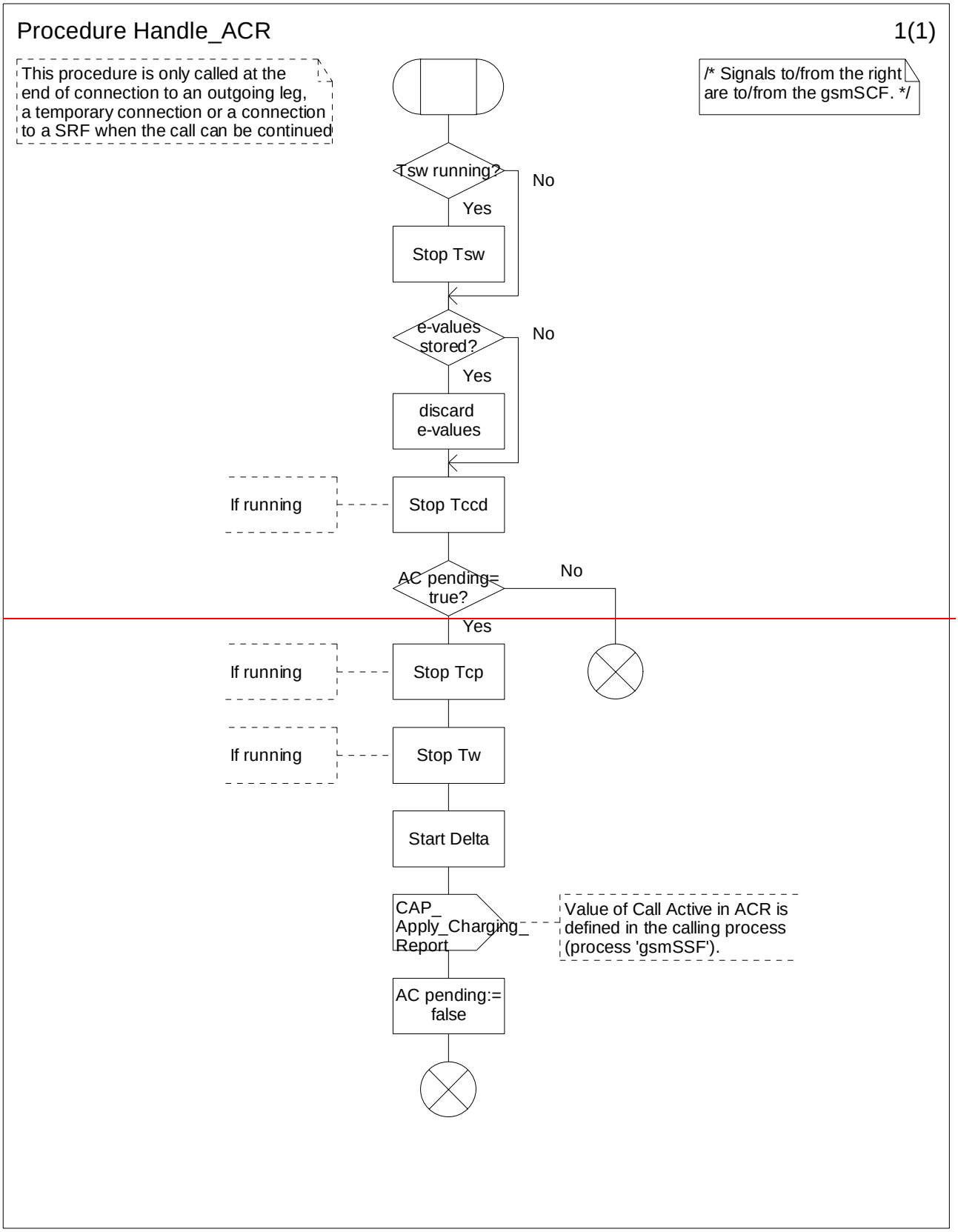


Figure 4.70: Procedure Handle_ACR (sheet 1)

****** Next Modified Section ******



~~**Figure 4.70: Procedure Handle_ACR (sheet 1)**~~

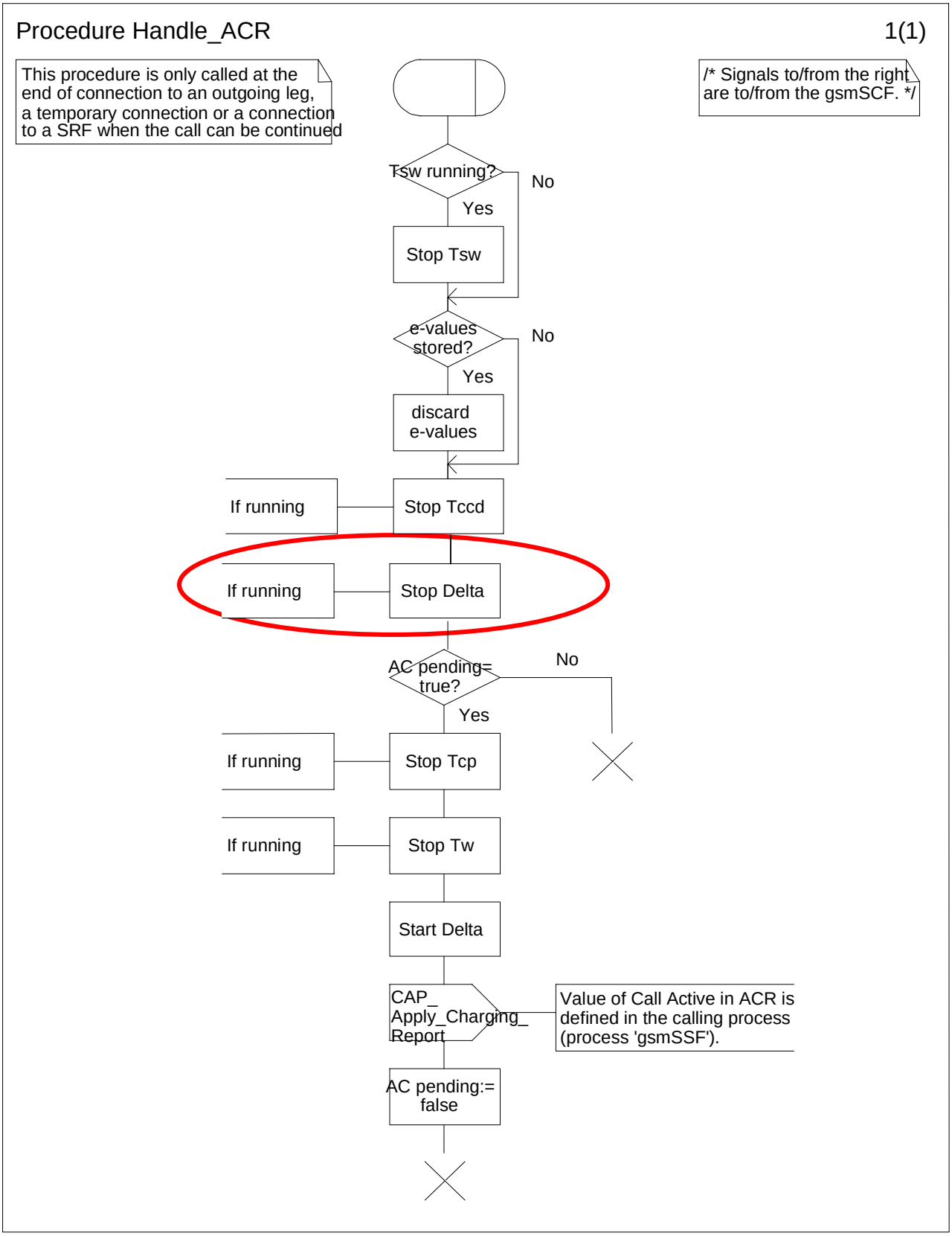


Figure 4.70: Procedure Handle_ACR (sheet 1)

****** End of Document ******

3GPP TSG CN WG2 Meeting #30 ***N2-030417***
Sophia Antipolis, France, 25th – 29th August 2003

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CHANGE REQUEST

⌘ **23.078** **CR** **600** ⌘**rev** **2** ⌘ Current version: **4.9.0** ⌘

*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 **X**

Title:	⌘	Correction in handling of Start-Delta and Stop-Delta operations.
Source:	⌘	Hughes Software Systems
Work item code:	⌘	CAMEL3
Date:	⌘	26/08/2003
Category:	⌘	**A**
Release:	⌘	Rel-4

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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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: ⌘

There are few problems in handling of Start-Delta and Stop-Delta operations in the SDLs.
Firstly , in the SDL "procedure Handle_ACR", the "Start Delta" operation is always executed, even in cases when charging of call is not required. E.g. in scenerios where "procedure Handle_ACR" is executed as a result of events like O/T-Busy, O/T-No Answer and Route Select Failure, delta timer would be running after sending Apply Charging Report to SCP. Now if service logic at SCP decides to follow-on the call (i.e by sending new Apply Charging, Connect,etc), there would be miscalculation of duration of call period (i.e Tcp – DELTA) at gsmSSF and thus leading to improper charging. Hence a decision box "CallActive" in the Handle_ACR procedure should be introduced which will insure that the "Start Delta" operation is executed only when the call (or connection) is active.
Secondly, in a scenerio where "procedure Handle_ACR" is executed (say due to events like O/T-Disconnect) while delta timer was already running, decision box "AC pending = TRUE" will exit "NO" and thus delta timer will continue to run. Thus call has been released with delta timer still running at gsmSSF and now if service logic at SCP decides to follow-on the call, there would be miscalculation of duration of call period at gsmSSF. Hence a judge should be added in "procedure Handle_ACR" to stop delta timer before checking "AC pending = TRUE".

Summary of change: ⌘

1. In the SDL, "procedure Handle_ACR", a decision box "CallActive" is to be introduced above the "Start Delta" task box. If "CallActive == TRUE", then only the "Start Delta" operation is executed.
2. In the SDL "procedure Handle_ACR" , a judge "Stop Delta" is to be introduced above "AC pending = TRUE" decision box. Delta timer should be stopped if it is already running.

Consequences if not approved:	⌘	Miscalculation of duration of call period at gsmSSF will lead to improper charging in case of services having logic of follow-on call.

Clauses affected:	⌘	4.5.6.4			
		Y	**N**		
Other specs Affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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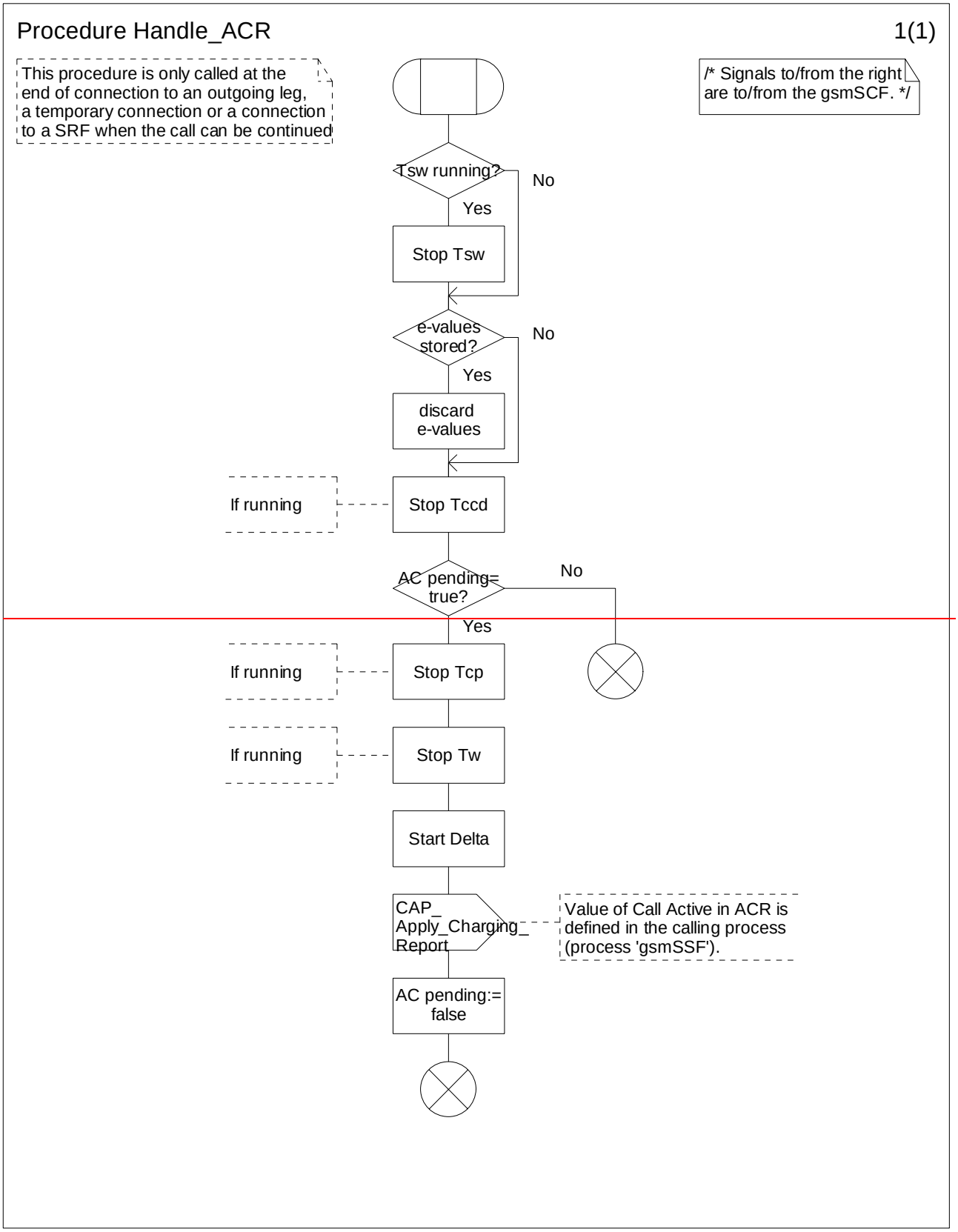
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

****** First Modified Section ******

4.5.6.4 Process gsmSSF and procedures



~~Figure 4.70: Procedure Handle_ACR (sheet 1)~~

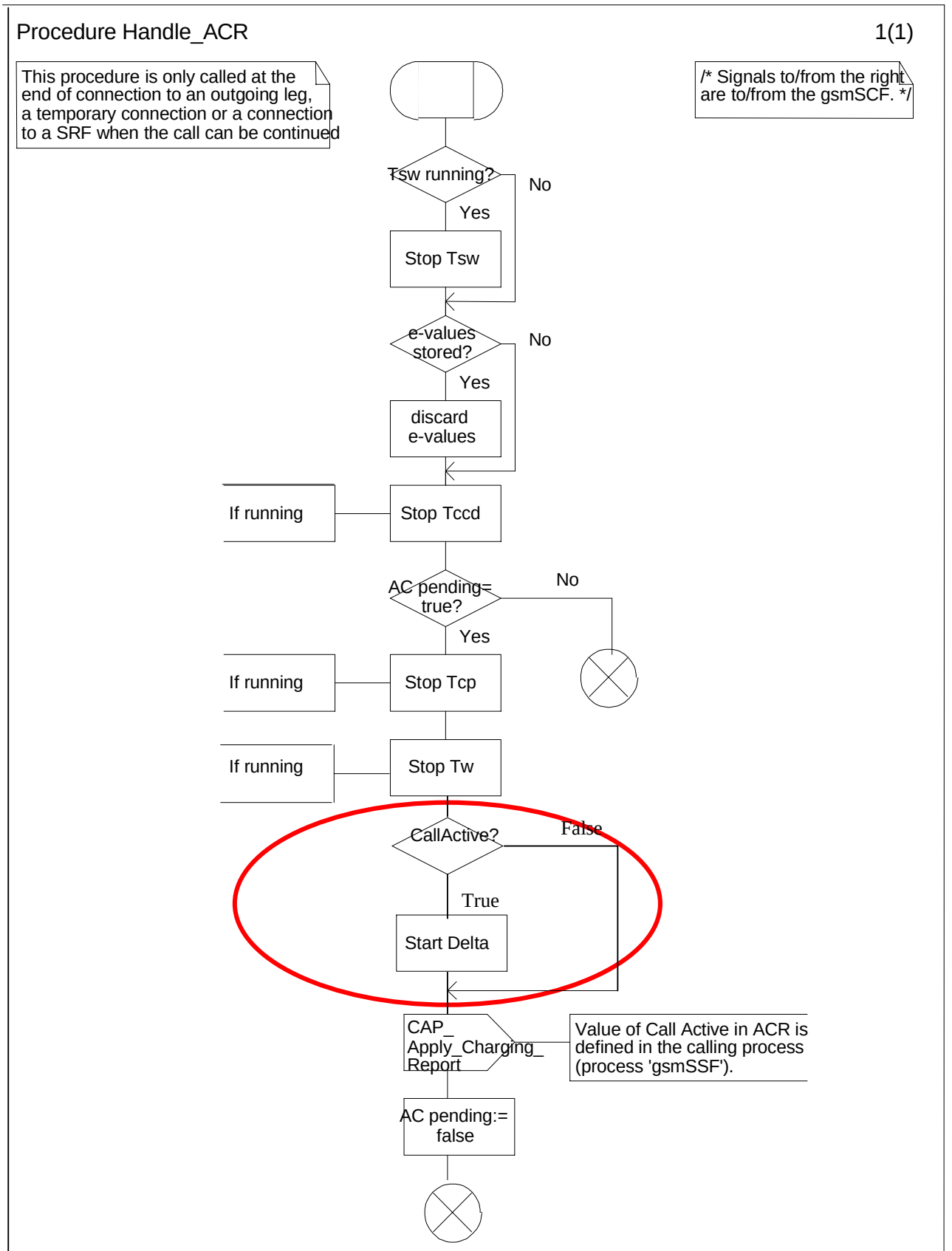
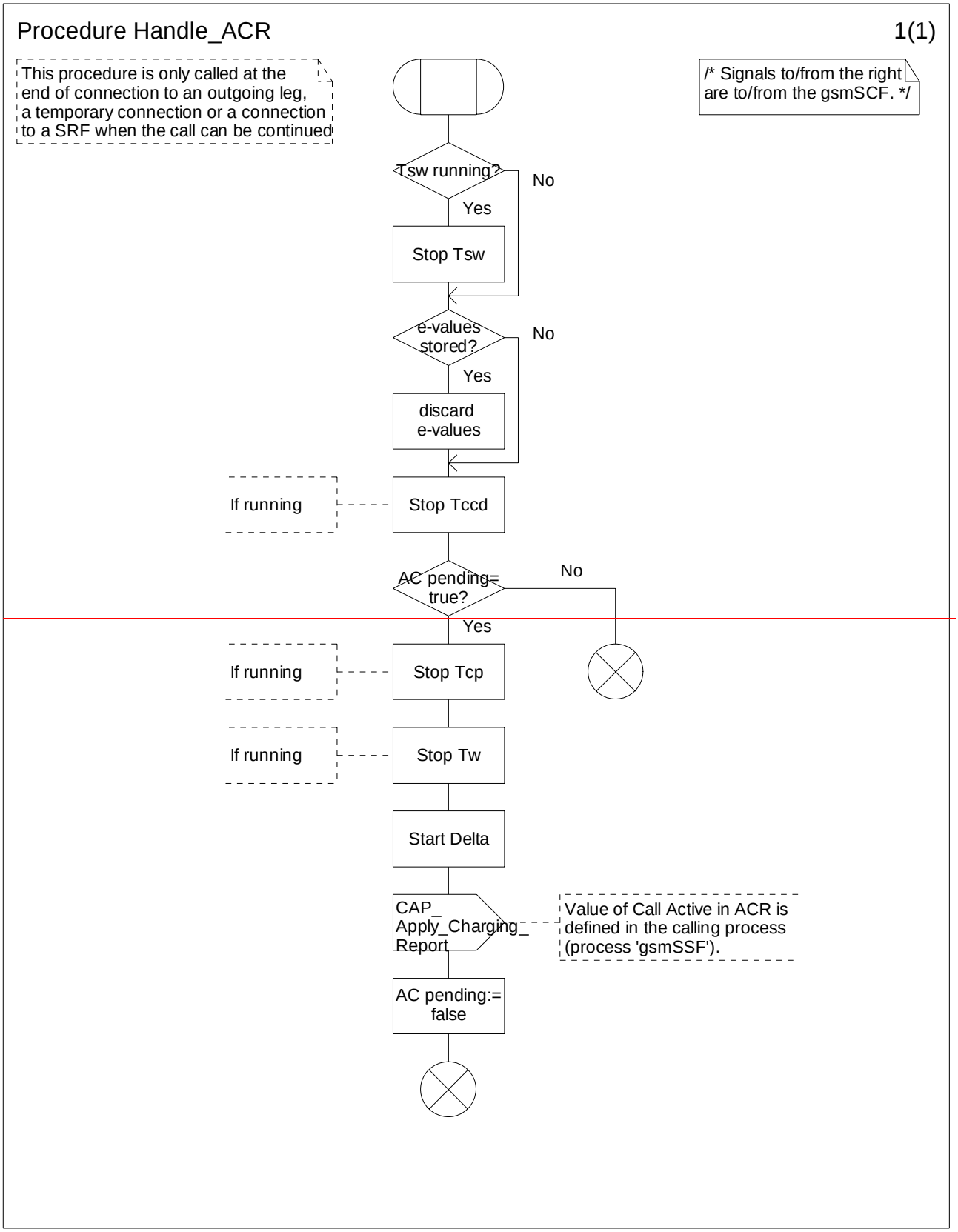


Figure 4.70: Procedure Handle_ACR (sheet 1)

****** Next Modified Section ******



~~**Figure 4.70: Procedure Handle_ACR (sheet 1)**~~

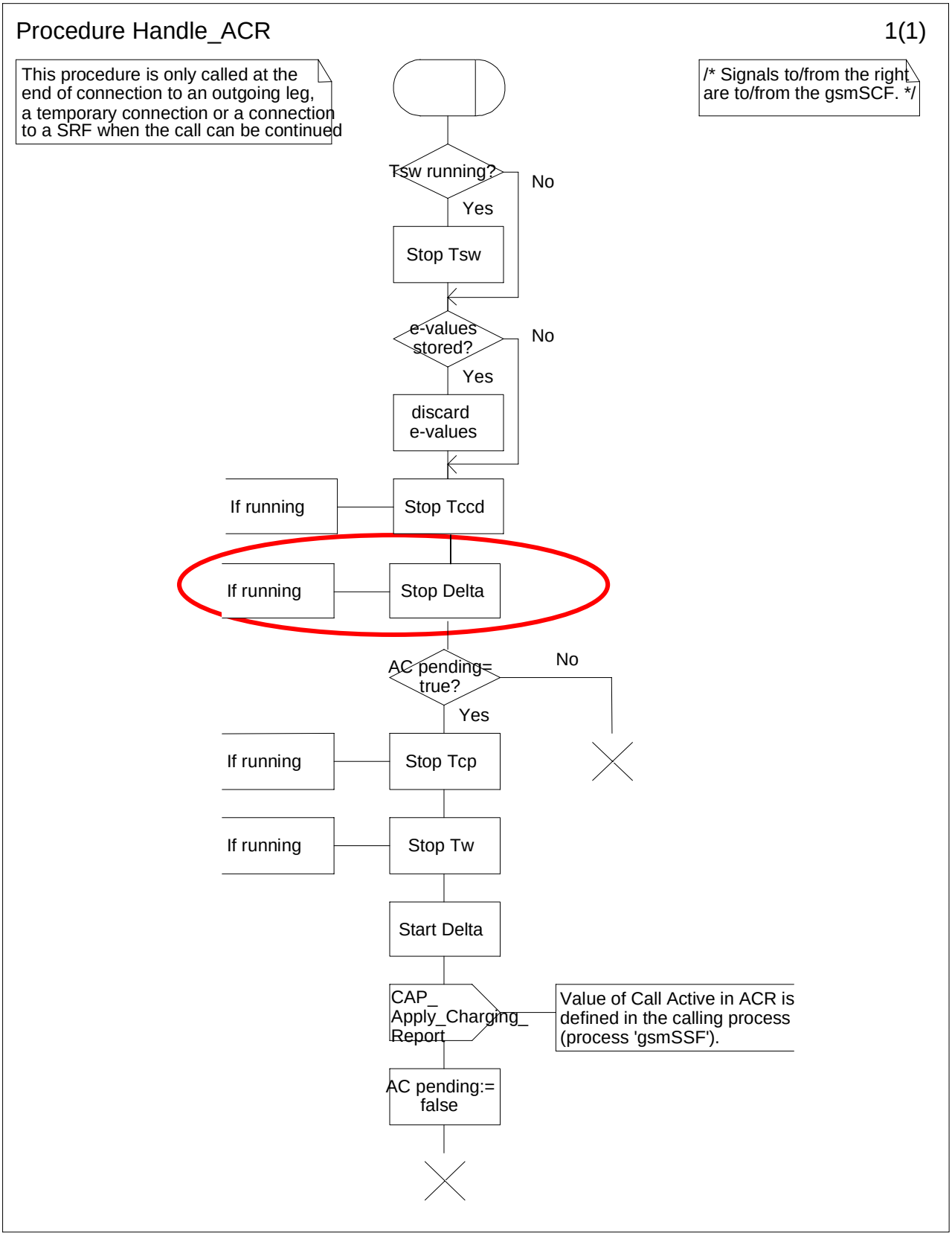


Figure 4.70: Procedure Handle_ACR (sheet 1)

****** End of Document ******

3GPP TSG CN WG2 Meeting #30 ***N2-030425***
Sophia Antipolis, France, 25th – 29th August 2003

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CHANGE REQUEST

⌘ **23.078** **CR** **622** ⌘**rev** ⌘ 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:	⌘	Correction in handling of Start-Delta and Stop-Delta operations.
Source:	⌘	Hughes Software Systems
Work item code:	⌘	CAMEL3
Date:	⌘	26/08/2003
Category:	⌘	**A**
Release:	⌘	Rel-5

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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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:	⌘	There are problems in handling of Start-Delta and Stop-Delta operations in the SDLs. In a scenerio where "procedure Handle_ACR" is executed (say due to events like O/T-Disconnect) while delta timer was already running, decision box "AC pending = TRUE" will exit "NO" and thus delta timer will continue to run. Thus call has been released with delta timer still running at gsmSSF and now if service logic at SCP decides to follow-on the call (i.e by sending new Apply Charging, Connect,etc), there would be miscalculation of duration of call period (i.e Tcp – DELTA) at gsmSSF and thus leading to improper charging. Hence a judge should be added in "procedure Handle_ACR" to stop delta timer before checking "AC pending = TRUE".
Summary of change:	⌘	In the SDL "procedure Handle_ACR" , a judge "Stop Delta" is to be introduced above "AC pending = TRUE" decision box. Delta timer should be stopped if it is already running.
Consequences if not approved:	⌘	Miscalculation of duration of call period at gsmSSF will lead to improper charging in case of services having logic of follow-on call.

Clauses affected:	⌘	4.5.7.5

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

Other comments: ⌘

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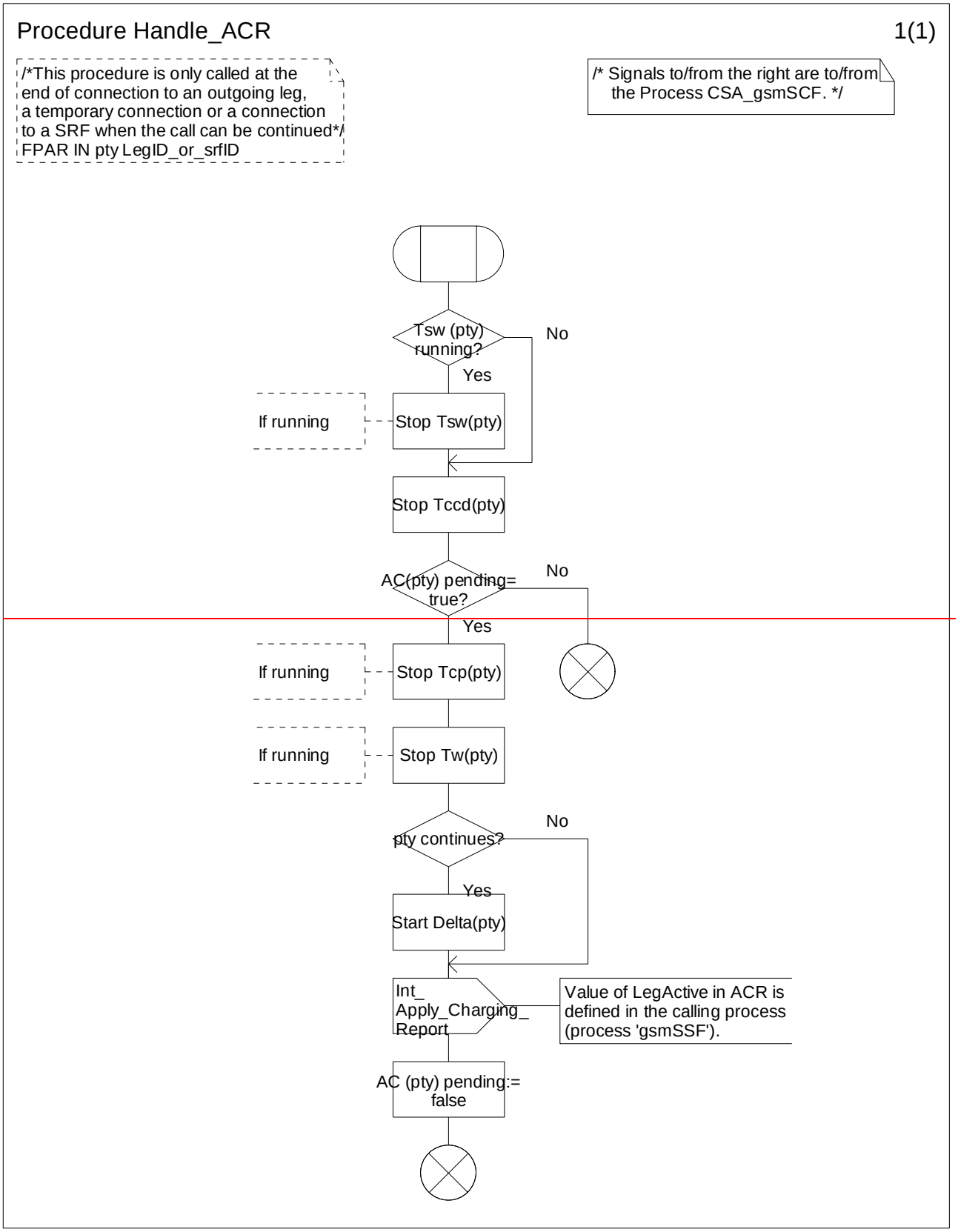
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

****** First Modified Section ******

4.5.7.5 Process CS_gsmSSF and procedures



~~Figure 4.101-1: Procedure Handle_ACR (sheet 1~~)

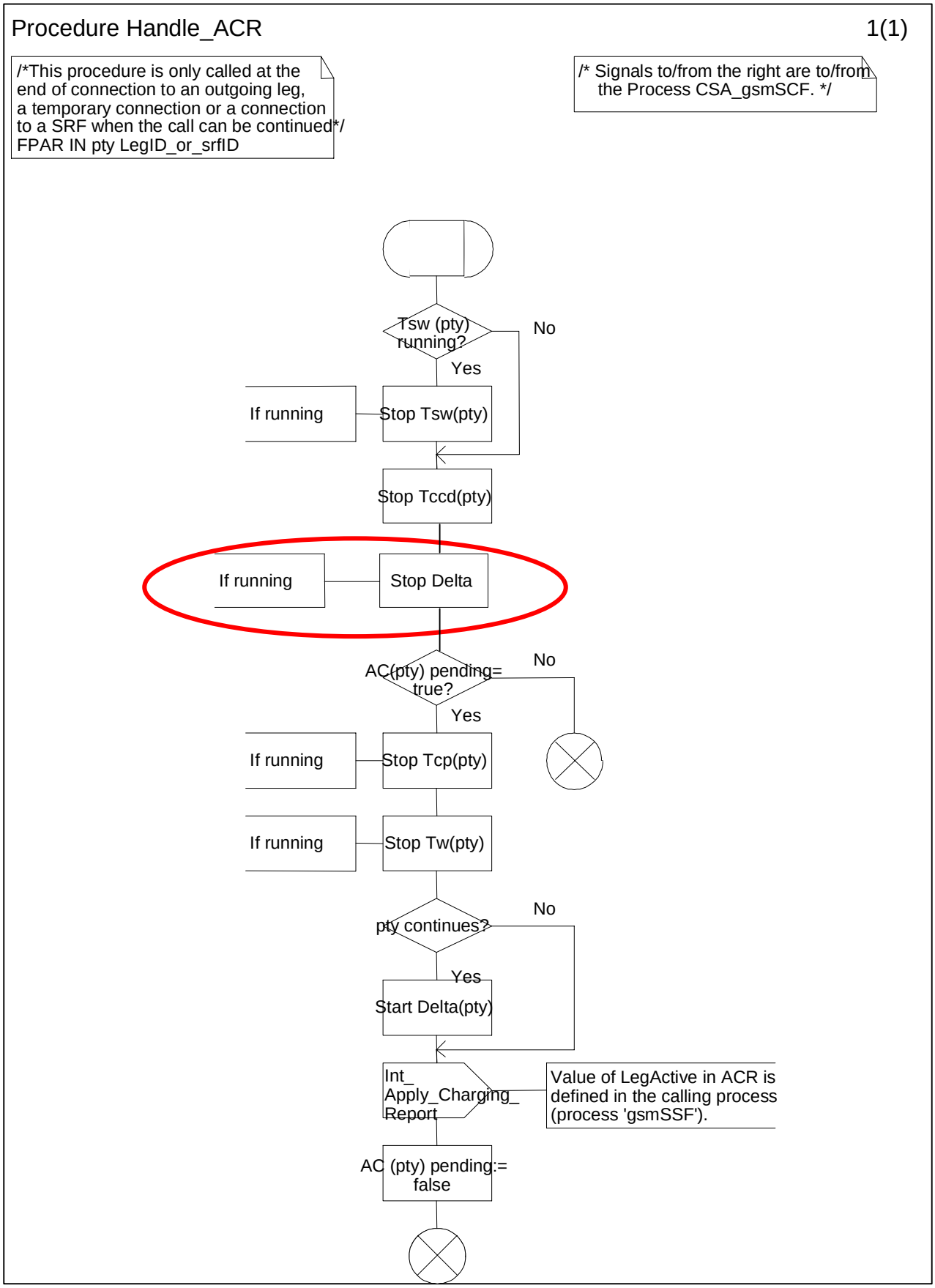


Figure Error! Reference source not found.**.2-1: Procedure Handle_ACR (sheet 1)**

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