3GPP TSG-CN Meeting #24 02 - 04 June 2004, Seoul, KOREA

Source: CN5 (OSA)

Title: 14 Rel-4 CRs 29.198-04 OSA API Part 4: Call control (Parlay call backs text

clarifications)

Agenda item: 7.10 (OSA Enhancements [OSA1])

Document for: APPROVAL

Doc-1st-	Spec	CR	Rev	Phase	Subject	Cat	Version	Doc-2nd-	Workite
NP-040256	29.198-04	068	-	Rel-4	Correct the P_TRIGGERING_ADDRESSES service property	F	4.8.0	N5-040252	OSA1
NP-040256	29.198-04-2	014	-	Rel-5	Correct the P_TRIGGERING_ADDRESSES service property	Α	5.6.0	N5-040253	OSA1
NP-040256	29.198-04-2	015	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	А	6.0.1	N5-040254	OSA1
NP-040256	29.198-04-3	022	-	Rel-5	Correct the P_TRIGGERING_ADDRESSES service property	А	5.6.0	N5-040255	OSA1
NP-040256	29.198-04-3	023	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	А	6.1.0	N5-040256	OSA1
NP-040256	29.198-05	047	-	Rel-4	Correct the P_TRIGGERING_ADDRESSES service property	F	4.8.0	N5-040257	OSA1
NP-040256	29.198-05	048	-	Rel-5	Correct the P_TRIGGERING_ADDRESSES service property	Α	5.6.0	N5-040258	OSA1
NP-040256	29.198-05	049	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	Α	6.0.1	N5-040259	OSA1
NP-040256	29.198-08	029	-	Rel-4	Correct the P_TRIGGERING_ADDRESSES service property	F	4.7.0	N5-040260	OSA1
NP-040256	29.198-08	030	-	Rel-5	Correct the P_TRIGGERING_ADDRESSES service property	А	5.5.0	N5-040261	OSA1
NP-040256	29.198-08	031	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	Α	6.0.1	N5-040262	OSA1
NP-040256	29.198-11	025	-	Rel-4	Correct the P_TRIGGERING_ADDRESSES service property	F	4.4.0	N5-040263	OSA1
NP-040256	29.198-11	026	-	Rel-5	Correct the P_TRIGGERING_ADDRESSES service property	Α	5.4.0	N5-040264	OSA1
NP-040256	29.198-11	027	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	Α	6.0.1	N5-040265	OSA1

For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the \mathbb{K} symbols.

Proposed change affects: UICC apps# ME Radio Access Network Core Network X Title: ★ Correct the P TRIGGERING ADDRESSES service property **CN5 Ultan Mulligan, ETSI PTCC** Source: Work item code:

SA1 Date: % 14/05/2004 Category: \mathfrak{R} Release:

REL-5 Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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 Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5)

Reason for change:
The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing.

There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.

Rel-6

(Release 6)

Summary of change: ₩

Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan.

Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported.

Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type.

Deprecate P_TRIGGERING_ADDRESSES as it is replaced by

P NOTIFICATION ADDRESS RANGES.

Consequences if not approved:

The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected:	器 8.1
Other specs affected:	Y N X Other core specifications
Other comments:	# This is a mirror CR to the Rel-4 CR in N5-040252.

Related Rel-5 CRs to TS 29.198-3, -4-3, 5, 8, and 11 are in N5-040250, N5-040255, N5-040258, N5-040261 and N5-040264

8 Generic Call Control Service Properties

8.1 List of Service Properties

The following table lists properties relevant for the GCC API.

Property	Туре	Description / Interpretation
P_TRIGGERING_EVENT_TYPES	INTEGER_SET	Indicates the static event types supported by the SCS. Static events are the events by which applications are initiated.
P_DYNAMIC_EVENT_TYPES	INTEGER_SET	Indicates the dynamic event types supported by the SCS. Dynamic events are the events the application can request for during the context of a call.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) e.g. {P_ADDRESS_PLAN_E164, P_ADDRESS_PLAN_IP}). Note that more than one address plan may be supported.
P_UI_CALL_BASED	BOOLEAN_SET	Value = TRUE: User interaction can be performed on call level and a reference to a Call object can be used in the IpUIManager.createUICall() operation.
		Value = FALSE: No User interaction on call level is supported.
P_UI_AT_ALL_STAGES	BOOLEAN_SET	Value = TRUE: User Interaction can be performed at any stage during a call.
		Value = FALSE: User Interaction can be performed in case there is only one party in the call.
P_MEDIA_TYPE	INTEGER_SET	Specifies the media type used by the Service. Values are defined by data-type TpMediaType : P_AUDIO, P_VIDEO, P_DATA

The previous table lists properties related to capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for
(Deprecated)		originating notifications it applies only to the originating number.
P NOTIFICATION ADDRESS RANGES	XML_ADDRESS_RANGE_SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they
		apply to the terminating number, for originating notifications
		they apply only to the originating number.
P_NOTIFICATION_TYPES	INTEGER_SET	Indicates whether the application is allowed to set originating and/or terminating triggers in the ECN. Set is:
		P_ORIGINATING
		P_TERMINATING
P_MONITOR_MODE	INTEGER_SET	Indicates whether the application is allowed to monitor in interrupt and/or notify mode. Set is:
		P_INTERRUPT
		P_NOTIFY
P_NUMBERS_TO_BE_CHANGED	INTEGER_SET	Indicates which numbers the application is allowed to change or fill for legs in an incoming call. Allowed value set:
		{P_ORIGINAL_CALLED_PARTY_NUMBER,
		P_REDIRECTING_NUMBER,
		P_TARGET_NUMBER,
		P_CALLING_PARTY_NUMBER}.
P_CHARGEPLAN_ALLOWED	INTEGER_SET	Indicates which charging is allowed in the setCallChargePlan indicator. Allowed values:
		{P_TRANSPARANT_CHARGING,
		P_CHARGE_PLAN}
P_CHARGEPLAN_MAPPING	INTEGER_INTEGER_MAP	Indicates the mapping of chargeplans (we assume they can be indicated with integers) to a logical network chargeplan indicator. When the chargeplan supports indicates P_CHARGE_PLAN then only chargeplans in this mapping are allowed.

8.2 Service Property values for the CAMEL Service Environment.

Implementations of the Generic Call Control API relying on the CSE of CAMEL phase 4 shall have the Service Properties outlined above set to the indicated values :

```
P_OPERATION_SET = {
"IpCallControlManager.createCall",
"IpCallControlManager.enableCallNotification",
\verb|`IpCallControlManager.disableCallNotification''|,\\
\verb|`IpCallControlManager.changeCallNotification''|,\\
"IpCallControlManager.getCriteria",
"IpCallControlManager.setCallLoadControl",
"IpCall.routeReq",
"IpCall.release"
"IpCall.deassignCall",
"IpCall.getCallInfoReq",
"IpCall.setCallChargePlan",
"IpCall.setAdviceOfCharge",
"IpCall.superviseCallReq"
P_TRIGGERING_EVENT_TYPES = {
P_CALL_REPORT_ALERTING,
{\tt P\_EVENT\_GCCS\_ADDRESS\_COLLECTED\_EVENT}\,,
P_EVENT_GCCS_ADDRESS_ANALYSED_EVENT,
P_EVENT_GCCS_CALLED_PARTY_BUSY,
P_EVENT_GCCS_CALLED_PARTY_UNREACHABLE,
P_EVENT_GCCS_NO_ANSWER_FROM_CALLED_PARTY,
P_EVENT_GCCS_ROUTE_SELECT_FAILURE
P_DYNAMIC_EVENT_TYPES = {
P_CALL_REPORT_ANSWER,
P_CALL_REPORT_BUSY,
P_CALL_REPORT_NO_ANSWER,
P_CALL_REPORT_DISCONNECT,
P_CALL_REPORT_SERVICE_CODE,
P_CALL_REPORT_ROUTING_FAILURE,
P_CALL_REPORT_NOT_REACHABLE
P_ADDRESS_PLAN = {
P_ADDRESS_PLAN_E164
P_UI_CALL_BASED = {
TRUE
P_UI_AT_ALL_STAGES = {
FALSE
P_MEDIA_TYPE = {
P_AUDIO
```

Annex D (informative): Change history

					Change history		
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Mar 2001	CN_11	NP-010134	047	-	CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0
June 2001	CN_12	NP-010327			Approved at TSG CN#12 and placed under Change Control	2.0.0	4.0.0
Sep 2001	CN_13	NP-010467	001		Changing references to JAIN	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	002		Correction of text descriptions for methods enableCallNotification and createNotification	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	003		Specify the behaviour when a call leg times out	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Removal of Faulty state in MPCCS Call State Transition Diagram and	4.0.0	4.1.0
					method callFaultDetected in MPCCS in OSA R4		
Sep 2001	CN_13	NP-010467			Missing TpCallAppInfoSet description in OSA R4	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Redirecting a call leg vs. creating a call leg clarification in OSA R4	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	007		Introduction of MPCC Originating and Terminating Call Leg STDs for IpCallLeg	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	800		Corrections to SetChargePlan() Addition of PartyToCharge parmeter	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	009		Corrections to SetChargePlan()	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	010		Remove distinction between final- and intermediate-report	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	011		Inclusion of TpMediaType	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	012		Corrections to GCC STD	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	013		Introduction of sequence diagrams for MPCC services	4.0.0	4.1.0
Sep 2001	CN 13	NP-010467			The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Corrections to SetCallChargePlan()	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Add one additional error indication	4.0.0	4.1.0
Sep 2001	CN 13	NP-010467	017		Corrections to Call Control – GCCS Exception handling	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001	CN 14	NP-010597			Replace Out Parameters with Return Types	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Removal of time based charging property	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001	CN 14	NP-010597			Correction of treatment datatype in superviseReq on call leg	4.1.0	4.2.0
Dec 2001	CN 14	NP-010597			Corrections to Call Control Data Types	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Correction to Call Control (CC)	4.1.0	4.2.0
Dec 2001	CN 14	NP-010597			Amend the Generic Call Control introductory part	4.1.0	4.2.0
Dec 2001	CN 14	NP-010597			Correction in TpCallEventType	4.1.0	4.2.0
Dec 2001	CN 14	NP-010597			Addition of missing description of RouteErr()	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Misleading description of createAndRouteCallLegErr()	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Correction to values of TpCallNotificationType,	4.1.0	4.2.0
Dan 2004	CNL 44	ND 040005	000		TpCallLoadControlMechanismType	110	400
Dec 2001	CN_14	NP-010695			Correction of method getLastRedirectionAddress	4.1.0	4.2.0
Mar 2002	CN_15	NP-020106			Add P_INVALID_INTERFACE_TYPE exception to lpService.setCallback() and lpService.setCallbackWithSessionID()	4.2.0	4.3.0
Mar 2002	CN_15	NP-020106			Correction of Event Subscription/Notification Data Type	4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	033		Correction of parameter name in IpCallLeg.routeReq() and in IpCallLeg.setAdviceOfCharge()	4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	034		Clarification of ambiguous Event handling rules	4.2.0	4.3.0
Jun 2002	CN_16	NP-020180	035		Correction to TpCallChargePlan	4.3.0	4.4.0
Jun 2002	CN_16	NP-020180	036		Correction to CAMEL Service Property values	4.3.0	4.4.0
Jun 2002	CN_16	NP-020181	037	-	Addition of support for Java API technology realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020182		-	Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187		-	Addition of support for Emergency Telecommunications Service	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183		-	Addition of support for Network Controlled Notifications MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187		-	Changes to getNotification()	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187		-	Addition of P_UNSUPPORTED_MEDIA release cause to TpReleaseCause	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	043	1_	Addition of CAMEL Phase 4 Service Property values	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187		-	Addition of indication whether SCS supports initially multiple	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	045	-	routeReqs in parallel Explicit exception for continueProcessing when not in interrupted	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	046	-	mode Indication needed that supervision will be ended when call or callLeg	4.4.0	5.0.0
			<u> </u>		is deassigned	<u></u>	
Jun 2002	CN_16	NP-020187	047	-	Clarify ambiguous Supervision duration	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	048	_	Detach/Attach request illegal during pending Attach/Detach request	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	049		Correction of Multi-Party Call Control properties	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	050	_	Correcting the sequence diagram descriptions in GCC and MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	051	-	Correcting erroneous description of UI behaviour in call control	4.4.0	5.0.0

Jun 2002	CN_16	NP-020187	052	-	Correcting the descriptions of sequence diagrams that don't match the diagram	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	053	-	Correcting erroneous references to GCC in MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	054	-	Addition of the Multi-media APIs to Call control SCF (29.198-4)	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	055	-	Updating Clause 4 for Release 5	4.4.0	5.0.0
Jun 2002	CN_16	NP-020188	056	-	Spliting of 29.198-04 into 4 separate TSs (sub-parts)	4.4.0	5.0.0
Sep 2002	CN_17	NP-020430	001		29.198-04-2 Correction on use of NULL in Call Control API	5.0.0	5.1.0
Sep 2002	CN_17	NP-020395	002		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0
Mar 2003	CN_19	NP-030020	003	-	Correction of status of GCC methods	5.1.0	5.2.0
Mar 2003	CN_19	NP-030020	004	-	Correction to Prepaid Sequence Diagram	5.1.0	5.2.0
Mar 2003	CN_19	NP-030020	005	-	Correction to TpCallEventCriteriaResult in Generic Call Control	5.1.0	5.2.0
Jun 2003	CN_20	NP-030238	007		Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Sep 2003	CN_21	NP-030352	800		Correction to Java Realisation Annex	5.3.0	5.4.0
Dec 2003	CN_22	NP-030544	009		Correction of description in superviseCallRes	5.4.0	5.5.0
Apr 2004	CN_23bis	NP-040155	011		Correct Java Code to conform with Java Rulebook in TS 29.198-01 and to remove errors	5.5.0	5.6.0

CR-Form-v7

CHANGE REQUEST

29.198-04-2 CR 015 # rev - # Current version: 6.0.1

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Proposed change affects: UICC apps# ME Radio Access Network Core Network X

Source: # CN5 Ultan Mulligan, ETSI PTCC

Work item code: # OSA1 Date: # 14/05/2004

Category: # A Release: # REL-6

Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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) (Release 1998) R98 **D** (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4)

be found in 3GPP TR 21.900. Rel-5 (Release 6)

Rel-6 (Release 6)

Reason for change: # The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets

of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing.

There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.

Summary of change: # Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES

which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan.

Correct the description of P_ADDRESSPLAN to clarify that more than one

address plan may be supported.

Correct the definition of P TRIGGERING ADDRESSES to refer to the

ADDRESSRANGE_SET service property type.

Deprecate P_TRIGGERING_ADDRESSES as it is replaced by

P NOTIFICATION ADDRESS RANGES.

Consequences if not approved:

The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected: # 8.1

Other specs affected:

Other core specifications

第 TS 29.198-03, -04-3, -05, -08, -11

Test specifications

O&M Specifications

Other comments: # This is a mirror CR to the Rel-4 CR in N5-040252.

Related Rel-6 CRs to TS 29.198-3, -4-3, 5, 8, and 11 are in N5-040251, N5-040256, N5-040259, N5-040262 and N5-040265

8 Generic Call Control Service Properties

8.1 List of Service Properties

The following table lists properties relevant for the GCC API.

Property	Туре	Description / Interpretation
P_TRIGGERING_EVENT_TYPES	INTEGER_SET	Indicates the static event types supported by the SCS. Static events are the events by which applications are initiated.
P_DYNAMIC_EVENT_TYPES	INTEGER_SET	Indicates the dynamic event types supported by the SCS. Dynamic events are the events the application can request for during the context of a call.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plan (defined in TpAddressPlan.) e.g. {P_ADDRESS_PLAN_E164, P_ADDRESS_PLAN_IP}). Note that more than one address plan may be supported.
P_UI_CALL_BASED	BOOLEAN_SET	Value = TRUE: User interaction can be performed on call level and a reference to a Call object can be used in the IpUIManager.createUICall() operation.
		Value = FALSE: No User interaction on call level is supported.
P_UI_AT_ALL_STAGES	BOOLEAN_SET	Value = TRUE: User Interaction can be performed at any stage during a call.
		Value = FALSE: User Interaction can be performed in case there is only one party in the call.
P_MEDIA_TYPE	INTEGER_SET	Specifies the media type used by the Service. Values are defined by data-type TpMediaType : P_AUDIO, P_VIDEO, P_DATA

The previous table lists properties related to capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
P NOTIFICATION ADDRESS RANGES	XML ADDRESS RANGE SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_NOTIFICATION_TYPES	INTEGER_SET	Indicates whether the application is allowed to set originating and/or terminating triggers in the ECN. Set is: P_ORIGINATING P_TERMINATING
P_MONITOR_MODE	INTEGER_SET	Indicates whether the application is allowed to monitor in interrupt and/or notify mode. Set is: P_INTERRUPT P_NOTIFY
P_NUMBERS_TO_BE_CHANGED	INTEGER_SET	Indicates which numbers the application is allowed to change or fill for legs in an incoming call. Allowed value set: {P_ORIGINAL_CALLED_PARTY_NUMBER, P_REDIRECTING_NUMBER, P_TARGET_NUMBER, P_CALLING_PARTY_NUMBER}.
P_CHARGEPLAN_ALLOWED	INTEGER_SET	Indicates which charging is allowed in the setCallChargePlan indicator. Allowed values: {P_TRANSPARANT_CHARGING, P_CHARGE_PLAN}
P_CHARGEPLAN_MAPPING	INTEGER_INTEGER_MAP	Indicates the mapping of chargeplans (we assume they can be indicated with integers) to a logical network chargeplan indicator. When the chargeplan supports indicates P_CHARGE_PLAN then only chargeplans in this mapping are allowed.

8.2 Service Property values for the CAMEL Service Environment.

Implementations of the Generic Call Control API relying on the CSE of CAMEL phase 4 shall have the Service Properties outlined above set to the indicated values :

```
P_OPERATION_SET = {
"IpCallControlManager.createCall",
"IpCallControlManager.enableCallNotification",
\verb|`IpCallControlManager.disableCallNotification''|,\\
\verb|`IpCallControlManager.changeCallNotification''|,\\
"IpCallControlManager.getCriteria",
"IpCallControlManager.setCallLoadControl",
"IpCall.routeReq",
"IpCall.release"
"IpCall.deassignCall",
"IpCall.getCallInfoReq",
"IpCall.setCallChargePlan",
"IpCall.setAdviceOfCharge",
"IpCall.superviseCallReq"
P_TRIGGERING_EVENT_TYPES = {
P_CALL_REPORT_ALERTING,
{\tt P\_EVENT\_GCCS\_ADDRESS\_COLLECTED\_EVENT}\,,
P_EVENT_GCCS_ADDRESS_ANALYSED_EVENT,
P_EVENT_GCCS_CALLED_PARTY_BUSY,
P_EVENT_GCCS_CALLED_PARTY_UNREACHABLE,
P_EVENT_GCCS_NO_ANSWER_FROM_CALLED_PARTY,
P_EVENT_GCCS_ROUTE_SELECT_FAILURE
P_DYNAMIC_EVENT_TYPES = {
P_CALL_REPORT_ANSWER,
P_CALL_REPORT_BUSY,
P_CALL_REPORT_NO_ANSWER,
P_CALL_REPORT_DISCONNECT,
P_CALL_REPORT_SERVICE_CODE,
P_CALL_REPORT_ROUTING_FAILURE,
P_CALL_REPORT_NOT_REACHABLE
P_ADDRESS_PLAN = {
P_ADDRESS_PLAN_E164
P_UI_CALL_BASED = {
TRUE
P_UI_AT_ALL_STAGES = {
FALSE
P_MEDIA_TYPE = {
P_AUDIO
```

Annex E (informative): Change history

_				_	Change history		
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Mar 2001	CN_11	NP-010134	047	-	CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0
June 2001		NP-010327			Approved at TSG CN#12 and placed under Change Control	2.0.0	4.0.0
Sep 2001			001		Changing references to JAIN	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	002		Correction of text descriptions for methods enableCallNotification and createNotification	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	003		Specify the behaviour when a call leg times out	4.0.0	4.1.0
Sep 2001	_	NP-010467	003		Removal of Faulty state in MPCCS Call State Transition Diagram and	4.0.0	4.1.0
OCP 2001	011_13	141 -010-07	004		method callFaultDetected in MPCCS in OSA R4	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	005		Missing TpCallAppInfoSet description in OSA R4	4.0.0	4.1.0
Sep 2001		NP-010467	006		Redirecting a call leg vs. creating a call leg clarification in OSA R4	4.0.0	4.1.0
Sep 2001		NP-010467	007		Introduction of MPCC Originating and Terminating Call Leg STDs for	4.0.0	4.1.0
					IpCallLeg		
Sep 2001			800		Corrections to SetChargePlan() Addition of PartyToCharge parmeter	4.0.0	4.1.0
Sep 2001			009		Corrections to SetChargePlan()	4.0.0	4.1.0
Sep 2001		NP-010467	010		Remove distinction between final- and intermediate-report	4.0.0	4.1.0
Sep 2001			011		Inclusion of TpMediaType	4.0.0	4.1.0
Sep 2001			012		Corrections to GCC STD	4.0.0	4.1.0
Sep 2001		NP-010467	013		Introduction of sequence diagrams for MPCC services	4.0.0	4.1.0
Sep 2001			014		The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
Sep 2001					Corrections to SetCallChargePlan()	4.0.0	
Sep 2001 Sep 2001			016 017		Add one additional error indication Corrections to Call Control – GCCS Exception handling	4.0.0	4.1.0
Sep 2001			017		Corrections to Call Control – GCCS Exception handling Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001			019		Replace Out Parameters with Return Types	4.0.0	4.1.0
Dec 2001			020		Removal of time based charging property	4.1.0	4.2.0
Dec 2001			021		Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001		NP-010597	022		Correction of treatment datatype in superviseReq on call leg	4.1.0	4.2.0
Dec 2001			023		Corrections to Call Control Data Types	4.1.0	4.2.0
Dec 2001			024		Correction to Call Control (CC)	4.1.0	4.2.0
Dec 2001			025		Amend the Generic Call Control introductory part	4.1.0	4.2.0
Dec 2001			026		Correction in TpCallEventType	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	027		Addition of missing description of RouteErr()	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	028		Misleading description of createAndRouteCallLegErr()	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	029		Correction to values of TpCallNotificationType,	4.1.0	4.2.0
					TpCallLoadControlMechanismType		
Dec 2001			030		Correction of method getLastRedirectionAddress	4.1.0	4.2.0
Mar 2002	CN_15	NP-020106	031		Add P_INVALID_INTERFACE_TYPE exception to	4.2.0	4.3.0
Mar 2002	CN 1E	ND 020406	022		IpService.setCallback() and IpService.setCallbackWithSessionID()	420	420
Mar 2002 Mar 2002		NP-020106 NP-020106	032		Correction of Event Subscription/Notification Data Type	4.2.0 4.2.0	4.3.0
IVIAI 2002	CIN_15	INP-020106	033		Correction of parameter name in IpCallLeg.routeReq() and in IpCallLeg.setAdviceOfCharge()	4.2.0	4.3.0
Mar 2002	CN 15	NP-020106	034	<u> </u>	Clarification of ambiguous Event handling rules	4.2.0	4.3.0
Jun 2002		NP-020180			Correction to TpCallChargePlan	4.3.0	4.4.0
Jun 2002		NP-020180			Correction to CAMEL Service Property values	4.3.0	4.4.0
Jun 2002			037	-	Addition of support for Java API technology realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020182		-	Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002			039	-	Addition of support for Emergency Telecommunications Service	4.4.0	5.0.0
Jun 2002			040	-	Addition of support for Network Controlled Notifications MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	041	-	Changes to getNotification()	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	042	-	Addition of P_UNSUPPORTED_MEDIA release cause to	4.4.0	5.0.0
					TpReleaseCause		
Jun 2002			043	-	Addition of CAMEL Phase 4 Service Property values	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	044	-	Addition of indication whether SCS supports initially multiple	4.4.0	5.0.0
1 222-	0.1.1.1	ND coo:	0.15		routeReqs in parallel	4.5	.
Jun 2002	CN_16	NP-020187	045	-	Explicit exception for continueProcessing when not in interrupted	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	046	<u> </u>	mode Indication needed that supervision will be ended when call or callLeg	4.4.0	5.0.0
Juli 2002	CIN_ID	INF-UZU10/	040	[is deassigned	4.4.0	3.0.0
Jun 2002	CN_16	NP-020187	047	-	Clarify ambiguous Supervision duration	4.4.0	5.0.0
Jun 2002		NP-020187		-	Detach/Attach request illegal during pending Attach/Detach request	4.4.0	5.0.0
			049	-	Correction of Multi-Party Call Control properties	4.4.0	5.0.0
	CIN TO	1111 -020107					
Jun 2002				_	Correcting the sequence diagram descriptions in GCC and MPCC		5.0.0
	CN_16	NP-020187	050 051	-	Correcting the sequence diagram descriptions in GCC and MPCC Correcting erroneous description of UI behaviour in call control	4.4.0 4.4.0	5.0.0 5.0.0

					diagram		
Jun 2002	CN_16	NP-020187	053	-	Correcting erroneous references to GCC in MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	054	-	Addition of the Multi-media APIs to Call control SCF (29.198-4)	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	055	-	Updating Clause 4 for Release 5	4.4.0	5.0.0
Jun 2002	CN_16	NP-020188	056	-	Spliting of 29.198-04 into 4 separate TSs (sub-parts)	4.4.0	5.0.0
Sep 2002	CN_17	NP-020430	001		29.198-04-2 Correction on use of NULL in Call Control API	5.0.0	5.1.0
Sep 2002	CN_17	NP-020395	002		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0
Mar 2003	CN_19	NP-030020	003	-	Correction of status of GCC methods	5.1.0	5.2.0
Mar 2003	CN_19	NP-030020	004	-	Correction to Prepaid Sequence Diagram	5.1.0	5.2.0
Mar 2003	CN_19	NP-030020	005	-	Correction to TpCallEventCriteriaResult in Generic Call Control	5.1.0	5.2.0
Jun 2003	CN_20	NP-030238	007		Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Sep 2003	CN_21	NP-030352	800		Correction to Java Realisation Annex	5.3.0	5.4.0
Dec 2003	CN_22	NP-030544	009		Correction of description in superviseCallRes	5.4.0	5.5.0
Dec 2003	CN_22	NP-030553	010		Add OSA API support for 3GPP2 networks	5.5.0	6.0.0
Feb 2004					Added Java code attachment 2919804-2J2EE.zip which was	6.0.0	6.0.1
					delivered late by outside developers. See Annex C.		

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{K} symbols.

Proposed change affects: UICC apps# ME Radio Access Network Core Network X Title: ★ Correct the P TRIGGERING ADDRESSES service property **CN5 Ultan Mulligan, ETSI PTCC** Source: Work item code:

SA1 Date: % 14/05/2004 Category: \mathfrak{R} Release:

REL-5 Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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 Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5)

Reason for change:
The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing.

There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.

Rel-6

(Release 6)

Summary of change: ₩

Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan.

Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported.

Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type.

Deprecate P_TRIGGERING_ADDRESSES as it is replaced by

P NOTIFICATION ADDRESS RANGES.

Consequences if not approved:

The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected:	₩ 8.1
Other specs affected:	Y N X Other core specifications X Test specifications O&M Specifications
Other comments:	# This is a mirror CR to the Rel-4 CR in N5-040252.

8 Multi-Party Call Control Service Properties

8.1 List of Service Properties

The following table lists properties relevant for the MPCC API.

Property	Туре	Description / Interpretation
P_TRIGGERING_EVENT_TYPES	INTEGER_SET	Indicates the static event types supported by the SCS. Static events are the events by which applications are initiated.
P_DYNAMIC_EVENT_TYPES	INTEGER_SET	Indicates the dynamic event types supported by the SCS. Dynamic events are the events the application can request for during the context of a call.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) e.g. {P_ADDRESS_PLAN_E164, P_ADDRESS_PLAN_IP}). Note that more than one address plan may be supported.
P_UI_CALL_BASED	BOOLEAN_SET	Value = TRUE: User interaction can be performed on call level and a reference to a Call object can be used in the IpUIManager.createUICall() operation. Value = FALSE: No User interaction on call level is supported.
P_UI_AT_ALL_STAGES	BOOLEAN_SET	Value = TRUE: User Interaction can be performed at any stage during a call . Value = FALSE: User Interaction can be performed in case there is only one party in the call.
P_MEDIA_TYPE	INTEGER_SET	Specifies the media type used by the Service. Values are defined by data- type TpMediaType : P_AUDIO, P_VIDEO, P_DATA
P_MAX_CALLLEGS_PER_CALL	INTEGER_SET	Indicates the maximum number of legs in a call for which a connection to a call party exists in the network. The enforcement of this property is done only when a leg is created or routed by the application.
P_UI_CALLLEG_BASED	BOOLEAN_SET	Value = TRUE : User interaction can be performed on leg level and a reference to a CallLeg object can be used in the IpUIManager.createUICall() operation. Value = FALSE : No user interaction on leg level is supported.
P_PARALLEL_INITIAL_ROUTING_REQU ESTS	BOOLEAN_SET	Indicates whether for application initiated calls it is possible to issue multiple routing request methods in parallel or that the application has to wait for the result of the first request before another one can be invoked. Value = TRUE: Multiple routing requests can be invoked in parallel. Value = FALSE: Result of first request has to be received before another request can be issued.

The previous table lists properties related to capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS

Property	Туре	Description
P_TRIGGERING_ADDRESSES	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For
(Deprecated)		terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
		See further explanation on which events are originating and which
		are terminating, below.
P_NOTIFICATION_ADDRESS_RAN	XML_ADDRESS_RANGE_SET	Indicates for which numbers notifications may be set. More than
GES		one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only
		to the originating number.
P_MONITOR_MODE	INTEGER_SET	Indicates whether the application is allowed to monitor in interrupt and/or notify mode. Set is:
		P_INTERRUPT
		P_NOTIFY
P_NUMBERS_TO_BE_CHANGED	INTEGER_SET	Indicates which numbers the application is allowed to change or fill
		for legs in an incoming call. Allowed value set:
		{P_ORIGINAL_CALLED_PARTY_NUMBER,
		P_REDIRECTING_NUMBER,
		P_TARGET_NUMBER,
		P_CALLING_PARTY_NUMBER}.
P_CHARGEPLAN_ALLOWED	INTEGER_SET	Indicates which charging is allowed in the setCallChargePlan indicator. Allowed values:
		{P_TRANSPARANT_CHARGING,
		P_CHARGE_PLAN}
P_CHARGEPLAN_MAPPING	INTEGER_INTEGER_MAP	Indicates the mapping of chargeplans (we assume they can be indicated with integers) to a logical network chargeplan indicator. When the chargeplan supports indicates P_CHARGE_PLAN then only chargeplans in this mapping are allowed.
P_HIGH_PROBABILITY_OF_COMP	BOOLEAN_SET	Value = TRUE : high probability of call completion field can be set.
LETION		Value = FALSE : high probability of call completion field can not be set. FALSE is the default value.

The following table explains how the P_TRIGGERING_ADDRESSES property that is inherited via the Generic Call Control properties should be interpreted with respect to which of the notifications apply to originating numbers and which of the notifications apply to terminating numbers.

P_CALL_EVENT_ORIGINATING_CALL_ATTEMPT	Originating
P_CALL_EVENT_ORIGINATING_CALL_ATTEMPT_AUTHORISED	Originating
P_CALL_EVENT_ADDRESS_COLLECTED	Originating
P_CALL_EVENT_ADDRESS_ANALYSED	Originating
P_CALL_EVENT_ORIGINATING_SERVICE_CODE	Originating
P_CALL_EVENT_ORIGINATING_RELEASE	Originating
P_CALL_EVENT_TERMINATING_CALL_ATTEMPT	Terminating
P_CALL_EVENT_TERMINATING_CALL_ATTEMPT_AUTHORISED	Terminating
P_CALL_EVENT_ALERTING	Terminating
P_CALL_EVENT_ANSWER	Terminating
P_CALL_EVENT_TERMINATING_RELEASE	Terminating
P_CALL_EVENT_REDIRECTED	Terminating
P_CALL_EVENT_TERMINATING_SERVICE_CODE	Terminating
P_CALL_EVENT_QUEUED	N/A

8.2 Service Property values for the CAMEL Service Environment.

Implementations of the MultiParty Call Control API relying on the CSE of CAMEL phase 4 shall have the Service Properties outlined above set to the indicated values :

```
P_OPERATION_SET = {
```

```
"IpMultiPartyCallControlManager.createCall",
"IpMultiPartyCallControlManager.createNotification",
"IpMultiPartyCallControlManager.destroyNotification",
\verb|`IpMultiPartyCallControlManager.changeNotification''|,\\
\verb|`IpMultiPartyCallControlManager.getNotification|'|
"IpMultiPartyCallControlManager.getNextNotification",
"IpMultiPartyCallControlManager.enableNotifications",
\verb|`IpMultiPartyCallControlManager.disableNotifications|'',
\verb|`IpMultiPartyCallControlManager.setCallLoadControl|''
"IpMultiPartyCall.getCallLegs",
"IpMultiPartyCall.createCallLeg"
"IpMultiPartyCall.createAndRouteCallLegReq",
"IpMultiPartyCall.release",
"IpMultiPartyCall.deassignCall",
"IpMultiPartyCall.getInfoReq",
"IpMultiPartyCall.setChargePlan",
"IpMultiPartyCall.setAdviceOfCharge",
"IpMultiPartyCall.superviseReq",
"IpCallLeg.routeReq",
"IpCallLeg.eventReportReq",
"IpCallLeg.release",
\verb|`IpCallLeg.getInfoReq''|\\
"IpCallLeg.getCall"
"IpCallLeg.continueProcessing"
P_TRIGGERING_EVENT_TYPES = {
P_CALL_EVENT_ADDRESS_COLLECTED,
P_CALL_EVENT_ADDRESS_ANALYSED,
P_CALL_EVENT_ORIGINATING_RELEASE,
P_CALL_EVENT_TERMINATING_CALL_ATTEMPT_AUTHORISED,
P_CALL_EVENT_TERMINATING_RELEASE
```

Note: P_CALL_EVENT_ORIGINATING_RELEASE only for the routing failure case, TpReleaseCause = P_ROUTING_FAILURE

```
P_DYNAMIC_EVENT_TYPES = {
P_CALL_EVENT_ALERTING,
P_CALL_EVENT_ANSWER,
P_CALL_EVENT_ORIGINATING_RELEASE,
P_CALL_EVENT_ORIGINATING_SERVICE_CODE,
P_CALL_EVENT_TERMINATING_RELEASE,
P_CALL_EVENT_TERMINATING_SERVICE_CODE
P_ADDRESS_PLAN = {
P_ADDRESS_PLAN_E164
P_UI_CALL_BASED = {
TRUE
P_UI_AT_ALL_STAGES = {
FALSE
P_MEDIA_TYPE = {
P_AUDIO
P_MAX_CALLLEGS_PER_CALL = {
2,
3.
4,
5,
6
P_UI_CALLLEG_BASED = {
TRUE
}
```

```
P_MEDIA_ATTACH_EXPLICIT = {
FALSE
}
```

Annex D (informative): Change history

	Change history						
Date	TSG#	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Mar 2001	CN_11	NP-010134	047	-	CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0
June 2001	CN_12	NP-010327			Approved at TSG CN#12 and placed under Change Control	2.0.0	4.0.0
Sep 2001	CN_13	NP-010467	001		Changing references to JAIN	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	002		Correction of text descriptions for methods enableCallNotification and createNotification	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	003		Specify the behaviour when a call leg times out	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	004		Removal of Faulty state in MPCCS Call State Transition Diagram and	4.0.0	4.1.0
					method callFaultDetected in MPCCS in OSA R4		
Sep 2001	CN_13	NP-010467	005		Missing TpCallAppInfoSet description in OSA R4	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Redirecting a call leg vs. creating a call leg clarification in OSA R4	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	007		Introduction of MPCC Originating and Terminating Call Leg STDs for IpCallLeg	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Corrections to SetChargePlan() Addition of PartyToCharge parmeter	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Corrections to SetChargePlan()	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Remove distinction between final- and intermediate-report	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Inclusion of TpMediaType	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Corrections to GCC STD	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Introduction of sequence diagrams for MPCC services	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	_		The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Corrections to SetCallChargePlan()	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Add one additional error indication	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Corrections to Call Control – GCCS Exception handling	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467			Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001	CN_14	NP-010597			Replace Out Parameters with Return Types	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Removal of time based charging property	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Correction of treatment datatype in superviseReq on call leg	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Corrections to Call Control Data Types	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Correction to Call Control (CC)	4.1.0	4.2.0
Dec 2001 Dec 2001	CN_14 CN 14	NP-010597 NP-010597			Amend the Generic Call Control introductory part Correction in TpCallEventType	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Addition of missing description of RouteErr()	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Misleading description of reateAndRouteCallLegErr()	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597			Correction to values of TpCallNotificationType,	4.1.0	4.2.0
Dec 2001	CN_14	NP-010695	020		TpCallLoadControlMechanismType Correction of method getLastRedirectionAddress	4.1.0	4.2.0
Mar 2002	CN_15	NP-020106			Add P_INVALID_INTERFACE_TYPE exception to	4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	022		IpService.setCallback() and IpService.setCallbackWithSessionID() Correction of Event Subscription/Notification Data Type	4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	033		Correction of parameter name in IpCallLeg.routeReq() and in	4.2.0	4.3.0
Mar 2002	CNL 1E	NP-020106	024		IpCallLeg.setAdviceOfCharge()	420	4.3.0
Mar 2002 Jun 2002	CN_15 CN 16	NP-020106 NP-020180		 	Clarification of ambiguous Event handling rules	4.2.0	
Jun 2002 Jun 2002	CN_16	NP-020180			Correction to TpCallChargePlan Correction to CAMEL Service Property values	4.3.0	4.4.0
Jun 2002	CN_16	NP-020181	037		Addition of support for Java API technology realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020182		<u> </u>	Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN 16	NP-020187		<u> </u>	Addition of support for Emergency Telecommunications Service	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183		_	Addition of support for Network Controlled Notifications MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187		_	Changes to getNotification()	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187		-	Addition of P_UNSUPPORTED_MEDIA release cause to TpReleaseCause	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	043	<u> </u>	Addition of CAMEL Phase 4 Service Property values	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187		-	Addition of indication whether SCS supports initially multiple routeRegs in parallel	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	045	-	Explicit exception for continueProcessing when not in interrupted mode	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	046	-	Indication needed that supervision will be ended when call or callLeg	4.4.0	5.0.0
lun 2002	CN 46	ND 000407	047	1	is deassigned	4.4.0	F 0 0
Jun 2002	CN_16	NP-020187		-	Clarify ambiguous Supervision duration	4.4.0	5.0.0
Jun 2002 Jun 2002	CN_16	NP-020187 NP-020187		-	Detach/Attach request illegal during pending Attach/Detach request Correction of Multi-Party Call Control properties	4.4.0	5.0.0 5.0.0
Jun 2002 Jun 2002		NP-020187		[Correction of Multi-Party Call Control properties Correcting the sequence diagram descriptions in GCC and MPCC	4.4.0	
Jun 2002 Jun 2002	CN_16 CN_16	NP-020187		Ε-	Correcting the sequence diagram descriptions in GCC and MPCC Correcting erroneous description of UI behaviour in call control	4.4.0	5.0.0 5.0.0
Juli 2002	CIN_ID	INC-02018/	บอา	1-	Correcting erroneous description of Of behaviour in call control	4.4.0	5.0.0

Jun 2002	CN_16	NP-020187	052	-	Correcting the descriptions of sequence diagrams that don't match the diagram	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	053	-	Correcting erroneous references to GCC in MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	054	-	Addition of the Multi-media APIs to Call control SCF (29.198-4)	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	055	-	Updating Clause 4 for Release 5	4.4.0	5.0.0
Jun 2002	CN_16	NP-020188	056	-	Spliting of 29.198-04 into 4 separate TSs (sub-parts)	4.4.0	5.0.0
Sep 2002	CN_17	NP-020431	001		29.198-04-3 Correction of error in Call Forward on Busy sequence diagram	5.0.0	5.1.0
Sep 2002	CN_17	NP-020431	002		Correct inconsistencies in IpCallLeg state transition diagrams	5.0.0	5.1.0
Sep 2002	CN_17	NP-020431	003		Clarification of the overlapping criteria definition and eventType mapping to IN TDPs	5.0.0	5.1.0
Sep 2002	CN_17	NP-020431	004		Add support for Carrier selection	5.0.0	5.1.0
Sep 2002	CN_17	NP-020431	005		Correction on use of NULL in Call Control API	5.0.0	5.1.0
Sep 2002	CN_17	NP-020395	006		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0
Mar 2003	CN_19	NP-030031	007		Correction of status of MPCC methods	5.1.0	5.2.0
Mar 2003	CN_19	NP-030031	800		Inconsistent description of use of secondary callback	5.1.0	5.2.0
Mar 2003	CN_19	NP-030020	009		Correction to TpReleaseCauseSet in Multi Party Call Control IDL	5.1.0	5.2.0
Mar 2003	CN_19	NP-030130	010		Correction of definition of the P_MAX_CALLLEGS_PER_CALL	5.1.0	5.2.0
Jun 2003	CN_20	NP-030238	011		Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Sep 2003	CN_21	NP-030352	014		Correction to Java Realisation Annex	5.3.0	5.4.0
Dec 2003	CN_22	NP-030544	015		Correction of description in superviseRes	5.4.0	5.5.0
Dec 2003	CN_22	NP-030550	016		Correction of description of TpNotificationRequestedSetEntry	5.4.0	5.5.0
Apr 2004	CN_23bis	NP-040155	020		Correct Java Code to conform with Java Rulebook in TS 29.198-01 and to remove errors	5.5.0	5.6.0

For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the \mathbb{K} symbols.

Proposed change affects: UICC apps# ME Radio Access Network Core Network X Title: ★ Correct the P TRIGGERING ADDRESSES service property **CN5 Ultan Mulligan, ETSI PTCC** Source: Work item code:

SA1 Date: % 14/05/2004 Category: \mathfrak{R} Release:

REL-6 Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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 Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5)

Reason for change:
The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing.

There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.

Rel-6

(Release 6)

Summary of change: ₩

Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan.

Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported.

Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE SET service property type.

Deprecate P_TRIGGERING_ADDRESSES as it is replaced by

P NOTIFICATION ADDRESS RANGES.

Consequences if not approved:

The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected:	第 8.1
Other specs affected:	Y N X Other core specifications X Test specifications O&M Specifications
Other comments:	# This is a mirror CR to the Rel-4 CR in N5-040252.

8 Multi-Party Call Control Service Properties

8.1 List of Service Properties

The following table lists properties relevant for the MPCC API.

Property	Туре	Description / Interpretation
P_TRIGGERING_EVENT_TYPES	INTEGER_SET	Indicates the static event types supported by the SCS. Static events are the events by which applications are initiated.
P_DYNAMIC_EVENT_TYPES	INTEGER_SET	Indicates the dynamic event types supported by the SCS. Dynamic events are the events the application can request for during the context of a call.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plan (defined in TpAddressPlan.) e.g. {P_ADDRESS_PLAN_E164, P_ADDRESS_PLAN_IP}). Note that more than one address plan may be supported.
P_UI_CALL_BASED	BOOLEAN_SET	Value = TRUE: User interaction can be performed on call level and a reference to a Call object can be used in the IpUIManager.createUICall() operation. Value = FALSE: No User interaction on call level is supported.
P_UI_AT_ALL_STAGES	BOOLEAN_SET	Value = TRUE: User Interaction can be performed at any stage during a call . Value = FALSE: User Interaction can be performed in case there is only one party in the call.
P_MEDIA_TYPE	INTEGER_SET	Specifies the media type used by the Service. Values are defined by data- type TpMediaType : P_AUDIO, P_VIDEO, P_DATA
P_MAX_CALLLEGS_PER_CALL	INTEGER_SET	Indicates the maximum number of legs in a call for which a connection to a call party exists in the network. The enforcement of this property is done only when a leg is created or routed by the application.
P_UI_CALLLEG_BASED	BOOLEAN_SET	Value = TRUE : User interaction can be performed on leg level and a reference to a CallLeg object can be used in the IpUIManager.createUICall() operation. Value = FALSE : No user interaction on leg level is supported.
P_CALLLEG_PROPERTIES	STRING_SET	Indicates which of the user identity fields are available, valid values are given by TpCallLegPropertiesName.
P_PARALLEL_INITIAL_ROUTING_REQU ESTS	BOOLEAN_SET	Indicates whether for application initiated calls it is possible to issue multiple routing request methods in parallel or that the application has to wait for the result of the first request before another one can be invoked. Value = TRUE: Multiple routing requests can be invoked in parallel. Value = FALSE: Result of first request has to be received before another request can be issued.

The previous table lists properties related to capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number. See further explanation on which events are originating and which are terminating, below.
P_NOTIFICATION_ADDRESS_RAN GES	XML_ADDRESS_RANGE_SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_MONITOR_MODE	INTEGER_SET	Indicates whether the application is allowed to monitor in interrupt and/or notify mode. Set is: P_INTERRUPT P_NOTIFY
P_NUMBERS_TO_BE_CHANGED	INTEGER_SET	Indicates which numbers the application is allowed to change or fill for legs in an incoming call. Allowed value set: {P_ORIGINAL_CALLED_PARTY_NUMBER, P_REDIRECTING_NUMBER, P_TARGET_NUMBER, P_CALLING_PARTY_NUMBER}.
P_CHARGEPLAN_ALLOWED	INTEGER_SET	Indicates which charging is allowed in the setCallChargePlan indicator. Allowed values: {P_TRANSPARANT_CHARGING, P_CHARGE_PLAN}
P_CHARGEPLAN_MAPPING	INTEGER_INTEGER_MAP	Indicates the mapping of chargeplans (we assume they can be indicated with integers) to a logical network chargeplan indicator. When the chargeplan supports indicates P_CHARGE_PLAN then only chargeplans in this mapping are allowed.
P_HIGH_PROBABILITY_OF_COMP LETION	BOOLEAN_SET	Value = TRUE: high probability of call completion field can be set. Value = FALSE: high probability of call completion field can not be set. FALSE is the default value.

The following table explains how the P_TRIGGERING_ADDRESSES property that is inherited via the Generic Call Control properties should be interpreted with respect to which of the notifications apply to originating numbers and which of the notifications apply to terminating numbers.

P_CALL_EVENT_ORIGINATING_CALL_ATTEMPT	Originating
P_CALL_EVENT_ORIGINATING_CALL_ATTEMPT_AUTHORISED	Originating
P_CALL_EVENT_ADDRESS_COLLECTED	Originating
P_CALL_EVENT_ADDRESS_ANALYSED	Originating
P_CALL_EVENT_ORIGINATING_SERVICE_CODE	Originating
P_CALL_EVENT_ORIGINATING_RELEASE	Originating
P_CALL_EVENT_TERMINATING_CALL_ATTEMPT	Terminating
P_CALL_EVENT_TERMINATING_CALL_ATTEMPT_AUTHORISED	Terminating
P_CALL_EVENT_ALERTING	Terminating
P_CALL_EVENT_ANSWER	Terminating
P_CALL_EVENT_TERMINATING_RELEASE	Terminating
P_CALL_EVENT_REDIRECTED	Terminating
P_CALL_EVENT_TERMINATING_SERVICE_CODE	Terminating
P_CALL_EVENT_QUEUED	N/A

8.2 Service Property values for the CAMEL Service Environment.

Implementations of the MultiParty Call Control API relying on the CSE of CAMEL phase 4 shall have the Service Properties outlined above set to the indicated values :

```
P_OPERATION_SET = {
```

```
"IpMultiPartyCallControlManager.createCall",
"IpMultiPartyCallControlManager.createNotification",
"IpMultiPartyCallControlManager.destroyNotification",
\verb|`IpMultiPartyCallControlManager.changeNotification''|,\\
\verb|`IpMultiPartyCallControlManager.getNotification|'|
"IpMultiPartyCallControlManager.getNextNotification",
"IpMultiPartyCallControlManager.enableNotifications",
\verb|`IpMultiPartyCallControlManager.disableNotifications|'',
\verb|`IpMultiPartyCallControlManager.setCallLoadControl|''
"IpMultiPartyCall.getCallLegs",
"IpMultiPartyCall.createCallLeg"
"IpMultiPartyCall.createAndRouteCallLegReq",
"IpMultiPartyCall.release",
"IpMultiPartyCall.deassignCall",
"IpMultiPartyCall.getInfoReq",
"IpMultiPartyCall.setChargePlan",
"IpMultiPartyCall.setAdviceOfCharge",
"IpMultiPartyCall.superviseReq",
"IpCallLeg.routeReq",
"IpCallLeg.eventReportReq",
"IpCallLeg.release",
\verb|`IpCallLeg.getInfoReq''|\\
"IpCallLeg.getCall"
"IpCallLeg.continueProcessing"
P_TRIGGERING_EVENT_TYPES = {
P_CALL_EVENT_ADDRESS_COLLECTED,
P_CALL_EVENT_ADDRESS_ANALYSED,
P_CALL_EVENT_ORIGINATING_RELEASE,
P_CALL_EVENT_TERMINATING_CALL_ATTEMPT_AUTHORISED,
P_CALL_EVENT_TERMINATING_RELEASE
```

Note: P_CALL_EVENT_ORIGINATING_RELEASE only for the routing failure case, TpReleaseCause = P_ROUTING_FAILURE

```
P_DYNAMIC_EVENT_TYPES = {
P_CALL_EVENT_ALERTING,
P_CALL_EVENT_ANSWER,
P_CALL_EVENT_ORIGINATING_RELEASE,
P_CALL_EVENT_ORIGINATING_SERVICE_CODE,
P_CALL_EVENT_TERMINATING_RELEASE,
P_CALL_EVENT_TERMINATING_SERVICE_CODE
P_ADDRESS_PLAN = {
P_ADDRESS_PLAN_E164
P_UI_CALL_BASED = {
TRUE
P_UI_AT_ALL_STAGES = {
FALSE
P_MEDIA_TYPE = {
P_AUDIO
P_MAX_CALLLEGS_PER_CALL = {
2,
3.
4,
5,
6
P_UI_CALLLEG_BASED = {
TRUE
}
```

```
P_MEDIA_ATTACH_EXPLICIT = {
FALSE
}
```

Annex E (informative): Change history

					Change history		
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Mar 2001		NP-010134	047	-	CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0
June 2001		NP-010327			Approved at TSG CN#12 and placed under Change Control	2.0.0	4.0.0
Sep 2001		NP-010467			Changing references to JAIN	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	002		Correction of text descriptions for methods enableCallNotification and createNotification	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	003		Specify the behaviour when a call leg times out	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	004		Removal of Faulty state in MPCCS Call State Transition Diagram and	4.0.0	4.1.0
					method callFaultDetected in MPCCS in OSA R4		
Sep 2001	CN_13	NP-010467	005		Missing TpCallAppInfoSet description in OSA R4	4.0.0	4.1.0
Sep 2001			006		Redirecting a call leg vs. creating a call leg clarification in OSA R4	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	007		Introduction of MPCC Originating and Terminating Call Leg STDs for IpCallLeg	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	800		Corrections to SetChargePlan() Addition of PartyToCharge parmeter	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	009		Corrections to SetChargePlan()	4.0.0	4.1.0
Sep 2001		NP-010467	010		Remove distinction between final- and intermediate-report	4.0.0	4.1.0
Sep 2001		NP-010467	011		Inclusion of TpMediaType	4.0.0	4.1.0
Sep 2001		NP-010467	012		Corrections to GCC STD	4.0.0	4.1.0
Sep 2001		NP-010467	013		Introduction of sequence diagrams for MPCC services	4.0.0	4.1.0
Sep 2001		NP-010467	014		The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
Sep 2001		NP-010467	015		Corrections to SetCallChargePlan()	4.0.0	4.1.0
Sep 2001		NP-010467	016		Add one additional error indication	4.0.0	4.1.0
Sep 2001		NP-010467	017		Corrections to Call Control – GCCS Exception handling	4.0.0	4.1.0
Sep 2001			018		Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001		NP-010597	019		Replace Out Parameters with Return Types	4.1.0	4.2.0
Dec 2001	CN 14	NP-010597	020		Removal of time based charging property	4.1.0	4.2.0
Dec 2001			021		Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001		NP-010597	022		Correction of treatment datatype in superviseReg on call leg	4.1.0	4.2.0
Dec 2001	CN 14	NP-010597	023		Corrections to Call Control Data Types	4.1.0	4.2.0
Dec 2001		NP-010597	024		Correction to Call Control (CC)	4.1.0	4.2.0
Dec 2001		NP-010597	025		Amend the Generic Call Control introductory part	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	026		Correction in TpCallEventType	4.1.0	4.2.0
Dec 2001		NP-010597	027		Addition of missing description of RouteErr()	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	028		Misleading description of createAndRouteCallLegErr()	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	029		Correction to values of TpCallNotificationType, TpCallLoadControlMechanismType	4.1.0	4.2.0
Dec 2001	CN 14	NP-010695	030		Correction of method getLastRedirectionAddress	4.1.0	4.2.0
Mar 2002		NP-020106	031		Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.2.0	4.3.0
Mar 2002	CN 15	NP-020106	032		Correction of Event Subscription/Notification Data Type	4.2.0	4.3.0
Mar 2002		NP-020106	033		Correction of parameter name in IpCallLeg.routeReq() and in	4.2.0	4.3.0
	011 4-	115 000100			lpCallLeg.setAdviceOfCharge()		
Mar 2002		NP-020106			Clarification of ambiguous Event handling rules	4.2.0	4.3.0
Jun 2002		NP-020180			Correction to TpCallChargePlan	4.3.0	4.4.0
Jun 2002		NP-020180			Correction to CAMEL Service Property values	4.3.0	4.4.0
Jun 2002			037	-	Addition of support for Java API technology realisation	4.4.0	5.0.0
Jun 2002		NP-020182		-	Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002 Jun 2002		NP-020187		1	Addition of support for Emergency Telecommunications Service Addition of support for Network Controlled Notifications MPCC	4.4.0	5.0.0
Jun 2002 Jun 2002		NP-020183		Ε	Changes to getNotification()	4.4.0	5.0.0
Jun 2002 Jun 2002		NP-020187 NP-020187	041 042	Ε	Addition of P_UNSUPPORTED_MEDIA release cause to	4.4.0	5.0.0
					TpReleaseCause		
Jun 2002			043	-	Addition of CAMEL Phase 4 Service Property values	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	044	-	Addition of indication whether SCS supports initially multiple routeRegs in parallel	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	045	-	Explicit exception for continueProcessing when not in interrupted mode	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	046	-	Indication needed that supervision will be ended when call or callLeg is deassigned	4.4.0	5.0.0
Jun 2002	CN 16	NP-020187	047	-	Clarify ambiguous Supervision duration	4.4.0	5.0.0
Jun 2002		NP-020187		<u> </u>	Detach/Attach request illegal during pending Attach/Detach request	4.4.0	5.0.0
Jun 2002			049	 	Correction of Multi-Party Call Control properties	4.4.0	5.0.0
Jun 2002		NP-020187	050	-	Correcting the sequence diagram descriptions in GCC and MPCC	4.4.0	5.0.0
	10.1	1.4. 020107		1	1 2 2 2 2 19 110 2 2 4 2 5 110 2 4 14 14 17 10 14 14 14 17 17 17 17 17 17 17 17 17 17 17 17 17	1.7.0	0.0.0

Jun 2002	CN_16	NP-020187	052	-	Correcting the descriptions of sequence diagrams that don't match the diagram	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	053	-	Correcting erroneous references to GCC in MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	054	-	Addition of the Multi-media APIs to Call control SCF (29.198-4)	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	055	-	Updating Clause 4 for Release 5	4.4.0	5.0.0
Jun 2002	CN_16	NP-020188	056	-	Spliting of 29.198-04 into 4 separate TSs (sub-parts)	4.4.0	5.0.0
Sep 2002	CN_17	NP-020431	001		29.198-04-3 Correction of error in Call Forward on Busy sequence diagram	5.0.0	5.1.0
Sep 2002	CN_17	NP-020431	002		Correct inconsistencies in IpCallLeg state transition diagrams	5.0.0	5.1.0
Sep 2002	CN_17	NP-020431	003		Clarification of the overlapping criteria definition and eventType mapping to IN TDPs	5.0.0	5.1.0
Sep 2002	CN_17	NP-020431	004		Add support for Carrier selection	5.0.0	5.1.0
Sep 2002	CN_17	NP-020431	005		Correction on use of NULL in Call Control API	5.0.0	5.1.0
Sep 2002	CN_17	NP-020395	006		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0
Mar 2003	CN_19	NP-030031	007		Correction of status of MPCC methods	5.1.0	5.2.0
Mar 2003	CN_19	NP-030031	800		Inconsistent description of use of secondary callback	5.1.0	5.2.0
Mar 2003	CN_19	NP-030020	009		Correction to TpReleaseCauseSet in Multi Party Call Control IDL	5.1.0	5.2.0
Mar 2003	CN_19	NP-030130	010		Correction of definition of the P_MAX_CALLLEGS_PER_CALL	5.1.0	5.2.0
Jun 2003	CN_20	NP-030238	011		Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Jun 2003	CN_20	NP-030305	012	1	Unclear overlap criteria for rejection of createNotification	5.3.0	6.0.0
Jun 2003	CN_20	NP-030247	013		Add support for advanced subscriber presentation	5.3.0	6.0.0
Dec 2003	CN_22	NP-030550	017		Correction of description of TpNotificationRequestedSetEntry	6.0.0	6.1.0
Dec 2003	CN_22	NP-030553	019		Add OSA API support for 3GPP2 networks	6.0.0	6.1.0
							+

Detailed explanations of the above categories can

be found in 3GPP TR 21.900.

Meeting #27, Miami, FL, USA, 10-14 May 2004 CR-Form-v7 CHANGE REQUEST \mathfrak{R} 29.198-04 CR 068 Current version: **#rev** For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the **%** symbols. UICC apps# ME Radio Access Network Core Network X Proposed change affects: Title: ★ Correct the P TRIGGERING ADDRESSES service property 器 CN5 Ultan Mulligan, ETSI PTCC Source: Date: 第 14/05/2004 Category: \mathfrak{R} Release: # REL-4 Use one of the following categories: Use <u>one</u> of the following releases: F (correction) (GSM Phase 2) 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) (Release 1999) R99

Rel-4

Rel-5

Rel-6

(Release 4)

(Release 5)

(Release 6)

Reason for change: 第	The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.
Summary of change: 第	Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported. Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type. Deprecate P_TRIGGERING_ADDRESSES as it is replaced by P_NOTIFICATION_ADDRESS_RANGES.
Consequences if # not approved:	The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected: Other specs affected:	# 6.5 Y N X Other core specifications X Test specifications O&M Specifications
Other comments:	# Mirror CRs to this CR exist for Rel-5 and Rel-6 in N5-040253 to N5-040256

respectively.
Related Rel-4 CRs to TS 29.198-3, 5, 8, and 11 are in N5-040249, N5-040257, N5-040260 and N5-040263

Change in Clause 6.5

6.5 Generic Call Control Service Properties

6.5.1 List of Service Properties

The following table lists properties relevant for the GCC API.

Property	Туре	Description / Interpretation
P_TRIGGERING_EVENT_TYPES	INTEGER_SET	Indicates the static event types supported by the SCS. Static events are the events by which applications are initiated.
P_DYNAMIC_EVENT_TYPES	INTEGER_SET	Indicates the dynamic event types supported by the SCS. Dynamic events are the events the application can request for during the context of a call.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) e.g. {P_ADDRESS_PLAN_E164, P_ADDRESS_PLAN_IP}). Note that more than one address plan may be supported.
P_UI_CALL_BASED	BOOLEAN_SET	Value = TRUE: User interaction can be performed on call level and a reference to a Call object can be used in the IpUIManager.createUICall() operation.
		Value = FALSE: No User interaction on call level is supported.
P_UI_AT_ALL_STAGES	BOOLEAN_SET	Value = TRUE: User Interaction can be performed at any stage during a call.
		Value = FALSE: User Interaction can be performed in case there is only one party in the call.
P_MEDIA_TYPE	INTEGER_SET	Specifies the media type used by the Service. Values are defined by data-type TpMediaType : P_AUDIO, P_VIDEO, P_DATA

The previous table lists properties related to capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
P_NOTIFICATION_ADDRESS_RA NGES	XML_ADDRESS_RANGE_ SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_NOTIFICATION_TYPES	INTEGER_SET	Indicates whether the application is allowed to set originating and/or terminating triggers in the ECN. Set is: P_ORIGINATING P_TERMINATING
P_MONITOR_MODE	INTEGER_SET	Indicates whether the application is allowed to monitor in interrupt and/or notify mode. Set is:
		P_INTERRUPT P_NOTIFY
P_NUMBERS_TO_BE_CHANGED	INTEGER_SET	Indicates which numbers the application is allowed to change or fill for legs in an incoming call. Allowed value set:
		{P_ORIGINAL_CALLED_PARTY_NUMBER,
		P_REDIRECTING_NUMBER,
		P_TARGET_NUMBER,
		P_CALLING_PARTY_NUMBER}.
P_CHARGEPLAN_ALLOWED	INTEGER_SET	Indicates which charging is allowed in the setCallChargePlan indicator. Allowed values:
		{P_TRANSPARANT_CHARGING,
		P_CHARGE_PLAN}
P_CHARGEPLAN_MAPPING	INTEGER_INTEGER_MAP	Indicates the mapping of chargeplans (we assume they can be indicated with integers) to a logical network chargeplan indicator. When the chargeplan supports indicates P_CHARGE_PLAN then only chargeplans in this mapping are allowed.

6.5.2 Service Property values for the CAMEL Service Environment.

Implementations of the Generic Call Control API relying on the CSE of CAMEL phase 3 shall have the Service Properties outlined above set to the indicated values :

```
P_OPERATION_SET = {
"IpCallControlManager.enableCallNotification",
"IpCallControlManager.disableCallNotification",
"IpCallControlManager.changeCallNotification",
\verb"IpCallControlManager.getCriteria",\\
\verb|`IpCallControlManager.setCallLoadControl"|,\\
"IpCall.routeReq",
"IpCall.release",
"IpCall.deassignCall",
"IpCall.getCallInfoReq",
"IpCall.setCallChargePlan",
"IpCall.setAdviceOfCharge",
"IpCall.superviseCallReq"
P_TRIGGERING_EVENT_TYPES = {
P_EVENT_GCCS_ADDRESS_COLLECTED_EVENT,
P_EVENT_GCCS_ADDRESS_ANALYSED_EVENT,
P_EVENT_GCCS_CALLED_PARTY_BUSY,
P_EVENT_GCCS_CALLED_PARTY_UNREACHABLE,
P_EVENT_GCCS_NO_ANSWER_FROM_CALLED_PARTY,
P_EVENT_GCCS_ROUTE_SELECT_FAILURE
P_DYNAMIC_EVENT_TYPES = {
P CALL REPORT ANSWER,
P_CALL_REPORT_BUSY,
P_CALL_REPORT_NO_ANSWER,
P_CALL_REPORT_DISCONNECT,
P_CALL_REPORT_ROUTING_FAILURE,
P_CALL_REPORT_NOT_REACHABLE
P_ADDRESS_PLAN = {
P_ADDRESS_PLAN_E164
P_UI_CALL_BASED = {
TRUE
P_UI_AT_ALL_STAGES = {
FALSE
}
P_MEDIA_TYPE = {
P_AUDIO
```

End of Change in Clause 6.5

Annex B (informative): Change history

Date						Change history		·
Mar 2001 CN 11 NP-010134 O47 CR 29.198 for moving TS 29.198 from R99 to Rel 4 (NS-010158) 3.2.0 1. June 2001 CN 12 NP-010467 001 Changing references to JAIN 4.0.0 4.0	Date	TSG #	TSG Doc.	CR	Rev		Old	New
June 2001 CN 12 NP-010327			1		-			1.0.0
Sep 2001 CN_13 NP-010467 O02 Correction of text descriptions for methods enable CallNotification and 4.0.0 4 4.0.0 4 5 5 5 5 5 5 5 5 5		_		-				4.0.0
Sep 2001 CN 13 NP-010467 O3 Correction of text descriptions for methods enableCallNotification and 4.0.0 4 4.0.0 4 5 5 5 5 5 5 5 5 5				001				4.1.0
CreateNotification					1			4.1.0
Sep 2001 CN 13 NP-010467 005 Messing TpCallAppirIoSet description in OSA R4 4.0.0 4 4.		0.10		002				
Sep 2001 CN 13 NP-010467 005 Messing TpCallAppirIoSet description in OSA R4 4.0.0 4 4.	Sep 2001	CN 13	NP-010467	003			4.0.0	4.1.0
method calliFauliDetected in MPCCS in OSA R4								4.1.0
Sep 2001								
Sep 2001 CN_13 NP-010467 O75 Introduction of MPCC Originating and Terminating Call Leg STDs for 4.0.0 4	Sep 2001	CN 13	NP-010467	005			4.0.0	4.1.0
Sep 2001 CN_13 NP-010467 007								4.1.0
Dec Dec Dec Dec Dec Dec Dec								4.1.0
Sep 2001 CN 13 NP-010467 008 Corrections to SetChargePlan() Addition of PartyToCharge parmeter 4.0.0 4 Sep 2001 CN 13 NP-010467 010 Remove distinction between final- and intermediate-report 4.0.0 4 Sep 2001 CN 13 NP-010467 011 Inclusion of TpMediaType 4.0.0 4 Sep 2001 CN 13 NP-010467 012 Corrections to SetCos TD 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4.0.0 4 4 5 4.0.0 4								
Sep 2001 CN 13 NP-010467 009 - Corrections to SetChargePlan() 4.0.0 4 4 5 5 5 5 5 5 5 5	Sep 2001	CN 13	NP-010467	008			4.0.0	4.1.0
Sep 2001 CN 13 NP-010467 010 - Remove distinction between final- and intermediate-report 4.0.0 4.								4.1.0
Sep 2001 CN 13							1	4.1.0
Sep 2001 CN_13								4.1.0
Sep 2001 CN_13 NP-010467 013 Introduction of sequence diagrams for MPCC services 4.0.0 4 Sep 2001 CN_13 NP-010467 015 Corrections to SetCallChargePlan() 4.0.0 4 Sep 2001 CN_13 NP-010467 016 Add one additional error indication 4.0.0 4 Sep 2001 CN_13 NP-010467 016 Add one additional error indication 4.0.0 4 Sep 2001 CN_13 NP-010467 017 Corrections to Call Control - GCCS Exception handling 4.0.0 4 Sep 2001 CN_13 NP-010467 018 Corrections to Call Control - GCCS Exception handling 4.0.0 4 Sep 2001 CN_14 NP-010467 018 Corrections to Call Control - Errors in Exceptions 4.0.0 4 Sep 2001 CN_14 NP-010597 019 Replace Out Parameters with Return Types 4.1.0 4 Dec 2001 CN_14 NP-010597 020 Removal of time based charging property 4.1.0 4 Dec 2001 CN_14 NP-010597 021 Make attachMedia() and detachMedia() asynchronous 4.1.0 4 Dec 2001 CN_14 NP-010597 023 Corrections to Call Control Data Types 4.1.0 4 Dec 2001 CN_14 NP-010597 023 Correction to Call Control (CC) 4.1.0 4 Dec 2001 CN_14 NP-010597 024 Correction to Call Control (CC) 4.1.0 4 Dec 2001 CN_14 NP-010597 025 Amend the Generic Call Control introductory part 4.1.0 4 Dec 2001 CN_14 NP-010597 026 Correction in TpCallEventType 4.1.0 4 Dec 2001 CN_14 NP-010597 027 Addition of missing description of reateAndRouteCallLegErr() 4.1.0 4 Dec 2001 CN_14 NP-010597 027 Addition of missing description of reateAndRouteCallLegErr() 4.1.0 4 Dec 2001 CN_14 NP-010597 027 Addition of missing description of reateAndRouteCallLegErr() 4.1.0 4 Dec 2001 CN_14 NP-010597 027 Addition of missing description of reateAndRouteCallLegErr() 4.1.0 4 Dec 2001 CN_14 NP-010597 027 Addition of missing description of reateAnd								4.1.0
Sep 2001 CN_13 NP-010467 014								4.1.0
Sep 2001 CN_13 NP-010467 015 Corrections to SetCallChargePlan() 4.0.0 4								4.1.0
Sep 2001 CN_13 NP-010467 016 - Add one additional error indication 4.0.0 4 4 5 5 5 5 5 5 5 5								4.1.0
Sep 2001 CN_13 NP-010467 017					-		1	4.1.0
Sep 2001 CN_13 NP-010467 018 Corrections to Call Control - Errors in Exceptions 4.0.0 4.								4.1.0
Dec 2001 CN_14 NP-010597 O20								4.1.0
Dec 2001 CN_14 NP-010597 020 Removal of time based charging property 4.1.0 4.								4.2.0
Dec 2001 CN_14 NP-010597 021 Make attachMedia() and detachMedia() asynchronous 4.1.0 4.								
Dec 2001 CN_14 NP-010597 022 Correction of treatment datatype in superviseReq on call leg 4.1.0 4.								4.2.0
Dec 2001 CN_14 NP-010597 023 Corrections to Call Control Data Types 4.1.0 4.							1	4.2.0
Dec 2001 CN_14 NP-010597 024 Correction to Call Control (CC) 4.1.0 4.					!			4.2.0
Dec 2001 CN_14 NP-010597 025 Amend the Generic Call Control introductory part 4.1.0 4.					-			4.2.0
Dec 2001 CN_14 NP-010597 026 Correction in TpCallEventType 4.1.0 4.							1	4.2.0
Dec 2001 CN_14 NP-010597 027 Addition of missing description of RouteErr() 4.1.0 4.		_						4.2.0
Dec 2001 CN_14 NP-010597 028 Misleading description of createAndRouteCallLegErr() 4.1.0 4.								4.2.0
Dec 2001 CN_14 NP-010597 029 Correction to values of TpCallNotificationType, TpCallLoadControlMechanismType 4.1.0 4.								4.2.0
Dec 2001 CN_14 NP-010695 030 Correction of method getLastRedirectionAddress 4.1.0 4.								4.2.0
Dec 2001 CN_14 NP-010695 030 Correction of method getLastRedirectionAddress 4.1.0 4.	Dec 2001	CN_14	NP-010597	029			4.1.0	4.2.0
Mar 2002 CN_15 NP-020106 031	Dec 2001	CN_14	NP-010695	030			4.1.0	4.2.0
IpService.setCallback() and IpService.setCallbackWithSessionID()		CN 15		031			4.2.0	4.3.0
Mar 2002 CN_15 NP-020106 032 Correction of Event Subscription/Notification Data Type 4.2.0 4. A.0 4. A.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Mar 2002 CN_15 NP-020106 033 Correction of parameter name in IpCallLeg.routeReq() and in IpCallLeg.setAdviceOfCharge() 4.2.0	Mar 2002	CN_15	NP-020106	032			4.2.0	4.3.0
Mar 2002 CN_15 NP-020106 034 Clarification of ambiguous Event handling rules 4.2.0 4.	Mar 2002	CN_15	NP-020106	033			4.2.0	4.3.0
Mar 2002 CN_15 NP-020106 034 Clarification of ambiguous Event handling rules 4.2.0 4 Jun 2002 CN_16 NP-020180 035 Correction to TpCallChargePlan 4.3.0 4 Jun 2002 CN_16 NP-020180 036 Correction to CAMEL Service Property values 4.3.0 4 Sep 2002 CN_17 NP-020424 057 Correction on use of NULL in Call Control API 4.4.0 4 Mar 2003 CN_19 NP-030020 058 Correction of status of methods to interfaces in clause 6.3 4.5.0 4 Mar 2003 CN_19 NP-030020 059 Correction to TpReleaseCauseSet in Multi Party Call Control 4.5.0 4 Mar 2003 CN_19 NP-030020 060 Correction to Sequence Diagrams to remove incorrect Framework references 4.5.0 4 Mar 2003 CN_19 NP-030020 061 Correction to User Interaction Prepaid Sequence Diagrams 4.5.0 4 Mar 2003 CN_19								
Jun 2002 CN_16 NP-020180 036 Correction to CAMEL Service Property values 4.3.0 4 Sep 2002 CN_17 NP-020424 057 Correction on use of NULL in Call Control API 4.4.0 4 Mar 2003 CN_19 NP-030020 058 Correction of status of methods to interfaces in clause 6.3 4.5.0 4 Mar 2003 CN_19 NP-030020 059 Correction to TpReleaseCauseSet in Multi Party Call Control 4.5.0 4 Mar 2003 CN_19 NP-030020 060 Correction to Sequence Diagrams to remove incorrect Framework references 4.5.0 4 Mar 2003 CN_19 NP-030020 061 Correction to User Interaction Prepaid Sequence Diagrams 4.5.0 4 Mar 2003 CN_19 NP-030020 062 Correction to remove unused TpCallChargeOrder 4.5.0 4 Mar 2003 CN_19 NP-030020 063 Correction to TpCallEventCriteriaResult in Generic Call Control 4.5.0 4 Mar 2003	Mar 2002	CN_15	NP-020106	034			4.2.0	4.3.0
Jun 2002 CN_16 NP-020180 036 Correction to CAMEL Service Property values 4.3.0 4 Sep 2002 CN_17 NP-020424 057 Correction on use of NULL in Call Control API 4.4.0 4 Mar 2003 CN_19 NP-030020 058 Correction of status of methods to interfaces in clause 6.3 4.5.0 4 Mar 2003 CN_19 NP-030020 059 Correction to TpReleaseCauseSet in Multi Party Call Control 4.5.0 4 Mar 2003 CN_19 NP-030020 060 Correction to Sequence Diagrams to remove incorrect Framework references 4.5.0 4 Mar 2003 CN_19 NP-030020 061 Correction to User Interaction Prepaid Sequence Diagrams 4.5.0 4 Mar 2003 CN_19 NP-030020 062 Correction to remove unused TpCallChargeOrder 4.5.0 4 Mar 2003 CN_19 NP-030020 063 Correction to TpCallEventCriteriaResult in Generic Call Control 4.5.0 4 Mar 2003	Jun 2002	CN_16	NP-020180	035		Correction to TpCallChargePlan	4.3.0	4.4.0
Mar 2003 CN_19 NP-030020 058 Correction of status of methods to interfaces in clause 6.3 4.5.0 4.5.0 Mar 2003 CN_19 NP-030020 059 Correction to TpReleaseCauseSet in Multi Party Call Control 4.5.0 4.5.0 4.5.0 Mar 2003 CN_19 NP-030020 060 Correction to Sequence Diagrams to remove incorrect Framework references 4.5.0 4.5.0 Mar 2003 CN_19 NP-030020 061 Correction to User Interaction Prepaid Sequence Diagrams 4.5.0 4.5.0 Mar 2003 CN_19 NP-030020 062 Correction to remove unused TpCallChargeOrder 4.5.0 4.5.0 Mar 2003 CN_19 NP-030020 063 Correction to TpCallEventCriteriaResult in Generic Call Control 4.5.0 4.5.0 Mar 2003 CN_19 NP-030020 064 Correction of status of methods to interfaces in clause 7.3 4.5.0 4.5.0 Jun 2003 CN_20 NP-030238 065 Correction of the description for callEventNotify & reportNotification								4.4.0
Mar 2003 CN_19 NP-030020 058 Correction of status of methods to interfaces in clause 6.3 4.5.0						,		4.5.0
Mar 2003 CN_19 NP-030020 059 Correction to TpReleaseCauseSet in Multi Party Call Control 4.5.0								4.6.0
Mar 2003 CN_19 NP-030020 060 Correction to Sequence Diagrams to remove incorrect Framework references 4.5.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>4.6.0</td></th<>							1	4.6.0
References Ref					-			4.6.0
Mar 2003 CN_19 NP-030020 061 Correction to User Interaction Prepaid Sequence Diagrams 4.5.0 4 Mar 2003 CN_19 NP-030020 062 Correction to remove unused TpCallChargeOrder 4.5.0 4 Mar 2003 CN_19 NP-030020 063 Correction to TpCallEventCriteriaResult in Generic Call Control 4.5.0 4 Mar 2003 CN_19 NP-030020 064 Correction of status of methods to interfaces in clause 7.3 4.5.0 4 Jun 2003 CN_20 NP-030238 065 Correction of the description for callEventNotify & reportNotification 4.6.0 4	2000		333320					
Mar 2003 CN_19 NP-030020 062 Correction to remove unused TpCallChargeOrder 4.5.0 4.5	Mar 2003	CN 19	NP-030020	061			4.5.0	4.6.0
Mar 2003 CN_19 NP-030020 063 Correction to TpCallEventCriteriaResult in Generic Call Control 4.5.0 4 Mar 2003 CN_19 NP-030020 064 Correction of status of methods to interfaces in clause 7.3 4.5.0 4 Jun 2003 CN_20 NP-030238 065 Correction of the description for callEventNotify & reportNotification 4.6.0 4					-			4.6.0
Mar 2003 CN_19 NP-030020 064 Correction of status of methods to interfaces in clause 7.3 4.5.0 4. Jun 2003 CN_20 NP-030238 065 Correction of the description for callEventNotify & reportNotification 4.6.0 4.					-			4.6.0
Jun 2003 CN_20 NP-030238 065 Correction of the description for callEventNotify & reportNotification 4.6.0 4.								4.6.0
					1		1	4.7.0
Dec 2003 ON_22 INF-030344 U00 Correction of description in superviseres and superviseCaliRes 4.7.0 4.								
	Dec 2003	CIN_22	INP-030544	מסט		Correction of description in superviseries and superviseCallRes	4.7.0	4.8.0

Meeting #27, Miami, FL, USA, 10-14 May 2004 CR-Form-v7 CHANGE REQUEST \mathfrak{R} Current version: 29.198-05 CR 047 **#rev** 4.8.0 For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols. Core Network X Proposed change affects: UICC apps# ME Radio Access Network Title: ★ Correct the P TRIGGERING ADDRESSES service property 第 CN5 Ultan Mulligan, ETSI PTCC Source: Work item code: SA1 Date: % 14/05/2004 Category: \mathfrak{R} F Release: # REL-4 Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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 Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6) The Service Property P TRIGGERING ADDRESSES is used to identify the sets Reason for change: # of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS RANGE SET. This type doesn't exist, but ADDRESSRANGE SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties. Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES Summary of change: ₩ which is of service property type XML ADDRESS RANGE SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type. Deprecate P_TRIGGERING_ADDRESSES as it is replaced by P_NOTIFICATION_ADDRESS_RANGES. Consequences if The interoperability problems encountered will continue, with different vendors not approved: adopting their own interpretation of the meaning of these service properties. Clauses affected: ж 10 Ν \mathfrak{R} Other specs X Other core specifications TS 29.198-03, -04, -08, -11 affected: Test specifications **O&M Specifications** Other comments: \mathfrak{H} Mirror CRs to this CR exist for Rel-5 and Rel-6 in N5-040258 and N5-040259

Related Rel-4 CRs to TS 29.198-3, 4, 8, and 11 are in N5-040249, N5-040252,

respectively.

N5-040260 and N5-040263

10 Service Properties

10.1 User Interaction Service Properties

The following table lists properties relevant for the User Interaction API.

Property	Туре	Description
P_INFO_TYPE	INTEGER_SET	Specifies whether the UI SCS supports text or URLs etc. Allowed value set:
		{P_INFO_ID,
		P_URL,
		P_TEXT}

The previous table lists properties related to capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Specifies which numbers the notification may be set
P_SERVICE_CODE	INTEGER_SET	Specifies the service codes that may be used for notification requests.
P NOTIFICATION ADDRESS RANGES	XML ADDRESS RANGE SET	Indicates for which numbers notifications may be set. More than one range may be present.

Annex B (informative): Change history

	Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New	
Mar 2001	CN_11	NP-010134	047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	4.0.0	
Jun 2001	CN_12	NP-010330	001		Corrections to OSA API Rel4	4.0.0	4.1.0	
Sep 2001	CN_13	NP-010468	002		Changing references to JAIN	4.1.0	4.2.0	
Dec 2001	CN_14	NP-010598	003		Replace Out Parameters with Return Types	4.2.0	4.3.0	
Dec 2001	CN_14	NP-010598	004		Correction of description of sendInfoRes()	4.2.0	4.3.0	
Dec 2001	CN_14	NP-010598	005		Correction to handling of deassign on related object	4.2.0	4.3.0	
Dec 2001	CN_14	NP-010598	006		Correction to Exceptions Raised in UI	4.2.0	4.3.0	
Dec 2001	CN_14	NP-010598	007		Correction to values of TpUIInfoType	4.2.0	4.3.0	
Mar 2002	CN_15	NP-020107	800		Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.3.0	4.4.0	
Sep 2002	CN_17	NP-020425	016		Correction on use of NULL in User Interaction API	4.4.0	4.5.0	
Sep 2002	CN_17	NP-020425	017		orrection to TpUlInfo data type to support binary data for SMS ervices		4.5.0	
Mar 2003	CN_19	NP-030021	022		Correction to User Interaction Prepaid Sequence Diagrams	4.5.0	4.6.0	
Mar 2003	CN_19	NP-030021	024		orrection to getNotification to remove _INVALID_CRITERIA exception		4.6.0	
Mar 2003	CN_19	NP-030021	026		Inconsistent description of use of secondary callback	4.5.0	4.6.0	
Mar 2003	CN_19	NP-030021	027		rection of status of methods to User Interaction interfaces		4.6.0	
Mar 2003	CN_19	NP-030021	030		rrections to User Interaction		4.6.0	
Mar 2003	CN_19	NP-030021	032		prrection of User Interaction Event Notification to support non text accordings		4.6.0	
Jun 2003	CN_20	NP-030238	034		Correction of the description for callEventNotify & reportNotification	4.6.0	4.7.0	
Dec 2003	CN_22	NP-030545	040		Correction to UI service responseRequested logic		4.8.0	

joint-API-group (Parlay, ETSI Project OSA, 3GPP TSG_CN WG5) N5-040258 Meeting #27, Miami, FL, USA, 10-14 May 2004 CR-Form-v7 CHANGE REQUEST \mathfrak{R} Current version: 29.198-05 CR 048 **#rev** For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols. Proposed change affects: UICC apps# ME Radio Access Network Core Network X Title: ★ Correct the P TRIGGERING ADDRESSES service property 第 CN5 Ultan Mulligan, ETSI PTCC Source: Work item code: SA1 Date: % 14/05/2004 Category: \mathfrak{R} Release: REL-5 Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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 Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6) The Service Property P TRIGGERING ADDRESSES is used to identify the sets Reason for change: # of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS RANGE SET. This type doesn't exist, but ADDRESSRANGE SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties. Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES Summary of change: ₩ which is of service property type XML ADDRESS RANGE SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type. Deprecate P_TRIGGERING_ADDRESSES as it is replaced by P_NOTIFICATION_ADDRESS_RANGES. Consequences if The interoperability problems encountered will continue, with different vendors not approved: adopting their own interpretation of the meaning of these service properties.

Clauses affected:	光 10
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications O&M Specifications
Other comments:	# This is a mirror CR to the Rel-4 CR in N5-040257. Related Rel-5 CRs to TS 29.198-3, 4-2, -4-3, 8, and 11 are in N5-040250, N5-040253, N5-040255, N5-040261 and N5-040264

10 Service Properties

10.1 User Interaction Service Properties

The following table lists properties relevant for the User Interaction API.

Property	Туре	Description
P_INFO_TYPE	INTEGER_SET	Specifies whether the UI SCS supports text or URLs etc. Allowed value set:
		{P_INFO_ID,
		P_URL,
		P_TEXT}

The previous table lists properties related to capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Specifies which numbers the notification may be set
P_SERVICE_CODE	INTEGER_SET	Specifies the service codes that may be used for notification requests.
P NOTIFICATION ADDRESS RANGES	XML ADDRESS RANGE SET	Indicates for which numbers notifications may be set. More than one range may be present.

Annex D (informative): Change history

	Change history						
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Mar 2001	CN_11	NP-010134	047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	4.0.0
Jun 2001	CN_12	NP-010330	001		Corrections to OSA API Rel4	4.0.0	4.1.0
Sep 2001	CN_13	NP-010468	002		Changing references to JAIN	4.1.0	4.2.0
Dec 2001	CN_14	NP-010598	003		Replace Out Parameters with Return Types	4.2.0	4.3.0
Dec 2001	CN_14	NP-010598	004		Correction of description of sendInfoRes()	4.2.0	4.3.0
Dec 2001	CN_14	NP-010598	005		Correction to handling of deassign on related object	4.2.0	4.3.0
Dec 2001	CN_14	NP-010598	006		Correction to Exceptions Raised in UI	4.2.0	4.3.0
Dec 2001	CN_14	NP-010598	007		Correction to values of TpUIInfoType	4.2.0	4.3.0
Mar 2002	CN_15	NP-020107	800		Add P_INVALID_INTERFACE_TYPE exception to	4.3.0	4.4.0
					IpService.setCallback() and IpService.setCallbackWithSessionID()		
Jun 2002	CN_16	NP-020181	009		Addition of support for Java API technology realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020189	010		Improve the vague description of P_ID_NOT_FOUND	4.4.0	5.0.0
Jun 2002	CN_16	NP-020182	011		Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020189	012		Detach call leg before playing announcement or collecting digits	4.4.0	5.0.0
Jun 2002	CN_16	NP-020189	013		Delete P_INVALID_CRITERIA from sendInfoAndCollectReq()	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	014		Addition of Support for Network Controlled Notifications UI	4.4.0	5.0.0
Jun 2002	CN_16	NP-020189	015		Correcting erroneous description of UI behaviour in call control	4.4.0	5.0.0
Sep 2002	CN_17	NP-020432	018		Add text to clarify requirements on support of methods	5.0.0	5.1.0
Sep 2002	CN_17	NP-020432	019		Correction on use of NULL in User Interaction API	5.0.0	5.1.0
Sep 2002	CN_17	NP-020432	020		Correction to TpUIInfo data type to support binary data for SMS ervices		5.1.0
Sep 2002	CN_17	NP-020395	021		ld text to clarify relationship between 3GPP and ETSI/Parlay OSA ecifications		5.1.0
Mar 2003	CN 19	NP-030021	023		Correction to User Interaction Prepaid Sequence Diagrams	5.1.0	5.2.0
Mar 2003	CN_19	NP-030021	025		rrection to getNotification to remove P_INVALID_CRITERIA ception		5.2.0
Mar 2003	CN_19	NP-030021	028		Addition of status of methods to User Interaction interfaces	5.1.0	5.2.0
Mar 2003	CN_19	NP-030021	031		prrections to User Interaction		5.2.0
Mar 2003	CN_19	NP-030021	033		Correction of User Interaction Event Notification to support non text encodings	5.1.0	5.2.0
Mar 2003	CN_19	NP-030033	029		Inconsistent description of use of secondary callback	5.1.0	5.2.0
Jun 2003	CN 20	NP-030238	035		Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Jun 2003	CN_20	NP-030244	036		Clarify IpUI sendInfoReq()	5.2.0	5.3.0
Jun 2003	CN 20	NP-030244			Update TpUIInfo for consistency with GMS capabilities	5.2.0	5.3.0
Jun 2003	CN 20	NP-030299		1	Specifying the origin of a GUI message	5.2.0	5.3.0
Sep 2003	CN_21	NP-030352			Correction to Java Realisation Annex	5.3.0	5.4.0
Dec 2003	CN_22	NP-030545	041		Correction to UI service responseRequested logic	5.4.0	5.5.0
Apr 2004	CN_23bis	NP-040155	045		Correct Java Code to conform with Java Rulebook in TS 29.198-01 and to remove errors	5.5.0	5.6.0

joint-API-group (Parlay, ETSI Project OSA, 3GPP TSG_CN WG5) N5-040259 Meeting #27, Miami, FL, USA, 10-14 May 2004 CR-Form-v7 CHANGE REQUEST \mathfrak{R} Current version: 29.198-05 CR 049 **#rev** For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols. Proposed change affects: UICC apps# ME Radio Access Network Core Network X Title: ★ Correct the P TRIGGERING ADDRESSES service property **CN5 Ultan Mulligan, ETSI PTCC** Source: Work item code: SA1 Date: % 14/05/2004 Category: \mathfrak{R} Release: REL-6 Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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) (Release 1999) R99 Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6) The Service Property P TRIGGERING ADDRESSES is used to identify the sets Reason for change: # of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS RANGE SET. This type doesn't exist, but ADDRESSRANGE SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties. Summary of change: ₩ Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML ADDRESS RANGE SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the definition of P_TRIGGERING_ADDRESSES to refer to the

	ADDRESSRANGE_SET service property type. Deprecate P_TRIGGERING_ADDRESSES as it is replaced by P_NOTIFICATION_ADDRESS_RANGES.					
Consequences if not approved:	# The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.					
Clauses affected:	光 10					
Other specs affected:	Y N X Other core specifications X Test specifications O&M Specifications O&M Specifications					
Other comments:	# This is a mirror CR to the Rel-4 CR in N5-040257. Related Rel-6 CRs to TS 29.198-3, 4-2, -4-3, 8, and 11 are in N5-040251, N5-040254, N5-040256, N5-040262 and N5-040265					

10 Service Properties

10.1 User Interaction Service Properties

The following table lists properties relevant for the User Interaction API.

Property	Type	Description
P_INFO_TYPE		Specifies whether the UI SCS supports text or URLs etc. Allowed values are defined by TpUIInfoType.
P_SPEECH_RECOGNITION_SUPPORTED	BOOLEAN	Value: TRUE when the speech recognition features are supported

The previous table lists properties related to capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Specifies which numbers the notification may be set
P_SERVICE_CODE	INTEGER_SET	Specifies the service codes that may be used for notification requests.
P_NOTIFICATION_ADDRESS_RANGES	XML_ADDRESS_RANGE_SET	Indicates for which numbers notifications may be set. More than one range may be present.

Annex E (informative): Change history

	Change history						
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Mar 2001	CN_11	NP-010134	047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	4.0.0
Jun 2001	CN_12	NP-010330	001		Corrections to OSA API Rel4	4.0.0	4.1.0
Sep 2001	CN_13	NP-010468	002		Changing references to JAIN	4.1.0	4.2.0
Dec 2001	CN_14	NP-010598	003		Replace Out Parameters with Return Types	4.2.0	4.3.0
Dec 2001	CN_14	NP-010598	004		rrection of description of sendInfoRes()		4.3.0
Dec 2001	CN_14	NP-010598	005		Correction to handling of deassign on related object	4.2.0	4.3.0
Dec 2001	CN_14	NP-010598	006		Correction to Exceptions Raised in UI	4.2.0	4.3.0
Dec 2001	CN_14	NP-010598	007		Correction to values of TpUIInfoType	4.2.0	4.3.0
Mar 2002	CN_15	NP-020107	800		Add P_INVALID_INTERFACE_TYPE exception to	4.3.0	4.4.0
	_				IpService.setCallback() and IpService.setCallbackWithSessionID()		
Jun 2002	CN_16	NP-020181	009		Addition of support for Java API technology realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020189	010		Improve the vague description of P_ID_NOT_FOUND	4.4.0	5.0.0
Jun 2002	CN_16	NP-020182	011		Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020189	012		Detach call leg before playing announcement or collecting digits	4.4.0	5.0.0
Jun 2002	CN_16	NP-020189	013		Delete P_INVALID_CRITERIA from sendInfoAndCollectReq()	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	014		Addition of Support for Network Controlled Notifications UI	4.4.0	5.0.0
Jun 2002	CN_16	NP-020189	015		Correcting erroneous description of UI behaviour in call control	4.4.0	5.0.0
Sep 2002	CN_17	NP-020432	018		Add text to clarify requirements on support of methods	5.0.0	5.1.0
Sep 2002	CN 17	NP-020432	019		Correction on use of NULL in User Interaction API	5.0.0	5.1.0
Sep 2002	CN_17	NP-020432	020		Correction to TpUIInfo data type to support binary data for SMS	5.0.0	5.1.0
					services		
Sep 2002	CN_17	NP-020395	021		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA	5.0.0	5.1.0
					specifications	ļ	
Mar 2003	CN_19	NP-030021	023		Correction to User Interaction Prepaid Sequence Diagrams	5.1.0	5.2.0
Mar 2003	CN_19	NP-030021	025		Correction to getNotification to remove P_INVALID_CRITERIA exception	5.1.0	5.2.0
Mar 2003	CN_19	NP-030021	028		Addition of status of methods to User Interaction interfaces	5.1.0	5.2.0
Mar 2003	CN_19	NP-030021	031		Corrections to User Interaction	5.1.0	5.2.0
Mar 2003	CN_19	NP-030021	033		Correction of User Interaction Event Notification to support non text	5.1.0	5.2.0
					encodings		
Mar 2003	CN_19	NP-030033	029		Inconsistent description of use of secondary callback	5.1.0	5.2.0
Jun 2003	CN_20	NP-030238	035		Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Jun 2003	CN_20	NP-030244	036		Clarify IpUI sendInfoReg()	5.2.0	5.3.0
Jun 2003	CN 20	NP-030244	037		Update TpUIInfo for consistency with GMS capabilities	5.2.0	5.3.0
Jun 2003	CN_20	NP-030299	038	1	Specifying the origin of a GUI message	5.2.0	5.3.0
Sep 2003	CN_21	NP-030352	039		Correction to Java Realisation Annex	5.3.0	5.4.0
Dec 2003	CN_22	NP-030545	041		Correction to UI service responseRequested logic	5.4.0	5.5.0
Dec 2003	CN 22	NP-030553	042		Add OSA API support for 3GPP2 networks	5.5.0	6.0.0
Dec 2003	CN 22	NP-030554	043	l	Improve User Interaction message management functions	5.5.0	6.0.0
Dec 2003	CN_22	NP-030555	044		Add speech recognition/synthesis capability to the Generic User	5.5.0	6.0.0
Feb 2004					Interaction Added Java code attachment 2919805J2EE.zip which was delivered late by outside developers. See Annex C.	6.0.0	6.0.1

Meeting #27, Miami, FL, USA, 10-14 May 2004 CR-Form-v7 CHANGE REQUEST \mathfrak{R} Current version: 29.198-08 CR 029 **#rev** For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols. UICC apps# ME Radio Access Network Core Network X Proposed change affects: Title: ★ Correct the P TRIGGERING ADDRESSES service property 器 CN5 Ultan Mulligan, ETSI PTCC Source: Date: 第 14/05/2004 Category: \mathfrak{R} Release: # REL-4 Use one of the following categories: Use <u>one</u> of the following releases: F (correction) (GSM Phase 2) 2

A (corresponds to a correction in an earlier release)

B (addition of feature).

D (editorial modification)

be found in 3GPP TR 21.900.

C (functional modification of feature)

Detailed explanations of the above categories can

R96

R97

R98

R99

Rel-4

Rel-5

Rel-6

(Release 1996)

(Release 1997)

(Release 1998)

(Release 1999)

(Release 4)

(Release 5)

(Release 6)

Reason for change: #	The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.
Summary of change: #	Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported. Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type. Deprecate P_TRIGGERING_ADDRESSES as it is replaced by P_NOTIFICATION_ADDRESS_RANGES.
Consequences if	The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected: Other specs affected:	# 10 Y N
Other comments:	# Mirror CRs to this CR exist for Rel-5 and Rel-6 in N5-040261 and N5-040262

respectively.
Related Rel-4 CRs to TS 29.198-3, 4, 5, and 11 are in N5-040249, N5-040252, N5-040257 and N5-040263

10 Data Session Control Service Properties

The following table lists properties relevant for the Data Session Control API.

Property	Туре	Description/Interpretation
P_TRIGGERING_EVENT_TYPES	INTEGER_SET	Indicates the static event types supported by the SCS. Static events are the events by which applications are initiated.
P_DYNAMIC_EVENT_TYPES	INTEGER_SET	Indicates the dynamic event types supported by the SCS. Dynamic events are the events the application can request for during the context of a call.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) E.g. P_ADDRESS_PLAN_IP. Note that more than one address plan may be supported.

The previous table lists properties related to the capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS

Property	Туре	Description/Interpretation
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
P_NOTIFICATION_ADDRESS_RANGES	XML ADDRESS RANGE SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_MONITOR_MODE	INTEGER_SET	Indicates whether the application is allowed to monitor in interrupt and/or notify mode. Set is: P_INTERRUPT P_NOTIFY
P_NUMBERS_TO_BE_CHANGED	INTEGER_SET	Indicates which numbers the application is allowed to change or fill for legs in an incoming call. Allowed value set: {P_TARGET_NUMBER}.
P_CHARGEPLAN_ALLOWED	INTEGER_SET	Indicates which charging is allowed in the setDataSessionChargePlan indicator. Allowed values: {P_CHARGE_PER_VOLUME, P_TRANSPARANT_CHARGING, P_CHARGE_PLAN}
P_CHARGEPLAN_MAPPING	INTEGER_INTEGER_MAP	Indicates the mapping of charge plans (we assume they can be indicated with integers) to a logical network charge plan indicator. When the P_CHARGEPLAN_ALLOWED property indicates P_CHARGE_PLAN, then only charge plans in this mapping are allowed.
P_CURRENCY_ALLOWED	STRING_SET	Indicates the currencies that are allowed to be set for the charge plan in the setDataSessionChargePlan. The valid values for the string set are according to ISO-4217:1995. E.g. {"EUR", "NLG"}.

Annex B (informative): Change history

	Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New	
Mar 2001	CN_11	NP-010134	047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0	
Jun 2001	CN_12	NP-010330	001		Corrections to OSA API Rel4	4.0.0	4.1.0	
Sep 2001	CN_13	NP-010471	002		Changing references to JAIN	4.1.0	4.2.0	
Dec 2001	CN_14	NP-010601	003		Replace Out Parameters with Return Types	4.2.0	4.3.0	
Dec 2001	CN_14	NP-010601	004		Corrections and alignment additions to the Data Session Control SCF	4.2.0	4.3.0	
Mar 2002	CN_15	NP-020110	005		Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.3.0	4.4.0	
Sep 2002	CN_17	NP-020426	009		Introduce new method getNotifications to correct the result type of IpDataSessionControlManager.getNotification() to permit retreival of all created notifications.	4.4.0	4.5.0	
Sep 2002	CN_17	NP-020426	010		Correction on use of NULL in Data Session Control API	4.4.0	4.5.0	
Mar 2003	CN_19	NP-030024	018		Correction of status of methods to Data Session Control interfaces	4.5.0	4.6.0	
Mar 2003	CN_19	NP-030024	020		Corrections to Data Session Control Types	4.5.0	4.6.0	
Jun 2003	CN_20	NP-030238	024		Correction of the description for callEventNotify & reportNotification	4.6.0	4.7.0	

Meeting #27, Miami, FL, USA, 10-14 May 2004 CR-Form-v7 CHANGE REQUEST \mathfrak{R} 29.198-08 CR 030 Current version: **#rev** For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols. UICC apps# ME Radio Access Network Core Network X Proposed change affects: Title: ★ Correct the P TRIGGERING ADDRESSES service property Source: 器 CN5 Ultan Mulligan, ETSI PTCC Date: 第 14/05/2004 Category: \mathfrak{R} Release: REL-5 Use one of the following categories: Use <u>one</u> of the following releases: F (correction) (GSM Phase 2) 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) (Release 1999) R99 Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5)

Rel-6

(Release 6)

Reason for change: #	The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.
Summary of change: #	Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported. Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type. Deprecate P_TRIGGERING_ADDRESSES as it is replaced by P_NOTIFICATION_ADDRESS_RANGES.
Consequences if # not approved:	The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected:	第 10
Other specs affected:	Y N X Other core specifications X Test specifications O&M Specifications T S 29.198-03, -04-2, -04-3, -05, -11 TOWN TOWN TOWN TOWN TOWN TOWN TOWN TOWN
Other comments:	# This is a mirror CR to the Rel-4 CR in N5-040260.

Related Rel-5 CRs to TS 29.198-3, 4-2, -4-3, 5, and 11 are in N5-040250, N5-040253, N5-040255, N5-040258 and N5-040264

10 Data Session Control Service Properties

The following table lists properties relevant for the Data Session Control API.

Property	Туре	Description/Interpretation
P_TRIGGERING_EVENT_TYPES	INTEGER_SET	Indicates the static event types supported by the SCS. Static events are the events by which applications are initiated.
P_DYNAMIC_EVENT_TYPES	INTEGER_SET	Indicates the dynamic event types supported by the SCS. Dynamic events are the events the application can request for during the context of a call.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) E.g. P_ADDRESS_PLAN_IP. Note that more than one address plan may be supported.

The previous table lists properties related to the capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description/Interpretation
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
P_NOTIFICATION_ADDRESS_RANGES	XML ADDRESS RANGE SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_MONITOR_MODE	INTEGER_SET	Indicates whether the application is allowed to monitor in interrupt and/or notify mode. Set is: P_INTERRUPT P_NOTIFY
P_NUMBERS_TO_BE_CHANGED	INTEGER_SET	Indicates which numbers the application is allowed to change or fill for legs in an incoming call. Allowed value set: {P_TARGET_NUMBER}.
P_CHARGEPLAN_ALLOWED	INTEGER_SET	Indicates which charging is allowed in the setDataSessionChargePlan indicator. Allowed values: {P_CHARGE_PER_VOLUME, P_TRANSPARANT_CHARGING, P_CHARGE_PLAN}
P_CHARGEPLAN_MAPPING	INTEGER_INTEGER_MAP	Indicates the mapping of charge plans (we assume they can be indicated with integers) to a logical network charge plan indicator. When the P_CHARGEPLAN_ALLOWED property indicates P_CHARGE_PLAN, then only charge plans in this mapping are allowed.
P_CURRENCY_ALLOWED	STRING_SET	Indicates the currencies that are allowed to be set for the charge plan in the setDataSessionChargePlan. The valid values for the string set are according to ISO-4217:1995. E.g. {"EUR", "NLG"}.

Annex D (informative): Change history

	Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New	
Mar 2001	CN_11	NP-010134	047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0	
Jun 2001	CN_12	NP-010330	001		Corrections to OSA API Rel4	4.0.0	4.1.0	
Sep 2001	CN_13	NP-010471	002		Changing references to JAIN	4.1.0	4.2.0	
Dec 2001	CN_14	NP-010601	003		Replace Out Parameters with Return Types	4.2.0	4.3.0	
Dec 2001	CN_14	NP-010601	004		Corrections and alignment additions to the Data Session Control SCF	4.2.0	4.3.0	
Mar 2002	CN_15	NP-020110	005		Add P_INVALID_INTERFACE_TYPE exception to	4.3.0	4.4.0	
					IpService.setCallback() and IpService.setCallbackWithSessionID()			
Jun 2002	CN_16	NP-020182	006		Addition of support for WSDL realisation	4.4.0	5.0.0	
Jun 2002	CN_16	NP-020183	007		Addition of Support for Network Controlled Notifications DSC	4.4.0	5.0.0	
Jun 2002	CN_16	NP-020192	800		Adding missing text concerning the activity timer and criteria overlap	4.4.0	5.0.0	
Sep 2002	CN_17	NP-020435	011		Remove duplicate exception from	5.0.0	5.1.0	
					IpDataSessionControlManager.createNotification()			
Sep 2002	CN_17	NP-020435	012		Remove P_SERVICE_INFORMATION_MISSING and	5.0.0	5.1.0	
					P_SERVICE_FAULT_ENCOUNTERED exceptions			
					from_DataSessionControl methods.			
Sep 2002	CN_17	NP-020435	013		Introduce new method getNotifications to correct the result type of	5.0.0	5.1.0	
					IpDataSessionControlManager.getNotification() to permit retreival of			
					all created notifications.			
Sep 2002	CN_17	NP-020435	014		Add P_INVALID_INTERFACE_TYPE exception to	5.0.0	5.1.0	
					IpDataSessionControlManager.createNotification(), resulting in new			
C-= 2000	CN 47	ND 000405	045		createNotifications() method	F 0 0	F 4 0	
Sep 2002	CN_17	NP-020435			Add text to clarify requirements on support of methods	5.0.0	5.1.0	
Sep 2002	CN_17	NP-020435			Correction on use of NULL in Data Session Control API	5.0.0	5.1.0	
Sep 2002	CN_17	NP-020395	017		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA	5.0.0	5.1.0	
Mar 2003	CN 19	NP-030024	019		specifications Addition of status of methods to Data Session Control interfaces	F 1 0	5.2.0	
						5.1.0		
Mar 2003 Mar 2003	CN_19	NP-030024 NP-030034	021		Corrections to data types in Data Session Control	5.1.0	5.2.0	
	CN_19				Inconsistent description of use of secondary callback	5.1.0		
Mar 2003	CN_19	NP-030034	023		Promotion of TpDataSessionQosClass data type definition to the	5.1.0	5.2.0	
Jun 2003	CN 20	NP-030238	025		Common Data Types	5.2.0	5.3.0	
	CN_20	NP-030236			Correction of the description for callEventNotify & reportNotification Correction to Java Realisation Annex	5.3.0	5.4.0	
Sep 2003 Apr 2004		NP-030352 NP-040155			Correct Java Code to conform with Java Rulebook in TS 29.198-01	5.4.0	5.4.0	
Apr 2004	CIN_Z3DIS	1117-040155	028		land to remove errors	3.4.0	5.5.0	
	-				and to remove entris		1	
	-						1	
			İ	i .			1	

Detailed explanations of the above categories can

be found in 3GPP TR 21.900.

Meeting #27, Miami, FL, USA, 10-14 May 2004 CR-Form-v7 CHANGE REQUEST \mathfrak{R} 29.198-08 CR 031 Current version: **#rev** For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols. UICC apps# ME Radio Access Network Core Network X Proposed change affects: Title: ₩ Correct the P TRIGGERING ADDRESSES service property Source: 器 CN5 Ultan Mulligan, ETSI PTCC Date: 第 14/05/2004 Category: \mathfrak{R} Release: REL-6 Use one of the following categories: Use <u>one</u> of the following releases: F (correction) (GSM Phase 2) 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) (Release 1999) R99

Rel-4

Rel-5

Rel-6

(Release 4)

(Release 5)

(Release 6)

Reason for change: 第	The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.
Summary of change: #	Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported. Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type. Deprecate P_TRIGGERING_ADDRESSES as it is replaced by P_NOTIFICATION_ADDRESS_RANGES.
Consequences if	The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected:	第 10
Other specs affected:	Y N X Other core specifications X Test specifications O&M Specifications
Other comments:	# This is a mirror CR to the Rel-4 CR in N5-040260.

Related Rel-6 CRs to TS 29.198-3, 4-2, -4-3, 5, and 11 are in N5-040251, N5-040254, N5-040256, N5-040259 and N5-040265

10 Data Session Control Service Properties

The following table lists properties relevant for the Data Session Control API.

Property	Туре	Description/Interpretation
P_TRIGGERING_EVENT_TYPES	INTEGER_SET	Indicates the static event types supported by the SCS. Static events are the events by which applications are initiated.
P_DYNAMIC_EVENT_TYPES	INTEGER_SET	Indicates the dynamic event types supported by the SCS. Dynamic events are the events the application can request for during the context of a call.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) E.g. P_ADDRESS_PLAN_IP. Note that more than one address plan may be supported.

The previous table lists properties related to the capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description/Interpretation
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
P_NOTIFICATION_ADDRESS_RANGES	XML ADDRESS RANGE SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_MONITOR_MODE	INTEGER_SET	Indicates whether the application is allowed to monitor in interrupt and/or notify mode. Set is: P_INTERRUPT P_NOTIFY
P_NUMBERS_TO_BE_CHANGED	INTEGER_SET	Indicates which numbers the application is allowed to change or fill for legs in an incoming call. Allowed value set: {P_TARGET_NUMBER}.
P_CHARGEPLAN_ALLOWED	INTEGER_SET	Indicates which charging is allowed in the setDataSessionChargePlan indicator. Allowed values: {P_CHARGE_PER_VOLUME, P_TRANSPARANT_CHARGING, P_CHARGE_PLAN}
P_CHARGEPLAN_MAPPING	INTEGER_INTEGER_MAP	Indicates the mapping of charge plans (we assume they can be indicated with integers) to a logical network charge plan indicator. When the P_CHARGEPLAN_ALLOWED property indicates P_CHARGE_PLAN, then only charge plans in this mapping are allowed.
P_CURRENCY_ALLOWED	STRING_SET	Indicates the currencies that are allowed to be set for the charge plan in the setDataSessionChargePlan. The valid values for the string set are according to ISO-4217:1995. E.g. {"EUR", "NLG"}.

Annex E (informative): Change history

Mar 2001 Jun 2001 Sep 2001 Dec 2001	CN_11 CN_12	TSG Doc. NP-010134	CR	Rev	Subject/Comment	Old	New
Jun 2001 Sep 2001 Dec 2001	CN_12	NP-010134				Oiu	New
Sep 2001 Dec 2001			047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0
Dec 2001	CN 12	NP-010330	001		Corrections to OSA API Rel4	4.0.0	4.1.0
	CIN_IS	NP-010471	002		Changing references to JAIN	4.1.0	4.2.0
Dag 2001	CN_14	NP-010601	003		Replace Out Parameters with Return Types	4.2.0	4.3.0
Dec 2001	CN_14	NP-010601	004		Corrections and alignment additions to the Data Session Control SCF	4.2.0	4.3.0
Mar 2002	CN_15	NP-020110	005		Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.3.0	4.4.0
Jun 2002	CN_16	NP-020182	006		Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	007		Addition of Support for Network Controlled Notifications DSC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020192	800		Adding missing text concerning the activity timer and criteria overlap	4.4.0	5.0.0
Sep 2002	_	NP-020435	011		Remove duplicate exception from IpDataSessionControlManager.createNotification()	5.0.0	5.1.0
Sep 2002	CN_17	NP-020435	012		Remove P_SERVICE_INFORMATION_MISSING and P_SERVICE_FAULT_ENCOUNTERED exceptions from_DataSessionControl methods.	5.0.0	5.1.0
Sep 2002	CN_17	NP-020435	013		Introduce new method getNotifications to correct the result type of IpDataSessionControlManager.getNotification() to permit retreival of all created notifications.	5.0.0	5.1.0
Sep 2002	CN_17	NP-020435	014		Add P_INVALID_INTERFACE_TYPE exception to IpDataSessionControlManager.createNotification(), resulting in new createNotifications() method	5.0.0	5.1.0
Sep 2002	CN_17	NP-020435	015		Add text to clarify requirements on support of methods	5.0.0	5.1.0
Sep 2002	CN_17	NP-020435	016		Correction on use of NULL in Data Session Control API	5.0.0	5.1.0
Sep 2002	CN_17	NP-020395	017		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0
Mar 2003	CN_19	NP-030024	019		Addition of status of methods to Data Session Control interfaces	5.1.0	5.2.0
Mar 2003	CN_19	NP-030024	021		Corrections to data types in Data Session Control	5.1.0	5.2.0
Mar 2003	CN_19	NP-030034	022		Inconsistent description of use of secondary callback	5.1.0	5.2.0
Mar 2003	CN_19	NP-030034	023		Promotion of TpDataSessionQosClass data type definition to the Common Data Types	5.1.0	5.2.0
Jun 2003	CN_20	NP-030238	025		Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Sep 2003	CN_21	NP-030352	026		Correction to Java Realisation Annex	5.3.0	5.4.0
Dec 2003		NP-030553	027		Add OSA API support for 3GPP2 networks	5.4.0	6.0.0
Feb 2004					Added Java code attachment 2919808J2EE.zip which was delivered late by outside developers. See Annex C.	6.0.0	6.0.1

Date: % 14/05/2004

CR-Form-v7 CHANGE REQUEST \mathfrak{R} 29.198-11 CR 025 Current version: **#rev** 4.4.0 For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols. Proposed change affects: UICC apps# ME Radio Access Network Core Network X Title: ★ Correct the P TRIGGERING ADDRESSES service property **CN5 Ultan Mulligan, ETSI PTCC** Source:

Category: ₩ F Release: # REL-4 Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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 Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:

The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing.

There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.

Summary of change: # Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan.

Correct the description of P_ADDRESSPLAN to clarify that more than one

Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported.

Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type.

Deprecate P_TRIGGERING_ADDRESSES as it is replaced by

P NOTIFICATION ADDRESS RANGES.

Consequences if not approved:

Work item code:

SA1

The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected:	第 10
Other specs affected:	Y N X Other core specifications
Other comments:	# Mirror CRs for Rel-5 and Rel-6 in N5-040264 and N5-040265 respectively.

Related Rel-4 CRs to TS 29.198-3, 4, 5, 8 are in N5-040249, N5-040252, N5-040257 and N5-040260

10 Account Management Service Properties

The following table lists properties relevant for the Account Management API.

Property	Туре	Description/Interpretation
P_EVENT_TYPES	INTEGER_SET	Indicates the event types supported by the SCS. Static events are the events by which applications are initiated.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) E.g. {P_ADDRESS_PLAN_E164, P_ADDRESS_PLAN_IP}). Note that more than one address plan may be supported.

The previous table lists properties related to the capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description/Interpretation
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
P_NOTIFICATION_ADDRESS_RANGES	XML_ADDRESS_RANG E_SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_CURRENCY_ALLOWED	STRING_SET	Indicates the currencies that can be returned in the queryBalanceRes. The valid values for the string set are according to ISO-4217:1995. E.g. {"EUR", "NLG"}.
P_HISTORY_ALLOWED	STRING_SET	Indicates the length of the transaction history interval that is allowed to be retrieved by the application. The valid values for the string are according to TpDateAndTime. The string-set will be of format {"lower_start_time", "upper_stop_time"}, e.g. {"1998-12-04 10:30", "1999-12-04 10:30"}
P_BULK_QUERY_ALLOWED	BOOLEAN_SET	Indicates whether the application is allowed to issue a queryBalanceReq for more than one user. Value = TRUE : the users parameter of type TpAddressSet may contain more than one user. Value = FALSE : the users parameter of type TpAddressSet may contain only one user.

Annex B (informative): Change history

	Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New	
Mar 2001	CN_11	NP-010134	047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0	
Jun 2001	CN_12	NP-010327			Approved at TSG CN#12 and placed under Change Control	2.0.0	4.0.0	
Sep 2001	CN_13	NP-010472	001		Changing references to JAIN	4.0.0	4.1.0	
Sep 2001	CN_13	NP-010472	002		Missing exceptions for enabling and changing the notifications	4.0.0	4.1.0	
Dec 2001	CN_14	NP-010602	003		Replace Out Parameters with Return Types	4.1.0	4.2.0	
Dec 2001	CN_14	NP-010602	004		Replace erroneous use of incorrect data type TpSessionID by TpAssignmentID in Account Management interface	4.1.0	4.2.0	
Mar 2002	CN_15	NP-020111	005		Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.2.0	4.3.0	
Mar 2002	CN_15	NP-020111	006		Correction of parameter name in IpAccountManager.createNotification()	4.2.0	4.3.0	
Mar 2002	CN_15	NP-020111	007		Correction of result parameter of getNotification, set in stead of single result	4.2.0	4.3.0	
Mar 2003	CN_19	NP-030025	015	-	Correction to TpChargingEventCriteria in Account Management	4.3.0	4.4.0	
Mar 2003	CN_19	NP-030025	017	-	Correction of status of methods to Account Management interfaces	4.3.0	4.4.0	

Meeting #27, Miami, FL, USA, 10-14 May 2004 CR-Form-v7 CHANGE REQUEST \mathfrak{R} 29.198-11 CR 026 Current version: **#rev** For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols. UICC apps# ME Radio Access Network Core Network X Proposed change affects: Title: ₩ Correct the P TRIGGERING ADDRESSES service property Source: 器 CN5 Ultan Mulligan, ETSI PTCC Date: 第 14/05/2004 Category: \mathfrak{R} Release: REL-5 Use one of the following categories: Use <u>one</u> of the following releases: F (correction) (GSM Phase 2) 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) (Release 1999) R99 Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. (Release 5)

Rel-5

Rel-6

(Release 6)

Reason for change: #	The Service Property P_TRIGGERING_ADDRESSES is used to identify the sets of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS_RANGE_SET. This type doesn't exist, but ADDRESSRANGE_SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties.
Summary of change: 策	Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported. Correct the definition of P_TRIGGERING_ADDRESSES to refer to the ADDRESSRANGE_SET service property type. Deprecate P_TRIGGERING_ADDRESSES as it is replaced by P_NOTIFICATION_ADDRESS_RANGES.
Consequences if # not approved:	The interoperability problems encountered will continue, with different vendors adopting their own interpretation of the meaning of these service properties.

Clauses affected:	第 10
Other specs affected:	Y N X Other core specifications X Test specifications O&M Specifications TS 29.198-03, -04-2, -04-3, -05, -08 TS 29.198-03, -04-2, -04-3, -05, -08
Other comments:	# This is a mirror CR to the Rel-4 CR in N5-040263.

Related Rel-5 CRs to TS 29.198-3, 4-2, -4-3, 5, 8 are in N5-040250, N5-040253, N5-040255, N5-040258 and N5-040261

10 Account Management Service Properties

The following table lists properties relevant for the Account Management API.

Property	Туре	Description/Interpretation
P_EVENT_TYPES	INTEGER_SET	Indicates the event types supported by the SCS. Static events are the events by which applications are initiated.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) E.g. {P_ADDRESS_PLAN_E164, P_ADDRESS_PLAN_IP}). Note that more than one address plan may be supported.

The previous table lists properties related to the capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description/Interpretation
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
P_NOTIFICATION_ADDRESS_RANGES	XML_ADDRESS_RANGE_SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_CURRENCY_ALLOWED	STRING_SET	Indicates the currencies that can be returned in the queryBalanceRes. The valid values for the string set are according to ISO-4217:1995. E.g. {"EUR", "NLG"}.
P_HISTORY_ALLOWED	STRING_SET	Indicates the length of the transaction history interval that is allowed to be retrieved by the application. The valid values for the string are according to TpDateAndTime. The string-set will be of format {"lower_start_time", "upper_stop_time"}, e.g. {"1998-12-04 10:30", "1999-12-04 10:30"}
P_MAX_ADDRESSES_PER_QUERY	INTEGER_SET	Indicates the maximum number of addresses which can be included in a queryBalanceReq.

Annex D (informative): Change history

	Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New	
Mar 2001	CN_11	NP-010134	047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0	
Jun 2001	CN_12	NP-010327			Approved at TSG CN#12 and placed under Change Control	2.0.0	4.0.0	
Sep 2001	CN_13	NP-010472	001		Changing references to JAIN	4.0.0	4.1.0	
Sep 2001	CN_13	NP-010472	002		Missing exceptions for enabling and changing the notifications	4.0.0	4.1.0	
Dec 2001	CN_14	NP-010602	003		Replace Out Parameters with Return Types	4.1.0	4.2.0	
Dec 2001	CN_14	NP-010602	004		Replace erroneous use of incorrect data type TpSessionID by TpAssignmentID in Account Management interface	4.1.0	4.2.0	
Mar 2002	CN_15	NP-020111	005		Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.2.0	4.3.0	
Mar 2002	CN_15	NP-020111	006		Correction of parameter name in IpAccountManager.createNotification()	4.2.0	4.3.0	
Mar 2002	CN_15	NP-020111	007		Correction of result parameter of getNotification, set in stead of single result	4.2.0	4.3.0	
Jun 2002	CN_16	NP-020193	800		Change to new Service Property P_MAX_ADDRESSES_PER_QUERY for Account Management	4.3.0	5.0.0	
Jun 2002	CN_16	NP-020182	009		Addition of support for WSDL realisation	4.3.0	5.0.0	
Jun 2002	CN_16	NP-020183	010		Addition of Support for Network Controlled Notifications AM	4.3.0	5.0.0	
Sep 2002	CN_17	NP-020436	011		Correction of IpAccountManager STD to permit multiple notifications	5.0.0	5.1.0	
Sep 2002	CN_17	NP-020436	012		Add text to clarify requirements on support of methods	5.0.0	5.1.0	
Sep 2002	CN_17	NP-020436	013		Add missing callback interface for notifications in Account Management	5.0.0	5.1.0	
Sep 2002	CN_17	NP-020395	014		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0	
Mar 2003	CN 19	NP-030025	016		Correction to TpChargingEventCriteria in Account Management	5.1.0	5.2.0	
Mar 2003	CN_19	NP-030025	018		Addition of status of methods to Account Management interfaces	5.1.0	5.2.0	
Mar 2003	CN_19	NP-030035	019		Inconsistent description of use of secondary callback	5.1.0	5.2.0	
Sep 2003	CN_21	NP-030352	020		Correction to Java Realisation Annex	5.2.0	5.3.0	
Apr 2004	CN_23bis	NP-040155	023		Correct Java Code to conform with Java Rulebook in TS 29.198-01 and to remove errors	5.3.0	5.4.0	

CHANGE REQUEST # 29.198-11 CR 027 # rev - # Current version: 6.0.1 # 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: ★ Correct the P TRIGGERING ADDRESSES service property Source: **光 CN5 Ultan Mulligan, ETSI PTCC** Work item code:

SA1 Date: % 14/05/2004 Category: \mathfrak{R} Release:

REL-6 Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 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) (Release 1998) R98 **D** (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6)

The Service Property P TRIGGERING ADDRESSES is used to identify the sets Reason for change: # of address ranges for which an application can request notifications. At present it is defined as being of service property type ADDRESS RANGE SET. This type doesn't exist, but ADDRESSRANGE SET does. This is defined as a set of addresses, with wildcards permitted. The Address Plan within which these addresses are defined is missing. There is no way to correlate the values of P_TRIGGERING_ADDRESSES with the values of P_ADDRESSPLAN, the service property identifying the address plans supported by the SCF. This is a particular problem when more than one address plan is supported by an SCF, and has resulted in interoperability issues, where different interpretations have been placed on the contents of these service properties. Summary of change: ₩ Introduce a new service property P_NOTIFICATION_ADDRESS_RANGES which is of service property type XML_ADDRESS_RANGE_SET, which is defined as a sequence of values of TpAddressRange, and therefore contains all the information necessary to uniquely identify address ranges, including the address plan. Correct the description of P_ADDRESSPLAN to clarify that more than one address plan may be supported. Correct the definition of P TRIGGERING ADDRESSES to refer to the ADDRESSRANGE SET service property type. Deprecate P TRIGGERING ADDRESSES as it is replaced by P NOTIFICATION ADDRESS RANGES. Consequences if The interoperability problems encountered will continue, with different vendors not approved: adopting their own interpretation of the meaning of these service properties.

Related Rel-6 CRs to TS 29.198-3, 4-2, -4-3, 5, 8 are in N5-040251, N5-040254, N5-040256, N5-040259 and N5-040262

10 Account Management Service Properties

The following table lists properties relevant for the Account Management API.

Property	Туре	Description/Interpretation
P_ EVENT_TYPES	INTEGER_SET	Indicates the event types supported by the SCS. Static events are the events by which applications are initiated.
P_ADDRESSPLAN	INTEGER_SET	Indicates the supported address plans (defined in TpAddressPlan.) E.g. {P_ADDRESS_PLAN_E164, P_ADDRESS_PLAN_IP}). Note that more than one address plan may be supported.

The previous table lists properties related to the capabilities of the SCS itself. The following table lists properties that are used in the context of the Service Level Agreement, e.g. to restrict the access of applications to the capabilities of the SCS.

Property	Туре	Description/Interpretation
P_TRIGGERING_ADDRESSES (Deprecated)	ADDRESS_RANGE_SET	Indicates for which numbers the notification may be set. For terminating notifications it applies to the terminating number, for originating notifications it applies only to the originating number.
P_NOTIFICATION_ADDRESS_RANGES	XML_ADDRESS_RANGE_SET	Indicates for which numbers notifications may be set. More than one range may be present. For terminating notifications they apply to the terminating number, for originating notifications they apply only to the originating number.
P_CURRENCY_ALLOWED	STRING_SET	Indicates the currencies that can be returned in the queryBalanceRes. The valid values for the string set are according to ISO-4217:1995. E.g. {"EUR", "NLG"}.
P_HISTORY_ALLOWED	STRING_SET	Indicates the length of the transaction history interval that is allowed to be retrieved by the application. The valid values for the string are according to TpDateAndTime. The string-set will be of format {"lower_start_time", "upper_stop_time"}, e.g. {"1998-12-04 10:30", "1999-12-04 10:30"}
P_MAX_ADDRESSES_PER_QUERY	INTEGER_SET	Indicates the maximum number of addresses which can be included in a queryBalanceReq.

Annex E (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Mar 2001	CN_11	NP-010134	047		CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)	3.2.0	1.0.0
Jun 2001	CN_12	NP-010327			Approved at TSG CN#12 and placed under Change Control	2.0.0	4.0.0
Sep 2001	CN_13	NP-010472	001		Changing references to JAIN	4.0.0	4.1.0
Sep 2001	CN_13	NP-010472	002		Missing exceptions for enabling and changing the notifications	4.0.0	4.1.0
Dec 2001	CN_14	NP-010602	003		Replace Out Parameters with Return Types	4.1.0	4.2.0
Dec 2001	CN_14	NP-010602	004		Replace erroneous use of incorrect data type TpSessionID by TpAssignmentID in Account Management interface	4.1.0	4.2.0
Mar 2002	CN_15	NP-020111	005		Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.2.0	4.3.0
Mar 2002	CN_15	NP-020111	006		Correction of parameter name in IpAccountManager.createNotification()	4.2.0	4.3.0
Mar 2002	CN_15	NP-020111	007		Correction of result parameter of getNotification, set in stead of single result	4.2.0	4.3.0
Jun 2002	CN_16	NP-020193	800		Change to new Service Property P_MAX_ADDRESSES_PER_QUERY for Account Management	4.3.0	5.0.0
Jun 2002	CN_16	NP-020182	009		Addition of support for WSDL realisation	4.3.0	5.0.0
Jun 2002	CN_16	NP-020183	010		Addition of Support for Network Controlled Notifications AM	4.3.0	5.0.0
Sep 2002	CN_17	NP-020436	011		Correction of IpAccountManager STD to permit multiple notifications	5.0.0	5.1.0
Sep 2002	CN_17	NP-020436	012		Add text to clarify requirements on support of methods	5.0.0	5.1.0
Sep 2002	CN_17	NP-020436	013		Add missing callback interface for notifications in Account Management	5.0.0	5.1.0
Sep 2002	CN_17	NP-020395	014		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0
Mar 2003	CN_19	NP-030025	016		Correction to TpChargingEventCriteria in Account Management	5.1.0	5.2.0
Mar 2003	CN_19	NP-030025	018		Addition of status of methods to Account Management interfaces	5.1.0	5.2.0
Mar 2003	CN_19	NP-030035	019		Inconsistent description of use of secondary callback	5.1.0	5.2.0
Sep 2003	CN_21	NP-030352	020		Correction to Java Realisation Annex	5.2.0	5.3.0
Dec 2003	CN_22	NP-030556	021		Add methods for balanceUpdate(), voucherUpdate() and getCreditExpiryDate() to OSA Account Management	5.3.0	6.0.0
Dec 2003	CN_22	NP-030553	022		Add OSA API support for 3GPP2 networks	5.3.0	6.0.0
Feb 2004					Added Java code attachment 2919811J2EE.zip which was delivered late by outside developers. See Annex C.	6.0.0	6.0.1
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