3GPP TSG-CN Meeting #24 **NP-040256**
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	A	5.6.0	N5-040253	OSA1
NP-040256	29.198-04-2	015	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	A	6.0.1	N5-040254	OSA1
NP-040256	29.198-04-3	022	-	Rel-5	Correct the P_TRIGGERING_ADDRESSES service property	A	5.6.0	N5-040255	OSA1
NP-040256	29.198-04-3	023	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	A	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	A	5.6.0	N5-040258	OSA1
NP-040256	29.198-05	049	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	A	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	A	5.5.0	N5-040261	OSA1
NP-040256	29.198-08	031	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	A	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	A	5.4.0	N5-040264	OSA1
NP-040256	29.198-11	027	-	Rel-6	Correct the P_TRIGGERING_ADDRESSES service property	A	6.0.1	N5-040265	OSA1

CR-Form-v7

CHANGE REQUEST

⌘ **29.198-04-2** **CR** **014** ⌘ **rev** **-** ⌘ Current version: **5.6.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**A**
Release:	⌘	*REL-5*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	TS 29.198-03, -04-3, -05, -08, -11
			X	Test specifications		
			X	O&M 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	Type	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	Type	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”,
“IpCallControlManager.disableCallNotification”,
“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,
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	004	--	Removal of Faulty state in MPCCS Call State Transition Diagram and 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	CN_13	NP-010467	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	008	--	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	014	--	The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	015	--	Corrections to SetCallChargePlan()	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	016	--	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	018	--	Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001	CN_14	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	CN_14	NP-010597	021	--	Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	022	--	Correction of treatment datatype in superviseReq 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	CN_14	NP-010597	024	--	Correction to Call Control (CC)	4.1.0	4.2.0
Dec 2001	CN_14	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	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, 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	CN_15	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	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	038	-	Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	039	-	Addition of support for Emergency Telecommunications Service	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	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 TpReleaseCause	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	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 routeReqs 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	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	008	--	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

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CHANGE REQUEST

⌘ 29.198-04-2 CR 015 ⌘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 ☒

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
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:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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:	⌘	**Y** / **N**	Other core specifications	⌘	TS 29.198-03, -04-3, -05, -08, -11
		X /	Other core specifications		
		/ **X**	Test specifications		
		/ **X**	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	Type	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	Type	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”,
“IpCallControlManager.disableCallNotification”,
“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,
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	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 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	CN_13	NP-010467	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	008	--	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	014	--	The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	015	--	Corrections to SetCallChargePlan()	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	016	--	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	018	--	Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001	CN_14	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	CN_14	NP-010597	021	--	Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	022	--	Correction of treatment datatype in superviseReq 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	CN_14	NP-010597	024	--	Correction to Call Control (CC)	4.1.0	4.2.0
Dec 2001	CN_14	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	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, 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	CN_15	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	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	038	-	Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	039	-	Addition of support for Emergency Telecommunications Service	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	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 TpReleaseCause	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	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 routeReqs 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	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	4.4.0	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	008	--	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 delivered late by outside developers. See Annex C.	6.0.0	6.0.1

CR-Form-v7

CHANGE REQUEST

⌘ **29.198-04-3** **CR** **022** ⌘ **rev** **-** ⌘ Current version: **5.6.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1 ***Date:*** ⌘ 14/05/2004
Category:	⌘	**A** ***Release:*** ⌘ *REL-5*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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:	⌘	**Y** / **N**	Other core specifications	⌘	TS 29.198-03, 04-2, -05, -08, -11
		X /	Test specifications		
		/ **X**	O&M 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, 4-2, 5, 8, and 11 are in N5-040250, N5-040253, N5-040258, N5-040261 and N5-040264

8 Multi-Party Call Control Service Properties

8.1 List of Service Properties

The following table lists properties relevant for the MPCC API.

Property	Type	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_REQUESTS	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	Type	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_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_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_COMPLETION	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”,
“IpMultiPartyCallControlManager.changeNotification”,
“IpMultiPartyCallControlManager.getNotification”,
“IpMultiPartyCallControlManager.getNextNotification”,
“IpMultiPartyCallControlManager.enableNotifications”,
“IpMultiPartyCallControlManager.disableNotifications”,
“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”,
“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 = {
1,
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
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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	008	--	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	014	--	The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
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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	018	--	Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001	CN_14	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	CN_14	NP-010597	021	--	Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	022	--	Correction of treatment datatype in superviseReq 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	CN_14	NP-010597	024	--	Correction to Call Control (CC)	4.1.0	4.2.0
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Dec 2001	CN_14	NP-010695	030	--	Correction of method getLastRedirectionAddress	4.1.0	4.2.0
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Mar 2002	CN_15	NP-020106	032	--	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	038	-	Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	039	-	Addition of support for Emergency Telecommunications Service	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	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 TpReleaseCause	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	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 routeReqs 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	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-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	008	--	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

CR-Form-v7

CHANGE REQUEST

⌘ **29.198-04-3** **CR** **023** ⌘ **rev** **-** ⌘ Current version: **6.1.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
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:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	TS 29.198-03, 04-2, -05, -08, -11
			X	Test specifications		
			X	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, 4-2, 5, 8, and 11 are in N5-040251, N5-040254, N5-040259, N5-040262 and N5-040265

8 Multi-Party Call Control Service Properties

8.1 List of Service Properties

The following table lists properties relevant for the MPCC API.

Property	Type	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_REQUESTS	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	Type	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_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_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_COMPLETION	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”,
“IpMultiPartyCallControlManager.changeNotification”,
“IpMultiPartyCallControlManager.getNotification”,
“IpMultiPartyCallControlManager.getNextNotification”,
“IpMultiPartyCallControlManager.enableNotifications”,
“IpMultiPartyCallControlManager.disableNotifications”,
“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”,
“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 = {
1,
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	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 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	CN_13	NP-010467	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	008	--	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	014	--	The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	015	--	Corrections to SetCallChargePlan()	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	016	--	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	018	--	Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001	CN_14	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	CN_14	NP-010597	021	--	Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	022	--	Correction of treatment datatype in superviseReq 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	CN_14	NP-010597	024	--	Correction to Call Control (CC)	4.1.0	4.2.0
Dec 2001	CN_14	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	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, 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	CN_15	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	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	038	-	Addition of support for WSDL realisation	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	039	-	Addition of support for Emergency Telecommunications Service	4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	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 TpReleaseCause	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	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 routeReqs 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	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-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	008	--	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

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CHANGE REQUEST

⌘ 29.198-04 CR 068 ⌘rev - ⌘ Current version: 4.8.0 ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**F**
Release:	⌘	*REL-4*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	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:	⌘	6.5			
Other specs affected:	⌘	Y: X / N:	Other core specifications	⌘	TS 29.198-03, -05, -08, -11
		Y: / N: X	Test specifications		
		Y: / N: X	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	Type	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	Type	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.

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”,
“IpCallControlManager.getCriteria”,
“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

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 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	CN_13	NP-010467	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	008	--	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	014	--	The use of the REDIRECT event needs to be illustrated	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	015	--	Corrections to SetCallChargePlan()	4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	016	--	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	018	--	Corrections to Call Control – Errors in Exceptions	4.0.0	4.1.0
Dec 2001	CN_14	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	CN_14	NP-010597	021	--	Make attachMedia() and detachMedia() asynchronous	4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	022	--	Correction of treatment datatype in superviseReq 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	CN_14	NP-010597	024	--	Correction to Call Control (CC)	4.1.0	4.2.0
Dec 2001	CN_14	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	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, 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	CN_15	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	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
Sep 2002	CN_17	NP-020424	057	--	Correction on use of NULL in Call Control API	4.4.0	4.5.0
Mar 2003	CN_19	NP-030020	058	--	Correction of status of methods to interfaces in clause 6.3	4.5.0	4.6.0
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	4.6.0
Mar 2003	CN_19	NP-030020	061	--	Correction to User Interaction Prepaid Sequence Diagrams	4.5.0	4.6.0
Mar 2003	CN_19	NP-030020	062	--	Correction to remove unused TpCallChargeOrder	4.5.0	4.6.0
Mar 2003	CN_19	NP-030020	063	--	Correction to TpCallEventCriteriaResult in Generic Call Control	4.5.0	4.6.0
Mar 2003	CN_19	NP-030020	064	--	Correction of status of methods to interfaces in clause 7.3	4.5.0	4.6.0
Jun 2003	CN_20	NP-030238	065	--	Correction of the description for callEventNotify & reportNotification	4.6.0	4.7.0
Dec 2003	CN_22	NP-030544	066	--	Correction of description in superviseRes and superviseCallRes	4.7.0	4.8.0

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CHANGE REQUEST

⌘ 29.198-05 CR 047 ⌘rev - ⌘ Current version: 4.8.0 ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

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

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**F**
Release:	⌘	*REL-4*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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. 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:	⌘	10

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	TS 29.198-03, -04, -08, -11
			X	Test specifications		
			X	O&M Specifications		

Other comments:	⌘	Mirror CRs to this CR exist for Rel-5 and Rel-6 in N5-040258 and N5-040259 respectively. Related Rel-4 CRs to TS 29.198-3, 4, 8, and 11 are in N5-040249, N5-040252, 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	Type	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	Type	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	008	--	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	--	Correction to TpUIInfo data type to support binary data for SMS services	4.4.0	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	--	Correction to getNotification to remove P_INVALID_CRITERIA exception	4.5.0	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	--	Correction of status of methods to User Interaction interfaces	4.5.0	4.6.0
Mar 2003	CN_19	NP-030021	030	--	Corrections to User Interaction	4.5.0	4.6.0
Mar 2003	CN_19	NP-030021	032	--	Correction of User Interaction Event Notification to support non text encodings	4.5.0	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	4.7.0	4.8.0

CR-Form-v7

CHANGE REQUEST

⌘ **29.198-05** **CR** **048** ⌘ **rev** **-** ⌘ Current version: **5.6.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**A**
Release:	⌘	*REL-5*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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. 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:	⌘	10			
Other specs affected:	⌘	**Y** / **N** **X** / ☐ Other core specifications ☐ / **X** Test specifications ☐ / **X** O&M Specifications	⌘	TS 29.198-03, -04-2, -04-3, -08, -11	
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	Type	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	Type	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	008	--	Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.3.0	4.4.0
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 services	5.0.0	5.1.0
Sep 2002	CN_17	NP-020395	021		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	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	--	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 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	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
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

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CHANGE REQUEST

⌘ **29.198-05** **CR** **049** ⌘ **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:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**A**
Release:	⌘	*REL-6*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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. 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:	⌘	10

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	TS 29.198-03, -04-2, -04-3, -08, -11
			X	Test specifications		
			X	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	INTEGER_SET	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	Type	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	--	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	008	--	Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()	4.3.0	4.4.0
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 services	5.0.0	5.1.0
Sep 2002	CN_17	NP-020395	021		Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	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	--	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 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	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	--	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 Interaction	5.5.0	6.0.0
Feb 2004	--	--	--	--	Added Java code attachment 2919805J2EE.zip which was delivered late by outside developers. See Annex C.	6.0.0	6.0.1

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CHANGE REQUEST

⌘ **29.198-08** **CR** **029** ⌘ **rev** **-** ⌘ Current version: **4.7.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**F**
Release:	⌘	*REL-4*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	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:	⌘	10			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	TS 29.198-03, -04, -05, -11
		X /	Test specifications		
		/ **X**	O&M Specifications		
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	Type	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	Type	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

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CHANGE REQUEST

⌘ **29.198-08** **CR** **030** ⌘ **rev** **-** ⌘ Current version: **5.5.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1 ***Date:*** ⌘ 14/05/2004
Category:	⌘	**A** ***Release:*** ⌘ *REL-5*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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:	⌘	10			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	TS 29.198-03, -04-2, -04-3, -05, -11
		X /	Test specifications		
		/ **X**	O&M Specifications		
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	Type	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	Type	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 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	008	--	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 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
Apr 2004	CN_23bis	NP-040155	028	--	Correct Java Code to conform with Java Rulebook in TS 29.198-01 and to remove errors	5.4.0	5.5.0

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CHANGE REQUEST

⌘ **29.198-08** **CR** **031** ⌘ **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:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**A**
Release:	⌘	*REL-6*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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:	⌘	10			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	TS 29.198-03, -04-2, -04-3, -05, -11
		X /	Test specifications		
		/ **X**	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	Type	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	Type	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

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
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	008	--	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 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	CN_22	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

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CHANGE REQUEST

⌘ **29.198-11** **CR** **025** ⌘ **rev** **-** ⌘ Current version: **4.4.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**F**
Release:	⌘	*REL-4*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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:	⌘	10

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	TS 29.198-03, -04, -05, -08
			X	Test specifications		
			X	O&M 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	Type	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	Type	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_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

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CHANGE REQUEST

⌘ **29.198-11** **CR** **026** ⌘ **rev** **-** ⌘ Current version: **5.4.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correct the P_TRIGGERING_ADDRESSES service property
Source:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1 ***Date:*** ⌘ 14/05/2004
Category:	⌘	**A** ***Release:*** ⌘ *REL-5*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	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:	⌘	10			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	TS 29.198-03, -04-2, -04-3, -05, -08
		X /	Test specifications		
		/ **X**	O&M Specifications		
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	Type	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	Type	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	008	--	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

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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:	⌘	CN5 Ultan Mulligan, ETSI PTCC
Work item code:	⌘	OSA1
Date:	⌘	14/05/2004
Category:	⌘	**A**
Release:	⌘	*REL-6*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

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

	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	Type	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	Type	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	008	--	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