

**3GPP TSG CN Plenary Meeting #17  
4 - 6 September 2002, Biarritz, FRANCE**

**NP-020426**

**Source:** CN5 (OSA)  
**Title:** Rel-4 CR 29.198-08 OSA API Part 8: Data session control  
**Agenda item:** 7.10  
**Document for:** APPROVAL

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Doc-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Doc-2nd-Level	Workitem
NP-020426	29.198-08	009	-	Rel-4	Introduce new method getNotifications to correct the result type of IpDataSessionControlManager.getNotification() to permit retrieval of all created notifications.	F	4.4.0	N5-020713	OSA1
NP-020426	29.198-08	010	-	Rel-4	Correction on use of NULL in Data Session Control API	F	4.4.0	N5-020761	OSA1

## CHANGE REQUEST

⌘ **29.198-08 CR 009** ⌘ 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:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘	Introduce new method getNotifications to correct the result type of IpDataSessionControlManager.getNotification() to permit retrieval of all created notifications.
<b>Source:</b>	⌘	CN5
<b>Work item code:</b>	⌘	OSA1
		<b>Date:</b> ⌘ 12/07/2002
<b>Category:</b>	⌘	<b>F</b>
		Use <u>one</u> of the following categories:
		<b>F</b> (correction)
		<b>A</b> (corresponds to a correction in an earlier release)
		<b>B</b> (addition of feature),
		<b>C</b> (functional modification of feature)
		<b>D</b> (editorial modification)
		Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .
		<b>Release:</b> ⌘ <b>REL-4</b>
		Use <u>one</u> of the following releases:
		<b>2</b> (GSM Phase 2)
		<b>R96</b> (Release 1996)
		<b>R97</b> (Release 1997)
		<b>R98</b> (Release 1998)
		<b>R99</b> (Release 1999)
		<b>REL-4</b> (Release 4)
		<b>REL-5</b> (Release 5)

<b>Reason for change:</b>	⌘	<p>In description of IpDataSessionControlManager.getNotification() the result is given as a TpDataSessionEventCriteria data type, which permits only one created notification to be returned. There is no means to select which one, nor to return the entire list (more than one non-overlapping notification can be created).</p> <p>The other getNotification() methods in the other SCFs all return a list of notification criteria, sorted by AssignmentID. This one should be no different.</p> <p>In order to make this change in a backwards compatible manner, getNotification() is deprecated and a new method getNotifications is introduced. This breaks with existing naming convention.</p>
<b>Summary of change:</b>	⌘	<p>Deprecate IpDataSessionControlManager.getNotification().</p> <p>Introduce new getNotifications() to change result type from TpDataSessionEventCriteria to TpDataSessionEventCriteriaResultSet and add this data type definition.</p>
<b>Consequences if not approved:</b>	⌘	<p>This method can't be used as described ! There is no means to return the entire list of requested notifications, nor to know which notification is being returned: the first created one, the most recent created one, cycling through the list etc.</p>

<b>Clauses affected:</b>	⌘	8.4, 11
<b>Other specs Affected:</b>	⌘	<input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
<b>Other comments:</b>	⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: [http://www.3gpp.org/3G\\_Specs/CRs.htm](http://www.3gpp.org/3G_Specs/CRs.htm). Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 8.4 Interface Class IpDataSessionControlManager

Inherits from: IpService.

This interface is the "SCF manager" interface for Data Session Control.

<<Interface>> IpDataSessionControlManager
<pre> createNotification (appDataSessionControlManager: in IpAppDataSessionControlManagerRef,   eventCriteria: in TpDataSessionEventCriteria): TpAssignmentID destroyNotification (assignmentID: in TpAssignmentID): void changeNotification (assignmentID: in TpAssignmentID, eventCriteria: in TpDataSessionEventCriteria): void &lt;&lt;deprecated&gt;&gt; getNotification (): TpDataSessionEventCriteria &lt;&lt;new&gt;&gt; getNotifications (): TpDataSessionEventCriteriaResultSet         </pre>

### Method

#### **createNotification()**

This method is used to enable data session notifications so that events can be sent to the application. This is the first step an application has to do to get initial notifications of data session happening in the network. When such an event happens, the application will be informed by reportNotification(). In case the application is interested in other events during the context of a particular data session it has to use the connectReq() method on the data session object. The application will get access to the data session object when it receives the reportNotification().

The createNotification method is purely intended for applications to indicate their interest to be notified when certain data session events take place. It is possible to subscribe to a certain event for a whole range of addresses, e.g. the application can indicate it wishes to be informed when a data session is setup to any number starting with 800.

If some application already requested notifications with criteria that overlap the specified criteria, the request is refused with P\_INVALID\_CRITERIA. The criteria are said to overlap if both originating and terminating ranges overlap and the same number plan is used.

If the same application requests two notifications with exactly the same criteria but different callback references, the second callback will be treated as an additional callback. Both notifications will share the same assignmentID. The gateway will always use the most recent callback. In case this most recent callback fails the second most recent is used. In case the createNotification contains no callback, at the moment the application needs to be informed the gateway will use as callback the callback that has been registered by setCallback().

Returns assignmentID: Specifies the ID assigned by the Data Session Manager object for this newly-enabled event notification.

### Parameters

**appDataSessionControlManager: in IpAppDataSessionControlManagerRef**

If this parameter is set (i.e. not NULL) it specifies a reference to the application interface which is used for callbacks. If set to NULL, the application interface defaults to the interface specified via the setCallback() method.

**eventCriteria: in TpDataSessionEventCriteria**

Specifies the event specific criteria used by the application to define the event required. Individual addresses or address ranges may be specified for destination and/or origination. Examples of events are "Data Session set up".

*Returns*

**TpAssignmentID**

*Raises*

**TpCommonExceptions, P\_SERVICE\_INFORMATION\_MISSING,  
P\_SERVICE\_FAULT\_ENCOUNTERED, P\_INVALID\_NETWORK\_STATE, P\_INVALID\_ADDRESS,  
P\_INVALID\_CRITERIA, P\_INVALID\_EVENT\_TYPE**

*Method***destroyNotification()**

This method is used by the application to disable data session notifications.

*Parameters*

**assignmentID: in TpAssignmentID**

Specifies the assignment ID given by the data session manager object when the previous createNotification() was done.

*Raises*

**TpCommonExceptions, P\_SERVICE\_INFORMATION\_MISSING,  
P\_SERVICE\_FAULT\_ENCOUNTERED, P\_INVALID\_NETWORK\_STATE,  
P\_INVALID\_ASSIGNMENT\_ID**

*Method***changeNotification()**

This method is used by the application to change the event criteria introduced with the createNotification method. Any stored notification request associated with the specified assignmentID will be replaced with the specified events requested.

*Parameters*

**assignmentID: in TpAssignmentID**

Specifies the ID assigned by the manager interface for the event notification.

**eventCriteria: in TpDataSessionEventCriteria**

Specifies the new set of event criteria used by the application to define the event required. Only events that meet these criteria are reported.

*Raises*

**TpCommonExceptions, P\_SERVICE\_INFORMATION\_MISSING,  
P\_SERVICE\_FAULT\_ENCOUNTERED, P\_INVALID\_NETWORK\_STATE,  
P\_INVALID\_ASSIGNMENT\_ID, P\_INVALID\_CRITERIA, P\_INVALID\_EVENT\_TYPE**

*Method***<<deprecated>> getNotification()**

This method is deprecated and its use is discouraged. It will be removed in a later release. It is replaced with getNotifications.

This method is used by the application to query the event criteria set with createNotification or changeNotification.

Returns eventCriteria: Specifies the event criteria used by the application to define the event required. Only events that meet these requirements are reported.

*Parameters*

No Parameters were identified for this method.

*Returns*

**TpDataSessionEventCriteria**

*Raises*

**TpCommonExceptions, P\_SERVICE\_INFORMATION\_MISSING,  
P\_SERVICE\_FAULT\_ENCOUNTERED, P\_INVALID\_NETWORK\_STATE**

*Method***<<new>> getNotifications()**

This method replaces getNotification()

This method is used by the application to query the event criteria set with createNotification or changeNotification.

Returns eventCriteria: the list of event criteria for the notifications requested by the application. If there is no information to return (e.g. no notifications requested by the application), an empty set (zero length) is returned.

*Parameters*

No Parameters were identified for this method.

*Returns*

**TpDataSessionEventCriteriaResultSet**

*Raises*

**TpCommonExceptions, P\_INVALID\_NETWORK\_STATE**

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## 11 Data Definitions

All data types referenced but not defined in this clause are common data definitions which may be found in ES 201 915-2.

### 11.1 Data Session Control Data Definitions

#### 11.1.1 IpAppDataSession

Defines the address of an IpAppDataSession Interface.

#### 11.1.2 IpAppDataSessionRef

Defines a Reference to type IpAppDataSession

#### 11.1.3 IpAppDataSessionControlManager

Defines the address of an IpAppDataSessionControlManager Interface.

#### 11.1.4 IpAppDataSessionControlManagerRef

Defines a Reference to type IpAppDataSessionControlManager.

#### 11.1.5 IpDataSession

Defines the address of an IpDataSession Interface.

#### 11.1.6 IpDataSessionRef

Defines a Reference to type IpDataSession.

#### 11.1.7 IpDataSessionControlManager

Defines the address of an IpDataSessionControlManager Interface.

#### 11.1.8 IpDataSessionControlManagerRef

Defines a Reference to type IpDataSessionControlManager.

### 11.2 Event Notification data definitions

#### 11.2.1 TpDataSessionEventName

Defines the names of events being notified with a new call request. The following events are supported. The values may be combined by a logical "OR" function when requesting the notifications. Additional events that can be requested/received during the call process are found in the TpDataSessionReportType data-type.

Name	Value	Description
P_EVENT_NAME_UNDEFINED	0	Undefined
P_EVENT_DSCS_SETUP	1	The data session is going to be setup.
P_EVENT_DSCS_ESTABLISHED	2	The data session is established by the network.
P_EVENT_DSCS_QOS_CHANGED	4	A change in QoS class has taken place during the life of the data session.

### 11.2.2 TpDataSessionMonitorMode

Defines the mode that the call will monitor for events, or the mode that the call is in following a detected event.

Name	Value	Description
P_DATA_SESSION_MONITOR_MODE_INTERRUPT	0	The data session event is intercepted by the data session control service and data session establishment is interrupted. The application is notified of the event and data session establishment resumes following an appropriate API call or network event (such as a data session release)
P_DATA_SESSION_MONITOR_MODE_NOTIFY	1	The data session event is detected by the data session control service but not intercepted. The application is notified of the event and data session establishment continues
P_DATA_SESSION_MONITOR_MODE_DO_NOT_MONITOR	2	Do not monitor for the event

### 11.2.3 TpDataSessionEventCriteria

Defines the Sequence of Data Elements that specify the criteria for an event notification.

Of the addresses only the Plan and the AddrString are used for the purpose of matching the notifications against the criteria.

Sequence Element Name	Sequence Element Type	Description
DestinationAddress	TpAddressRange	Defines the destination address or address range for which the notification is requested.
OriginatingAddress	TpAddressRange	Defines the origination address or an address range for which the notification is requested.
DataSessionEventName	TpDataSessionEventName	Name of the event(s)
MonitorMode	TpDataSessionMonitorMode	Defines the mode that the Data Session is in following the notification. Monitor mode P_DATA_SESSION_MONITOR_MODE_DO_NOT_MONITOR R is not a legal value here.

### 11.2.4 TpDataSessionEventInfo

Defines the Sequence of Data Elements that specify the information returned to the application in a Data Session event notification.

Sequence Element Name	Sequence Element Type	Description
DestinationAddress	TpAddress	Defines the destination address for which the notification is reported.
OriginatingAddress	TpAddress	Defines the origination address for which the notification is reported.
DataSessionEventName	TpDataSessionEventName	Name of the event(s)
MonitorMode	TpDataSessionMonitorMode	Defines the mode in which the Data Session is reporting the notification. Monitor mode P_DATA_SESSION_MONITOR_MODE_DO_NOT_MONITOR is not a legal value here.
QoSClass	TpDataSessionQoSClass	Defines the Quality of Service (QoS) class for the Data Session. QoSClass NULL is not a legal value when DataSessionEventName is set to P_EVENT_DSCS_QOS_CHANGED. For this particular event, the QoSClass defines the new QoS class effective after the change.



## 11.2.5 TpDataSessionQoSClass

Defines the Quality of Service (QoS) classes for a data session.

Name	Value	Description
P_DATA_SESSION_QOS_CLASS_CONVERSATIONAL	0	Specifies the Conversational QoS class, as specified in TS 123 107.
P_DATA_SESSION_QOS_CLASS_STREAMING	1	Specifies the Streaming QoS class, as specified in TS 123 107.
P_DATA_SESSION_QOS_CLASS_INTERACTIVE	2	Specifies the Interactive QoS class, as specified in TS 123 107.
P_DATA_SESSION_QOS_CLASS_BACKGROUND	3	Specifies the Background QoS class, as specified in TS 123 107.

## 11.2.6 TpDataSessionChargePlan

Defines the Sequence of Data Elements that specify the charge plan for the call.

Sequence Element Name	Sequence Element Type	Description
ChargeOrderType	TpDataSessionChargeOrder	Charge order
Currency	TpString	Currency unit according to ISO-4217:1995
AdditionalInfo	TpString	Descriptive string which is sent to the billing system without prior evaluation. Could be included in the ticket.

Valid Currencies are:

ADP, AED, AFA, ALL, AMD, ANG, AON, AOR, ARS, ATS, AUD, AWG, AZM, BAM,  
 BBD, BDT, BEF, BGL, BGN, BHD, BIF, BMD, BND, BOB, BOV, BRL, BSD, BTN,  
 BWP, BYB, BZD, CAD, CDF, CHF, CLF, CLP, CNY, COP, CRC, CUP, CVE, CYP,  
 CZK, DEM, DJF, DKK, DOP, DZD, ECS, ECV, EEK, EGP, ERN, ESP, ETB, EUR,  
 FIM, FJD, FKP, FRF, GBP, GEL, GHC, GIP, GMD, GNF, GRD, GTQ, GWP, GYD,  
 HKD, HNL, HRK, HTG, HUF, IDR, IEP, ILS, INR, IQD, IRR, ISK, ITL, JMD,  
 JOD, JPY, KES, KGS, KHR, KMF, KPW, KRW, KWD, KYD, KZT, LAK, LBP, LKR,  
 LRD, LSL, LTL, LUF, LVL, LYD, MAD, MDL, MGF, MKD, MMK, MNT, MOP, MRO,  
 MTL, MUR, MVR, MWK, MXN, MXV, MYR, MZM, NAD, NGN, NIO, NLG, NOK, NPR,  
 NZD, OMR, PAB, PEN, PGK, PHP, PKR, PLN, PTE, PYG, QAR, ROL, RUB, RUR,  
 RWF, SAR, SBD, SCR, SDD, SEK, SGD, SHP, SIT, SKK, SLL, SOS, SRG, STD,  
 SVC, SYP, SZL, THB, TJR, TMM, TND, TOP, TPE, TRL, TTD, TWD, TZS, UAH,  
 UGX, USD, USN, USS, UYU, UZS, VEB, VND, VUV, WST, XAF, XAG, XAU, XBA,  
 XBB, XBC, XBD, XCD, XDR, XFO, XFU, XOF, XPD, XPF, XPT, XTS, XXX, YER,  
 YUM, ZAL, ZAR, ZMK, ZRN, ZWD.

XXX is used for transactions where no currency is involved.

### 11.2.7 TpDataSessionChargeOrder

Defines the Tagged Choice of Data Elements that specify the charge plan for the call.

Tag Element Type	
	TpDataSessionChargeOrderCategory

Tag Element Value	Choice Element Type	Choice Element Name
P_DATA_SESSION_CHARGE_PER_VOLUME	TpChargePerVolume	ChargePerVolume
P_DATA_SESSION_CHARGE_NETWORK	TpString	NetworkCharge

### 11.2.8 TpDataSessionChargeOrderCategory

Name	Value	Description
P_DATA_SESSION_CHARGE_PER_VOLUME	0	Charge per volume
P_DATA_SESSION_CHARGE_NETWORK	1	Operator specific charge plan specification, e.g. charging table name/charging table entry

### 11.2.9 TpChargePerVolume

Defines the Sequence of Data Elements that specify the time based charging information. The volume is the sum of uplink and downlink transfer data volumes.

Sequence Element Name	Sequence Element Type	Description
InitialCharge	TpInt32	Initial charge amount (in currency units * 0.0001)
CurrentChargePerKilobyte	TpInt32	Current tariff (in currency units * 0.0001)
NextChargePerKilobyte	TpInt32	Next tariff (in currency units * 0.0001) after tariff switch. Only used in setAdviceOfCharge()

### 11.2.10 TpDataSessionIdentifier

Defines the Sequence of Data Elements that unambiguously specify the Data Session object

Sequence Element Name	Sequence Element Type	Sequence Element Description
DataSessionReference	IpDataSessionRef	This element specifies the interface reference for the Data Session object.
DataSessionID	TpSessionID	This element specifies the data session ID of the Data Session.

### 11.2.11 TpDataSessionError

Defines the Sequence of Data Elements that specify the additional information relating to a call error.

Sequence Element Name	Sequence Element Type
ErrorTime	TpDateAndTime
ErrorType	TpDataSessionErrorType
AdditionalErrorInfo	TpDataSessionAdditionalErrorInfo

### 11.2.12 TpDataSessionAdditionalErrorInfo

Defines the Tagged Choice of Data Elements that specify additional Data Session error and Data Session error specific information.

Tag Element Type	
	TpDataSessionErrorType

Tag Element Value	Choice Element Type	Choice Element Name
P_DATA_SESSION_ERROR_UNDEFINED	NULL	Undefined
P_DATA_SESSION_ERROR_INVALID_ADDRESS	TpAddressError	DataSessionErrorInvalidAddress
P_DATA_SESSION_ERROR_INVALID_STATE	NULL	Undefined

### 11.2.13 TpDataSessionErrorType

Defines a specific Data Session error.

Name	Value	Description
P_DATA_SESSION_ERROR_UNDEFINED	0	Undefined; the method failed or was refused, but no specific reason can be given.
P_DATA_SESSION_ERROR_INVALID_ADDRESS	1	The operation failed because an invalid address was given
P_DATA_SESSION_ERROR_INVALID_STATE	2	The data session was not in a valid state for the requested operation

### 11.2.14 TpDataSessionFault

Defines the cause of the data session fault detected.

Name	Value	Description
P_DATA_SESSION_FAULT_UNDEFINED	0	Undefined
P_DATA_SESSION_USER_ABORTED	1	User has finalised the data session before any message could be sent by the application
P_DATA_SESSION_TIMEOUT_ON_RELEASE	2	This fault occurs when the final report has been sent to the application, but the application did not explicitly release data session object, within a specified time. The timer value is operator specific.
P_DATA_SESSION_TIMEOUT_ON_INTERRUPT	3	This fault occurs when the application did not instruct the gateway how to handle the call within a specified time, after the gateway reported an event that was requested by the application in interrupt mode. The timer value is operator specific.

### 11.2.15 TpDataSessionReleaseCause

Defines the Sequence of Data Elements that specify the cause of the release of a data session.

Sequence Element Name	Sequence Element Type
Value	TpInt32
Location	TpInt32
NOTE: the Value and Location are specified as in ITU-T Recommendation Q.850.	

## 11.2.16 TpDataSessionSuperviseVolume

Defines the Sequence of Data Elements that specify the amount of volume that is allowed to be transmitted for the specific connection.

Sequence Element Name	Sequence Element Type	Sequence Element Description
VolumeQuantity	TpInt32	This data type is identical to a TpInt32, and defines the quantity of the granted volume that can be transmitted for the specific connection. The volume specifies the sum of uplink and downlink transfer data volumes.
VolumeUnit	TpInt32	In Order to enlarge the range of the volume quantity value the exponent of a scaling factor ( $10^{\wedge}\text{VolumeUnit}$ ) is provided. When the unit is for example in kilobytes, VolumeUnit shall be set to 3.

## 11.2.17 TpDataSessionSuperviseReport

Defines the responses from the data session control service for calls that are supervised. The values may be combined by a logical "OR" function.

Name	Value	Description
P_DATA_SESSION_SUPERVISE_VOLUME_REACHED	01h	The maximum volume has been reached.
P_DATA_SESSION_SUPERVISE_DATA_SESSION_ENDED	02h	The data session has ended, either due to data session party to reach of maximum volume or calling or called release.
P_DATA_SESSION_SUPERVISE_MESSAGE_SENT	04h	A warning message has been sent.

## 11.2.18 TpDataSessionSuperviseTreatment

Defines the treatment of the call by the data session control service when the supervised volume is reached. The values may be combined by a logical "OR" function.

Name	Value	Description
P_DATA_SESSION_SUPERVISE_RELEASE	01h	Release the data session when the data session supervision volume is reached.
P_DATA_SESSION_SUPERVISE_RESPOND	02h	Notify the application when the call supervision volume is reached.
P_DATA_SESSION_SUPERVISE_INFORM	04h	Send a warning message to the originating party when the maximum volume is reached. If data session release is requested, then the data session will be released following the message after an administered time period

## 11.2.19 TpDataSessionReport

Defines the Sequence of Data Elements that specify the data session report specific information.

Sequence Element Name	Sequence Element Type
MonitorMode	TpDataSessionMonitorMode
DataSessionEventTime	TpDateAndTime
DataSessionReportType	TpDataSessionReportType
AdditionalReportInfo	TpDataSessionAdditionalReportInfo

## 11.2.20 TpDataSessionAdditionalReportInfo

Defines the Tagged Choice of Data Elements that specify additional data session report information for certain types of reports.

Tag Element Type
TpDataSessionReportType

Tag Element Value	Choice Element Type	Choice Element Name
P_DATA_SESSION_REPORT_UNDEFINED	NULL	Undefined
P_DATA_SESSION_REPORT_CONNECTED	NULL	Undefined
P_DATA_SESSION_REPORT_DISCONNECT	TpDataSessionReleaseCause	DataSessionDisconnect

### 11.2.21 TpDataSessionReportRequest

Defines the Sequence of Data Elements that specify the criteria relating to data session report requests.

Sequence Element Name	Sequence Element Type
MonitorMode	TpDataSessionMonitorMode
DataSessionReportType	TpDataSessionReportType

### 11.2.22 TpDataSessionReportRequestSet

Defines a Numbered Set of Data Elements of TpDataSessionReportRequest.

### 11.2.23 TpDataSessionReportType

Defines a specific data session event report type.

Name	Value	Description
P_DATA_SESSION_REPORT_UNDEFINED	0	Undefined
P_DATA_SESSION_REPORT_CONNECTED	1	Data session established.
P_DATA_SESSION_REPORT_DISCONNECT	2	Data session disconnect requested by data session party

### 11.2.24 TpDataSessionEventCriteriaResult

Defines a sequence of data elements that specify a requested data session event notification criteria with the associated assignmentID.

Sequence Element Name	Sequence Element Type	Sequence Element Description
<u>EventCriteria</u>	TpDataSessionEventCriteria	<u>The event criteria that were specified by the application.</u>
<u>AssignmentID</u>	<u>TpAssignmentID</u>	<u>The associated assignmentID. This can be used to disable the notification.</u>

### 11.2.25 TpDataSessionEventCriteriaResultSet

Defines a set of TpDataSessionEventCriteriaResult.

## CHANGE REQUEST

⌘ **29.198-08 CR 010** ⌘ 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:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘ Correction on use of NULL in Data Session Control API		
<b>Source:</b>	⌘ CN5		
<b>Work item code:</b>	⌘ OSA1	<b>Date:</b>	⌘ 12/07/2002
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ REL-4
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Use <u>one</u> 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)

<b>Reason for change:</b>	⌘ OMG IDL does not support NULL as a valid value for a data type; attempts to send a null value result in a marshalling exception and a gateway can never receive the call.
<b>Summary of change:</b>	⌘ Use of null for dataSessionReference parameter in reportNotification method modified to define appropriate behaviour in NOTIFY mode
<b>Consequences if not approved:</b>	⌘ Failure to correct the API shall result in vendor specific interpretation and interoperability issues.

<b>Clauses affected:</b>	⌘ 8.2;		
<b>Other specs affected:</b>	⌘ <input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘	
<b>Other comments:</b>	⌘ Mirror Rel-5 CR CR 29.198-08 in N5-020764.		

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\*\*\*\*\* START OF FIRST CHANGE \*\*\*\*\*

## 8.2 Interface Class IpAppDataSessionControlManager

Inherits from: IpInterface.

The data session control manager application interface provides the application data session control management functions to the data session control SCF.

<<Interface>> IpAppDataSessionControlManager
dataSessionAborted (dataSession : in TpSessionID) : void reportNotification (dataSessionReference : in TpDataSessionIdentifier, eventInfo : in TpDataSessionEventInfo, assignmentID : in TpAssignmentID) : IpAppDataSessionRef dataSessionNotificationContinued () : void dataSessionNotificationInterrupted () : void

*Method*

**dataSessionAborted()**

This method indicates to the application that the Data Session object has aborted or terminated abnormally. No further communication will be possible between the Data Session object and the application.

*Parameters*

**dataSession : in TpSessionID**

Specifies the session ID of the data session that has aborted or terminated abnormally.

*Method*

**reportNotification()**

This method notifies the application of the arrival of a data session-related event.

Returns appDataSession : Specifies a reference to the application object which implements the callback interface for the new data session. If the application has previously explicitly passed a reference to the IpAppDataSession interface using a setCallback() invocation, this parameter may be null, or if supplied must be the same as that provided during the setCallback().

This parameter will be null if the notification is in NOTIFY mode.

*Parameters*

**dataSessionReference : in TpDataSessionIdentifier**

Specifies the session ID and the reference to the Data Session object to which the notification relates. ~~This parameter will be null~~ If the notification is being given in NOTIFY mode, this parameter shall be ignored by the application client implementation, and consequently the implementation of the SCS entity invoking reportNotification may populate this parameter as it chooses.

**eventInfo : in TpDataSessionEventInfo**

Specifies data associated with this event. This data includes the destination address provided by the end-user and the quality of service requested or negotiated for the data session.

**assignmentID : in TpAssignmentID**

Specifies the assignment id which was returned by the createNotification() method. The application can use assignment ID to associate events with event-specific criteria and to act accordingly.

*Returns*

**IpAppDataSessionRef**

\*\*\*\*\* END OF FIRST CHANGE \*\*\*\*\*