3GPP TSG CN Plenary Meeting #10, Bangkok, Thailand 6th – 8th December 2000

Source: TSG CN WG 5

Title: CRs to R99 Work Item OSA, 3GPP TS 29.198

Agenda item: 7.23

Document for: APPROVAL

Introduction:

This document contains 17 CRs on R99 Work Item "OSA", that have been agreed by TSG CN WG5, and are forwarded to TSG CN Plenary meeting #10 for approval.

SPEC	CR	REV	TDoc	PHASE	SUBJECT	CAT	OLD VER
29.198	025		N5-000199	R99	Removal of the originatingAddress from the connectReq method in IpDataSession	F	3.1.0
29.198	026	1	N5-000233	R99	Alignment between new ETSI document for common data and TS29.198	F	3.1.0
29.198	027		N5-000243	R99	Correction of the type TpTerminalCapabilities	F	3.1.0
29.198	028		N5-000245	R99	Incorrect Date and Time example in Data Definitions	F	3.1.0
29.198	029		N5-000246	R99	Double IDL definition for TpGCCSException	F	3.1.0
29.198	030		N5-000247	R99	Parameter EnabledOrDisbled in TpServiceTypeDescription	F	3.1.0
29.198	031		N5-000248	R99	readonly is an IDL keyword	F	3.1.0
29.198	032		N5-000249	R99	Error correction in the Scope definition, section 1	F	3.1.0
29.198	034		N5-000253	R99	Specific exceptions for method invocations in invalid states	F	3.1.0
29.198	035		N5-000254	R99	Unclear default value for TpAccessType	F	3.1.0
29.198	036	1	N5-000299	R99	Unclear description for TpAuthType	F	3.1.0
29.198	037		N5-000256	R99	TpInterfaceName in method obtainInterface()	F	3.1.0
29.198	038		N5-000262	R99	Correction on numbering in TpCallAppInfoType	F	3.1.0
29.198	039		N5-000263	R99	Addition of MonitorMode in TpCallEventInfo	F	3.1.0
29.198	040		N5-000264	R99	Renaming of P_CALL_REPORT_REFUSED_BUSY	D	3.1.0
29.198	043		N5-000292	R99	Removal of the parameter serviceProperties in the method selectService	F	3.1.0
29.198	044		N5-000297	R99	Inclusion of missing state transitions in case call related information could not be retrieved.	F	3.1.0

3GPP CN WG5 Meeting #6 Vienna, Austria, 17-19 October 2000

Document **N5-000199**

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

		CHANGE	REQ	JES1	Please page fo	see embedded help i or instructions on how		
		29.198	CR	025		Current Versi	on: 3.1.0	
GSM (AA.BB) or 3G	(AA.BBB) specific	ation number↑		1	CR number a	as allocated by MCC	support team	
For submission list expected approval	meeting # here ↑		ipproval rmation	X t version of th	nis form is availa	strate non-strate	gic	only)
Proposed chang		(U)SIM] ME		UTRAN	/ Radio	Core Networ	k X
Source:	Nokia					<u>Date:</u>	11th Octobe 2000	er
Subject:	Removal of	the originatingAc	ddress fro	om the o	connectR	eq method in I	pDataSession	
Work item:	OSA							
Category: FA (only one category shall be marked with an X)	Correspond Addition of Functional Editorial m	modification of fe odification	ature				Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00	X
Reason for change:	Furthermor parameter	2 document TS 23 e there is no map in Data Session C eter is also omitte	ping to C Control S	CAMEL OF Which	nor other	identified reas	on to have thi	S
Clauses affecte	d: 6.5.1.4	l, 9.5						
Other specs affected:	Other 3G cor Other GSM of specificat MS test specific BSS test specific O&M specific	ions ifications cifications	-	\rightarrow List of \rightarrow L	of CRs: of CRs: of CRs:			
Other comments:								
help.doc								

<----- double-click here for help and instructions on how to create a CR.

6.5.1.4 IpDataSession

<<Interface>>

IpDataSession

 $connect Req(dataSessionID: in TpSessionID \ , \ response Requested: in TpDataSessionReportRequestSet \ , \\ targetAddress: in TpAddress \ , \\ originatingAddress: in TpAddress, \\ assignmentID: out TpAssignmentIDRef): TpResult$

release(dataSessionID: in TpSessionID, cause: in TpDataSessionReleaseCause): TpResult

superviseDataSessionReq(dataSessionID: in TpSessionID, treatment: in

TpDataSessionSuperviseTreatment, bytes: in TpDataSessionSuperviseVolume): TpResult

setDataSessionChargePlan(dataSessionID: in TpSessionID, dataSessionChargePlan: in TpDataSessionChargePlan): TpResult

setAdviceOfCharge(dataSessionID : in TpSessionID, aoCInfo : in TpAoCInfo, tariffSwitch : in TpDuration): TpResult

```
/* This interface is the SCF manager' interface for Data Session Control. */
interface IpDataSessionControlManager : IpService
   /* This method is used to enable data session notifications. */
   void enableDataSessionNotification (
   in IpAppDataSessionControlManager appInterface,
   in TpDataSessionEventCriteria eventCriteria,
   out TpAssignmentID assignmentID)
   raises (TpDSCSException, TpGeneralException);
\slash ^{\star} This method is used by the application to disable data session notifications. \slash ^{\star}/
void disableDataSessionNotification
   in TpAssignmentID assignmentID)
   raises (TpDSCSException, TpGeneralException);
/* This interface provides the means to control a data session. */
interface IpDataSession : IpService
   /^{\star} This method requests connection of the data session to the destination party.*/
   void connectReq (
   in TpSessionID dataSessionID,
   in TpDataSessionReportRequestSet responseRequested,
   in TpAddress targetAddress,
   in TpAddress originatingAddress,
   out TpAssignmentID assignmentID)
   raises (TpDSCSException, TpGeneralException);
```

3GPP Meeting CN5 #5 Vienna, 17-18 Oct 2000

Document **N5-000233**

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

		CHANGE I	REQI	JES1			file at the bottom of the to fill in this form cor	
		29.198			, 5	Current Versi		
GSM (AA.BB) or 30	G (AA.BBB) specific		CK			allocated by MCC		
For submission to: CN#10 for approval for information strategic for information for informatio							nly)	
Proposed chan (at least one should be		(U)SIM	ME		UTRAN /	Radio	Core Network	X
Source:	Ericsson					Date:	8 Nov 2000	
Subject:	Alignment	petween new ETS	I docum	ent for o	common da	ata and TS29	.198	
Work item:	OSA							
(only one category shall be marked (B Addition of	modification of fea		rlier rele	ease X	Release:	Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00	X
Reason for change:	_	review of the new lignments in the da					nd the TS29.19	98
Clauses affecte	ed: 8.1.4.8	3, 8.1.4.12, 8.1.4.	17, 9.1					
Other specs affected:	Other 3G co Other GSM of specifical MS test specifical BSS test specifical O&M specifical	tions cifications ecifications	-	\rightarrow List of \rightarrow L	of CRs: of CRs: of CRs:			
Other comments:								
help.doc								

<----- double-click here for help and instructions on how to create a CR.

8.1.4.8 TpResultInfo

Defines further information relating to the result of the method, such as error codes.

•		letilod, such as error codes.		
Name	Value			
P_RESULT_INFO_UNDEFINED	0000h	No further information present		
P_INVALID_APPLICATION_ID P_INVALID_DOMAIN_ID	0001h	Invalid application client ID		
P_INVALID_CLIENT_CAPABILITY P_INVALID_AUTH_CAPABILITY	0002h	Invalid <u>authentication</u> <u>elient</u> capability		
P_INVALID_AGREEMENT_TEXT	0003h	Invalid agreement text		
P_INVALID_SIGNING_ALGORITHM	0004h	Invalid signing algorithm		
P_INVALID_INTERFACE_ID P_INVALID_INTERFACE_NAME	0005h	Invalid interface nameHD		
P_INVALID_SERVICE_ID	0006h	Invalid service capability feature ID		
P_INVALID_EVENT_TYPE	0007h	Invalid event type		
P_SERVICE_NOT_ENABLED	0008h	The service capability feature ID does not correspond to a SCF that has been enabled		
P_INVALID_ASSIGNMENT_ID	0009h	The assignment ID does not correspond to one of the valid assignment Idsis invalid		
P_INVALID_PARAMETER	000Ah	The method has been called with an invalid parameter		
P_INVALID_PARAMETER_VALUE	000Bh	A method parameter has an invalid value		
P_PARAMETER_MISSING	000Ch	A required parameter has not been specified in the method call		
P_RESOURCES_UNAVAILABLE	000Dh	The required resources in the network are not available		
P_TASK_REFUSED	000Eh	The requested method has been refused		
P_TASK_CANCELLED	000Fh	The requested method has been cancelled		
P_INVALID_DATE_TIME_FORMAT	0010h	Invalid date and time format provided		
P_NO_CALLBACK_ADDRESS_SET	0011h	The requested method has been refused because no callback address is set		
P_INVALID_TERMINATION_TEXT	0012h	Invalid termination text		
P_INVALID_SIGNATURE	<u>0012h</u>	Invalid digital signature		
P_INVALID_SERVICE_TOKEN	0013h	The service capability feature token does not correspond to a token that had been issued, or the issued token has expired		
P_INVALID_AUTHENTICATION	0014h	The client has not been correctly authenticated		
P_INVALID_SERVICE_PROPERTY	0015h	Invalid service capability feature property		
P_METHOD_NOT_SUPPORTED	001Ah	The method is not allowed or supported within the context of the current SCF agreement.		
P_ACCESS_DENIED	<u>0014h</u>	The client is not currently authenticated with the framework		
P_INVALID_PROPERTY	<u>0015h</u>	The framework does not recognise the property supplied by the client		
P METHOD NOT SUPPORTED	0016	within the context of the current service agreement.		
P NO ACCEPTABLE AUTH CAPABILITY	001	An authentication mechanism, which is acceptable to the framework, is not supported by the client		
P INVALID INTERFACE TYPE	0018			
P_INVALID_ACCESS_TYPE	0019	The framework does not support the type of access interface requested		
P SERVICE ACCESS DENIED	0012	h by the client. The client application is not allowed to access this service.		
General security errors				
P_USER_NOT_SUBSCRIBED	0030h	O030h A service (or application) is unauthorised to access information and request SCFs with regards to users that are not subscribed to it.		
P_APPLICATION_NOT_ACTIVATED	0031h	A service (or application) is unauthorised to access information and request SCFs with regards to its subscribed users that have		

		deactivated that particular service (or application).
P_USER_PRIVACY	0032h	A service (or application) is unauthorised to access information and request an SCF with regards to its subscribed users that have set their privacy flag regarding that particular SCF.
P_GCCS_SERVICE_INFORMATION_MISSING	0100h	Information relating to the Call Control SCF could not be found
P_GCCS_SERVICE_FAULT_ENCOUNTERED	0101h	Fault detected in the Call Control SCF
P_GCCS_UNEXPECTED_SEQUENCE	0102h	Unexpected sequence of methods, i.e., the sequence does not match the specified state diagrams for the call or the call leg.
P_GCCS_INVALID_ADDDRESS	0103h	Invalid address specified
P_GCCS_INVALID_CRITERIA	0104h	Invalid criteria specified
P_GCCS_INVALID_NETWORK_STATE	0105h	Although the sequence of method calls is allowed by the OSA gateway, the underlying protocol can not support it.
		E.g., in some protocols some methods are only allowed by the protocol, when the call processing is suspended, e.g., after reporting an event that was monitored in interrupt mode.
P_GUIS_INVALID_CRITERIA	0300h	Invalid criteria specified
P_GUIS_ILLEGAL_ID	0301h	Information id specified is invalid
P_GUIS_ID_NOT_FOUND	0302h	A legal information id is not known to the User Interaction SCF
P_GUIS_ILLEGAL_RANGE	0303h	The values for minimum and maximum collection length are out of range.
P_GUIS_INVALID_COLLECTION_CRITERIA	0304h	Invalid collection criteria specified
P_GUIS_INVALID_NETWORK_STATE	0305h	Although the sequence of method calls is allowed by the OSA gateway, the underlying protocol can not support it.
		E.g., in some protocols some methods are only allowed by the protocol, when the call processing is suspended, e.g., after reporting an event that was monitored in interrupt mode.
P_GUIS_UNEXPECTED_SEQUENCE	0306h	Unexpected sequence of methods, i.e., the sequence does not match the specified state diagrams.
P_DSCS_SERVICE_INFORMATION_MISSING	0400h	Information relating to the Data Session Control SCF could not be found
P_DSCS_SERVICE_FAULT_ENCOUNTERED	0401h	Fault detected in the Data Session Control SCF
P_DSCS_UNEXPECTED_SEQUENCE	0402h	Unexpected sequence of methods, i.e., the sequence does not match the specified state diagrams for the data session.
P_DSCS_INVALID_ADDDRESS	0403h	Invalid address specified
P_DSCS_INVALID_STATE	0404h	Invalid state specified
P_DSCS_INVALID_CRITERIA	0405h	Invalid criteria specified
P_DSCS_INVALID_NETWORK_STATE	0406h	Although the sequence of method calls is allowed by the OSA gateway, the underlying protocol can not support it.

8.1.4.12 TpAddress

Defines the structure of data elements that specifies an address.

Structure Member Name	Structure Member Type
Plan	TpAddressPlan
AddrString	TpString
Name	TpString
Presentation	TpAddressPresentation
Screening	TpAddressScreening
SubAddressString	TpString

The AddrString defines the actual address information and the structure of the string depends on the Plan. The following table gives an overview of the format of the AddrString for the different address plans.

Address Plan	AddrString Format Description	Example
P_ADDRESS_PLAN_NOT_PRESENT	Not applicable	

P ADDRESS PLAN UNDEFINED	Not applicable	
P ADDRESS PLAN IP	For Ipv4 the dotted quad notation is used. Also for IPv6 the dotted notation is used. The address can optionally be followed by a port number separated by a colon.	<u>"127.0.0.1:42"</u>
P_ADDRESS_PLAN_MULTICAST	An Ipv4 class D address or Ipv6 equivalent in dotted notation.	<u>"224.0.0.0"</u>
P ADDRESS PLAN UNICAST	A non multicast or broadcast IP address in dotted notation.	"127.0.0.1"
P ADDRESS PLAN E164	An international number without the international access code, including the country code and excluding the leading zero of the area code.	<u>"31161249111"</u>
P_ADDRESS_PLAN_AESA	The ATM End System Address in binary format (40 bytes)	01234567890ABCDEF01234567890AB CDEF01234567
P ADDRESS PLAN URL	A uniform resource locator as defined in IETF RFC 1738	"http://www.parlay.org"
P ADDRESS PLAN NSAP	The binary representation of the Network Service Access Point	490001AA000400010420
P_ADDRESS_PLAN_SMTP	An e-mail address as specified in IETF RFC822	"webmaster@parlay.org"
P_ADDRESS_PLAN_X400	The X400 address structured as a set of attibute value pairs separated by semicolons.	"C=nl;ADMD= ;PRMD=uninet;O=parlay;S=Doe;I=S;G =John'

8.1.4.17 TpAddressScreening

Defines whether an address has been screened by the application.

Name	Value	Description
P_ADDRESS_SCREENING_UNDEFINED	0	Undefined
P_ADDRESS_SCREENING_USER_VERIFIED_PASSED	1	user provided address verified and passed
P_ADDRESS_SCREENING_USER_NOT_VERIFIED	2	user provided address not verified
P_ADDRESS_SCREENING_USER_VERIFIED_FAILED	3	user provided address verified and failed
P_ADDRESS_SCREENING_NETWORK	4	Network provided address (Note that even though the application may provide the address to the gateway, from the end-user point of view it is still regarded as a network provided address)

9.1 Generic IDL

```
const TpInt32 P_INVALID_AUTH_CAPABILITY = 2;
const TpInt32 P_INVALID_AGREEMENT_TEXT = 3;
const TpInt32 P_INVALID_SIGNING_ALGORITHM = 4;
const TpInt32 P_INVALID_INTERFACE_NAME = 5;
      TpInt32 P_INVALID_SERVICE_ID = 6;
const TpInt32 P_INVALID_EVENT_TYPE = 7;
const TpInt32 P_SERVICE_NOT_ENABLED = 8;
const TpInt32 P_INVALID_ASSIGNMENT_ID = 9;
const TpInt32 P_INVALID_PARAMETER = 10;
const TpInt32 P_INVALID_PARAMETER_VALUE
const TpInt32 P_PARAMETER_MISSING = 12;
                _INVALID_PARAMETER_VALUE
                                          = 11;
const TpInt32 P_RESOURCES_UNAVAILABLE = 13;
const TpInt32 P_TASK_REFUSED = 14;
const TpInt32 P_TASK_CANCELLED = 15;
const TpInt32 P_INVALID_DATE_TIME_FORMAT = 16;
const TpInt32 P_NO_CALLBACK_ADDRESS_SET = 17;
const TpInt32 P_INVALID_SIGNATURE = 18;
      TpInt32 P_INVALID_SERVICE_TOKEN = 19;
const TpInt32 P_ACCESS_DENIED = 20;
const TpInt32 P_INVALID_PROPERTY = 21;
const TpInt32 P_METHOD_NOT_SUPPORTED = 22;
const TpInt32 P_NO_ACCEPTABLE_AUTH_CAPABILITY = 23;
      TpInt32 P_INVALID_INTERFACE_TYPE = 24;
const TpInt32 P_SERVICE_ACCESS_TYPE = 25;
const TpInt32 P_SERVICE_ACCESS_DENIED = 26;
      TpInt32 P_USER_NOT_SUBSCRIBED = 48;
const TpInt32 P_APPLICATION_NOT_ACTIVATED = 49;
const TpInt32 P_USER_PRIVACY = 50;
      // Defines the general Parlay exception values
      enum TpGeneralExceptionType
          P_RESULT_INFO_UNDEFINED, // No further information present
          P_INVALID_APPLICATION_ID, // Invalid application ID
          P_INVALID_CLIENT_CAPABILITY,// Invalid client capability
          P_INVALID_AGREEMENT_TEXT,
                                       // Invalid agreement text
          P_INVALID_SIGNING_ALGORITHM, // Invalid signing algorithm
                                       // Invalid interface name
          P INVALID INTERFACE NAME,
                                        // Invalid service capability feature ID
          P INVALID SERVICE ID.
          P_INVALID_EVENT_TYPE,
                                        // Invalid event type
          P SERVICE NOT ENABLED.
                                        // The SCF ID does not correspond
                                        // to a SCF that has been enabled
          P INVALID ASSIGNMENT ID,
                                        // The assignment ID does not
                                        // correspond to one of the valid assignment IDs
                                        // The method has been called with an
          P INVALID PARAMETER,
                                        // invalid parameter
                                       // A method parameter has an invalid value
          P INVALID PARAMETER VALUE.
          P PARAMETER MISSING,
                                        // A required parameter has not been
                                        // specified in the method call
          P_RESOURCES_UNAVAILABLE,
                                         // The required resources in the
                                        // network are not available
                                        // The requested method has been refused
          P TASK REFUSED.
          P TASK CANCELLED
                                        // The requested method has been cancelled
          P_INVALID_DATE_TIME_FORMAT, // Invalid date and time format provided
          P_NO_CALLBACK_ADDRESS_SET,
                                         // The requested method has been refused
                                         // because no callback address is set
          P INVALID TERMINATION TEXT, // Invalid termination text
          P_INVALID_SERVICE_TOKEN,
                                         // The SCF token does not correspond to a
                                         // token that had been issued, or the issued token
                                         // has expired.
                                        // The client has not been correctly authenticated
          P_INVALID_AUTHENTICATION,
          P_INVALID_SERVICE_PROPERTY,
                                        // Invalid service capability feature property.
          P_METHOD_NOT_SUPPORTED
                                         // The method is not allowed or supported within
                                        // the context of the current SCF agreement.
     1:
      exception TpGeneralException
          TpGeneralExceptionType exceptionType;
      // Defines the GCCS OSA exception values
      enum TpGCCSExceptionType
          P_GCCS_SERVICE_INFORMATION_MISSING,// Information relating to the Call
                                               // Control SCF could not be found
          P GCCS SERVICE FAULT ENCOUNTERED, // Fault detected in the Call Control SCF
          P_GCCS_UNEXPECTED_SEQUENCE, // Unexpected sequence of methods, i.e.,
```

```
// the sequence does not match the specified
                                  // state diagrams for the call or the call leg.
    P GCCS INVALID ADDDRESS,
                                 // Invalid address specified
                                  // Invalid criteria specified
    P GCCS INVALID CRITERIA,
    P_GCCS_INVALID_NETWORK_STATE, // Although the sequence of method calls is
                                  // allowed by the OSA gateway, the underlying
                                  // protocol can not support it. E.g., in some
                                 // protocols some methods are only allowed by
                                  // the protocol, when the call processing is
                                  // suspended, e.g., after reporting an event
                                  // that was monitored in interrupt mode.
};
exception TpGCCSException
    TpGCCSExceptionType exceptionType;
// Defined the GUIS OSA exception values
enum TpGUISExceptionType
    P_GUIS_INVALID_CRITERIA, // Invalid criteria specified
                             // Information id specified is invalid
    P_GUIS_ILLEGAL_ID,
    P GUIS ID NOT FOUND,
                             // A legal information id is not known to the User
                             // Interaction SCF
    P_GUIS_ILLEGAL_RANGE,
                             // The values for minimum and maximum collection
                              // length are out of range.
    P_GUIS_INVALID_COLLECTION_CRITERIA, // Invalid collection criteria specified
    P GUIS NETWORK DEASSIGN, // The relation between the network and the OSA
                             // gateway is terminated. Therefore, the gateway
                              // can no longer perform UI operations. This can
                              // happen after the last requested report is sent
                             // to the application. To prevent this error, the
                              /// application should ensure that it has requested
                              // events which are not yet reported.
    P_GUIS_INVALID_NETWORK_STATE // Although the sequence of method calls is
                                  // allowed by the OSA gateway, the underlying
                                 // protocol can not support it. E.g., in some
                                  // protocols some methods are only allowed by
                                  // the protocol, when the call processing is
                                 // suspended, e.g., after reporting an event
                                 // that was monitored in interrupt mode.
exception TpGUISException
    TpGUISExceptionType exceptionType;
```

9.3.1 Common Data Types for Call Control

```
const TpInt32 P_GCCS_INVALID_ADDDRESS = 259;
                const TpInt32 P_GCCS_INVALID_CRITERIA = 2601;
                const TpInt32 P_GCCS_INVALID_NETWORK_STATE = 26\frac{12}{12};
                exception TpGCCSException
                    TpInt32 exceptionType;
                };
                }; // end module cc
            }; // end module osa
        }; // end module threegpp
    }; // end module org
#endif
// END file CC.idl
            Common data types for User Interaction
9.4.1
// source file: UI.idl
// User Interaction data description
#ifndef __OSA_UI_DEFINED
#define __OSA_UI_DEFINED
#include <OSA.idl>
module org {
module threegpp {
 module osa {
  module ui {
    /* Define the possible Exceptions. */
    exception TpGUISException {
        TpInt32 exceptionType;
    const TpInt32 P_GUIS_INVALID_CRITERIA = 768;
                                                            /* Invalid criteria specified */
    const TpInt32 P_GUIS_ILLEGAL_ID = 769;
                                                       /* Information id specified is invalid
    const TpInt32 P_GUIS_ID_NOT_FOUND = 770;
                                                            /* Information id is not known to
the User Interaction Service */
   const TpInt32 P_GUIS_ILLEGAL_RANGE = 771;
                                                            /* The values for minimum and
maximum collection length are out of range */
    const TpInt32 P_GUIS_INVALID_COLLECTION_CRITERIA = 772; /* Invalid collection criteria
specified */
   const TpInt32 P_GUIS_INVALID_NETWORK_STATE = 7734;
                                                            /* Although the sequence of
method calls is allowed by the gateway, the underlying protocol can not support it. */
const TpInt32 P_GUIS_UNEXPECTED_SEQUENCE = 7745;
                                                        /* Although the sequence of method
calls is allowed by the gateway, the underlying protocol can not support it. */
   }; // end module ui
  }; // end module osa
 }; // end module threegpp
}; // end module org
#endif
```

// END file UI.idl

3GPP TSG-CN WG5 Meeting #7 Sophia Antipolis, France, 7th – 8th November, 2000

Document **N5-000243**

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

	CHANGE REQUEST Please see embedded help fit page for instructions on how to							
	29.198 CR 027 Current Version	on: 3.1.0						
GSM (AA.BB) or 3G	G (AA.BBB) specification number ↑ ↑ CR number as allocated by MCC s	support team						
For submission to: TSG-CN#10 for approval X strategic list expected approval meeting # here for information fo								
Proposed chang	Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc Proposed change affects: (at least one should be marked with an X) The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc USIM ME UTRAN / Radio Core Network X							
Source:	Nokia <u>Date:</u>	3 rd November 2000						
Subject:	Correction of the type TpTerminalCapabilities							
Work item:	OSA							
Category: (only one category shall be marked with an X)	A Corresponds to a correction in an earlier release B Addition of feature C Functional modification of feature	Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00						
Reason for change:	The type TpServicePropertyList is used to define the properties of an appropriate to use this for the terminal capabilities which are describe headers as specified in W3C [12] and adopted in the WAP UAProf sp contains URLs; terminal attributes and values, in RDF format; or a co both". This error seems to be only in the data definitions, because the defines this type as TpString which is a proper type for this purpose. Also the reference numbers have been corrected.	ed as: "CC/PP pecification [13]. It imbination of						
Clauses affected	ed: 8.8.2.2, 9.7							
affected:	Other 3G core specifications → List of CRs: Other GSM core specifications → List of CRs: MS test specifications → List of CRs: BSS test specifications → List of CRs: O&M specifications → List of CRs:							
Other comments:								

<----- double-click here for help and instructions on how to create a CR.

help.doc

8.2.1.23 TpServicePropertyMode

This type is left as a placeholder but is not used in release 99. This defines SCF property modes.

Name	Value	Documentation
NORMAL	0	The value of the corresponding SCF property type may optionally be provided
MANDATORY	1	The value of the corresponding SCF property type must be provided at service registration time
READONLY	2	The value of the corresponding SCF property type is optional, but once given a value it may not be modified
MANDATORY_READONLY	3	The value of the corresponding SCF property type must be provided and subsequently it may not be modified.

8.2.1.24 TpServicePropertyTypeName

This data type is identical to TpString and describes a valid SCF property name. The valid SCF property names are listed in the SCF data definition.

8.2.1.25 TpServicePropertyName

This data type is identical to TpString. It defines a valid SFC property name. Valid SCF property names are listed in the SCF data definition.

8.2.1.26 TpServicePropertyNameList

This data type defines a Numbered Set of Data Elements of type TpServicePropertyName.

8.2.1.27 TpServicePropertyValue

This data type is identical to TpString and describes a valid value of a SCF property. The valid SCF property values are given in the SCF data definition.

8.2.1.28 TpServicePropertyValueList

This data type defines a Numbered Set of Data Elements of type TpServicePropertyValue

8.2.1.29 TpServiceProperty

This data type is a Sequence of Data Elements which describes an "SCF property". It is a structured data type which consists of:

Sequence Element	Sequence Element	Documentation
Name	Туре	
ServicePropertyName	TpServicePropertyName	
ServicePropertyValueLis t	TpServicePropertyValueList	
ServicePropertyMode	TpServicePropertyMode	

8.2.1.30 TpServicePropertyList

This data type defines a Numbered Set of Data Elements of type TpServiceProperty.

8.8 Terminal Capabilities Data Definitions

8.8.1 Interface Definitions

8.8.1.1 IpTerminalCapabilities

Defines the address of an IpTerminalCapabilities Interface.

8.8.1.2 IpTerminalCapabilitiesRef

Defines a reference to type IpTerminalCapabilities

8.8.2 Terminal Capabilities Data Definitions

The constants and types defined in the following sections are defined in the *org.threegpp.osa.termcap* package.

8.8.2.1 terminalIdentity

Identifies the terminal.

Name	Туре	Documentation
terminalIdentity	TpString	Identifies the terminal. It may be a logical address known by the WAP Gateway/PushProxy.

8.8.2.2 TpTerminalCapabilities

This data type is a Sequence_of_Data_Elements that describes the terminal capabilities. It is a structured type that consists of:

Sequence Element	Sequence Element	Documentation		
Name	Туре			
StatusCode	TpBoolean	Indicates whether or not the terminalCapabilities are available.		
TerminalCapabilities	TpS <u>tringervicePropertyList</u>	Specifies the latest available capabilities of the user's terminal. This information, if available, is returned as CC/PP headers as specified in W3C [612] and adopted in the WAP UAProf specification [139]. It contains URLs; terminal attributes and values, in RDF format; or a combination of both.		

8.8.2.3 TpTerminalCapabilitiesError

Defines an error that is reported by the Terminal Capabilities SCF.

Name	Value	Description
P_TERMCAP_ERROR_UNDEFINED	0	Undefined.
P_TERMCAP_INVALID_TERMINALID	1	The request can not be handled because the terminal id specified is not valid.
P_TERMCAP_SYSTEM_FAILURE	2	System failure. The request cannot be handled because of a general problem in the terminal capabilities service or the underlying network.

9.7 Terminal Capabilities: TERMCAP.idl

```
#ifndef __TERMCAP_DEFINED
#define __TERMCAP_DEFINED
#include <OSA.idl>
module org {
module threegpp {
module osa {
module termcap {
   enum TpTerminalCapabilitiesError {
                                         /* Undefined */
        P_TERMCAP_ERROR_UNDEFINED,
        P_TERMCAP_INVALID_TERMINALID,
                                            /* Terminal ID not valid */
        {\tt P\_TERMCAP\_SYSTEM\_FAILURE} \qquad \qquad /* \ {\tt General problem in terminal capabilities SCF or in}
underlying network */
      };
     exception TpTermCapException {
         TpTerminalCapabilitiesError error;
   };
    /* TpTerminalCapabilities: Structure containing status code and terminal
    capabilities. */
    struct TpTerminalCapabilities {
        /* statusCode: Indicates whether or not the terminalCapabilities
        are available. */
        TpBoolean StatusCode;
        /* terminalCapabilities: Specifies the latest available capabilities of the user's terminal.
This information, if available, is returned as CC/PP headers as specified in W3C [126] and adopted
in the WAP UAProf specification [\frac{139}{2}]. It contains URLs; terminal attributes and values, in RDF
format; or a combination of both. \bar{*}/
        TpString TerminalCapabilities;
    };
    interface IpTerminalCapabilities : IpService {
        /* Method: getTerminalCapabilities()
            This method is used by an application to get the capabilities of a
            user's terminal. Direction: Application to Network
            In parameter TerminalIdentity: Identifies the terminal. It may be
            a logical address known by the WAP {\tt Gateway/PushProxy.}
            Out parameter, see TerminalCapabilityStruct*/
        void getTerminalCapabilities (
            in TpString terminalIdentity,
            out TpTerminalCapabilities result
         raises (TpTermCapException, TpGeneralException);
    };
};};};
;
#endif
```

Document **N5-000245**

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8.1.4.11 TpDateAndTime

This data type is identical to a TpString. It specifies the data and time in accordance with International Standard ISO 8601. This is defined as the string of characters in the following format:

```
HH:MM:SS.mmm

or

YYYY-MM-DD HH:MM:SS.mmmZ

where the date is specified as:
```

YYYY four digits year
MM two digits month
DD two digits day

The date elements are separated by a hyphen character (-).

The time is specified as:

```
HH two digits hours (24h notation)

MM two digits minutes

SS two digits seconds

mmm three digits fractions of a second (i.e. milliseconds)
```

A colon character separates the time elements (:). The date and time are separated by a space. Optionally, a capital letter Z may be appended to the time field to indicate Universal Time (UTC). Otherwise, local time is assumed.

Example

The 4 December 1998, at 10:30 and 15 seconds is encoded as the string:

```
1998-12-04 10:30:15.000 for local time, or in UTC it would be:
1998-12-04 10:30:15.000Z
```

Document **N5-000246**

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9.1 Generic IDL

```
#ifndef __OSA_DEFINED
#define __OSA_DEFINED
module org
  module threegpp
     module osa
        Primitive data types
        typedef boolean TpBoolean; // Defines a Boolean data type
                                  // Defines a signed 32 bit integer
        typedef long
                       TpInt32;
        typedef float
                       TpFloat;
                                  // Defines a single precision real number.
        typedef string TpString; // Defines a string comprising length and data.
        // Primitive based OSA datatypes
                        TpDuration; // This data type is a TpInt32 representing a
        typedef TpInt32
                             // time interval in milliseconds. A value of "-1" defines
                             // infinite duration and a value of "-2" represents default
                             // duration.
        typedef TpInt32 TpSessionID; // Defines a network unique session ID. OSA
                             // uses this ID to identify sessions, e.g. call or call leg
                             // sessions, within an object implementing an interface
                             // capable of handling multiple sessions. For the different
                             // OSA service capability feature, the sessionIDs are unique
                             // only in the context of a manager instantiation (e.g., within
                             // the context of one generic call control manager). As such
                             // if an application creates two instances of the same SCF
                             // manager it shall use different instantiations of the
                             // callback objects which implement the callback interfaces.
        typedef TpInt32 TpAssignmentID; // This data type is identical to a TpInt32. It
                             // specifies a number which identifies an individual
                             // event notification enabled by the application or
                             // OSA service capability feature.
        typedef sequence < TpSessionID> TpSessionIDSet;
```

```
// Defines the general Parlay exception values
enum TpGeneralExceptionType
  P_RESULT_INFO_UNDEFINED, // No further information present
  P_INVALID_APPLICATION_ID, // Invalid application ID
  P_INVALID_CLIENT_CAPABILITY,// Invalid client capability
  P_INVALID_AGREEMENT_TEXT, // Invalid agreement text
  P_INVALID_SIGNING_ALGORITHM,// Invalid signing algorithm
  P_INVALID_INTERFACE_NAME, // Invalid interface name
  P_INVALID_SERVICE_ID,
                            // Invalid service capability feature ID
  P_INVALID_EVENT_TYPE,
                             // Invalid event type
  P_SERVICE_NOT_ENABLED,
                             // The SCF ID does not correspond
                       // to a SCF that has been enabled
  P_INVALID_ASSIGNMENT_ID, // The assignment ID does not
                      // correspond to one of the valid assignment IDs
  P INVALID PARAMETER,
                             // The method has been called with an
                       // invalid parameter
  P_INVALID_PARAMETER_VALUE, // A method parameter has an invalid value
  P_PARAMETER_MISSING,
                             // A required parameter has not been
                      // specified in the method call
  P_RESOURCES_UNAVAILABLE, // The required resources in the
                       // network are not available
  P_TASK_REFUSED,
                              // The requested method has been refused
  P_TASK_CANCELLED,
                              // The requested method has been cancelled
  P_INVALID_DATE_TIME_FORMAT, // Invalid date and time format provided
  P_NO_CALLBACK_ADDRESS_SET, // The requested method has been refused
                       // because no callback address is set
  P_INVALID_TERMINATION_TEXT, // Invalid termination text
  P_INVALID_SERVICE_TOKEN, // The SCF token does not correspond to a
                       // token that had been issued, or the issued token
                       // has expired.
  P_INVALID_AUTHENTICATION, // The client has not been correctly authenticated
  P_INVALID_SERVICE_PROPERTY, // Invalid service capability feature property.
                            // The method is not allowed or supported within
  P_METHOD_NOT_SUPPORTED
                      // the context of the current SCF agreement.
};
exception TpGeneralException
  TpGeneralExceptionType exceptionType;
};
```

```
// Defines the GCCS OSA exception values
enum TpGCCSExceptionType
  - P_GCCS_SERVICE_INFORMATION_MISSING,// Information relating to the Call
                            // Control SCF could not be found
   P_GCCS_SERVICE_FAULT_ENCOUNTERED, // Fault detected in the Call Control SCF
  P_GCCS_UNEXPECTED_SEQUENCE, // Unexpected sequence of methods, i.e.,
                        // the sequence does not match the specified
                       // state diagrams for the call or the call leg.
  P_GCCS_INVALID_ADDDRESS,
                              // Invalid address specified
  P_GCCS_INVALID_CRITERIA, // Invalid criteria specified
  P_GCCS_INVALID_NETWORK_STATE,// Although the sequence of method calls is
                       // allowed by the OSA gateway, the underlying
                       // protocol can not support it. E.g., in some
                       // protocols some methods are only allowed by
                        // the protocol, when the call processing is
                       // suspended, e.g., after reporting an event
                       // that was monitored in interrupt mode.
exception TpGCCSException
  TpGCCSExceptionType exceptionType;
// Defined the GUIS OSA exception values
enum TpGUISExceptionType
{
   P_GUIS_INVALID_CRITERIA, // Invalid criteria specified
                          // Information id specified is invalid
   P_GUIS_ILLEGAL_ID,
   P_GUIS_ID_NOT_FOUND,
                           // A legal information id is not known to the User
                     // Interaction SCF
   P_GUIS_ILLEGAL_RANGE, // The values for minimum and maximum collection
                      // length are out of range.
   P_GUIS_INVALID_COLLECTION_CRITERIA, // Invalid collection criteria specified
   P_GUIS_NETWORK_DEASSIGN, // The relation between the network and the OSA
                      // gateway is terminated. Therefore, the gateway
                      \ensuremath{//} can no longer perform UI operations. This can
                      // happen after the last requested report is sent
                      // to the application. To prevent this error, the
```

Document **N5-000247**

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8.2.1.24 TpServiceTypeDescription

This type is left as a placeholder but is not used in release 99.

This data type is a Sequence_of_Data_Elements which describes an SCF type. It is a structured data type. It consists of:

Sequence Element	Sequence Element	Documentation
Name	Туре	
ServiceTypeProperty List	TpServiceTypePropertyList	a sequence of property name and property mode tuples associated with the SCF type
ServiceTypeNameList	TpServiceTypeNameList	the names of the super types of the associated SCF type
EnabledOrDisabled	TpBoolean	an indication whether the SCF type is enabled (true) or disabled (false)

Document **N5-000248**

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Work item:	OSA						
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The stage 3 documentation of the OSA R'99 API consists of two parts:

- The API specification (Part 1).

This is a normative stage 3 specification of the capabilities of the OSA R'99 API and describes the OSA API interface classes, containing class diagrams (see section 6), state transition diagrams (see section 7), $\frac{89}{100}$, and the IDLs (see section $\frac{89}{100}$).

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7 State Transition Diagrams

This section contains the State Transition Diagrams for the objects that implement the interfaces on the gateway side. The State Transition Diagrams show the behaviour of these objects. For each state the methods that can be invoked by the application are shown. Methods not shown for a specific state are not relevant for that state and will return an the P_TASK_REFUSED exception. Apart from the methods that can be invoked by the application also events internal to the gateway or related to network events are shown together with the resulting event or action performed by the gateway. These internal events are shown between quotation marks.

Document **N5-000254**

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8.2.2.1 TpAccessType

This data type is identical to a TpString. This identifies the type of access interface requested by the client application. If they request P_ACCESS, then a reference to the IpAccess interface is returned. (Network operators can define their own access interfaces to satisfy client requirements for different types of access. These can be selected using the TpAccessType, but should be preceded by the string "SP_". The following values <u>isare</u> defined for OSA release 99:

String Value	Description
NULL	An empty (NULL) string indicates the default access type
P_ACCESS	Access using the OSA Access Interfaces: IpAccess and IpAppAccess

9.2.3 Trust and Security Management IDL

```
#include <fw.idl>
module org{
module threegpp{
module osa{
module fw{
module trust_and_security{
     Data definitions
  typedef TpString
                                      // The type of access interface requested by the client
                     TpAccessType;
                                      // application. For OSA release 99 the following values
                                      // hasve been defined: NULL (indicates the default access
                                      // type) and P_ACCESS.
  typedef TpString
                     TpAuthType;
                                      // The type of authentication mechanism requested by the
                                      // client. For OSA release 99 the following values have
                                      // been defined: NULL (indicates OSA authentication),
                                      // P_AUTHENTICATION (indicates use of the OSA
                                      // authentication interfaces.
  typedef TpString TpAuthCapability;
                                      // The authentication capabilities that could be supported
                                      // by the OSA. For OSA release 99 the following values
                                      // have been defined: NULL (indicates no client
                                      // capabilities, P_DES_56, P_DES_128, P_RSA_512 and
                                   P_RSA_1024).
```

Document **N5-000256**

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Subject:	TpInterface	Name in method o	obtainInt	erface()			2000	
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help.doc	< doub	le-click here for h	elp and	instruction	s on how	to create a	CR.	

8.2.2.5 TpInterfaceName

This data type is identical to a TpString, and is defined as a string of characters that identify the names of the framework SCFs that are be supported by the OSA API. Other Network operator specific SCFs may also be used, but should be preceded by the string "SP_". The following values are defined for OSA release 99.

Character String Value	Description
NULL	An empty (NULL) string indicates no interface.

9.2.3 Trust and Security Management IDL

```
#include <fw.idl>
module org{
module threegpp{
module osa{
module fw{
module trust_and_security{
     Data definitions
                    TpAccessType;
  typedef TpString
                                      // The type of access interface requested by the client
                                      // application. For OSA release 99 the following values
                                      // have been defined: NULL (indicates the default access
                                      // type) and P_ACCESS.
                                      // The type of authentication mechanism requested by the
  typedef TpString
                    TpAuthType;
                                      // client. For OSA release 99 the following values have
                                      // been defined: NULL (indicates OSA authentication),
                                      // P_AUTHENTICATION (indicates use of the OSA
                                      // authentication interfaces.
  typedef TpString TpAuthCapability;
                                      // The authentication capabilities that could be supported
                                      // by the OSA. For OSA release 99 the following values
                                      // have been defined: NULL (indicates no client
                                      // capabilities, P_DES_56, P_DES_128, P_RSA_512 and
                                   P_RSA_1024).
                    TpAuthCapabilityList; // A string of multiple TpAuthCapability
  typedef TpString
                                           // concatenated using a commas.
```

3GPP Meeting CN5 #7 Sophia Antipolis, November 7-8

Document **N5-000262**

CHANGE REQUEST Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.								
		29.198	CR	038		Current Versi	on: 3.1.0	
GSM (AA.BB) or 3	G (AA.BBB) specification	n number↑		1 (CR number a	as allocated by MCC	support team	
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Proposed char (at least one should be		(U)SIM	ME		UTRAN	/ Radio	Core Netwo	k X
Source:	Ericsson					<u>Date:</u>	27 October	2000
Subject:	Correction to r	<mark>make consecut</mark>	<mark>ive num</mark> l	bering fo	r TpCall	AppInfoType		
Work item:	OSA							
(only one category shall be marked with an X)	B Addition of fea C Functional mo D Editorial modi	odification of fea fication	ature				Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00	X
Reason for change:	The numbering	g for TpCallApp	oInto I yp	e is not	consecu	tive		
Clauses affecte	ed: 8.3.3.3							
Other specs affected:	Other 3G core so Other GSM core specification MS test specific BSS test specific O&M specification	ations	-	→ List o → List o → List o → List o → List o	f CRs: f CRs: f CRs:			
Other comments:								
help.doc	< double-	-click here for h	nelp and	instruction	ons on h	ow to create a	CR.	

8.3.3.3 TpCallAppInfoType

Defines the type of application related call information.

Name	Value	Description
P_CALL_APP_UNDEFINED	0	Undefined
P_CALL_APP_ALERTING_MECHANISM	1	The alerting mechanism or pattern to use
P_CALL_APP_NETWORK_ACCESS_TYPE	2	The network access type (e.g. ISDN)
P_CALL_APP_TELE_SERVICE	<u>3</u> 4	Indicates the tele-service (e.g. speech) and related info such as clearing programme
P_CALL_APP_BEARER_SERVICE	<u>4</u> 5	Indicates the bearer service (e.g. 64kb/s unrestricted data).
P_CALL_APP_PARTY_CATEGORY	<u>5</u> 6	The category of the calling or called party
P_CALL_APP_PRESENTATION_ADDRESS	<u>6</u> 7	The address to be presented to other call parties
P_CALL_APP_GENERIC_INFO	<u>7</u> 8	Carries unspecified application-Service Capability Feature information
P_CALL_APP_ADDITIONAL_ADDRESS	<u>8</u> 9	Indicates an additional address

3GPP Meeting CN5 #7 Sophia Antipolis, November 7-8

Document **N5-000263**

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

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8.3.2.6 TpCallEventInfo

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

Sequence Element Name	Sequence Element Type
DestinationAddress	TpAddress
OriginatingAddress	TpAddress
OriginalDestinationAddress	TpAddress
RedirectingAddress	TpAddress
CallAppInfo	TpCallAppInfoSet
CallEventName	TpCallEventName
CallNotificationType	TpCallNotificationType
<u>MonitorMode</u>	<u>TpCallMonitorMode</u>

9.3 Call Control

9.3.1 Common Data Types for Call Control

```
// source file: CC.idl
// Generic Call Data description
#ifndef __OSA_CC_DEFINED
#define __OSA_CC_DEFINED
         //Defines the type of notification.
         // \\ Indicates \ whether \ it \ is \ related \ to \ the \ originating \ of \ the \ terminating \ user \ in \ the \ call.
          struct TpCallEventInfo
             {\tt TpAddress\ DestinationAddress:}
             TpAddress OriginatingAddress;
             TpAddress OriginalDestinationAddress;
             TpAddress RedirectingAddress;
             TpCallAppInfoSet CallAppInfo;
             TpCallEventName CallEventName;
             TpCallNotificationType CallNotificationType;
             TpCallMonitorMode MonitorMode;
         }; // end module cc
     }; // end module osa
}; // end module threegpp
 }; // end module org
#endif
// END file CC.idl
```

3GPP Meeting CN5 #7 Sophia Antipolis, November 7-8

Document **N5-000264**

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

		CHANGE I	REQU	JEST		see embedded help r instructions on how		
		29.198	CR	040		Current Versi	on: 3.1.	0
GSM (AA.BB) or 30	G (AA.BBB) specifica	ation number↑		1 (CR number a	as allocated by MCC	support team	
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Proposed chan (at least one should be	ge affects:	ersion 2 for 3GPP and SMG (U)SIM	ME		UTRAN	Able from: ftp://ftp.3gpp.		twork X
Source:	Ericsson					Date:	27 Octo	ber 2000
Subject:		of P_CALL_REPO EPORT_BUSY. A						sedBusy
Work item:	OSA							
(only one category shall be marked (A Correspond Addition of	modification of fea		rlier rele	ase	Release:	Phase 2 Release Release Release Release	96 97 98 99 X
Reason for change:		should not imply there was an inco					the call by	being
Clauses affecte	ed: 8.3.3.2	26, 9.3.1						
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3GPP

8.3.3.26 TpCallAdditionalReportInfo

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

Tag Element Type	
TpCallReportType	

Tag Element Value	Choice Element Type	Choice Element Name
P_CALL_REPORT_UNDEFINED	NULL	Undefined
P_CALL_REPORT_PROGRESS	NULL	Undefined
P_CALL_REPORT_ALERTING	NULL	Undefined
P_CALL_REPORT_ANSWER	NULL	Undefined
P_CALL_REPORT REFUSED_ BUSY	TpCallReleaseCause	Refused Busy
P_CALL_REPORT_NO_ANSWER	NULL	Undefined
P_CALL_REPORT_DISCONNECT	TpCallReleaseCause	CallDisconnect
P_CALL_REPORT_REDIRECTED	TpAddress	ForwardAddress
P_CALL_REPORT_SERVICE_CODE	TpCallServiceCode	ServiceCode
P_CALL_REPORT_ROUTING_FAILURE	TpCallReleaseCause	RoutingFailure

9.3.1 Common Data Types for Call Control

```
// source file: CC.idl
// Generic Call Data description
#ifndef __OSA_CC_DEFINED
#define __OSA_CC_DEFINED
#include <OSA.idl>
#include <UI.idl>
module org
module threegpp
    module osa
      module cc
         /* Defines a specific call event report type. */
         enum TpCallReportType
                                           /* Undefined */
            P_CALL_REPORT_UNDEFINED,
           P_CALL_REPORT_PROGRESS,
                                          /* Call routing progress event */
           P_CALL_REPORT_ALERTING,
                                           /* Call alerting at address */
           P_CALL_REPORT_ANSWER,
                                           /* Call answered at address */
                                          /* Called address refused call due to busy */
           P_CALL_REPORT_BUSY,
                                           /* No answer at called address */
            P_CALL_REPORT_NO_ANSWER,
            P_CALL_REPORT_DISCONNECT,
                                           /* Call disconnect requested by address */
           P_CALL_REPORT_REDIRECTED,
            P_CALL_REPORT_SERVICE_CODE,
            P_CALL_REPORT_ROUTING_FAILURE
         /* Defines the Tagged Choice of Data Elements that specify additional call report
      information. */
         union TpCallAdditionalReportInfo switch(TpCallReportType)
            case P_CALL_REPORT_BUSY: TpCallReleaseCause RefuseBusy;
            case P_CALL_REPORT_DISCONNECT: TpCallReleaseCause CallDisconnect;
            case P_CALL_REPORT_REDIRECTED: TpAddress ForwardAddress;
```

3GPP

3GPP TSG-CN WG5 Meeting #7 Sophia Antipolis, France, 7th – 8th November, 2000

Document **N5-000292**

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

		CHANGE	REQ	UEST	Please s		file at the bottom of this to fill in this form correctly.
		29.198	CR	043		Current Version	on: 3.1.0
GSM (AA.BB) or 30	G (AA.BBB) specificat	tion number↑		10	CR number a	s allocated by MCC	support team
For submission	I meeting # here ↑	for info	pproval rmation	X		strate non-strate	gic use only)
Proposed change (at least one should be	ge affects:	rsion 2 for 3GPP and SMG (U)SIM	ME	t version of thi	UTRAN ,		core Network X
Source:	Nokia					<u>Date:</u>	7 th November 2000
Subject:	Removal of	the parameter se	ervicePro	operties i	in the me	thod selectSer	vice
Work item:	OSA						
Category: (only one category shall be marked with an X)	Correspond Addition of f Functional r	nodification of fe		ırlier rele	ase	Release:	Phase 2 Release 96 Release 97 Release 98 Release 99 X Release 00
Reason for change:		Properties need ras been determin			any more	at this phase a	as the specific
Clauses affecte	<u>d:</u> 6.2.3.4,	9					
Other specs affected:	Other 3G core Other GSM co specification MS test specification BSS test specification	ons fications cifications	-		f CRs: f CRs: f CRs:		
Other comments:							
help.doc							

<----- double-click here for help and instructions on how to create a CR.

6.2.3.4 IpAccess

<<Interface>>

IpAccess

obtainInterface(interfaceName: in TpInterfaceName, fwInterface: out IpOsaRefRef): TpResult

obtainInterfaceWithCallback(interfaceName: in TpInterfaceName, appInterface: in IpOsaRef, fwInterface: out IpOsaRefRef): TpResult

accessCheck(serviceToken: in TpServiceToken,securityContext: in TpString, securityDomain: in TpString, group: in TpString, serviceAccessTypes: in TpString, serviceAccessControl: out TpServiceAccessControlRef): TpResult

selectService(serviceID: in TpServiceID, serviceProperties: in TpServicePropertyList, serviceToken: out TpServiceTokenRef): TpResult

signServiceAgreement(serviceToken: in TpServiceToken, agreementText: in TpString, signingAlgorithm: in TpSigningAlgorithm, signatureAndServiceMgr: out TpSignatureAndServiceMgrRef): TpResult

terminateServiceAgreement(serviceToken: in TpServiceToken, terminationText: in TpString, digitalSignature: in TpString): TpResult

endAccess(endAccessProperties: in TpEndAccessProperties): TpResult

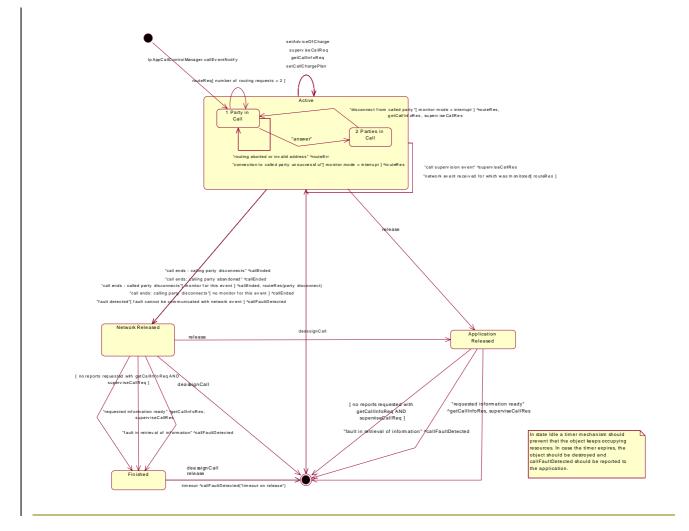
3GPP Meeting CN5 #7 Sophia Antipolis, November 7-8

Document **N5-000297**

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

		CHANGE I	REQU		se see embedded help for instructions on how		
		29.198	CR	044	Current Versi	on: 3.1.0	
GSM (AA.BB) or 3	BG (AA.BBB) specific	ation number↑		↑ CR numbe	r as allocated by MCC	support team	
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Proposed chall (at least one should be	nge affects:	(U)SIM	ME		N / Radio	Core Network	_
Source:	Ericsson				<u>Date:</u>	27 October 2	2000
Subject:	Inclusion of retrieved.	missing state trai	nsitions in	case call rela	ted information	could not be	
Work item:	OSA						
Category: (only one category shall be marked with an X) Reason for	B Addition of C Functional D Editorial m	modification of fea	ature		Release:	Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00	X
<u>change:</u>	application	ents) the SCF will When this is impo an explicit transitio	ossible (d	ue to e.g. dialo	og failure toward	•	re
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7.2.2 Call



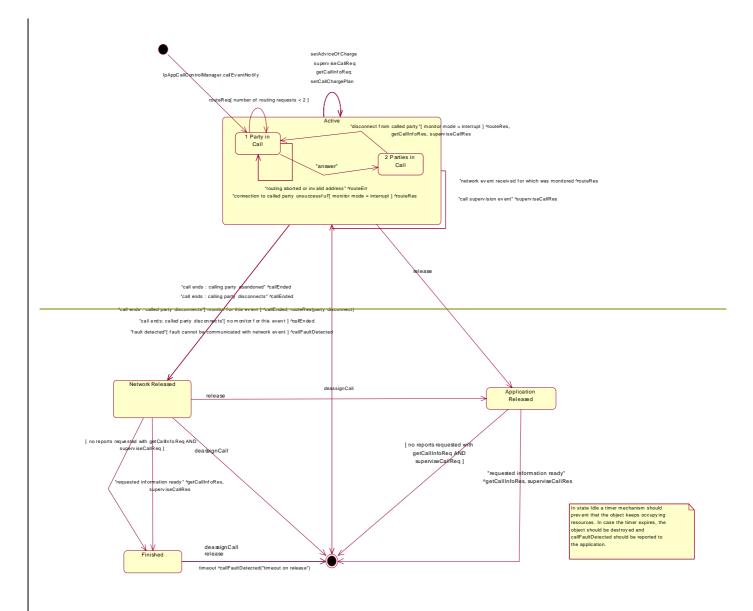


Figure 7-12: State Transition Diagram for Call

7.2.2.1 Active state

In this state a call between two parties is being setup or present. Refer to the substates for more details

The application can request the gateway for a certain type of charging of the call by calling setCallChargePlan(). The application can request for charging related information by calling getCallInfoReq(). Furthermore the application can request supervision of the call by calling superviseCallReq(). It is also allowed to send Advice Of Charge information by calling setAdviceOfCharge().

7.2.2.1.1 1 Party in Call state

When the Call is in this state a calling party is present. The application can now request that a connection to a called party be established by calling the method routeReq(). When the calling party abandons the call before the application has invoked the routeReq() operation, the gateway informs the application by invoking callFaultDetected() and also the operation callEnded() will be invoked. When the calling party abandons the call after the application has invoked routeReq() but before the call has actually been established, the gateway informs the application by invoking callEnded().

When the calling party answers the call, a transition will be made to the 2 Parties in Call state. In case the call can not be established because the application supplied an invalid address or the connection to the called party was unsuccessful while the application was monitoring for the latter in interrupt mode, the Call object will stay in this state

In this state user interaction is possible unless there is an outstanding routing request.

7.2.2.1.2 2 Parties in Call state

A connection between two parties has been established.

In case the calling party disconnects, the gateway informs the application by invoking callEnded().

When the called party disconnects different situations apply:

- 1. the application is monitoring for this event in interrupt mode: a transition is made to the 1 Party in Call state, the application is informed with routeRes with indication that the called party has disconnected and all requested reports are sent to the application. The application now again has control of the call.
- 2. the application is monitoring for this event but not in interrupt mode. In this case a transition is made to the Network Released state and the gateway informs the application by invoking the operation routeRes() and callEnded().
- 3. the application is not monitoring for this event. In this case the application is informed by the gateway invoking the callEnded() operation and a transition is made to the Network Released state.

7.2.2.3 Network released state

In this state the call has ended and the Gateway collects the possible call information requested with getCallInfoReq() and / or superviseCallReq(). The information will be returned to the application by invoking the methods getCallInfoRes() and / or superviseCallRes() on the application. Also when a call was unsuccessful these methods are used. In case the application has not requested additional call related information immediately a transition is made to state Idle.

7.2.2.4 Finished state

In this state the call has ended and no call related information is to be send to the application. The application can only release the Call object. Calling the deassingCall() method has the same effect. Note that the application has to release the object itself as good OO practice requires that when an object was created on behalf of a certain entity, this entity is also responsible for destroying it when the object is no longer needed.

7.2.2.5 Application released state.

In this state the application has requested to release the Call object and the Gateway collects the possible call information requested with getCallInfoReq(). In case the application has not requested additional call related information immediately the Call object is destroyed.

3GPP Meeting CN5 #6 Sophia Antipolis, France, 7-8 November 2000

Document **N5-000299**

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

		CHANGE F	REQU	JEST		,	file at the bottom of this to fill in this form correctly.
		29.198	CR	036_F	R1	Current Versi	on: 3.1.0
GSM (AA.BB) or 30	G (AA.BBB) specifica	tion number↑		↑ CF	R number a	s allocated by MCC	support team
For submission list expected approva		for ap	oproval mation	X		strate non-strate	· '
Form: CR cover shee	et, version 2 for 3GPP a	nd SMG The latest version	on of this form	is available fro	m: ftp://ft	p.3gpp.org/Info	ormation/CR-Form- v2.doc
Proposed chan (at least one should be		(U)SIM	ME [U	JTRAN .	/ Radio	Core Network X
Source:	Lucent Tech	nnologies				<u>Date:</u>	6 November 2000
Subject:	Unclear desc	ription for TpAuth	Гуре				
Work item:	OSA						
(only one category shall be marked	Correspond Addition of	modification of fea		ilier relea	se X	Release:	Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00
Reason for change:	Interfaces is	ion between using a not clear from the is no distinction.	e text in				
Clauses affecte	ed: 8.2.2.2	, 9.2.3					
Other specs affected:	Other 3G core Other GSM c specificati MS test speci BSS test speci O&M specific	ons fications cifications		 → List of 	CRs: CRs: CRs:		
Other comments:							
help.doc	< doub	le-click here for h	elp and	instructio	ns on h	ow to create a	CR.

8.2.2.2 TpAuthType

This data type is identical to a TpString. It identifies the type of authentication mechanism requested by the client. It provides Network operators and client's with the opportunity to use an alternative to the OSA Authentication interface, e.g. CORBA Security. OSA Authentication is the default authentication method. Other Network operator specific capabilities may also be used, but should be preceded by the string "SP_". The following values are is defined for OSA release 99:

String Value	Description
NULL	An empty (NULL) string indicates the default authentication method: OSA Authentication.
P_AUTHENTICATION	Authenticate using the OSA Authentication Interfaces: IpAuthentication and IpAppAuthentication
	Indicates the default authentication method, i.e. the IpAuthentication and IpAppAuthentication interfaces.

9.2.3 Trust and Security Management IDL

```
#include <fw.idl>
module org{
module threegpp{
module osa{
module fw{
module trust_and_security{
     Data definitions
  typedef TpString
                                     // The type of access interface requested by the client
                     TpAccessType;
                                      // application. For OSA release 99 the following values
                                      // have been defined: NULL (indicates the default access
                                      // type) and P_ACCESS.
  typedef TpString
                     TpAuthType;
                                     // The type of authentication mechanism requested by the
                                     // client. For OSA release 99 the following values hasve
                                      // been defined: NULL (indicates OSA authentication),
                                      // P_AUTHENTICATION (indicates use of the OSA
                                      // authentication interfaces).
  typedef TpString TpAuthCapability;
                                     // The authentication capabilities that could be supported
                                      // by the OSA. For OSA release 99 the following values
                                      // have been defined: NULL (indicates no client
```

// capabilities, P_DES_56, P_DES_128, P_RSA_512 and P_RSA_1024).