

**3GPP TSG CN Plenary  
Meeting #10, Bangkok, Thailand  
6<sup>th</sup> – 8<sup>th</sup> December 2000**

**Tdoc NP-000636**

**Source:** TSG\_CN WG 4  
**Title:** CRs to R99 Work Item Camel Phase 3  
**Agenda item:** 7.2  
**Document for:** APPROVAL

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**Introduction:**

This document contains 6 CRs on R99 Work Item Camel Phase 3, that have been agreed by TSG\_CN WG4, and is forwarded to TSG\_CN Plenary meeting #10 for approval.

SMG#	TDoc	SPEC	CR	RE	PHAS	VERS	SUBJECT	CAT
CN10	N4-001088	29.002	210		R99	3.6.0	Introduction of GGSN Address	F
CN10	N4-001089	29.002	211		Rel-4	4.1.0	Introduction of GGSN Address	A
CN10	N4-000907	29.002	190		R99	3.6.0	Corrections of ISD data structure for CAMEL phase 3	F
CN10	N4-000908	29.002	191		Rel-4	4.1.0	Corrections of ISD data structure for CAMEL phase 3	A
CN10	N4-001047	29.002	213		R99	3.6.0	ATSI correction	F
CN10	N4-001048	29.002	214		Rel-4	4.1.0	ATSI correction	A

<b>CHANGE REQUEST</b>			
<b>29.002 CR 190</b>		Current Version: <b>3.6.0</b>	
For submission to: <b>CN#10</b>	for approval <input checked="" type="checkbox"/>	strategic <input type="checkbox"/>	
	for information <input type="checkbox"/>	non-strategic <input type="checkbox"/>	

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:** (U)SIM  ME  UTRAN / Radio  Core Network   
(at least one should be marked with an X)

**Source:** CN4 **Date:** 14<sup>th</sup> November 2000

**Subject:** Corrections of ISD data structure for CAMEL phase 3

**Work item:** CAMEL phase 3

<b>Category:</b>	F Correction <input checked="" type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	<b>Release:</b>	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
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**Reason for change:** critical correction  
 The parameters sgsn-CAMEL-SubscriptionInfo and chargingCharacteristics are moved from GPRSSubscriptionData to InsertSubscriberDataArg. This allows stand alone updating of these parameters without having to send the possibly unmodified gprsDataList.

**Clauses affected:** 17.7.1

<b>Other specs affected:</b>	Other 3G core specifications <input type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: → List of CRs: → List of CRs: → List of CRs: → List of CRs:
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**Other comments:**

## 17.7.1 Mobile Service data types

.....

-- subscriber management types

```

InsertSubscriberDataArg ::= SEQUENCE {
    imsi [0] IMSI OPTIONAL,
    COMPONENTS OF SubscriberData,
    extensionContainer [14] ExtensionContainer OPTIONAL,
    ... ,
    naea-PreferredCI [15] NAEA-PreferredCI OPTIONAL,
    -- naea-PreferredCI is included at the discretion of the HLR operator.
    gprsSubscriptionData [16] GPRSSubscriptionData OPTIONAL,
    roamingRestrictedInSgsnDueToUnsupportedFeature [23] NULL
    OPTIONAL,
    networkAccessMode [24] NetworkAccessMode OPTIONAL,
    lsaInformation [25] LSAInformation OPTIONAL,
    lmu-Indicator [21] NULL OPTIONAL,
    lcsInformation [22] LCSInformation OPTIONAL,
    istAlertTimer [26] IST-AlertTimerValue OPTIONAL,
    superChargerSupportedInHLR [27] AgeIndicator OPTIONAL,
    mc-SS-Info [28] MC-SS-Info OPTIONAL,
    cs-AllocationRetentionPriority [29] CS-AllocationRetentionPriority
    OPTIONAL,
    sgsn-CAMEL-SubscriptionInfo [17] SGSN-CAMEL-SubscriptionInfo OPTIONAL,
    chargingCharacteristics [18] ChargingCharacteristics OPTIONAL
}
    -- If the Network Access Mode parameter is sent, it shall be present only in
    -- the first sequence if segmentation is used
  
```

.....

```

GPRSDataList ::= SEQUENCE SIZE (1..maxNumOfPDP-Contexts) OF
    PDP-Context
  
```

```

maxNumOfPDP-Contexts INTEGER ::= 50
  
```

```

PDP-Context ::= SEQUENCE {
    pdp-ContextId ContextId,
    pdp-Type [16] PDP-Type,
    pdp-Address [17] PDP-Address OPTIONAL,
    qos-Subscribed [18] QoS-Subscribed,
    vplmnAddressAllowed [19] NULL OPTIONAL,
    apn [20] APN,
    extensionContainer [21] ExtensionContainer OPTIONAL,
    ... ,
    ext-QoS-Subscribed [0] Ext-QoS-Subscribed OPTIONAL,
    pdp-ChargingCharacteristics [1] ChargingCharacteristics OPTIONAL }
    -- qos-Subscribed shall be discarded if ext-QoS-Subscribed is received and
    supported
  
```

```

ContextId ::= INTEGER (1..maxNumOfPDP-Contexts)
  
```

```

GPRSSubscriptionData ::= SEQUENCE {
    completeDataListIncluded NULL OPTIONAL,
    -- If segmentation is used, completeDataListIncluded may only be present in the
    -- first segment.
    gprsDataList [1] GPRSDataList,
    extensionContainer [2] ExtensionContainer OPTIONAL,
    ... 7
    sgsn-CAMEL-SubscriptionInfo [3] SGSN-CAMEL-SubscriptionInfo OPTIONAL,
    chargingCharacteristics [4] ChargingCharacteristics OPTIONAL
}
  
```

.....

<b>CHANGE REQUEST</b>			
<b>29.002 CR 191</b>		Current Version: <b>4.1.0</b>	
For submission to: <b>CN#10</b>	for approval <input checked="" type="checkbox"/>	strategic <input type="checkbox"/>	
	for information <input type="checkbox"/>	non-strategic <input type="checkbox"/>	

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:** (U)SIM  ME  UTRAN / Radio  Core Network   
*(at least one should be marked with an X)*

**Source:** CN4 **Date:** 14<sup>th</sup> November 2000

**Subject:** Corrections of ISD data structure for CAMEL phase 3

**Work item:** CAMEL phase 3

<b>Category:</b>	F Correction <input type="checkbox"/> A Corresponds to a correction in an earlier release <input checked="" type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	<b>Release:</b>	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input type="checkbox"/> Release 00 <input checked="" type="checkbox"/>
------------------	--	-----------------	--

**Reason for change:** The parameters sgsn-CAMEL-SubscriptionInfo and chargingCharacteristics are moved from GPRSSubscriptionData to InsertSubscriberDataArg. This allows stand alone updating of these parameters without having to send the possibly unmodified gprsDataList.

**Clauses affected:** 17.7.1

<b>Other specs affected:</b>	Other 3G core specifications <input type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: → List of CRs: → List of CRs: → List of CRs: → List of CRs:
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**Other comments:**

## 17.7.1 Mobile Service data types

.....

-- subscriber management types

```

InsertSubscriberDataArg ::= SEQUENCE {
    imsi                               [0] IMSI                               OPTIONAL,
    COMPONENTS OF                      SubscriberData,
    extensionContainer                  [14] ExtensionContainer           OPTIONAL,
    ... ,
    naea-PreferredCI                   [15] NAEA-PreferredCI           OPTIONAL,
    -- naea-PreferredCI is included at the discretion of the HLR operator.
    gprsSubscriptionData                [16] GPRSSubscriptionData       OPTIONAL,
    roamingRestrictedInSgsnDueToUnsupportedFeature [23]                NULL
    OPTIONAL,
    networkAccessMode                  [24] NetworkAccessMode         OPTIONAL,
    lsaInformation                      [25] LSAInformation             OPTIONAL,
    lmu-Indicator                       [21] NULL                       OPTIONAL,
    lcsInformation                      [22] LCSInformation            OPTIONAL,
    istAlertTimer                      [26] IST-AlertTimerValue        OPTIONAL,
    superChargerSupportedInHLR         [27] AgeIndicator              OPTIONAL,
    mc-SS-Info                         [28] MC-SS-Info                OPTIONAL,
    cs-AllocationRetentionPriority      [29] CS-AllocationRetentionPriority
    OPTIONAL,
    sgsn-CAMEL-SubscriptionInfo      [17] SGSN-CAMEL-SubscriptionInfo OPTIONAL,
    chargingCharacteristics       [18] ChargingCharacteristics   OPTIONAL
}
-- If the Network Access Mode parameter is sent, it shall be present only in
-- the first sequence if segmentation is used

```

.....

```

GPRSDataList ::= SEQUENCE SIZE (1..maxNumOfPDP-Contexts) OF
    PDP-Context

```

```

maxNumOfPDP-Contexts INTEGER ::= 50

```

```

PDP-Context ::= SEQUENCE {
    pdp-ContextId                      ContextId,
    pdp-Type                            [16] PDP-Type,
    pdp-Address                         [17] PDP-Address             OPTIONAL,
    qos-Subscribed                      [18] QoS-Subscribed,
    vplmnAddressAllowed                 [19] NULL OPTIONAL,
    apn                                 [20] APN,
    extensionContainer                  [21] ExtensionContainer           OPTIONAL,
    ... ,
    ext-QoS-Subscribed                  [0] Ext-QoS-Subscribed         OPTIONAL,
    pdp-ChargingCharacteristics         [1] ChargingCharacteristics    OPTIONAL }
-- qos-Subscribed shall be discarded if ext-QoS-Subscribed is received and
supported

```

```

ContextId ::= INTEGER (1..maxNumOfPDP-Contexts)

```

```

GPRSSubscriptionData ::= SEQUENCE {
    completeDataListIncluded           NULL                               OPTIONAL,
    -- If segmentation is used, completeDataListIncluded may only be present in the
    -- first segment.
    gprsDataList                       [1] GPRSDataList,
    extensionContainer                  [2] ExtensionContainer           OPTIONAL,
    ... ,
    sgsn-CAMEL-SubscriptionInfo      [3] SGSN-CAMEL-SubscriptionInfo OPTIONAL,
    chargingCharacteristics       [4] ChargingCharacteristics   OPTIONAL
}

```

.....

CR-Form-v3

## CHANGE REQUEST

⌘ **29.002 CR 210** ⌘ rev **-** ⌘ Current version: **3.6.0** ⌘

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

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘ Export of GSN-Address data type		
<b>Source:</b>	⌘ CN4		
<b>Work item code:</b>	⌘ CAMEL3	<b>Date:</b>	⌘ 14-Nov-00
<b>Category:</b>	⌘ <b>F</b> Critical correction	<b>Release:</b>	⌘ R99
	<i>Use one of the following categories:</i> <b>F</b> (essential 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)		<i>Use one of the following releases:</i> <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)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		

<b>Reason for change:</b>	⌘ The data type GSN-Address is not available to other modules. However the data type GSN-Address is used by 29.078 CAP modules.		
<b>Summary of change:</b>	⌘ The data type GSN-Address is exported from MAP-MS-DataTypes		
<b>Consequences if not approved:</b>	⌘ Corresponding changes for introduction of GGSN Address in 29.078 are not possible		

<b>Clauses affected:</b>	⌘ 17.7.1		
<b>Other specs affected:</b>	<input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘	CR 22.078-065, CR 23.078-255, CR 29.078-135r1
<b>Other comments:</b>	⌘		

## 17.7 MAP constants and data types

### 17.7.1 Mobile Service data types

```
MAP-MS-DataTypes {
    ccitt identified-organization (4) etsi (0) mobileDomain (0)
    gsm-Network (1) modules (3) map-MS-DataTypes (11) version6 (6)}
```

DEFINITIONS

IMPLICIT TAGS

::=

BEGIN

EXPORTS

*-- location registration types*

```
UpdateLocationArg,
UpdateLocationRes,
CancelLocationArg,
CancelLocationRes,
PurgeMS-Arg,
PurgeMS-Res,
SendIdentificationArg,
SendIdentificationRes,
UpdateGprsLocationArg,
UpdateGprsLocationRes,
IST-SupportIndicator,
```

*-- gprs location registration types*  
*GSN-Address,*

*-- handover types*

```
ForwardAccessSignalling-Arg,
PrepareHO-Arg,
PrepareHO-Res,
PrepareSubsequentHO-Arg,
PrepareSubsequentHO-Res,
ProcessAccessSignalling-Arg,
SendEndSignal-Arg,
SendEndSignal-Res,
```

*-- authentication management types*

```
SendAuthenticationInfoArg,
SendAuthenticationInfoRes,
AuthenticationFailureReportArg,
AuthenticationFailureReportRes,
```

*-- security management types*

```
EquipmentStatus,
Kc,
```

*-- subscriber management types*

```
InsertSubscriberDataArg,
InsertSubscriberDataRes,
DeleteSubscriberDataArg,
DeleteSubscriberDataRes,
SubscriberData,
ODB-Data,
SubscriberStatus,
ZoneCodeList,
maxNumOfZoneCodes,
O-CSI,
D-CSI,
O-BcsmCamelTDPCriteriaList,
T-BCSM-CAMEL-TDP-CriteriaList,
SS-CSI,
ServiceKey,
DefaultCallHandling,
CamelCapabilityHandling,
BasicServiceCriteria,
SupportedCamelPhases,
```

CR-Form-v3

## CHANGE REQUEST

⌘ **29.002 CR 211** ⌘ rev **-** ⌘ Current version: **4.1.0** ⌘

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

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘ Export of GSN-Address data type		
<b>Source:</b>	⌘ CN4		
<b>Work item code:</b>	⌘ CAMEL3	<b>Date:</b>	⌘ 14-Nov-00
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ REL-4
<p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (essential 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)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p><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)</p>	

<b>Reason for change:</b>	⌘ The data type GSN-Address is not available to other modules. However the data type GSN-Address is used by 29.078 CAP modules.		
<b>Summary of change:</b>	⌘ The data type GSN-Address is exported from MAP-MS-DataTypes		
<b>Consequences if not approved:</b>	⌘ Corresponding changes for introduction of GGSN Address in 29.078 are not possible		

<b>Clauses affected:</b>	⌘ 17.7.1		
<b>Other specs affected:</b>	<input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘	CR 22.078-065, CR 23.078-255, CR 29.078-135r1
<b>Other comments:</b>	⌘		



## 17.7 MAP constants and data types

### 17.7.1 Mobile Service data types

```
MAP-MS-DataTypes {  
    ccitt identified-organization (4) etsi (0) mobileDomain (0)  
    gsm-Network (1) modules (3) map-MS-DataTypes (11) version7 (7)}
```

DEFINITIONS

IMPLICIT TAGS

::=

BEGIN

EXPORTS

*-- location registration types*

```
UpdateLocationArg,  
UpdateLocationRes,  
CancelLocationArg,  
CancelLocationRes,  
PurgeMS-Arg,  
PurgeMS-Res,  
SendIdentificationArg,  
SendIdentificationRes,  
UpdateGprsLocationArg,  
UpdateGprsLocationRes,  
IST-SupportIndicator,
```

*-- gprs location registration types*  
GSN-Address,

*-- handover types*

```
ForwardAccessSignalling-Arg,  
PrepareHO-Arg,  
PrepareHO-Res,  
PrepareSubsequentHO-Arg,  
PrepareSubsequentHO-Res,  
ProcessAccessSignalling-Arg,  
SendEndSignal-Arg,  
SendEndSignal-Res,
```

*-- authentication management types*

```
SendAuthenticationInfoArg,  
SendAuthenticationInfoRes,  
AuthenticationFailureReportArg,  
AuthenticationFailureReportRes,
```

*-- security management types*

```
EquipmentStatus,  
Kc,
```

*-- subscriber management types*

```
InsertSubscriberDataArg,  
InsertSubscriberDataRes,  
DeleteSubscriberDataArg,  
DeleteSubscriberDataRes,  
SubscriberData,  
ODB-Data,  
SubscriberStatus,  
ZoneCodeList,  
maxNumOfZoneCodes,  
O-CSI,  
D-CSI,  
O-BcsmCamelTDPCriteriaList,  
T-BCSM-CAMEL-TDP-CriteriaList,  
SS-CSI,  
ServiceKey,  
DefaultCallHandling,  
CamelCapabilityHandling,  
BasicServiceCriteria,
```

<b>CHANGE REQUEST</b>		Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.
<b>29.002 CR 213</b>	Current Version: <b>3.6.0</b>	
GSM (AA.BB) or 3G (AA.BBB) specification number ↑	↑ CR number as allocated by MCC support team	
For submission to: <input style="width: 100px;" type="text"/>	for approval <input checked="" type="checkbox"/> for information <input type="checkbox"/>	strategic <input type="checkbox"/> non-strategic <input type="checkbox"/> (for SMG use only)
list expected approval meeting # here ↑		

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:** (U)SIM  ME  UTRAN / Radio  Core Network   
*(at least one should be marked with an X)*

**Source:** CN4 **Date:** 13 Nov. 2000

**Subject:** ATSI correction

**Work item:** CAMEL phase 3

<b>Category:</b>	F Correction <input checked="" type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	<b>Release:</b>	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
------------------	--	-----------------	--

(only one category shall be marked with an X)

**Reason for change:** critical correction

- Current ATSI definition in the MAP specification 29.002 allows to handle more than one SS data and/or CSI as the return result, i.e. it is capable to send all the SS data and CSI which are defined in the CAMEL phase 3. However the request (argument) allows only one of each SS data and CSI. – The inconsistency shall be resolved.
- The inconsistency between the definitions of the argument and the return result would require multiple request if the SCP would like to obtain several SS data and/or CSI, despite of full capability of the return result. – Solving the inconsistency provides the efficient signalling usage.

**Clauses affected:** 17.7.1

<b>Other specs affected:</b>	Other 3G core specifications <input checked="" type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: 29.002 R4, CR 23.078 247 → List of CRs: → List of CRs: → List of CRs: → List of CRs:
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**Other comments:**



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

## 17.7 MAP constants and data types

### 17.7.1 Mobile Service data types

.....

-- any time information handling types

```
AnyTimeSubscriptionInterrogationArg ::= SEQUENCE {
  subscriberIdentity          [0] SubscriberIdentity,
  requestedSubscriptionInfo    [1] RequestedSubscriptionInfo,
  gsmSCF-Address              [2] ISDN-AddressString,
  extensionContainer           [3] ExtensionContainer           OPTIONAL,
  longFTN-Supported           [4] NULL                        OPTIONAL,
  ...}
```

```
AnyTimeSubscriptionInterrogationRes ::= SEQUENCE {
  callForwardingData          [1] CallForwardingData           OPTIONAL,
  callBarringData             [2] CallBarringData           OPTIONAL,
  odb-Info                    [3] ODB-Info                 OPTIONAL,
  camel-SubscriptionInfo      [4] CAMEL-SubscriptionInfo    OPTIONAL,
  supportedVLR-CAMEL-Phases    [5] SupportedCamelPhases     OPTIONAL,
  supportedSGSN-CAMEL-Phases   [6] SupportedCamelPhases     OPTIONAL,
  extensionContainer           [7] ExtensionContainer         OPTIONAL,
  ...}
```

```
RequestedSubscriptionInfo ::= SEQUENCE {
  requestedSS-InfoList        [1] RequestedSS-InfoListSS-ForBS-Code OPTIONAL,
  odb                         [2] NULL                        OPTIONAL,
  requestedCAMEL-SubscriptionInfo [3] RequestedCAMEL-SubscriptionInfo
  OPTIONAL,
  supportedVLR-CAMEL-Phases    [4] NULL                        OPTIONAL,
  supportedSGSN-CAMEL-Phases   [5] NULL                        OPTIONAL,
  extensionContainer           [6] ExtensionContainer         OPTIONAL,
  ...}
```

```
RequestedSS-InfoList ::= SEQUENCE SIZE (1.. maxNumOfBasicServices) OF
SS-ForBS-Code
```

```
RequestedCAMEL-SubscriptionInfo ::= BIT STRINGENUMERATED {
  o-CSI                       (0),
  t-CSI                       (1),
  vt-CSI                      (2),
  tif-CSI                     (3),
  gprs-CSI                    (4),
  sms-CSI                     (5),
  ss-CSI                      (6),
  m-CSI                       (7),
  d-csi                       (8)} (SIZE (1..32))
-- Bits 9 to 31 shall be discarded if received.
```

```
CallForwardingData ::= SEQUENCE {
  forwardingFeatureList       Ext-ForwFeatureList,
  notificationToCSE           NULL                        OPTIONAL,
  extensionContainer           [0] ExtensionContainer         OPTIONAL,
  ...}
```

```
CallBarringData ::= SEQUENCE {
  callBarringFeatureList      Ext-CallBarFeatureList,
  password                    Password,
  wrongPasswordAttemptsCounter WrongPasswordAttemptsCounter,
  notificationToCSE           NULL                        OPTIONAL,
  extensionContainer           ExtensionContainer             OPTIONAL,
  ...}
```

```
WrongPasswordAttemptsCounter ::= INTEGER (0..4)
```

```
ODB-Info ::= SEQUENCE {
  odb-Data                    ODB-Data,
  notificationToCSE           NULL                        OPTIONAL,
  extensionContainer           ExtensionContainer             OPTIONAL,
  ...}
```

```

CAMEL-SubscriptionInfo ::= SEQUENCE {
    o-CSI [0] O-CSI OPTIONAL,
    o-BcsmCamelTDP-CriteriaList [1] O-BcsmCamelTDPCriteriaList OPTIONAL,
    d-CSI [2] D-CSI OPTIONAL,
    t-CSI [3] T-CSI OPTIONAL,
    t-BCSM-CAMEL-TDP-CriteriaList [4] T-BCSM-CAMEL-TDP-CriteriaList OPTIONAL,
    vt-CSI [5] T-CSI OPTIONAL,
    vt-BCSM-CAMEL-TDP-CriteriaList [6] T-BCSM-CAMEL-TDP-CriteriaList OPTIONAL,
    tif-CSI [7] NULL OPTIONAL,
    tif-CSI-NotificationToCSE [8] NULL OPTIONAL,
    gprs-CSI [9] GPRS-CSI OPTIONAL,
    sms-CSI [10] SMS-CSI OPTIONAL,
    ss-CSI [11] SS-CSI OPTIONAL,
    m-CSI [12] M-CSI OPTIONAL,
    extensionContainer [13] ExtensionContainer OPTIONAL,
    ...}

```

```

AnyTimeModificationArg ::= SEQUENCE {
    subscriberIdentity [0] SubscriberIdentity,
    gsmSCF-Address [1] ISDN-AddressString,
    modificationRequestFor-CF-Info [2] ModificationRequestFor-CF-Info OPTIONAL,
    modificationRequestFor-CB-Info [3] ModificationRequestFor-CB-Info OPTIONAL,
    modificationRequestFor-CSI [4] ModificationRequestFor-CSI OPTIONAL,
    extensionContainer [5] ExtensionContainer OPTIONAL,
    longFTN-Supported [6] NULL OPTIONAL,
    ...}

```

```

AnyTimeModificationRes ::= SEQUENCE {
    ss-InfoFor-CSE [0] Ext-SS-InfoFor-CSE OPTIONAL,
    camel-SubscriptionInfo [1] CAMEL-SubscriptionInfo OPTIONAL,
    extensionContainer [2] ExtensionContainer OPTIONAL,
    ...}

```

```

ModificationRequestFor-CF-Info ::= SEQUENCE {
    ss-Code [0] SS-Code,
    basicService [1] Ext-BasicServiceCode OPTIONAL,
    ss-Status [2] Ext-SS-Status OPTIONAL,
    forwardedToNumber [3] AddressString OPTIONAL,
    forwardedToSubaddress [4] ISDN-SubaddressString OPTIONAL,
    noReplyConditionTime [5] Ext-NoRepCondTime OPTIONAL,
    modifyNotificationToCSE [6] ModificationInstruction OPTIONAL,
    extensionContainer [7] ExtensionContainer OPTIONAL,
    ...}

```

```

ModificationRequestFor-CB-Info ::= SEQUENCE {
    ss-Code [0] SS-Code,
    basicService [1] Ext-BasicServiceCode OPTIONAL,
    ss-Status [2] Ext-SS-Status OPTIONAL,
    password [3] Password OPTIONAL,
    wrongPasswordAttemptsCounter [4] WrongPasswordAttemptsCounter OPTIONAL,
    modifyNotificationToCSE [5] ModificationInstruction OPTIONAL,
    extensionContainer [6] ExtensionContainer OPTIONAL,
    ...}

```

```

ModificationRequestFor-CSI ::= SEQUENCE {
    requestedCamel-SubscriptionInfo [0] RequestedCAMEL-SubscriptionInfo,
    modifyNotificationToCSE [1] ModificationInstruction OPTIONAL,
    modifyCSI-State [2] ModificationInstruction OPTIONAL,
    extensionContainer [3] ExtensionContainer OPTIONAL,
    ...}

```

```

ModificationInstruction ::= ENUMERATED {
    deactivate (0),
    activate (1)}

```

.....

<b>CHANGE REQUEST</b>		Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.
<b>29.002 CR 214</b>	Current Version: <b>4.1.0</b>	
GSM (AA.BB) or 3G (AA.BBB) specification number ↑	↑ CR number as allocated by MCC support team	
For submission to: <input style="width: 100px;" type="text"/>	for approval <input checked="" type="checkbox"/> for information <input type="checkbox"/>	strategic <input type="checkbox"/> non-strategic <input type="checkbox"/> (for SMG use only)
list expected approval meeting # here ↑		

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:** (U)SIM  ME  UTRAN / Radio  Core Network   
*(at least one should be marked with an X)*

**Source:** CN4 **Date:** 13 Nov. 2000

**Subject:** ATSI correction

**Work item:** CAMEL phase 3

<b>Category:</b>	F Correction <input type="checkbox"/> A Corresponds to a correction in an earlier release <input checked="" type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	<b>Release:</b>	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input type="checkbox"/> Release 00 <input checked="" type="checkbox"/>
------------------	--	-----------------	--

(only one category shall be marked with an X)

**Reason for change:**

- Current ATSI definition in the MAP specification 29.002 allows to handle more than one SS data and/or CSI as the return result, i.e. it is capable to send all the SS data and CSI which are defined in the CAMEL phase 3. However the request (argument) allows only one of each SS data and CSI. – The inconsistency shall be resolved.
- The inconsistency between the definitions of the argument and the return result would require multiple request if the SCP would like to obtain several SS data and/or CSI, despite of full capability of the return result. – Solving the inconsistency provides the efficient signalling usage.

**Clauses affected:** 17.7.1

<b>Other specs affected:</b>	Other 3G core specifications <input checked="" type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: 29.002 R99, CR 23.078 247 → List of CRs: → List of CRs: → List of CRs: → List of CRs:
------------------------------	--	--

**Other comments:**



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

## 17.7 MAP constants and data types

### 17.7.1 Mobile Service data types

.....

-- any time information handling types

```
AnyTimeSubscriptionInterrogationArg ::= SEQUENCE {
  subscriberIdentity          [0] SubscriberIdentity,
  requestedSubscriptionInfo   [1] RequestedSubscriptionInfo,
  gsmSCF-Address              [2] ISDN-AddressString,
  extensionContainer          [3] ExtensionContainer           OPTIONAL,
  longFTN-Supported          [4] NULL                        OPTIONAL,
  ...}
```

```
AnyTimeSubscriptionInterrogationRes ::= SEQUENCE {
  callForwardingData         [1] CallForwardingData           OPTIONAL,
  callBarringData            [2] CallBarringData           OPTIONAL,
  odb-Info                   [3] ODB-Info                 OPTIONAL,
  camel-SubscriptionInfo     [4] CAMEL-SubscriptionInfo    OPTIONAL,
  supportedVLR-CAMEL-Phases  [5] SupportedCamelPhases     OPTIONAL,
  supportedSGSN-CAMEL-Phases [6] SupportedCamelPhases     OPTIONAL,
  extensionContainer          [7] ExtensionContainer        OPTIONAL,
  ...}
```

```
RequestedSubscriptionInfo ::= SEQUENCE {
  requestedSS-InfoList       [1] RequestedSS-InfoListSS-ForBS-Code OPTIONAL,
  odb                        [2] NULL                               OPTIONAL,
  requestedCAMEL-SubscriptionInfo [3] RequestedCAMEL-SubscriptionInfo
  OPTIONAL,
  supportedVLR-CAMEL-Phases  [4] NULL                               OPTIONAL,
  supportedSGSN-CAMEL-Phases [5] NULL                               OPTIONAL,
  extensionContainer         [6] ExtensionContainer              OPTIONAL,
  ...}
```

```
RequestedSS-InfoList ::= SEQUENCE SIZE (1.. maxNumOfBasicServices) OF
SS-ForBS-Code
```

```
RequestedCAMEL-SubscriptionInfo ::= BIT STRINGENUMERATED {
  o-CSI          (0),
  t-CSI          (1),
  vt-CSI         (2),
  tif-CSI        (3),
  gprs-CSI       (4),
  sms-CSI        (5),
  ss-CSI         (6),
  m-CSI          (7),
  d-csi          (8)} (SIZE (1..32))
-- Bits 9 to 31 shall be discarded if received.
```

```
CallForwardingData ::= SEQUENCE {
  forwardingFeatureList      Ext-ForwFeatureList,
  notificationToCSE          NULL                               OPTIONAL,
  extensionContainer          [0] ExtensionContainer           OPTIONAL,
  ...}
```

```
CallBarringData ::= SEQUENCE {
  callBarringFeatureList     Ext-CallBarFeatureList,
  password                   Password,
  wrongPasswordAttemptsCounter WrongPasswordAttemptsCounter,
  notificationToCSE          NULL                               OPTIONAL,
  extensionContainer          ExtensionContainer                OPTIONAL,
  ...}
```

```
WrongPasswordAttemptsCounter ::= INTEGER (0..4)
```

```
ODB-Info ::= SEQUENCE {
  odb-Data                   ODB-Data,
  notificationToCSE          NULL                               OPTIONAL,
  extensionContainer          ExtensionContainer                OPTIONAL,
  ...}
```

```

CAMEL-SubscriptionInfo ::= SEQUENCE {
    o-CSI [0] O-CSI OPTIONAL,
    o-BcsmCamelTDP-CriteriaList [1] O-BcsmCamelTDPCriteriaList OPTIONAL,
    d-CSI [2] D-CSI OPTIONAL,
    t-CSI [3] T-CSI OPTIONAL,
    t-BCSM-CAMEL-TDP-CriteriaList [4] T-BCSM-CAMEL-TDP-CriteriaList OPTIONAL,
    vt-CSI [5] T-CSI OPTIONAL,
    vt-BCSM-CAMEL-TDP-CriteriaList [6] T-BCSM-CAMEL-TDP-CriteriaList OPTIONAL,
    tif-CSI [7] NULL OPTIONAL,
    tif-CSI-NotificationToCSE [8] NULL OPTIONAL,
    gprs-CSI [9] GPRS-CSI OPTIONAL,
    sms-CSI [10] SMS-CSI OPTIONAL,
    ss-CSI [11] SS-CSI OPTIONAL,
    m-CSI [12] M-CSI OPTIONAL,
    extensionContainer [13] ExtensionContainer OPTIONAL,
    ...}

```

```

AnyTimeModificationArg ::= SEQUENCE {
    subscriberIdentity [0] SubscriberIdentity,
    gsmSCF-Address [1] ISDN-AddressString,
    modificationRequestFor-CF-Info [2] ModificationRequestFor-CF-Info OPTIONAL,
    modificationRequestFor-CB-Info [3] ModificationRequestFor-CB-Info OPTIONAL,
    modificationRequestFor-CSI [4] ModificationRequestFor-CSI OPTIONAL,
    extensionContainer [5] ExtensionContainer OPTIONAL,
    longFTN-Supported [6] NULL OPTIONAL,
    ...}

```

```

AnyTimeModificationRes ::= SEQUENCE {
    ss-InfoFor-CSE [0] Ext-SS-InfoFor-CSE OPTIONAL,
    camel-SubscriptionInfo [1] CAMEL-SubscriptionInfo OPTIONAL,
    extensionContainer [2] ExtensionContainer OPTIONAL,
    ...}

```

```

ModificationRequestFor-CF-Info ::= SEQUENCE {
    ss-Code [0] SS-Code,
    basicService [1] Ext-BasicServiceCode OPTIONAL,
    ss-Status [2] Ext-SS-Status OPTIONAL,
    forwardedToNumber [3] AddressString OPTIONAL,
    forwardedToSubaddress [4] ISDN-SubaddressString OPTIONAL,
    noReplyConditionTime [5] Ext-NoRepCondTime OPTIONAL,
    modifyNotificationToCSE [6] ModificationInstruction OPTIONAL,
    extensionContainer [7] ExtensionContainer OPTIONAL,
    ...}

```

```

ModificationRequestFor-CB-Info ::= SEQUENCE {
    ss-Code [0] SS-Code,
    basicService [1] Ext-BasicServiceCode OPTIONAL,
    ss-Status [2] Ext-SS-Status OPTIONAL,
    password [3] Password OPTIONAL,
    wrongPasswordAttemptsCounter [4] WrongPasswordAttemptsCounter OPTIONAL,
    modifyNotificationToCSE [5] ModificationInstruction OPTIONAL,
    extensionContainer [6] ExtensionContainer OPTIONAL,
    ...}

```

```

ModificationRequestFor-CSI ::= SEQUENCE {
    requestedCamel-SubscriptionInfo [0] RequestedCAMEL-SubscriptionInfo,
    modifyNotificationToCSE [1] ModificationInstruction OPTIONAL,
    modifyCSI-State [2] ModificationInstruction OPTIONAL,
    extensionContainer [3] ExtensionContainer OPTIONAL,
    ...}

```

```

ModificationInstruction ::= ENUMERATED {
    deactivate (0),
    activate (1)}

```

.....