Source: **SA WG3**

Title: **9 SA WG3 LI Group CRs to TS 33.108 (Rel-5 and Rel-6) which were agreed by SA WG3 by e-mail (30/11/2004)**

Document for: **Approval**

Agenda Item: **7.3.3**

The following CRs were agreed by SA WG3 by e-mail on 30 November 2004 and are presented to TSG SA for approval.

SA WG3 Doc number	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	LI Group Doc number	Work item
S3-040913	33.108	060	-	Rel-5	Correction to ULIC header	F	5.8.0	S3LI04_157r1	SEC1-LI
S3-040913	33.108	061	-	Rel-6	Correction to ULIC header	A	6.7.0	S3LI04_158r1	SEC1-LI
S3-040913	33.108	062	-	Rel-6	Correction on parameter GprsOperationErrorCode	F	6.7.0	S3LI04_156r2	SEC1-LI
S3-040913	33.108	063	-	Rel-6	Correction to the IMPORTS statements	F	6.7.0	S3LI04_161r2	SEC1-LI
S3-040913	33.108	064	-	Rel-6	Syntax Error in Annex B.3	F	6.7.0	S3LI04_172r1	SEC1-LI
S3-040913	33.108	065	-	Rel-6	Deleting CC from SIP message	B	6.7.0	S3LI04_173r3	SEC1-LI
S3-040913	33.108	066	-	Rel-6	Adding domain ID to HI3 CS domain module	B	6.7.0	S3LI04_174r3	SEC1-LI
S3-040913	33.108	067	-	Rel-6	Syntax Error in Annex B.3a	F	6.7.0	S3LI04_176r1	SEC1-LI
S3-040913	33.108	068	-	Rel-6	HI2 SIP Content clarification	C	6.7.0	S3LI04_179r1	SEC1-LI

3GPP TSG-SA3-LI Meeting #15   *Tdoc* ⌘*S3LI04_157r1*
San Antonio, USA, 11-13 October 2004

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **33.108 CR 060** | ⌘**rev** | **-** | ⌘ | Current version: | **5.8.0** | ⌘ |

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

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

Title: ⌘	Correction to ULIC header	
Source: ⌘	SA3-LI	
Work item code:⌘	SEC1-LI	*Date:* ⌘ 12/10/2004

Category: ⌘ **F**	*Release:* ⌘ Rel-5

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

Use <u>one</u> of the following releases:
Ph2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

Reason for change: ⌘	In case a centralized DF3/MF is serving both GGSN and SGSN, packets intercepted in both SGSN and GGSN are sent through the same DF3/MF to LEMF over HI3 interface. In the information sent over HI3 interface there is no indication allowing LEMF to distinguish whether the received packet was intercepted in the GGSN or in the SGSN.
Summary of change:⌘	The ULIC header is modified to carry information about the type of node (GGSN or SGSN) in which the packet was intercepted.
Consequences if not approved: ⌘	Wrong information sent to LEMF; in the mentioned cases, LEMF would receive duplicated/mixed copies of packets and it would be not possible for LEMF to distinguish which packet was intercepted in the GGSN and which was intercepted in the SGSN.

Clauses affected: ⌘	B.4, C.1.2, C.1.3

	Y	N		
Other specs affected: ⌘		X	Other core specifications	⌘
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘	

*** FIRST MODIFICATION ***

B.4   HI3 CC definition

```
Umts-HI3-PS {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2)
threeGPP(4) hi3(2) r5(5) version-12(12)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN
```

```
IMPORTS

GPRSCorrelationNumber
    FROM UmtsHI2Operations
    {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2) threeGPP(4)
    hi2(1) version-1(1)}    -- from 3GPP UmtsHI2Operations

LawfulInterceptionIdentifier,

TimeStamp
    FROM HI2Operations
    {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulIntercept(2) hi2(1)
    version3(3)};  -- from ETSI HI2Operations TS 101 671 Edition 3
```

```
-- Object Identifier Definitions

-- Security DomainId
lawfulInterceptDomainId OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0)
securityDomain(2) lawfulIntercept(2)}

-- Security Subdomains
threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}
hi3DomainId OBJECT IDENTIFIER  ::= {threeGPPSUBDomainId hi3-(2) r5(5) version-12(12)}
```

```
CC-PDU  ::= SEQUENCE
{
    uLIC-header       [1] ULIC-header,
    payload           [2] OCTET STRING
}

ULIC-header ::= SEQUENCE
{
    hi3DomainId             [0] OBJECT IDENTIFIER,  -- 3GPP HI3 Domain
    version                 [1] Version,
    lIID                    [2] LawfulInterceptionIdentifier OPTIONAL,
    correlation-Number      [3] GPRSCorrelationNumber,
    timeStamp               [4] TimeStamp OPTIONAL,
    sequence-number         [5] INTEGER (0..65535),
    t-PDU-direction         [6] TPDU-direction,
    ...,
    ice-type                [8] ICE-type OPTIONAL
        -- The ICE-type indicates the applicable Intercepting Control Element (see ref [19])
        -- in which the TPDU is intercepted.

}
```

```
Version ::= ENUMERATED
{
    version1(1),
    ...,
    version2(2)
}

TPDU-direction ::= ENUMERATED
{
    from-target    (1),
    to-target      (2),
    unknown        (3)
}
```

```
ICE-type ::= ENUMERATED
{
        sgsn        (1),
```

```
      ggsn      (2),
         ...
}
```

END-- OF Umts-HI3-PS

*** NEXT MODIFICATION ***

C.1.2   Definition of ULIC header version 0

ULIC header contains the following attributes:

- Correlation Number.

- Message Type (a value of 255 is used for HI3-PDU's).

- Direction.

- Sequence Number.

- Length.

- Intercepting Control Element (ICE) type.

T-PDU contains the intercepted information.

	Bits							
Octets	8	7	6	5	4	3	2	1
1	Version ('0 0 0')			'1'	Spare '1 1'		DIR	'0'
2	Message Type (value 255)							
3-4	Length							
5-6	Sequence Number							
7-8	not used (value 0)							
9	not used (value 255)							
10	not used (value 255)							
11	not used (value 255)							
12	not used (value 255)							
13-20	correlation number							

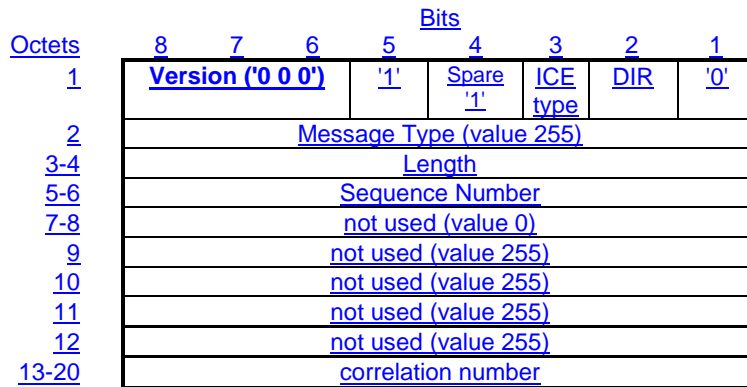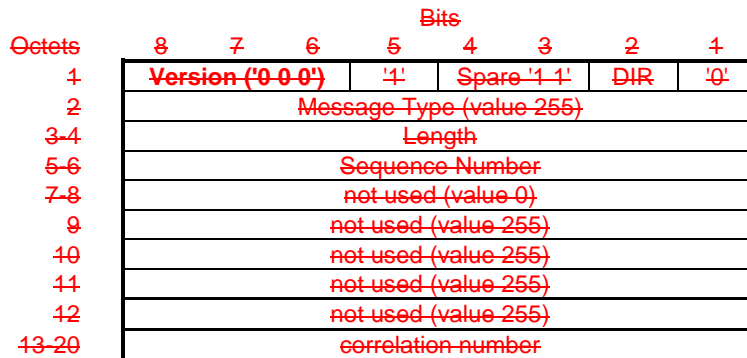|	Bits							
Octets	8	7	6	5	4	3	2	1
1	Version ('0 0 0')			'1'	Spare '1'	ICE type	DIR	'0'
2	Message Type (value 255)							
3-4	Length							
5-6	Sequence Number							
7-8	not used (value 0)							
9	not used (value 255)							
10	not used (value 255)							
11	not used (value 255)							
12	not used (value 255)							
13-20	correlation number							

Figure C.1: Outline of ULIC header

For interception tunneling the ULIC header shall be used as follows:

- Version shall be set to 0 to indicate the first version of ULIC header.

- DIR indicates the direction of the T-PDU:

    "1" indicating uplink (from observed mobile user); and

    "0" indicating downlink (to observed mobile user).

- Message Type shall be set to 255 (the unique value that is used for T-PDU within GTP [12]).

- Length shall be the length, in octets, of the signalling message excluding the ULIC header. Bit 8 of octet 3 is the most significant bit and bit 1 of octet 4 is the least significant bit of the length field.

- Sequence Number is an increasing sequence number for tunneled T-PDUs. Bit 8 of octet 5 is the most significant bit and bit 1 of octet 6 is the least significant bit of the sequence number field.

- Correlation Number consists of two parts: GGSN-ID identifies the GGSN which creates the Charging-ID.

    Charging-ID is defined in [12] and assigned uniquely to each PDP context activation on that GGSN (4 octets).

    The correlation number consist of 8 octets. The requirements for this correlation number are similar to that defined for charging in [12], chapter 5.4. Therefore it is proposed to use the Charging-ID, defined in [12], chapter 5.4 as part of correlation number. The Charging-ID is signaled to the new SGSN in case of SGSN-change so the tunnel identifier could be used "seamlessly" for the HI3 interface.
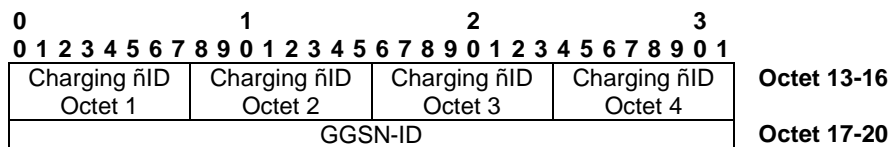
0	1	2	3	
0 1 2 3 4 5 6 7	8 9 0 1 2 3 4 5	6 7 8 9 0 1 2 3	4 5 6 7 8 9 0 1	
Charging ñID Octet 1	Charging ñID Octet 2	Charging ñID Octet 3	Charging ñID Octet 4	**Octet 13-16**
GGSN-ID				**Octet 17-20**

Figure C.2: Outline of correlation number

- Intercepting Control Element (ICE, see ref [19]) type. Indicates whether the T-PDU was intercepted in the GGSN or in the SGSN:

    î0î indicating GGSN; and

    ì1î indicating SGSN.

    This parameter is needed only in case the GGSN and the SGSN use the same Delivery Function/Mediation Function for the delivery of Content of Communication.

The ULIC header is followed by a subsequent payload information element. Only one payload information element is allowed in a single ULIC message.

		Bits							
Octets	8	7	6	5	4	3	2	1	
1 ñ 20	ULIC-Header								
21 ñn	Payload Information Element								

Figure C.3: ULIC header followed by the subsequent payload Information Element

The payload information element contains the header and the payload of the communication between the intercepted subscriber and the other party.

C.1.3   Definition of ULIC header version 1

ULIC-header version 1 is defined in ASN.1 (ref [5]) (see annex B.4) and is encoded according to BER (ref [6]). It contains the following attributes:

- Object Identifier (hi3DomainId)

- ULIC header ASN.1 version (version)
  ~~set to version1.~~

- lawful interception identifier (lIID, optional)
  sending of lawful interception identifier is application dependant; it is done according to national requirements.

- correlation number   (correlation-Number). As defined in clause 6.1.3

- time stamp (timeStamp, optional),
  sending of time stamp is application dependant; it is done according to national requirements.

- sequence number (sequence-number). Sequence Number is an increasing sequence number for tunneled T-PDUs. Handling of sequence number is application dependent; it is done according to national requirements (e.g. unique sequence number per PDP-context).

- TPDU direction (t-PDU-direction)
  indicates the direction of the T-PDU (from the target or to the target).

- ICE type (ice-type, optional)
  indicates the applicable Intercepting Control Element (see ref. [19]) in which the T-PDU was intercepted. This parameter is needed only in case the GGSN and the SGSN use the same Delivery Function/Mediation Function for the delivery of Content of Communication.

The ULIC header is followed by a subsequent payload information element. Only one payload information element is allowed in a single ULIC message (see annex B.4).
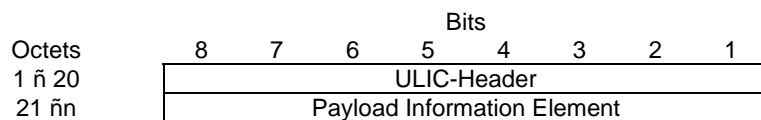
The payload information element contains the header and the payload of the communication between the intercepted subscriber and the other party.

*** END OF MODIFICATION ***

3GPP TSG-SA3-LI Meeting #15   *Tdoc* ⌘ *S3LI04_158r1*
San Antonio, USA, 11-13 October 2004

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CHANGE REQUEST

| ⌘ | **33.108** CR **061** | ⌘**rev** | **-** | ⌘ | Current version: | **6.7.0** | ⌘ |

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

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

Title: ⌘	Correction to ULIC header		
Source: ⌘	SA3-LI		
Work item code:⌘	SEC1-LI	**Date:** ⌘	12/10/2004

Category: ⌘ **A**	**Release:** ⌘ Rel-6
Use one of the following categories:	*Use one of the following releases:*
F (correction)	*Ph2 (GSM Phase 2)*
A (corresponds to a correction in an earlier release)	*R96 (Release 1996)*
B (addition of feature),	*R97 (Release 1997)*
C (functional modification of feature)	*R98 (Release 1998)*
D (editorial modification)	*R99 (Release 1999)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.	*Rel-4 (Release 4)*
	Rel-5 (Release 5)
	Rel-6 (Release 6)
	Rel-7 (Release 7)

Reason for change: ⌘	In case a centralized DF3/MF is serving both GGSN and SGSN, packets intercepted in both SGSN and GGSN are sent through the same DF3/MF to LEMF over HI3 interface. In the information sent over HI3 interface there is no indication allowing LEMF to distinguish whether the received packet was intercepted in the GGSN or in the SGSN.
Summary of change:⌘	The ULIC header is modified to carry information about the type of node (GGSN or SGSN) in which the packet was intercepted. Moreover, the definition of National Parameter, which was missing in the current version of the specification, has been added to clause C1.3.
Consequences if not approved: ⌘	Wrong information sent to LEMF; in the mentioned cases, LEMF would receive duplicated/mixed copies of packets and it would be not possible for LEMF to distinguish which packet was intercepted in the GGSN and which was intercepted in the SGSN.

Clauses affected: ⌘	B.4, C.1.2, C.1.3

	Y	N		
Other specs affected: ⌘		X	Other core specifications	⌘
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘	

*** FIRST MODIFICATION ***

B.4 Contents of communication (HI3 PS)

```
Umts-HI3-PS {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2)
threeGPP(4) hi3(2) r6(6) version-23(23)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN
```

```
IMPORTS

GPRSCorrelationNumber
    FROM UmtsHI2Operations
    {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2) threeGPP(4)
    hi2(1) r6(6) version-3(3)}    -- from 3GPP UmtsHI2Operations

LawfulInterceptionIdentifier,

TimeStamp
    FROM HI2Operations
    {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulIntercept(2) hi2(1)
    version5(5)};  -- from ETSI HI2Operations TS 101 671v2.9.1
```

```
-- Object Identifier Definitions

-- Security DomainId
lawfulInterceptDomainId OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0)
securityDomain(2) lawfulIntercept(2)}

-- Security Subdomains
threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}
hi3DomainId OBJECT IDENTIFIER  ::= {threeGPPSUBDomainId hi3(2) r6(6) version-23(23)}
```

```
CC-PDU  ::= SEQUENCE
{
    uLIC-header      [1] ULIC-header,
    payload          [2] OCTET STRING
}

ULIC-header ::= SEQUENCE
{
    hi3DomainId              [0] OBJECT IDENTIFIER,  -- 3GPP HI3 Domain
    version                  [1] Version,
    lIID                     [2] LawfulInterceptionIdentifier OPTIONAL,
    correlation-Number       [3] GPRSCorrelationNumber,
    timeStamp                [4] TimeStamp OPTIONAL,
    sequence-number          [5] INTEGER (0..65535),
    t-PDU-direction          [6] TPDU-direction,
    ...,
    national-HI3-ASN1parameters     [7] National-HI3-ASN1parameters OPTIONAL,
    --  encoded per national requirements
    ice-type                 [8] ICE-type OPTIONAL
        -- The ICE-type indicates the applicable Intercepting Control Element(see ref [19]) in which
        -- the T-PDU is intercepted.
}
```

```
Version ::= ENUMERATED
{
    version1(1),
    ...,
    version3(3)
}

TPDU-direction ::= ENUMERATED
{
    from-target    (1),
    to-target      (2),
    unknown        (3)
}
```

```
National-HI3-ASN1parameters ::= SEQUENCE
{
```

```
    countryCode     [1] PrintableString (SIZE (2)),
        -- Country Code according to ISO 3166-1 [39],
        -- the country to which the parameters inserted after the extension marker apply
    ...
        -- In case a given country wants to use additional national parameters according to its law,
        -- these national parameters should be defined using the ASN.1 syntax and added after the
        -- extension marker (...).
        -- It is recommended that "version parameter" and "vendor identification parameter" are
        -- included in the national parameters definition. Vendor identifications can be
        -- retrieved from IANA web site.
}
```

```
ICE-type ::= ENUMERATED
{
    sgsn        (1),
    ggsn        (2),
    ...
}
```

END-- OF Umts-HI3-PS

*** NEXT MODIFICATION ***

C.1.2   Definition of ULIC header version 0

ULIC header contains the following attributes:

- Correlation Number.

- Message Type (a value of 255 is used for HI3-PDU's).

- Direction.

- Sequence Number.

- Length.

- Intercepting Control Element (ICE) type.

T-PDU contains the intercepted information.

Octets	Bits							
	8	7	6	5	4	3	2	1
1	Version ('0 0 0')			'1'	Spare '1 1'		DIR	'0'
2	Message Type (value 255)							
3-4	Length							
5-6	Sequence Number							
7-8	not used (value 0)							
9	not used (value 255)							
10	not used (value 255)							
11	not used (value 255)							
12	not used (value 255)							
13-20	correlation number							

Octets	Bits 8	7	6	5	4	3	2	1
1	Version ('0 0 0')			'1'	Spare '1'	ICE type	DIR	'0'
2	Message Type (value 255)							
3-4	Length							
5-6	Sequence Number							
7-8	not used (value 0)							
9	not used (value 255)							
10	not used (value 255)							
11	not used (value 255)							
12	not used (value 255)							
13-20	correlation number							

Figure C.1: Outline of ULIC header

For interception tunneling the ULIC header shall be used as follows:

- Version shall be set to 0 to indicate the first version of ULIC header.

- DIR indicates the direction of the T-PDU:

    "1" indicating uplink (from observed mobile user); and

    "0" indicating downlink (to observed mobile user).

- Message Type shall be set to 255 (the unique value that is used for T-PDU within GTP [17]).

- Length shall be the length, in octets, of the signalling message excluding the ULIC header. Bit 8 of octet 3 is the most significant bit and bit 1 of octet 4 is the least significant bit of the length field.

- Sequence Number is an increasing sequence number for tunneled T-PDUs. Bit 8 of octet 5 is the most significant bit and bit 1 of octet 6 is the least significant bit of the sequence number field.

NOTE: When a handoff occurs between SGSNs, the DF3 serving the LEA may change. If the DF3 serving an LEA changes as a result of an handoff between SGSNs, contiguous sequencing may not occur as new sequencing may be initiated at the new DF3. Accordingly, the LEA should not assume that sequencing shall be contiguous when handoff occurs between SGSNs and the DF3 serving the LEA changes.

- Correlation Number consists of two parts: GGSN-ID identifies the GGSN which creates the Charging-ID.

    Charging-ID is defined in [17] and assigned uniquely to each PDP context activation on that GGSN (4 octets).

    The correlation number consist of 8 octets. The requirements for this correlation number are similar to that defined for charging in [17]. Therefore it is proposed to use the Charging-ID, defined in [17] as part of correlation number. The Charging-ID is signalled to the new SGSN in case of SGSN-change so the tunnel identifier could be used "seamlessly" for the HI3 interface.

0	1	2	3
0 1 2 3 4 5 6 7	8 9 0 1 2 3 4 5	6 7 8 9 0 1 2 3	4 5 6 7 8 9 0 1

Charging ñID Octet 1	Charging ñID Octet 2	Charging ñID Octet 3	Charging ñID Octet 4	**Octet 13-16**
GGSN-ID				**Octet 17-20**

Figure C.2: Outline of correlation number

- Intercepting Control Element (ICE, see ref [19]) type. Indicates whether the T-PDU was intercepted in the GGSN or in the SGSN:

        î 0î indicating GGSN; and

        ì 1î indicating SGSN.

This parameter is needed only in case the GGSN and the SGSN use the same Delivery Function/Mediation Function for the delivery of Content of Communication.

The ULIC header is followed by a subsequent payload information element. Only one payload information element is allowed in a single ULIC message.
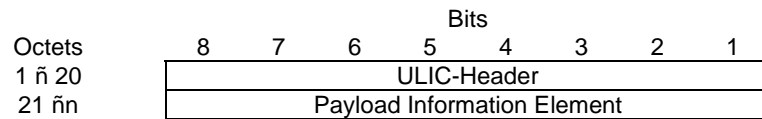
	Bits							
Octets	8	7	6	5	4	3	2	1
1 ñ 20	ULIC-Header							
21 ñn	Payload Information Element							

Figure C.3: ULIC header followed by the subsequent payload Information Element

The payload information element contains the header and the payload of the communication between the intercepted subscriber and the other party.

*** NEXT MODIFICATION ***

C.1.3   Definition of ULIC header version 1

ULIC-header version 1 is defined in ASN.1 [5] (see annex B.4) and is encoded according to BER [6]. It contains the following attributes:

- Object Identifier (hi3DomainId)

- ULIC header ASN.1 version (version)
  ~~set to version1.~~

- lawful interception identifier (lIID, optional)
  sending of lawful interception identifier is application dependant; it is done according to national requirements.

- correlation number   (correlation-Number). As defined in clause 6.1.3

- time stamp (timeStamp, optional),
  sending of time stamp is application dependant; it is done according to national requirements.

- sequence number (sequence-number). Sequence Number is an increasing sequence number for tunneled T-PDUs. Handling of sequence number is application dependent; it is done according to national requirements (e.g. unique sequence number per PDP-context).

  NOTE: When a handoff occurs between SGSNs, the DF3 serving the LEA may change. If the DF3 serving an LEA changes as a result of an handoff between SGSNs, contiguous sequencing may not occur as new sequencing may be initiated at the new DF3. Accordingly, the LEA should not assume that sequencing shall be contiguous when handoff occurs between SGSNs and the DF3 serving the LEA changes.

- TPDU direction (t-PDU-direction)
  indicates the direction of the T-PDU (from the target or to the target).

- National parameters (nationalParameters, optional)
  this parameter is encoded according to national requirements

- ICE type (ice-type, optional)
  indicates whether the T-PDU was intercepted in the GGSN or in the SGSN. This parameter is needed only in case the GGSN and the SGSN use the same Delivery Function/Mediation Function for the delivery of Content of Communication.

The ULIC header is followed by a subsequent payload information element. Only one payload information element is allowed in a single ULIC message (see annex B.4).

The payload information element contains the header and the payload of the communication between the intercepted subscriber and the other party.

*** END OF MODIFICATION ***

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **33.108 CR 062** | ⌘**rev** | **-** | ⌘ | Current version: | **6.7.0** | ⌘ |

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

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

Title:	⌘	Correction on parameter GprsOperationErrorCode
Source:	⌘	SA3-LI

Work item code:⌘	SEC1-LI	**Date:** ⌘	12/10/2004

Category: ⌘ **F**   **Release:** ⌘ Rel-6

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

Use <u>one</u> of the following releases:
Ph2   (GSM Phase 2)
R96   (Release 1996)
R97   (Release 1997)
R98   (Release 1998)
R99   (Release 1999)
Rel-4   (Release 4)
Rel-5   (Release 5)
Rel-6   (Release 6)
Rel-7   (Release 7)

Reason for change:	⌘	In TS 33.108, the parameter GprsOperationErrorCode is defined as an octet string of fixed size (2 octets), including the IEI and the cause value, according to the general definition in TS 24.008. This does not take in account possible ìVî formatting (only one octet) of the parameter which is foreseen by 3GPP TS 24.008 for SM cause and GMM cause.
Summary of change:⌘		The ASN.1 definition of the parameter GprsOperationErrorCode is changed to have variable length in order to allow sending only one octet with the SM/GMM cause.
Consequences if not approved:	⌘	In case the IEI for SM/GMM cause is not available at the DF2/MF, it would not be possible to send the parameter GprsOperationErrorCode in the format foreseen by ASN.1. Wrong information would be sent to the LEMF.

Clauses affected:	⌘	B.3

	Y	N		
Other specs affected:	⌘		X	Other core specifications ⌘
			X	Test specifications
			X	O&M Specifications

Other comments:	⌘	

B.3   Intercept related information (HI2 PS and IMS)

Declaration of ROSE operation umts-sending-of-IRI is ROSE delivery mechanism specific. When using FTP delivery mechanism, data UmtsIRIsContent must be considered.

ASN1 description of IRI (HI2 interface)

```
UmtsHI2Operations {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2)
threeGPP(4) hi2(1) r6(6) version-56(56)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN
```

```
IMPORTS

        OPERATION,
        ERROR
            FROM Remote-Operations-Information-Objects
            {joint-iso-itu-t(2) remote-operations(4) informationObjects(5) version1(0)}

        LawfulInterceptionIdentifier,
        TimeStamp,
        Network-Identifier,
        National-Parameters,
        National-HI2-ASN1parameters,
        DataNodeAddress,
        IPAddress,
        IP-value,
        X25Address

            FROM HI2Operations
            {itu-t(0) identified-organization(4) etsi(0) securityDomain(2)
                lawfulIntercept(2) hi2(1) version5(5)}; -- Imported from TS 101 671
```

```
-- Object Identifier Definitions

-- Security DomainId
lawfulInterceptDomainId OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0)
securityDomain(2) lawfulIntercept(2)}

-- Security Subdomains
threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}
hi2DomainId OBJECT IDENTIFIER   ::= {threeGPPSUBDomainId hi2(1) r6(6) version-56(56)}
```

```
umts-sending-of-IRI  OPERATION ::=
{
    ARGUMENT    UmtsIRIsContent
    ERRORS      { OperationErrors }
    CODE        global:{threeGPPSUBDomainId hi2(1) opcode(1)}
}
-- Class 2 operation . The timer shall be set to a value between 3 s and 240 s.
-- The timer.default value is 60s.
-- NOTE:    The same note as for HI management operation applies.
```

```
UmtsIRIsContent      ::= CHOICE
{
    umtsiRIContent           UmtsIRIContent,
    umtsIRISequence          UmtsIRISequence
}


UmtsIRISequence      ::= SEQUENCE OF UmtsIRIContent

-- Aggregation of UmtsIRIContent is an optional feature.
-- It may be applied in cases when at a given point in time
-- several IRI records are available for delivery to the same LEA destination.
-- As a general rule, records created at any event shall be sent
-- immediately and not withheld in the DF or MF in order to
-- apply aggragation.
-- When aggregation is not to be applied,
-- UmtsIRIContent needs to be chosen.
```

```
UmtsIRIContent        ::= CHOICE
{
    iRI-Begin-record       [1] IRI-Parameters, -- include at least one optional parameter
    iRI-End-record         [2] IRI-Parameters,
    iRI-Continue-record    [3] IRI-Parameters, -- include at least one optional parameter
    iRI-Report-record      [4] IRI-Parameters  -- include at least one optional parameter
}
```

```
unknown-version         ERROR ::= { CODE local:0}
missing-parameter       ERROR ::= { CODE local:1}
unknown-parameter-value ERROR ::= { CODE local:2}
unknown-parameter       ERROR ::= { CODE local:3}

OperationErrors ERROR ::=
{
    unknown-version |
    missing-parameter |
    unknown-parameter-value |
    unknown-parameter
}
-- This values may be sent by the LEMF, when an operation or a parameter is misunderstood.
```

```
-- Parameters having the same tag numbers must be identical in Rel-5 and Rel-6 modules.
IRI-Parameters      ::= SEQUENCE
{
    hi2DomainId            [0] OBJECT IDENTIFIER,  -- 3GPP HI2 domain
    iRIversion             [23] ENUMERATED
    {
        version2 (2),
        …,
        version3 (3),
        version4 (4),
            -- note that version5 (5) cannot be used as it was missed in the version 5 of this
            -- ASN.1 module.
        version6 (6)
    } OPTIONAL,
        -- if not present, it means version 1 is handled
    lawfulInterceptionIdentifier   [1] LawfulInterceptionIdentifier,
        -- This identifier is associated to the target.
    timeStamp              [3] TimeStamp,
        -- date and time of the event triggering the report.)
    initiator              [4] ENUMERATED
    {
        not-Available      (0),
        originating-Target (1),
            -- in case of GPRS, this indicates that the PDP context activation, modification
            -- or deactivation is MS requested
        terminating-Target (2),
            -- in case of GPRS, this indicates that the PDP context activation, modification or
            -- deactivation is network initiated
    ...
    } OPTIONAL,

    locationOfTheTarget    [8] Location OPTIONAL,
        -- location of the target subscriber
    partyInformation       [9] SET SIZE (1..10) OF PartyInformation OPTIONAL,
        -- This parameter provides the concerned party, the identiy(ies) of the party
        --)and all the information provided by the party.

    serviceCenterAddress   [13] PartyInformation OPTIONAL,
        -- e.g. in case of SMS message this parameter provides the address of  the relevant
        -- server within the calling (if server is originating) or called (if server is
        -- terminating) party address parameters
    sMS                    [14] SMS-report OPTIONAL,
        -- this parameter provides the SMS content and associated information

    national-Parameters    [16] National-Parameters OPTIONAL,
    gPRSCorrelationNumber  [18] GPRSCorrelationNumber OPTIONAL,
    gPRSevent              [20] GPRSEvent OPTIONAL,
        -- This information is used to provide particular action of the target
        -- such as attach/detach
    sgsnAddress            [21] DataNodeAddress OPTIONAL,
    gPRSOperationErrorCode [22] GPRSOperationErrorCode OPTIONAL,
    ggsnAddress            [24] DataNodeAddress OPTIONAL,
    qOS                    [25] UmtsQos OPTIONAL,
    networkIdentifier      [26] Network-Identifier OPTIONAL,
    sMSOriginatingAddress  [27] DataNodeAddress OPTIONAL,
```

```
    sMSTerminatingAddress    [28] DataNodeAddress OPTIONAL,
    iMSevent                 [29] IMSevent OPTIONAL,
    sIPMessage               [30] OCTET STRING  OPTIONAL,
    servingSGSN-number       [31] OCTET STRING (SIZE (1..20))   OPTIONAL,
    servingSGSN-address      [32] OCTET STRING (SIZE (5..17))   OPTIONAL,
                                  -- Octets are coded according to 3GPP TS 23.003 [25]
    ...,
    national-HI2-ASN1parameters [255]   National-HI2-ASN1parameters OPTIONAL
}
-- Parameters having the same tag numbers must be identical in Rel-5 and Rel-6 modules
```

```
-- PARAMETERS FORMATS
```

```
PartyInformation          ::= SEQUENCE
{
    party-Qualifier     [0]  ENUMERATED
    {
        gPRS-Target(3),
        ...
    },
    partyIdentity       [1] SEQUENCE
    {
        imei                 [1] OCTET STRING (SIZE (8)) OPTIONAL,
            -- See MAP format [4]

        imsi                 [3] OCTET STRING (SIZE (3..8)) OPTIONAL,
            -- See MAP format [4] International Mobile
            -- Station Identity E.212 number beginning with Mobile Country Code

        msISDN               [6] OCTET STRING (SIZE (1..9)) OPTIONAL,
            -- MSISDN of the target, encoded in the same format as the AddressString
            -- parameters defined in MAP format document [4], § 14.7.8

        e164-Format          [7] OCTET STRING   (SIZE (1 .. 25)) OPTIONAL,
            -- E164 address of the node in international format. Coded in the same format as
            -- the calling party number  parameter of the ISUP (parameter part:[5])

        sip-uri              [8] OCTET STRING    OPTIONAL,
            -- See [26]


        ...,
        tel-url              [9] OCTET STRING    OPTIONAL,
            -- See [36]
    },

    services-Data-Information   [4] Services-Data-Information OPTIONAL,
        -- This parameter is used to transmit all the information concerning the
        -- complementary information associated to the basic data call
    ...
}
```

```
Location    ::= SEQUENCE
{
    globalCellID       [2] GlobalCellID   OPTIONAL,
        --see MAP format (see [4])
    rAI                [4] Rai     OPTIONAL,
        -- the Routeing Area Identifier is coded in accordance with the § 10.5.5.15 of
        -- document [9] without the Routing Area Identification IEI (only the
        -- last 6 octets are used)
    gsmLocation        [5] GSMLocation OPTIONAL,
    umtsLocation       [6] UMTSLocation OPTIONAL,
    sAI                [7] Sai OPTIONAL,
        -- format:  PLMN-ID 3 octets (no. 1 – 3)
        --          LAC     2 octets (no. 4 – 5)
        --          SAC     2 octets (no. 6 – 7)
        --          (according to 3GPP TS 25.413)
    ...
}
```

```
GlobalCellID    ::= OCTET STRING  (SIZE (5..7))
Rai             ::= OCTET STRING (SIZE (6))
Sai             ::= OCTET STRING (SIZE (7))
```

```
GSMLocation      ::= CHOICE
{
    geoCoordinates  [1] SEQUENCE
    {
```

```
        latitude        [1] PrintableString (SIZE(7..10)),
                            -- format :    XDDMMSS.SS
        longitude       [2] PrintableString (SIZE(8..11)),
                            -- format :    XDDDMMSS.SS
        mapDatum        [3] MapDatum DEFAULT wGS84,
        ...,
        azimuth         [4] INTEGER (0..359) OPTIONAL
            -- The azimuth is the bearing, relative to true north.
    },
        -- format :    XDDDMMSS.SS
        --             X          : N(orth), S(outh), E(ast), W(est)
        --             DD or DDD  : degrees (numeric characters)
        --             MM         : minutes (numeric characters)
        --             SS.SS      : seconds, the second part (.SS) is optionnal
        -- Example :
        --          latitude short form    N502312
        --          longitude long form    E1122312.18

    utmCoordinates  [2] SEQUENCE
    {
        utm-East        [1] PrintableString (SIZE(10)),
        utm-North       [2] PrintableString (SIZE(7)),
            -- example  utm-East    32U0439955
            --          utm-North   5540736
        mapDatum        [3] MapDatum DEFAULT wGS84,
        ...,
        azimuth         [4] INTEGER (0..359) OPTIONAL
            -- The azimuth is the bearing, relative to true north.
    },

    utmRefCoordinates   [3] SEQUENCE
    {
        utmref-string       PrintableString (SIZE(13)),
        mapDatum            MapDatum DEFAULT wGS84,
        ...
    },
        -- example  32UPU91294045

    wGS84Coordinates    [4] OCTET STRING
        -- format is as defined in [37]; polygon type of shape is not allowed.
}

MapDatum ::= ENUMERATED
{
    wGS84,
    wGS72,
    eD50,   -- European Datum 50
    ...
}
```

```
UMTSLocation ::= CHOICE {
    point                   [1] GA-Point,
    pointWithUnCertainty    [2] GA-PointWithUnCertainty,
    polygon                 [3] GA-Polygon
}
```

```
GeographicalCoordinates ::= SEQUENCE {
    latitudeSign            ENUMERATED { north, south },
    latitude                INTEGER (0..8388607),
    longitude               INTEGER (-8388608..8388607),
    ...
}
```

```
GA-Point ::= SEQUENCE {
    geographicalCoordinates     GeographicalCoordinates,
    ...
}
```

```
GA-PointWithUnCertainty ::=SEQUENCE {
    geographicalCoordinates     GeographicalCoordinates,
    uncertaintyCode             INTEGER (0..127)
}
```

```
maxNrOfPoints                       INTEGER ::= 15
```

```
GA-Polygon ::= SEQUENCE (SIZE (1..maxNrOfPoints)) OF
```

```
     SEQUENCE {
         geographicalCoordinates    GeographicalCoordinates,
         ...
     }
```

```
SMS-report      ::= SEQUENCE
{
    sMS-Contents    [3] SEQUENCE
    {
        sms-initiator       [1] ENUMERATED  -- party which sent the  SMS
        {
            target          (0),
            server          (1),
            undefined-party (2),
            ...
        },
        transfer-status     [2] ENUMERATED
        {
            succeed-transfer   (0),        -- the transfer of the SMS message succeeds
            not-succeed-transfer(1),
            undefined          (2),
            ...
        } OPTIONAL,
        other-message       [3] ENUMERATED -- in case of terminating call, indicates if
                                           -- the server will send other SMS
        {
            yes       (0),
            no        (1),
            undefined (2),
            ...
        } OPTIONAL,
        content             [4] OCTET STRING (SIZE (1 .. 270)) OPTIONAL,
                                    -- Encoded in the format defined for the SMS mobile
        ...
    }
}
```

```
GPRSCorrelationNumber ::= OCTET STRING (SIZE(8..20))
```

```
GPRSEvent ::= ENUMERATED
{
    pDPContextActivation                 (1),
    startOfInterceptionWithPDPContextActive (2),
    pDPContextDeactivation               (4),
    gPRSAttach                           (5),
    gPRSDetach                           (6),
    locationInfoUpdate                   (10),
    sMS                                  (11),
    pDPContextModification               (13),
    servingSystem                        (14),
    ...
}
-- see [19]
```

```
IMSevent ::= ENUMERATED
{
    sIPmessage (1),
    ...
}
```

```
Services-Data-Information ::= SEQUENCE
{
    gPRS-parameters [1] GPRS-parameters OPTIONAL,
    ...
}
```

```
GPRS-parameters ::= SEQUENCE
{
    pDP-address-allocated-to-the-target   [1] DataNodeAddress OPTIONAL,
    aPN                     [2] OCTET STRING (SIZE(1..100)) OPTIONAL,
    pDP-type                [3] OCTET STRING (SIZE(2)) OPTIONAL,
    ...
}
```

```
GPRSOperationErrorCode ::= OCTET STRING (SIZE(2))
   refer to standard [9] for values(GMM cause or SM cause parameter).
```

```
-- The parameter shall carry the GMM cause value or the SM cause value, as defined in the standard
-- [9], without the IEI.
```

```
UmtsQos ::= CHOICE
{
    qosMobileRadio [1] OCTET STRING,
        -- The qosMobileRadio parameter shall be coded in accordance with the § 10.5.6.5 of
        -- document [9] without the Quality of service IEI and Length of
        -- quality of service IE (. That is, first
        -- two octets carrying 'Quality of service IEI' and 'Length of quality of service
        -- IE' shall be excluded).
    qosGn [2] OCTET STRING
        -- qosGn parameter shall be coded in accordance with § 7.7.34 of document [17]
}
```

```
END -- OF UmtsHI2Operations
```

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **33.108** CR **063** | ⌘**rev** | **-** | ⌘ | Current version: | **6.7.0** | ⌘ |

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

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

Title: ⌘	Correction to the IMPORTS statements		
Source: ⌘	SA3 LI		
Work item code:⌘	SEC1-LI	*Date:* ⌘	12/10/2004
Category: ⌘ **F**		*Release:* ⌘ Rel-6	

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

Use <u>one</u> of the following releases:
Ph2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

Reason for change: ⌘	ETSI TS 101 671 is approaching stability level at which it would be upgraded to ETSI ES 201 671 Edition 3. This CR offers to correct imports statements in 33.108, so that parameters imported form ETSI module would be most up to date and error free. Sub clause B.5 does not need update. Another CR ìAdding domain ID to HI3 CS domain moduleî addresses possible update to sub clause B.6. Besides, release 6 branches were added to the modules under B.3a.
Summary of change:⌘	Imports statements were updated, so that imported parameters are error free.
Consequences if not approved: ⌘	Possible wrong interpretation of ASN.1 parameters at LEMF.

Clauses affected: ⌘	Annexes B.3, B.3a, B.4.

		Y	N	
Other specs affected:	⌘		X	Other core specifications ⌘
			X	Test specifications
			X	O&M Specifications

Other comments: ⌘	

B.3 Intercept related information (HI2 PS and IMS)

Declaration of ROSE operation umts-sending-of-IRI is ROSE delivery mechanism specific. When using FTP delivery mechanism, data UmtsIRIsContent must be considered.

ASN1 description of IRI (HI2 interface)

```
UmtsHI2Operations {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2)
threeGPP(4) hi2(1) r6(6) version-65(65)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN
```

```
IMPORTS

        OPERATION,
        ERROR
            FROM Remote-Operations-Information-Objects
            {joint-iso-itu-t(2) remote-operations(4) informationObjects(5) version1(0)}

        LawfulInterceptionIdentifier,
        TimeStamp,
        Network-Identifier,
        National-Parameters,
        National-HI2-ASN1parameters,
        DataNodeAddress,
        IPAddress,
        IP-value,
        X25Address

            FROM HI2Operations
            {itu-t(0) identified-organization(4) etsi(0) securityDomain(2)
                lawfulIntercept(2) hi2(1) version75(75)}; -- Imported from TS 101 671v2.11.1
```

```
-- Object Identifier Definitions

-- Security DomainId
lawfulInterceptDomainId OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0)
securityDomain(2) lawfulIntercept(2)}

-- Security Subdomains
threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}
hi2DomainId OBJECT IDENTIFIER   ::= {threeGPPSUBDomainId hi2(1) r6(6) version-65(65)}
```

*** Next modification ***

```
-- Parameters having the same tag numbers must be identical in Rel-5 and Rel-6 modules.
IRI-Parameters      ::= SEQUENCE
{
    hi2DomainId          [0] OBJECT IDENTIFIER,  -- 3GPP HI2 domain
    iRIversion           ----[23] ENUMERATED
    {
        version2-(2),
        …,
        version3-(3),
        version4-(4),
        version6(6)
    } OPTIONAL,
        -- if not present, it means version 1 is handled
```

*** Next modification ***

B.3a Interception related information (HI2 CS)

For North America the use of J-STD-25 A[23] is recommended.

Declaration of ROSE operation sending-of-IRI is ROSE delivery mechanism specific. When using FTP delivery mechanism, data IRI-Content must be considered.

ASN1 description of IRI (HI2 CS interface)

```
UmtsCS-HI2Operations
{ itu-t (0) identified-organization (4) etsi (0) securityDomain (2) lawfulIntercept (2) threeGPP(4)
hi2CS (3) r6(6) version-32 (32)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN
```

```
IMPORTS OPERATION,
    ERROR
        FROM Remote-Operations-Information-Objects
        {joint-iso-itu-t (2) remote-operations(4) informationObjects(5) version1(0)}

    LawfulInterceptionIdentifier,
    TimeStamp,
    Intercepted-Call-State,
    PartyInformation,
    CallContentLinkCharacteristics,
    CommunicationIdentifier,
    CC-Link-Identifier,
    National-Parameters,
    National-HI2-ASN1parameters,

    FROM HI2Operations
        {itu-t(0) identified-organization(4) etsi(0) securityDomain(2)
            lawfulIntercept(2) hi2(1) version75(75)} -- Imported from TS 101 671v2.11.1 ASN.1

    Location,
    SMS-report

    FROM UmtsHI2Operations
        {itu-t(0) identified-organization(4) etsi(0) securityDomain(2)
            lawfulintercept(2) threeGPP(4) hi2(1) r6(6) version-64(64)};
            -- Imported from TS 33.108v6.8.0


-- Object Identifier Definitions

-- Security DomainId
lawfulInterceptDomainId OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0)
securityDomain(2) lawfulIntercept(2)}

-- Security Subdomains
threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}
hi2CSDomainId OBJECT IDENTIFIER ::= {threeGPPSUBDomainId hi2CS(3) r6(6) version-32(32)}
```

*** Next modification ***

```
IRI-Parameters       ::= SEQUENCE
{
    hi2CSDomainId                      [0] OBJECT IDENTIFIER OPTIONAL, -- 3GPP HI2 CS domain

    iRIversion                         [23] ENUMERATED
    {
        version1(1),
        ...,
        version2(2),
        version3(3)
    } OPTIONAL,
        -- if not present, it means version 1 is handled
```

*** Next modification ***

B.4   Contents of communication (HI3 PS)

```
Umts-HI3-PS {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2)
threeGPP(4) hi3(2) r6(6) version-32(32)}
```

```
DEFINITIONS IMPLICIT TAGS ::=

BEGIN
```

```
IMPORTS

GPRSCorrelationNumber
    FROM UmtsHI2Operations
    {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2) threeGPP(4)
    hi2(1) r6(6) version-63(63)}    -- Imported from TS 33.108v6.8.0from 3GPP UmtsHI2Operations

LawfulInterceptionIdentifier,

TimeStamp
    FROM HI2Operations
    {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulIntercept(2) hi2(1)
    version75(75)};  -- from ETSI HI2Operations TS 101 671v2.119.1
```

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **33.108** CR **064** | ⌘**rev** | **-** | ⌘ | Current version: | **6.7.0** | ⌘ |

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

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

Title: ⌘	Syntax Error in Annex B.3	
Source: ⌘	SA WG3-LI	
Work item code: ⌘	SEC1-LI	***Date:*** ⌘ 06/10/2004

Category: ⌘ **F**		***Release:*** ⌘ Rel-6
	Use one of the following categories: ***F*** *(correction)* ***A*** *(corresponds to a correction in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)* Detailed explanations of the above categories can be found in 3GPP TR 21.900.	*Use one of the following releases:* *Ph2* *(GSM Phase 2)* *R96* *(Release 1996)* *R97* *(Release 1997)* *R98* *(Release 1998)* *R99* *(Release 1999)* *Rel-4* *(Release 4)* *Rel-5* *(Release 5)* *Rel-6* *(Release 6)* *Rel-7* *(Release 7)*

Reason for change: ⌘	In Annex B.3 there is a minor Syntax Error, the comma at the end of the line 'tel_url' is incorrect. However, as the ASN.1 tools (Syntax Checker, Compiler) do not tolerate this error, it needs to be corrected.	
Summary of change: ⌘	Correction of a syntax error in the HI2 module	
Consequences if not approved: ⌘	Compilation cannot complete successfully	

Clauses affected: ⌘	Annex B.3	

	Y	N		
Other specs affected: ⌘		X	Other core specifications	⌘
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘		

```
-- PARAMETERS FORMATS
```

```
PartyInformation            ::= SEQUENCE
{
    party-Qualifier    [0]  ENUMERATED
    {
        gPRS-Target(3),
        ...
    },
    partyIdentity      [1] SEQUENCE
    {
        imei               [1] OCTET STRING (SIZE (8)) OPTIONAL,
            -- See MAP format [4]

        imsi               [3] OCTET STRING (SIZE (3..8)) OPTIONAL,
            -- See MAP format [4] International Mobile
            -- Station Identity E.212 number beginning with Mobile Country Code

        msISDN             [6] OCTET STRING (SIZE (1..9)) OPTIONAL,
            -- MSISDN of the target, encoded in the same format as the AddressString
            -- parameters defined in MAP format document [4], § 14.7.8

        e164-Format        [7] OCTET STRING   (SIZE (1 .. 25)) OPTIONAL,
            -- E164 address of the node in international format. Coded in the same format as
            -- the calling party number  parameter of the ISUP (parameter part:[5])

        sip-uri            [8] OCTET STRING    OPTIONAL,
            -- See [26]

        ...,
        tel-url            [9] OCTET STRING    OPTIONAL,
            -- See [36]
    },

    services-Data-Information  [4] Services-Data-Information OPTIONAL,
        -- This parameter is used to transmit all the information concerning the
        -- complementary information associated to the basic data call
    ...
}
```

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CHANGE REQUEST

⌘	**33.108 CR 065**	⌘**rev**	**-**	⌘	Current version:	**6.7.0**	⌘

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

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

Title:	⌘	Deleting CC from SIP message		
Source:	⌘	SA3 LI		
Work item code:⌘		SEC1-LI	***Date:*** ⌘	12/10/2004
Category:	⌘	**B**	***Release:*** ⌘	Rel-6

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

Use <u>one</u> of the following releases:
Ph2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

Reason for change:	⌘	IRI-only interception is granted in some countries and therefore it is illegal to send SIP messages to LEMF that contain CC data.
		Similar problem was solved for SMS by having ïcontentí parameter under ïSMS-reportí type optional.
		This CR proposes to comply with such legal requirement by defining new enumerated value to **IMSevent** type. Besides, an editorial change is proposed: in **IMSevent** type definition both the type and the parametr should be in boldface font.
Summary of change:⌘		New value is defined under **IMSevent** type.
Consequences if not approved:	⌘	Possible wrong interpretation of the ïsIPMessageí parameter at LEMF.

Clauses affected:	⌘	7.2, Annex B.3.

		Y	N		
Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	

Other comments:	⌘	

7.2   IRI for IMS

In addition, information on non-transmission related actions of a target constitute IRI and is sent via HI2, e.g. information on subscriber controlled input.

The IRI may be subdivided into the following categories:

1. Control information for HI2 (e.g. correlation information).

2. Basic data context information, for standard data transmission between two parties (e.g. SIP-message).

For each event, a Record is sent to the LEMF, if this is required. The following table gives the mapping between event type received at DF2 level and record type sent to the LEMF.

Table 7.1: Mapping between IMS Events and HI2 Records Type

Event	IRI Record Type
SIP-Message	REPORT

A set of information is used to generate the record. The records used transmit the information from mediation function to LEMF. This set of information can be extended in the CSCF or DF2 MF, if new IEs are available and if this is necessary in a specific country. The following table gives the mapping between information received per event and information sent in records.

Table 7.2: Mapping between IMS Events Information and IRI Information

Parameter	Description	HI2 ASN.1 parameter
Observed SIP URI	Observed SIP URI	partyInformation (sip-uri)
Observed TEL URL	Observed TEL URL	partyInformation (tel-url)
Event type	IMS Event	IMSevent
Event date	Date of the event generation in the CSCF	timestamp
Event time	Time of the event generation in the CSCF	
Network identifier	Unique number of the intercepting CSCF	NetworkIdentifier
Correlation number	Unique number for each PDP context delivered to the LEMF, to help the LEA, to have a correlation between each PDP Context and the IRI.	gPRSCorrelationNumber
Lawful interception identifier	Unique number for each lawful authorization.	lawfulInterceptionIdentifier
SIP message	Either wWhole SIP message, or SIP message header. SIP message header is used if warrant requires only IRI. In such case, specific content in the SIPMessage (e.g. iMessageí, etc.) must be deleted.	SIPMessage

NOTE: LIID parameter must be present in each record sent to the LEMF.

7.2.1   Events and information

This clause describes the information sent from the Delivery Function (DF) to the Law Enforcement Monitoring Facility (LEMF) to support Lawfully Authorized Electronic Surveillance (LAES). The information is described as records and information carried by a record. This focus is on describing the information being transferred to the LEMF.

The IRI events and data are encoded into records as defined in the Table 7-1 Mapping between IMS Events and HI2 Records Type and Annex B.3 Intercept related information (HI2). IRI is described in terms of a 'causing event' and information associated with that event. Within each IRI Record there is a set of events and associated information elements to support the particular service.

The communication events described in Table 7-1: Mapping between the IMS Event and HI2 Record Type and Table 7-2: Mapping between IMS Events Information and IRI Information convey the basic information for reporting the disposition of a communication. This clause describes those events and supporting information.

Each record described in this clause consists of a set of parameters. Each parameter is either:

mandatory (M)   - required for the record,

conditional (C)   - required in situations where a condition is met (the condition is given in the Description), or

optional (O)   - provided at the discretion of the implementation.

The information to be carried by each parameter is identified. Both optional and conditional parameters are considered to be OPTIONAL syntactically in ASN.1 Stage 3 descriptions. The Stage 2 inclusion takes precedence over Stage 3 syntax.

Table 7.3: SIP-Message REPORT Record

Parameter	MOC	Description/Conditions
observed SIP-URI	C	SIP URI of the interception target (if available)
observed TEL-URL	C	TEL URL of the interception target (if available)
event type	M	Provide IMS event type.
event date	M	Provide the date and time the event is detected.
event time		
network identifier	M	Shall be provided.
lawful intercept identifier	M	Shall be provided.
correlation number	C	If available and not included in the SIP-message
SIP message	M	The relevant SIP message or SIP message header.

*** Next Modification ***

B.3   Intercept related information (HI2 PS and IMS)

Declaration of ROSE operation umts-sending-of-IRI is ROSE delivery mechanism specific. When using FTP delivery mechanism, data UmtsIRIsContent must be considered.

ASN1 description of IRI (HI2 interface)

```
UmtsHI2Operations {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2)
threeGPP(4) hi2(1) r6(6) version-65(65)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN
```

```
IMPORTS

        OPERATION,
        ERROR
            FROM Remote-Operations-Information-Objects
            {joint-iso-itu-t(2) remote-operations(4) informationObjects(5) version1(0)}

        LawfulInterceptionIdentifier,
        TimeStamp,
        Network-Identifier,
        National-Parameters,
        National-HI2-ASN1parameters,
        DataNodeAddress,
        IPAddress,
        IP-value,
        X25Address

            FROM HI2Operations
            {itu-t(0) identified-organization(4) etsi(0) securityDomain(2)
                    lawfulIntercept(2) hi2(1) version5(5)}; -- Imported from TS 101 671
```

```
-- Object Identifier Definitions

-- Security DomainId
lawfulInterceptDomainId OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0)
securityDomain(2) lawfulIntercept(2)}
```

```
-- Security Subdomains
threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}
hi2DomainId OBJECT IDENTIFIER   ::= {threeGPPSUBDomainId hi2(1) r6(6) version-65(65)}
```

*** Next Modification ***

```
-- Parameters having the same tag numbers must be identical in Rel-5 and Rel-6 modules.
IRI-Parameters       ::= SEQUENCE
{
    hi2DomainId               [0] OBJECT IDENTIFIER,  -- 3GPP HI2 domain
    iRIversion                [23] ENUMERATED
    {
        version2 (2),
        …,
        version3 (3),
        version4 (4),
        version6 (6)
    } OPTIONAL,
        -- if not present, it means version 1 is handled
```

*** Next Modification ***

```
IMSevent ::= ENUMERATED
{
    unfilteredsSIPmessage ――(1),
        -- This value indicates to LEMF that the whole SIP message is sent.
    ...,
    sIPheaderOnly (2)
        -- If warrant requires only IRI then specific content in a 'sIPMessage'
        -- (e.g. 'Message', etc.) has been deleted before sending it to LEMF.
}
```

CR-Form-v7.1

CHANGE REQUEST

⌘	**33.108 CR 066**	⌘**rev** - ⌘	Current version: **6.7.0** ⌘

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

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

Title: ⌘	Adding domain ID to HI3 CS domain module	
Source: ⌘	SA3 LI	
Work item code:⌘	SEC1-LI	*Date:* ⌘ 12/10/2004
Category: ⌘ **B**		*Release:* ⌘ Rel-6

Use one of the following categories:	*Use one of the following releases:*
F *(correction)*	*Ph2* *(GSM Phase 2)*
A *(corresponds to a correction in an earlier release)*	*R96* *(Release 1996)*
B *(addition of feature),*	*R97* *(Release 1997)*
C *(functional modification of feature)*	*R98* *(Release 1998)*
D *(editorial modification)*	*R99* *(Release 1999)*
Detailed explanations of the above categories can	*Rel-4* *(Release 4)*
be found in 3GPP TR 21.900.	*Rel-5* *(Release 5)*
	Rel-6 *(Release 6)*
	Rel-7 *(Release 7)*

Reason for change: ⌘	All ASN.1 modules in 33.108 (HI2 PS and IMS, HI2 CS, HI3 PS), but HI3 CS include domain ID definitions. This CR offers to add domain ID to HI3 CS domain module as well.
	The CR offers to add optional **hi3CSDomainId** parameter with tag 0, and optional **version** parameter with tag 23 to **UMTS-Content-Report** type definition. This would be a backward incompatible change.
	Besides, the CR offers to replace under the operations **hi3CircuitLISubDomainId** by **hi3CSDomainId**. This change replaces ETSI branch by 3GPP one.
Summary of change:⌘	**hi3CSDomainId** and **version** parameters were added to the annex B.6, and ETSI branch of operations was replaced by 3GPP branch.
Consequences if not approved: ⌘	Possible wrong interpretation of ASN.1 parameters at LEMF.

Clauses affected: ⌘	Annex B.6

	Y	N		
Other specs affected: ⌘		X	Other core specifications	⌘
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘	

B.6 User data packet transfer (HI3 CS)

Declaration of ROSE operations circuit-Call-related-Services and no-circuit-Call-related-Services are ROSE delivery mechanism specific. When using FTP delivery mechanism, data Content-Report must be considered.

ASN.1 description of circuit data transfer operation (HI3 interface)

```
UMTS-HI3CircuitLIOperations
{itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2) threeGPP(4)
hi3CS(4) r6(6) version21(21)}


DEFINITIONS IMPLICIT TAGS ::=

-- The following operations are used to transmit user data, which can be exchanged via the DSS1,
-- ISUP or MAP signalling (e.g. UUS).

BEGIN

IMPORTS OPERATION,
    ERROR
        FROM Remote-Operations-Information-Objects
        {joint-iso-itu-t (2) remote-operations(4) informationObjects(5) version1(0)}

    hi3CircuitLISubDomainId
        FROM
        SecurityDomainDefinitions
        { itu-t (0) identified-organization (4) etsi (0) securityDomain (2)}

    LawfulInterceptionIdentifier,
    CommunicationIdentifier,
    TimeStamp,
    OperationErrors,
    Supplementary-Services,

        FROM HI2Operations
            {itu-t(0) identified-organization(4) etsi(0) securityDomain(2)
            lawfulIntercept(2) hi2(1) version73(73)} -- Imported from TS 101 671 v2.11.1 Edition 3

SMS-report
        FROM UmtsHI2Operations
            {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulintercept(2)
            threeGPP(4) hi2(1) version-2(2)};

-- Object Identifier Definitions

-- Security DomainId
lawfulInterceptDomainId OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0)
securityDomain(2) lawfulIntercept(2)}

-- Security Subdomains
threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}
hi3CSDomainId OBJECT IDENTIFIER   ::= {threeGPPSUBDomainId hi3CS(4) r6(6) version-2(2)}
```

```
uMTS-circuit-Call-related-Services  OPERATION ::=
{
    ARGUMENT    UMTS-Content-Report
    ERRORS      { OperationErrors }
    CODE        global:{ hi3CSDomainId hi3CircuitLISubDomainId circuit-Call-Serv (1) version1 (1)}
}
-- Class 2 operation. The timer shall be set to a value between 3 s and 240 s.
-- The timer default value is 60s.
-- NOTE: The same note as for HI management operation applies.
```

```
uMTS-no-Circuit-Call-related-Services    OPERATION ::=
{
    ARGUMENT    UMTS-Content-Report
    ERRORS      { OperationErrors }
    CODE        global:{ hi3CSDomainId hi3CircuitLISubDomainId no-Circuit-Call-Serv (2) version1
(1)}
}
-- Class 2 operation. The timer must be set to a value between 10s and 120s.
-- The timer default value is 60s.
```

```
UMTS-Content-Report       ::= SEQUENCE
{
    hi3CSDomainId                      [0] OBJECT IDENTIFIER OPTIONAL, -- 3GPP HI3 CS Domain.
            --  When FTP is used this parametr shall be sent to LEMF.
    version                            [23] ENUMERATED
    {
        version1(1),
        ...
    } OPTIONAL,
    lawfulInterceptionIdentifier    [6] LawfulInterceptionIdentifier OPTIONAL,
    communicationIdentifier         [1] CommunicationIdentifier,
        -- Used to uniquely identify an intercepted call: the same as used for the relevant IRI.
        -- Called "callIdentifier" in edition 1 ES 201 671.
    timeStamp                       [2] TimeStamp,
    initiator                       [3] ENUMERATED
    {
        originating-party(0),
        terminating-party(1),
        forwarded-to-party(2),
        undefined-party(3),
        ...
    } OPTIONAL,
    content                         [4] Supplementary-Services OPTIONAL,
        -- UUI are encoded in the format defined for the User-to-user information parameter
        -- of the ISUP protocol (see EN 300 356 [30]). Only one UUI parameter is sent per message.
    sMS-report                      [5] SMS-report OPTIONAL,
    ...
}
```

END -- UMTS-HI3CircuitLIOperations

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **33.108** CR **067** | ⌘**rev** | **-** | ⌘ | Current version: | **6.7.0** | ⌘ |

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

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

Title: ⌘	Syntax Error in Annex B.3a
Source: ⌘	SA3 LI

Work item code:⌘	SEC1-LI	**Date:** ⌘	12/10/2004

Category: ⌘	**F**		**Release:** ⌘	Rel-6

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

Use <u>one</u> of the following releases:
  Ph2 (GSM Phase 2)
  R96 (Release 1996)
  R97 (Release 1997)
  R98 (Release 1998)
  R99 (Release 1999)
  Rel-4 (Release 4)
  Rel-5 (Release 5)
  Rel-6 (Release 6)
  Rel-7 (Release 7)

Reason for change: ⌘	In Annex B3a there are 5 minor Syntax Errors, which ASN.1 tools (Syntax Checker, Compiler) do not tolerate.
Summary of change:⌘	Correction of syntactic errors in the HI2 CS module.
Consequences if not approved: ⌘	Compilation fails.

Clauses affected: ⌘	Annex B.3

	Y	**N**		
Other specs affected: ⌘		X	Other core specifications ⌘	
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘	

B.3a   Interception related information (HI2 CS)

For North America the use of J-STD-25 A[23] is recommended.

Declaration of ROSE operation sending-of-IRI is ROSE delivery mechanism specific. When using FTP delivery mechanism, data IRI-Content must be considered.

ASN1 description of IRI (HI2 CS interface)

```
UmtsCS-HI2Operations
{ itu-t (0) identified-organization (4) etsi (0) securityDomain (2) lawfulIntercept (2) threeGPP(4)
hi2CS (3) version-2 (2)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN
```

```
IMPORTS OPERATION,
    ERROR
        FROM Remote-Operations-Information-Objects
        {joint-iso-itu-t (2) remote-operations(4) informationObjects(5) version1(0)}

    LawfulInterceptionIdentifier,
    TimeStamp,
    Intercepted-Call-State,
    PartyInformation,
    CallContentLinkCharacteristics,
    CommunicationIdentifier,
    CC-Link-Identifier,
    National-Parameters,
    National-HI2-ASN1parameters,

    FROM HI2Operations
        {itu-t(0) identified-organization(4) etsi(0) securityDomain(2)
            lawfulIntercept(2) hi2(1) version5(5)} -- Imported from TS 101 671 ASN.1

    Location,
    SMS-report

    FROM UmtsHI2Operations
        {itu-t(0) identified-organization(4) etsi(0) securityDomain(2)
            lawfulintercept(2) threeGPP(4) hi2(1) r6(6) version-4(4)};


-- Object Identifier Definitions

-- Security DomainId
lawfulInterceptDomainId OBJECT IDENTIFIER ::= {itu-t(0) identified-organization(4) etsi(0)
securityDomain(2) lawfulIntercept(2)}

-- Security Subdomains
threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}
hi2CSDomainId OBJECT IDENTIFIER ::= {threeGPPSUBDomainId hi2CS(3) version-2(2)}
```

```
umtsCS-sending-of-IRI  OPERATION ::=
{
    ARGUMENT    UmtsCS-IRIsContent
    ERRORS      { OperationErrors }
    CODE        global:{ threeGPPSUBDomainID hi2CS(3) opcode(1)}
}
-- Class 2 operation. The timer shall be set to a value between 3 s and 240 s.
-- The timer.default value is 60s.
-- NOTE: The same note as for HI management operation applies.
```

```
UmtsCS-IRIsContent        ::= CHOICE
{
    iRIContent          UmtsCS-IRIContent,
    iRISequence         UmtsCS-IRISequence
}
```

```
UmtsCS-IRISequence       ::= SEQUENCE OF UmtsCS-IRIContent
    -- Aggregation of UmtsCS-IRIContent is an optional feature.
    -- It may be applied in cases when at a given point in time several IRI records are
    -- available for delivery to the same LEA destination.
    -- As a general rule, records created at any event shall be sent immediately and shall
    -- not held in the DF or MF in order to apply aggregation.
-- When aggregation is not to be applied, UmtsCS-IRIContent needs to be chosen.

UmtsCS-IRIContent        ::= CHOICE
{
    iRI-Begin-record        [1] IRI-Parameters,
        --at least one optional parameter must be included within the iRI-Begin-Record
    iRI-End-record          [2] IRI-Parameters,
    iRI-Continue-record     [3] IRI-Parameters,
        --at least one optional parameter must be included within the iRI-Continue-Record
    iRI-Report-record       [4] IRI-Parameters,
        --at least one optional parameter must be included within the iRI-Report-Record
    ...
}
```

```
unknown-version         ERROR ::= { CODE local:0}
missing-parameter       ERROR ::= { CODE local:1}
unknown-parameter-value ERROR ::= { CODE local:2}
unknown-parameter       ERROR ::= { CODE local:3}

OperationErrors ERROR ::=
{
    unknown-version |
    missing-parameter |
    unknown-parameter-value |
    unknown-parameter
}
--These values may be sent by the LEMF, when an operation or a parameter is misunderstood.
```

```
IRI-Parameters       ::= SEQUENCE
{
    hi2CSDomainId                       [0] OBJECT IDENTIFIER OPTIONAL, -- 3GPP HI2 CS domain

    iRIversion                          [23] ENUMERATED
    {
        version1(1),
        ...,
        version2(2)
    } OPTIONAL,
        -- if not present, it means version 1 is handled
    lawfulInterceptionIdentifier        [1] LawfulInterceptionIdentifier,
        -- This identifier is associated to the target.
    communicationIdentifier             [2] CommunicationIdentifier,
        -- used to uniquely identify an intercepted call.

    timeStamp                           [3] TimeStamp,
        -- date and time of the event triggering the report.
    intercepted-Call-Direct             [4] ENUMERATED
    {
        not-Available(0),
        originating-Target(1),
        terminating-Target(2),
    ...
    } OPTIONAL,
    intercepted-Call-State              [5] Intercepted-Call-State OPTIONAL,
        -- Not required for UMTS. May be included for backwards compatibility to GSM
    ringingDuration                     [6] OCTET STRING (SIZE (3)) OPTIONAL,
        -- Duration in seconds. BCD coded : HHMMSS
```

```
          -- Not required for UMTS. May be included for backwards compatibility to GSM
     conversationDuration           [7] OCTET STRING (SIZE (3)) OPTIONAL,
          -- Duration in seconds. BCD coded : HHMMSS
          -- Not required for UMTS. May be included for backwards compatibility to GSM
     locationOfTheTarget            [8] Location OPTIONAL,
          -- location of the target subscriber
     partyInformation               [9] SET SIZE (1..10) OF PartyInformation OPTIONAL,
          -- This parameter provides the concerned party (Originating, Terminating or forwarded
          -- party), the identity(ies) of the party and all the information provided by the party.
     callContentLinkInformation     [10] SEQUENCE
     {
          cCLink1Characteristics      [1] CallContentLinkCharacteristics OPTIONAL,
               -- information concerning the Content of Communication Link Tx channel established
               -- toward the LEMF (or the sum signal channel, in case of mono mode).
          cCLink2Characteristics      [2] CallContentLinkCharacteristics OPTIONAL,
               -- information concerning the Content of Communication Link Rx channel established
               -- toward the LEMF.
          ...
     } OPTIONAL,
     release-Reason-Of-Intercepted-Call [11] OCTET STRING (SIZE (2)) OPTIONAL,
          -- Release cause coded in [31] format.
          -- This parameter indicates the reason why the
          -- intercepted call cannot be established or why the intercepted call has been
          -- released after the active phase.
     nature-Of-The-intercepted-call  [12] ENUMERATED
     {
          --Not required for UMTS. May be included for backwards compatibility to GSM
          --Nature of the intercepted "call":
          gSM-ISDN-PSTN-circuit-call(0),
               -- the possible UUS content is sent through the HI2 or HI3 "data" interface
               -- the possible call content call is established through the HI3 „circuit„ interface
          gSM-SMS-Message(1),
               -- the SMS content is sent through the HI2 or HI3 "data" interface
          uUS4-Messages(2),
               -- the UUS content is sent through the HI2 or HI3 "data" interface
          tETRA-circuit-call(3),
               -- the possible call content call is established through the HI3 "circuit" interface
               -- the possible data are sent through the HI3 "data" interface
          teTRA-Packet-Data(4),
               -- the data are sent through the HI3 "data" interface
          gPRS-Packet-Data(5),
               -- the data are sent through the HI3 "data" interface
          ...
     } OPTIONAL,
     serviceCenterAddress           [13] PartyInformation OPTIONAL,
          -- e.g. in case of SMS message this parameter provides the address of  the relevant
          -- server within the calling (if server is originating) or called
          -- (if server is terminating) party address parameters
     sMS                            [14] SMS-report OPTIONAL,
          -- this parameter provides the SMS content and associated information
     cC-Link-Identifier             [15] CC-Link-Identifier OPTIONAL,
          -- Depending on a network option, this parameter may be used to identify a CC link
          -- in case of multiparty calls.
     national-Parameters            [16] National-Parameters OPTIONAL,
     ...,
     umts-Cs-Event                  [33] Umts-Cs-Event OPTIONAL,
     -- Care should be taken to ensure additional parameter numbering does not conflict with
     -- ETSI TS 101 671 or Annex B.3 of this document (PS HI2).
     national-HI2-ASN1parameters    [255]   National-HI2-ASN1parameters OPTIONAL

}


Umts-Cs-Event ::= ENUMERATED
{
     call-establishment          (1),
     answer                      (2),
     supplementary-Service       (3),
     handover                    (4),
     release                     (5),
     sMS                         (6),
     location-update             (7),
     subscriber-Controlled-Input (8),
     ...
}


END -- OF UmtsCS-HI2Operations
```

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **33.108** CR **068** | ⌘**rev** | **-** | ⌘ | Current version: | **6.7.0** | ⌘ |

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

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

| **Title:** | ⌘ | HI2 SIP Content clarification |

| **Source:** | ⌘ | SA 3 LI |

| **Work item code:** ⌘ | SEC1-LI | **Date:** ⌘ | 12/10/2004 |

| **Category:** | ⌘ | **C** | **Release:** ⌘ | Rel-6 |

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

Use <u>one</u> of the following releases:
Ph2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

| **Reason for change:** | ⌘ | National requirements should be included |

| **Summary of change:** ⌘ | If the national regulation forbids the delivery of specific content in the SIP parameter on HI2 this should be mentioned in the standard |

| **Consequences if not approved:** | ⌘ | Problems with the regulators in these specific countries |

| **Clauses affected:** | ⌘ | 7.2 |

		Y	N	
Other specs affected:	⌘		X	Other core specifications	⌘	
			X	Test specifications		
			X	O&M Specifications		

| **Other comments:** | ⌘ | |

7.2   IRI for IMS

In addition, information on non-transmission related actions of a target constitute IRI and is sent via HI2, e.g. information on subscriber controlled input.

The IRI may be subdivided into the following categories:

1. Control information for HI2 (e.g. correlation information).

2. Basic data context information, for standard data transmission between two parties (e.g. SIP-message).

For each event, a Record is sent to the LEMF, if this is required. The following table gives the mapping between event type received at DF2 level and record type sent to the LEMF.

Table 7.1: Mapping between IMS Events and HI2 Records Type

Event	IRI Record Type
SIP-Message	REPORT

A set of information is used to generate the record. The records used transmit the information from mediation function to LEMF. This set of information can be extended in the CSCF or DF2 MF, if this is necessary in a specific country. The following table gives the mapping between information received per event and information sent in records.

Table 7.2: Mapping between IMS Events Information and IRI Information

Parameter	Description	HI2 ASN.1 parameter
Observed SIP URI	Observed SIP URI	partyInformation (sip-url)
Observed TEL URL	Observed TEL URL	partyInformation (tel-url)
Event type	IMS Event	iMSevent
Event date	Date of the event generation in the CSCF	timeStamp
Event time	Time of the event generation in the CSCF	
Network identifier	Unique number of the intercepting CSCF	networkIdentifier
Correlation number	Unique number for each PDP context delivered to the LEMF, to help the LEA, to have a correlation between each PDP Context and the IRI.	gPRSCorrelationNumber
Lawful interception identifier	Unique number for each lawful authorization.	lawfulInterceptionIdentifier
SIP message	Whole SIP message	sIPMessage

NOTE1:   LIID parameter must be present in each record sent to the LEMF.
NOTE2:   Details for the parameter SIP message. If the warrant requires only signaling information, specific content in the parameter 'SIP message' like IMS (Immediate Messaging) has to be deleted/filtered.

7.2.1   Events and information

This clause describes the information sent from the Delivery Function (DF) to the Law Enforcement Monitoring Facility (LEMF) to support Lawfully Authorized Electronic Surveillance (LAES). The information is described as records and information carried by a record. This focus is on describing the information being transferred to the LEMF.

The IRI events and data are encoded into records as defined in the Table 7-1 Mapping between IMS Events and HI2 Records Type and Annex B.3 Intercept related information (HI2) [1]. IRI is described in terms of a 'causing event' and information associated with that event. Within each IRI Record there is a set of events and associated information elements to support the particular service.

The communication events described in Table 7-1: Mapping between the IMS Event and HI2 Record Type and Table 7-2: Mapping between IMS Events Information and IRI Information convey the basic information for reporting the disposition of a communication. This clause describes those events and supporting information.

Each record described in this clause consists of a set of parameters. Each parameter is either:

mandatory (M)   - required for the record,

conditional (C)   - required in situations where a condition is met (the condition is given in the Description), or

optional (O)   - provided at the discretion of the implementation.

The information to be carried by each parameter is identified. Both optional and conditional parameters are considered to be OPTIONAL syntactically in ASN.1 Stage 3 descriptions. The Stage 2 inclusion takes precedence over Stage 3 syntax.

Table 7.3: SIP-Message REPORT Record

Parameter	MOC	Description/Conditions
observed SIP-URI	C	SIP URI of the interception target (if available)
observed TEL-URL	C	TEL URL of the interception target (if available)
event type	M	Provide IMS event type.
event date	M	Provide the date and time the event is detected.
event time		
network identifier	M	Shall be provided.
lawful intercept identifier	M	Shall be provided.
correlation number	C	If available and not included in the SIP-message
SIP message	M	The relevant SIP message