**3GPP TSG-SA3 Meeting #81-LI-e-b *s3i210344***

**Online, , 19th May 2021 - 21st May 2021**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.108** | **CR** | **0425** | **rev** | **1** | **Current version:** | **16.3.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Extension of alarm-information OCTET String Size | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SA3LI (ZITiS) | | | | | | | | | |
| ***Source to TSG:*** | SA3LI | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LI16 | | | | |  | ***Date:*** | | | 2021-05-20 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-16 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change 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](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Other than ETSI TS 101 671 and ETSI TS 102 232-1, which is importing HI1-Operations from TS 101 671, within 3GPP TS 33.108 the alarm-information field is supporting just a maximum OCTET String size of 25 comparted to 256. This would imply that alarm message, longer than 25 characters, which previously have been used (TS 101 671 or TS 102 232-x) can no longer be used if the Interface towards the LEMF is changed to 3GPP TS 33.108. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | change alarm-information ASN.1 definition to max size 256 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Alarm messages as defined in TS 101 671 can not be sent when using 3GPP TS 33.108 Handover interface for Lawful Interception. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 1. M.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | s3i210344r1 | | | | | | | | |

First Change

# M.2 ASN.1 description of LI management notification operation (HI1 interface)

NOTE: This annex does not describe an electronic Handover Interface, but HI1 information, which is sent to the LEMF across the HI2 port.

**ASN.1 description of LI management notification operation (HI1 interface)**

ThreeGPP-HI1NotificationOperations

{itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulIntercept(2) threeGPP(4) hi1(0) notificationOperations(1) r16 (16) version-1(1)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN

IMPORTS

LawfulInterceptionIdentifier,

TimeStamp,

CommunicationIdentifier,

Network-Identifier,

CalledPartyNumber,

IPAddress

FROM HI2Operations

{itu-t(0) identified-organization(4) etsi(0) securityDomain(2)

lawfulIntercept(2) hi2(1) version18(18)}; -- Imported from TS 101 671v3.12.1

-- =============================

-- Object Identifier Definitions

-- =============================

-- LawfulIntercept DomainId

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

-- Security Subdomains

threeGPPSUBDomainId OBJECT IDENTIFIER ::= {lawfulInterceptDomainId threeGPP(4)}

-- hi1 Domain

threeGPP-hi1NotificationOperationsId OBJECT IDENTIFIER ::= {threeGPPSUBDomainId hi1(0) notificationOperations(1)}

threeGPP-hi1OperationId OBJECT IDENTIFIER ::= {threeGPP-hi1NotificationOperationsId r16 (16) version-1(1)}

ThreeGPP-HI1-Operation ::= CHOICE

{

liActivated [1] Notification,

liDeactivated [2] Notification,

liModified [3] Notification,

alarms-indicator [4] Alarm-Indicator,

threeGPP-National-HI1-ASN1parameters [5] ThreeGPP-National-HI1-ASN1parameters,

...}

-- ==================

-- PARAMETERS FORMATS

-- ==================

Notification ::= SEQUENCE

{

domainID [0] OBJECT IDENTIFIER OPTIONAL,

-- Once using FTP delivery mechanism

lawfulInterceptionIdentifier [1] LawfulInterceptionIdentifier,

-- This identifier is the LIID identity provided with the lawful authorization for each

-- target.

communicationIdentifier [2] CommunicationIdentifier OPTIONAL,

-- Only the NO/AP/SP Identifier is provided (the one provided with the Lawful

-- authorization) in CS domain.

timeStamp [3] TimeStamp,

-- date and time of the report.

threeGPP-National-HI1-ASN1parameters [5] ThreeGPP-National-HI1-ASN1parameters OPTIONAL,

target-Information [6] Target-Information OPTIONAL,

network-Identifier [7] Network-Identifier OPTIONAL,

-- Same definition of annexes B3, B8, B9, B.11.1. It is recommended to use the same value

-- than those decided by the CSP and the LEA as the NWO/PA/SvPIdentifier of

-- communicationIdentifier used in CS domain.

broadcastStatus [8] BroadcastStatus OPTIONAL,

...}

Alarm-Indicator ::= SEQUENCE

{

domainID [0] OBJECT IDENTIFIER OPTIONAL,

-- Once using FTP delivery mechanism

communicationIdentifier [1] CommunicationIdentifier OPTIONAL,

-- Only the NO/AP/SP Identifier is provided (the one provided with the

-- Lawful authorization)

timeStamp [2] TimeStamp,

-- date and time of the report.

alarm-information [3] OCTET STRING (SIZE (1..256)),

-- Provides information about alarms (free format).

-- Until ASN.1 Release 16 version 0 (document version v16.3.0) the octet string

-- was limited to a size of 25.

lawfulInterceptionIdentifier [4] LawfulInterceptionIdentifier OPTIONAL,

-- This identifier is the LIID identity provided with the lawful authorization

-- for each target in according to national law

threeGPP-National-HI1-ASN1parameters [5] ThreeGPP-National-HI1-ASN1parameters OPTIONAL,

target-Information [6] Target-Information OPTIONAL,

network-Identifier [7] Network-Identifier OPTIONAL,

-- the NO/AP/SP Identifier,

-- Same definition as annexes B3, B8, B9, B.11.1

network-Element-Information [8] OCTET STRING (SIZE (1..256)) OPTIONAL,

-- This identifier may be a network element identifier such an IP address with its IP value,

-- that may not work properly. To be defined between the CSP and the LEA.

...}

ThreeGPP-National-HI1-ASN1parameters ::= SEQUENCE

{

domainID [0] OBJECT IDENTIFIER OPTIONAL,

-- Once using FTP delivery mechanism.

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. Besides, it is recommended to avoid

-- using tags from 240 to 255 in a formal type definition.

...}

Target-Information ::= SEQUENCE

{

communicationIdentifier [0] CommunicationIdentifier OPTIONAL,

-- Only the NO/AP/SP Identifier is provided (the one provided with the

-- Lawful authorization)

network-Identifier [1] Network-Identifier OPTIONAL,

-- the NO/PA/SPIdentifier,

-- Same definition of annexes B3, B8, B9, B.11.1

broadcastArea [2] OCTET STRING (SIZE (1..256)) OPTIONAL,

-- A Broadcast Area is used to select the group of NEs (network elements) which an

-- interception applies to. This group may be built on the basis of network type, technology

-- type or geographic details to fit national regulation and jurisdiction. The pre-defined

-- values may be decided by the CSP and the LEA to determinate the specific part of the

-- network or plateform on which the target identity(ies) has to be activated or

-- desactivated.

targetType [3] TargetType OPTIONAL,

deliveryInformation [4] DeliveryInformation OPTIONAL,

liActivatedTime [5] TimeStamp OPTIONAL,

liDeactivatedTime [6] TimeStamp OPTIONAL,

liModificationTime [7] TimeStamp OPTIONAL,

interceptionType [8] InterceptionType OPTIONAL,

...,

liSetUpTime [9] TimeStamp OPTIONAL

-- date and time when the warrant is entered into the ADMF

}

TargetType ::= ENUMERATED

{

mSISDN(0),

iMSI(1),

iMEI(2),

e164-Format(3),

nAI(4),

sip-URI(5),

tel-URI(6),

iMPU (7),

iMPI (8),

...

}

DeliveryInformation ::= SEQUENCE

{

hi2DeliveryNumber [0] CalledPartyNumber OPTIONAL,

-- Circuit switch IRI delivery E164 number

hi3DeliveryNumber [1] CalledPartyNumber OPTIONAL,

-- Circuit switch voice content delivery E164 number

hi2DeliveryIpAddress [2] IPAddress OPTIONAL,

-- HI2 address of the LEMF.

hi3DeliveryIpAddress [3] IPAddress OPTIONAL,

-- HI3 address of the LEMF.

...}

InterceptionType ::= ENUMERATED

{

voiceIriCc(0),

voiceIriOnly(1),

dataIriCc(2),

dataIriOnly(3),

voiceAndDataIriCc(4),

voiceAndDataIriOnly(5),

...}

BroadcastStatus ::= ENUMERATED

{

succesfull(0),

-- Example of usage: following a broadcasted command at least the target list of one node with a LI function has

-- been modified or confirm to include the target id requested by the LEA.

unsuccesfull(1),

-- case of usage: such information could be provided to the LEMF following the impossibility to get a positive confirmation from at least one node with an LI function on the broadcasted command made by the operator's mediation or the management of mediation.

...}

END -- end of ThreeGPP-HI1NotificationOperations

End of changes