**3GPP TSG-SA3 Meeting #94-LI *s3i240498***

**Amsterdam, Netherlands, 9th Jul 2024 - 12th Jul 2024**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.128** | **CR** | **0669** | **rev** | **1** | **Current version:** | **18.8.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Introduction of next generation IP Packet Report format | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SA3-LI (OTD\_US, EVE compliancy solutions) | | | | | | | | | |
| ***Source to TSG:*** | SA3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LI18 | | | | |  | ***Date:*** | | | 2024-07-10 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **C** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | ETSI TC LI introduced a new packet header information report format that addresses deficiencies in the legacy reporting format. There are many advantages to aligning the reporting format used in 3GPP with the ETSI format. This contribution propses supeseding the existing packet header information reporting formats with this new format. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Introduces the terminology used by ETSI TC LI for the next generation IP Packet Report format and proposes using this format in favor of legacy formats. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Deficiencies in the current reporting format will persist and alignment between the standards will not be possible. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 3.3, 6.2.3.5.1, 6.2.3.5.3, 6.2.3.5.4, 6.2.3.9, Attachments urn\_3GPP\_ns\_li\_3GPPX1Extensions.xsd | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 33.127 CR 246 | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | |  | | --- | | This CR is associated with the following changes in the Forge: Merge request: [!269](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/269)  Commit hash: [96fdcf69cba830059b8b1de9cdd5c3fb3fb4d0c8](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/269/diffs?commit_id=96fdcf69cba830059b8b1de9cdd5c3fb3fb4d0c8) | | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | s3i240451 | | | | | | | | |

## \*\*\*\* START OF FIRST CHANGE (MAIN DOCUMENT) \*\*\*\*

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 23.501: "System Architecture for the 5G System".

[3] 3GPP TS 33.126: "Lawful Interception Requirements".

[4] 3GPP TS 23.502: "Procedures for the 5G System; Stage 2".

[5] 3GPP TS 33.127: "Lawful Interception (LI) Architecture and Functions".

[6] ETSI TS 103 120: "Lawful Interception (LI); Interface for warrant information".

[7] ETSI TS 103 221-1: "Lawful Interception (LI); Internal Network Interfaces; Part 1: X1".

[8] ETSI TS 103 221-2: "Lawful Interception (LI); Internal Network Interfaces; Part 2: X2/X3".

[9] ETSI TS 102 232-1: "Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery; Part 1: Handover specification for IP delivery".

[10] ETSI TS 102 232-7: "Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery; Part 7: Service-specific details for Mobile Services".

[11] 3GPP TS 33.501: "Security Architecture and Procedures for the 5G System".

[12] 3GPP TS 33.108: "3G security; Handover interface for Lawful Interception (LI)".

[13] 3GPP TS 24.501: "Non-Access-Stratum (NAS) protocol for 5G System (5GS)".

[14] 3GPP TS 24.007: "Mobile radio interface signalling layer 3; General Aspects".

[15] 3GPP TS 29.244: "Interface between the Control Plane and the User Plane nodes".

[16] 3GPP TS 29.502: "5G System; Session Management Services; Stage 3".

[17] 3GPP TS 29.571: "5G System; Common Data Types for Service Based Interfaces; Stage 3".

[18] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS)".

[19] 3GPP TS 23.003: "Numbering, addressing and identification ".

[20] OMA-TS-MLP-V3\_5-20181211-C: "Open Mobile Alliance; Mobile Location Protocol, Candidate Version 3.5", <https://www.openmobilealliance.org/release/MLS/V1_4-20181211-C/OMA-TS-MLP-V3_5-20181211-C.pdf>.

[21] 3GPP TS 29.540: "5G System; SMS Services; Stage 3".

[22] 3GPP TS 29.518: "5G System; Access and Mobility Management Services; Stage 3".

[23] 3GPP TS 38.413: "NG Application Protocol (NGAP)".

[24] 3GPP TS 29.572: "Location Management Services; Stage 3".

[25] 3GPP TS 29.503: "5G System; Unified Data Management Services".

[26] IETF RFC 815: "IP datagram reassembly algorithms".

[27] IETF RFC 2460: "Internet Protocol, Version 6 (IPv6) Specification".

[28] IETF RFC 793: "Transmission Control Protocol".

[29] IETF RFC 768: "User Datagram Protocol".

[30] IETF RFC 4340: "Datagram Congestion Control Protocol (DCCP)".

[31] IETF RFC 4960: "Stream Control Transmission Protocol".

[32] IANA (www.iana.org): Assigned Internet Protocol Numbers, "Protocol Numbers".

[33] IETF RFC 6437: "IPv6 Flow Label Specification".

[34] IETF RFC 791: "Internet Protocol".

[35] Open Geospatial Consortium OGC 05-010: "URNs of definitions in ogc namespace".

[36] 3GPP TS 33.107: "3G security; Lawful interception architecture and functions".

[37] 3GPP TS 37.340: "Evolved Universal Radio Access (E-UTRA) and NR-Multi-connectivity; Stage 2".

[38] 3GPP TS 36.413: "S1 Application Protocol (S1AP)".

[39] OMA-TS-MMS\_ENC-V1\_3-20110913-A: "Multimedia Messaging Service Encapsulation Protocol".

[40] 3GPP TS 23.140: "Multimedia Messaging Protocol. Functional Description. Stage 2".

[41] 3GPP TS 38.415: "NG-RAN; PDU Session User Plane Protocol".

[42] 3GPP TS 23.273: "5G System (5GS) Location Services (LCS); Stage 2".

[43] IETF RFC 4566: "SDP: Session Description Protocol".

[44] 3GPP TS 24.193: "Stage 3: Access Traffic Steering, Switching and Splitting (ATSSS)".

[45] 3GPP TS 29.509: "5G System; Authentication Server Services; Stage 3".

[46] 3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".

[47] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[48] 3GPP TS 29.504: "5G System; Unified Data Repository Services; Stage 3".

[49] 3GPP TS 29.505: "5G System; Usage of the Unified Data Repository services for Subscription Data; Stage 3".

[50] 3GPP TS 23.401 "General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access".

[51] 3GPP TS 24.301 "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS), Stage 3".

[52] 3GPP TS 23.271 "Functional stage 2 description of Location Services (LCS)".

[53] 3GPP TS 29.172 "Evolved Packet Core (EPC) LCS Protocol (ELP) between the Gateway Mobile Location Centre (GMLC) and the Mobile Management Entity (MME); SLg interface".

[54] 3GPP TS 29.171 "LCS Application Protocol (LCS-AP) between the Mobile Management Entity (MME) and Evolved Serving Mobile Location Centre (E-SMLC); SLs interface".

[55] 3GPP TS 24.379: "Mission Critical Push to Talk (MCPTT) call control; protocol specification".

[56] OMA-TS-PoC-System\_Description-V2\_1-20110802-A: "OMA PoC System Description".

[57] 3GPP TS 29.541: "5G System; Network Exposure (NE) function services for Non-IP Data Delivery (NIDD); Stage 3".

[58] 3GPP TS 29.522: "5G System; Network Exposure Function Northbound APIs; Stage 3".

[59] 3GPP TS 29.338: "Diameter based protocols to support Short Message Service (SMS) capable Mobile Management Entities (MMEs); Stage 3".

[60] 3GPP TS 29.337: "Diameter-based T4 interface for communications with packet data networks and applications".

[61] 3GPP TS 24.250: "Protocol for Reliable Data Service; Stage 3".

[62] 3GPP TS 29.128: "Mobility Management Entity (MME) and Serving GPRS Support Node (SGSN) interfaces for interworking with packet data networks and applications".

[63] 3GPP TS 29.122: "T8 reference point for Northbound APIs".

[64] 3GPP TS 29.598: "5G System; Unstructured Data Storage Services; Stage3".

[65] 3GPP TS 33.535: "Authentication and Key Management for Applications (AKMA) based on 3GPP credentials in the 5G System (5GS)".

[66] IETF RFC 5246: "The Transport Layer Security (TLS) Protocol Version 1.2".

[67] GSMA IR.88: "IR.88 LTE and EPC Roaming Guidelines".

[68] GSMA NG.114 "IMS Profile for Voice, Video and Messaging over 5GS".

[69] IETF RFC 8225: "PASSporT: Personal Assertion Token".

[70] IETF RFC 8224: "Authenticated Identity Management in the Session Initiation Protocol (SIP)".

[71] IETF RFC 8588: "Personal Assertion Token (PaSSporT) Extension for Signature-based Handling of Asserted information using toKENs (SHAKEN)".

[72] 3GPP TS 24.196: "Enhanced Calling Name (eCNAM)".

[73] IETF draft-ietf-stir-passport-rcd-26: "PASSporT Extension for Rich Call Data".

NOTE: The above document cannot be formally referenced until it is published as an RFC.

[74] 3GPP TS 24.229: "IP multimedia call control protocol based on Session Initiation Protocol (SIP)and Session Description Protocol (SDP); Stage 3".

[75] IANA Session Initiation Protocol (SIP) Parameters: <https://www.iana.org/assignments/sip-parameters/sip-parameters.xhtml>

[76] IETF RFC 8946: "Personal Assertion Token (PASSporT) Extension for Diverted Calls".

[77] 3GPP TS 23.204: "3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Support of Short Message Service (SMS) over generic 3GPP Internet Protocol (IP) access; Stage 2".

[78] GSMA RCC.07: "Rich Communication Suite – Advanced Communications Services and Client Specification".

[79] IETF RFC 4975: "The Message Session Relay Protocol (MSRP)".

[80] IETF RFC 3862: "Common Presence and Instant Messaging (CPIM): Message Format".

[81] IETF RFC 5438: "Instant Message Disposition Notification (IMDN)".

[82] OMA-TS-CPM\_System\_Description-V2\_2-20170926-C: "OMA Converged IP Messaging System Description".

[83] Void.

[84] 3GPP TS 36.455: "Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning Protocol A (LPPa) ".

[85] 3GPP TS 37.355: "LTE Positioning Protocol (LPP)".

[86] 3GPP TS 38.455: "NG-RAN; NR Positioning Protocol A (NRPPa)".

[87] 3GPP TS 29.274: "3GPP Evolved Packet System (EPS); Evolved General Packet Radio Service (GPRS) Tunnelling Protocol for Control plane (GTPv2-C); Stage 3".

[88] 3GPP TS 29.513: "5G System; Policy and Charging Control signalling flows and QoS parameter mapping".

[89] 3GPP TS 29.512: "5G System; Session Management Policy Control Service; Stage 3".

[90] 3GPP TS 29.508: "5G System; Session Management Event Exposure Service; Stage 3".

[91] 3GPP TS 29.514: "5G System; Policy Authorization Service; Stage 3".

[92] 3GPP TS 29.214: "Policy and Charging Control over Rx reference point".

[93] 3GPP TS 24.558: "Enabling Edge Applications; Protocol specification".

[94] 3GPP TS 29.558: "Enabling Edge Applications; Application Programming Interface (API) specification".

[95] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification; Core network protocols; Stage 3".

[96] 3GPP TS 29.551: "5G System; Packet Flow Description Management Service; Stage 3".

[97] ETSI TS 103 280: "Lawful Interception (LI); Dictionary for common parameters".

[98] 3GPP TS 26.512: "5G Media Streaming (5GMS); Protocols".

[99] 3GPP TS 26.247: "Transparent end-to-end Packet-switched Streaming Service (PSS); Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH)".

[100] 3GPP TS 29.563: "5G System; Home Subscriber Server (HSS) services for interworking with Unified Data Management (UDM); Stage 3".

[101] 3GPP TS 29.562: "5G System; Home Subscriber Server (HSS) Services; Stage 3".

[102] 3GPP TS 24.341 "Support of SMS over IP networks, Stage 3".

[103] 3GPP TS 38.473 "NG-RAN;F1 application protocol (F1AP)".

[104] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".

[105] ITU-T Recommendation Q.763 (1999): "Specifications of Signalling System No.7; Formats and codes".

[106] 3GPP TS 29.272: "Mobility Management Entity (MME) and Serving GPRS Support Node (SGSN) related interfaces based on Diameter protocol".

[107] IETF RFC 6442: "Location Conveyance for the Session Initiation Protocol".

[108] Void.

[109] OMA-TS-CPM\_Conv\_Function: "OMA CPM Conversation Functions".

[110] IETF RFC 2045: "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies".

[111] 3GPP TS 32.299: " Telecommunication management; Charging management; Diameter charging applications".

[112] 3GPP TS 32.423: "Telecommunication management; Subscriber and equipment trace; Trace data definition and management".

[113] 3GPP TS 38.414: "NG-RAN; NG data transport".

[114] IETF RFC 2045: "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies".

[115] IETF RFC 5322: "Internet Message Format".

[116] IETF RFC 4975: "The Message Session Relay Protocol (MSRP)".

[117] IETF RFC 6901: "JavaScript Object Notation (JSON) Pointer".

[118] IETF RFC 3261: "SIP: Session Initiation Protocol".

[119] W3C Recommendation: "XML Path Language (XPath)".

[120] IETF RFC 2046: "Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types".

[121] 3GPP TR 33.928: "ADMF Logic for Provisioning Lawful Interception (LI) ".

[122] 3GPP TS 23.316: "Wireless and wireline convergence access support for the 5G System".

[123] 3GPP TS 23.038: "Alphabets and language-specific information".

[124] ITU-T Recommendation X.680 (2021): "Information technology—Abstract Syntax Notation One (ASN.1): Specification of basic notation".

[125] IETF RFC 4282: "The Network Access Identifier".

[126] IETF RFC 7042: "IANA Considerations and IETF Protocol and Documentation Usage for IEEE 802 Parameters".

[127] IEEE "Guidelines for Use of Extended Unique Identifier (EUI), Organizationally Unique Identifier (OUI), and Company ID (CID)", <https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/tutorials/eui.pdf>

[128] 3GPP TS 24.502: "Access to the 3GPP 5G Core Network (5GCN) via Non-3GPP Access Networks (N3AN)".

[129] 3GPP TS 33.503: "Security aspects of Proximity based Services (ProSe) in the 5G System (5GS)".

[130] 3GPP TS 29.228: "IP Multimedia (IM) Subsystem Cx and Dx Interfaces; Signalling flows and message contents".

[131] 3GPP TS 24.174: "Support of multi-device and multi-identity in the IP Multimedia Subsystem (IMS)".

[132] OMA-TS-CPM\_Message\_Storage: "OMA CPM Message Storage".

[133] 3GPP TS 29.520: "Network Data Analytics Services".

[134] 3GPP2 C.S0015-A: "Short Message Service (SMS) for Wideband Spread Spectrum Systems".

[XX] ETSI TS 102 232-3: "Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery; Part 3: Service-specific details for internet access services".

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*\*

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

ADMF LI Administration Function

CC Content of Communication

CSP Communication Service Provider

CUPS Control and User Plane Separation

DNAI Data Network Access Identifier

ICF Identity Caching Function

IEF Identity Event Function

IPPR Internet Protocol Packet Reporting

IQF Identity Query Function

IRI Intercept Related Information

LAF Location Acquisition Function

LALS Lawful Access Location Services

LARF Location Acquisition Requesting Function

LEA Law Enforcement Agency

LEMF Law Enforcement Monitoring Facility

LI Lawful Interception

LICF Lawful Interception Control Function

LI\_HI1 LI\_Handover Interface 1

LI\_HI2 LI\_Handover Interface 2

LI\_HI3 LI\_Handover Interface 3

LI\_HI4 LI\_Handover Interface 4

LI\_HILA Lawful Interception Handover Interface Location Acquisition

LI\_HIQR Lawful Interception Handover Interface Query Response

LIPF Lawful Interception Provisioning Function

LIR Location Immediate Request

LI\_SI Lawful Interception System Information Interface

LISSF Lawful Interception State Storage Function

LI\_ST Lawful Interception State Transfer Interface

LI\_X1 Lawful Interception Internal Interface 1

LI\_X2 Lawful Interception Internal Interface 2

LI\_X2\_LA Lawful Interception Internal Interface 2 Location Acquisition

LI\_X3 Lawful Interception Internal Interface 3

LI\_XEM1 Lawful Interception Internal Interface Event Management Interface 1

LI\_XER Lawful Interception Internal Interface Event Record

LI\_XLA Lawful Interception Internal Interface Location Acquisition

LI\_XQR Lawful Interception Internal Interface Query Response

LTF Location Triggering Function

MDF Mediation and Delivery Function

MDF2 Mediation and Delivery Function 2

MDF3 Mediation and Delivery Function 3

MDT Minimization of Drive Test

MM Multimedia Message

MMS Multimedia Message Service

N3AEC Non-3GPP Access Establishment Cause

N3AF Non-3GPP Access Function

NAT Network Address Translation

NPLI Network Provided Location Information

O&M Operations and Management

PKMF ProSe Key Management Function

POI Point Of Interception

RCS Rich Communication Suite

SDP Session Description Protocol

SIP Session Initiation Protocol

SIRF System Information Retrieval Function

SOI Start Of Interception

TF Triggering Function

TNGF Trusted Non-3GPP Gateway Function

TWIF Trusted WLAN Interworking Function

xCC LI\_X3 Communications Content.

xIRI LI\_X2 Intercept Related Information

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*\*

##### 6.2.3.5.1 Packet data header reporting

When packet header information reporting is authorised, packet header information reports are generated either by the IRI-POI in the UPF (if approach 1 from clause 7.12.2.3 of TS 33.127 [5] is used) or by the MDF2 (if approach 2 from clause 7.12.2.3 of TS 33.127 [5] is used). Depending on the requirements of the warrant, the packet header information reports can be in per-packet form, or in summary form.

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*\*

#### 6.2.3.9 Packet header information reporting

##### 6.2.3.9.1 General

As described in TS 33.127 [5] clause 7.12.2, warrants that do not require the interception of communication contents but do require packet header information reporting will require access to the user plane packets. Packet header information reporting includes the following two IRI messages:

- Packet Data Header Reporting (PDHR) in the form of *PDHeaderReport* records.

- Packet Data Summary Reporting (PDSR) in the form of *PDSummaryReport* records.

TS 33.127 [5] clause 7.12.2 provides two approaches for the generation of such IRI messages.

In approach 1, the IRI-POI present in the UP Entity constructs and delivers the packet header information reporting related xIRIs to the MDF2 as described in clause 6.2.3.4.

In approach 2, the CC-POI present in the UP Entity intercepts, constructs and delivers the xCC to the MDF3 as described in clause 6.2.3.6. The MDF3 forwards the xCC to the MDF2 over the LI\_MDF interface and the MDF2 generates the IRI messages containing the packet header information reporting related records from the xCC.

In both approaches, the payload of the *PDHeaderReport* and *PDSummaryReport* records are as described in clauses 6.2.3.9.3, 6.2.3.9.4 tables 6.2.3.9.3-1 and 6.2.3.9.4-1. Note that in approach 2, the MDF2 generates these IRI messages containing *PDHeaderReport* and *PDSummaryReport* records without receiving the equivalent xIRI from an IRI-POI. The actions of the MDF2, the MDF3, the CC-TF in the CP Entity in 5GS and CUPS EPS, and the CC-POI in non-CUPS EPS are managed as part of the intercept data provisioned to them over the LI\_X1 interface.

In release 18.9.0 of this document an alternative approach to packet header information reporting was introduced using the IPPR mechanism as defined in ETSI TS 102 232-3 [135]. It is recommended that new implementations implement the IPPR mechanism as this aligns IP packet reporting across ETSI TS 102 232-3 [109], ETSI TS 102 232-7 [10], 3GPP TS 33.108 [12] (when using ETSI TS 102 232-7 [10] for the HI2 interface) and the present document.

For IPPR, in approach 1 described above, the POI generates an xIRI containing an .*XIRIEvent.iPIRIPacketReport*.

##### 6.2.3.9.2 Provisioning details

Table 6.2.3.9.2-1 shows the details of the HeaderReporting TaskDetailsExtension used in the LI\_X1 ActivateTask message used for provisioning LI functions when packet header information reporting is authorised.

Table 6.2.3.9.2-1: PDHRReportingExtensions parameters

|  |  |  |
| --- | --- | --- |
| Field name | Description | M/C/O |
| pDHType | This field shall be set to either:  - "PDHR," per-packet reporting.  - "PDSR," for summarized reporting. Includes PDSRParameters (see table 6.2.3.9.2-2). | M |

t

Table 6.2.3.9.2-2: PDSRParameters

|  |  |  |
| --- | --- | --- |
| Field name | Description | M/C/O |
| pDSRTriggerType | This field shall be set to at least one of the following triggers:  a) timer expiry (along with a timer value and unit).  b) packet count (along with a value for the number of packets detected before a summary is to be triggered).  c) byte count (along with a value for the cumulative byte size reached across all packets belonging to the summary before said summary is to be triggered).  Summary reports shall not be cumulative, i.e. each summary report shall describe only the packets contained in its respective range, and each new summary shall start its count (of whichever attribute from the numbered list above applies) from zero, i.e. the information in the (n+1)’th summary report starts immediately after the end of the n’th summary report. | M |
| useSessionTriggers | If useSessionTriggers is present and set to true, the trigger described in the pDSRTriggerType parameter shall be applied at the session level instead of per-flow. | C |

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*\*

##### 6.2.3.9.5 Usage of the Internet Protocol Packet Reporting record

ETSI TS 102 232-3 [XX] clause 6.2.5 defines the next generation Internet Protocol Packet Reporting structure (IPPR). As described in ETSI TS 102 232-3 [XX] clause 6.2.5 the IPPR may be used to deliver IRI reporting of packet header information in:

- per-packet form.

- summary form.

In either case, the LI function responsible for generating the xIRI extracts the information described in ETSI TS 102 232-3 [XX] clause 6.2.5 according to the IPPRType defined in the PDHRReportingExtensions parameters of the ActivateTask message used to provision the LI function.

When the summary form of IPPR is provisioned, the current summary is sent when the LI function responsible for generating the xIRI receives a DeactivateTask message for the Task that generated the IPPR regardless of whether the trigger in the IPPRType field of the ActivateTask message was met.

## \*\*\*\* END OF MAIN DOCUMENT CHANGES \*\*\*\*

## \*\*\*\* START OF FIRST CHANGE (ATTACHMENTS) \*\*\*\*

---a/33128/r18/TS33128Payloads.asn  
+++b/33128/r18/TS33128Payloads.asn

@@ -5,6 +5,15 @@ DEFINITIONS IMPLICIT TAGS EXTENSIBILITY IMPLIED ::=

5 5

6 6 BEGIN

7 7

8 + IMPORTS

9 +

10 + -- from ETSI TS 102 232-3 [6]

11 + IPIRIPacketReport

12 + FROM IPAccessPDU

13 + {itu-t(0) identified-organization(4) etsi(0) securityDomain(2) lawfulIntercept(2) li-ps(5) iPAccess(3) version17(17)};

14 +

15 + -- end of IMPORTS

16 +

8 17 -- =============

9 18 -- Relative OIDs

10 19 -- =============

@@ -266,7 +275,10 @@ XIRIEvent ::= CHOICE

266 275

267 276 -- UDM events, see clause 7.2.2.3, continued from tag 124

268 277 uDMProSeTargetIdentifierDeconcealment [159] UDMProSeTargetIdentifierDeconcealment,

269 - uDMProSeTargetAuthentication [160] UDMProSeTargetAuthentication

278 + uDMProSeTargetAuthentication [160] UDMProSeTargetAuthentication,

279 +

280 + -- IP Packet Report, see clause 6.2.3.9.5

281 + iPIRIPacketReport [161] IPAccessPDU.IPIRIPacketReport

270 282 }

271 283

272 284 -- ==============

@@ -527,6 +539,8 @@ IRIEvent ::= CHOICE

527 539 -- UDM events, see clause 7.2.2.3, continued from tag 124

528 540 uDMProSeTargetIdentifierDeconcealment [159] UDMProSeTargetIdentifierDeconcealment,

529 541 uDMProSeTargetAuthentication [160] UDMProSeTargetAuthentication

542 +

543 + -- Tag 161 is reserved because there is no equivalent IP Packet Report in IRIEvent.

530 544 }

531 545

532 546 IRITargetIdentifier ::= SEQUENCE

## \*\*\*\* END OF ALL CHANGES \*\*\*\*