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Diameter Command Codes for 3GPP EPS Diameter Applications  
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Abstract

This document describes a set of new IANA Diameter Command Codes to be used in new vendor-specific Diameter applications defined for the Third Generation Partnership Project (3GPP) Evolved Packet System (EPS).

Requirements Language

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC 2119](#) [[RFC2119](#)].

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## [1.](#) Introduction

The Third Generation Partnership Project (3GPP) is defining the Evolved Packet System (EPS) as part of their Release 8 architecture. As part of this architecture, the interfaces based on the Diameter protocol [[RFC3588](#)] required the definition of two new Diameter applications: the 3GPP S6a application (vendor-specific application id: 1677251) and 3GPP S13 application (vendor-specific application id: 1677252), both defined under the 3GPP vendor-id "10415". These Diameter applications are described in [[TS29.272](#)].

## [2.](#) Terminology

The base Diameter specification ([Section 1.4 of \[RFC3588\]](#)) defines most of the terminology used in this document. Additionally, the terms and acronyms defined in [[TS29.272](#)] are used in this document.

## [3.](#) Command Codes

As described in [[TS29.272](#)], the 3GPP S6a application specifies the following command pairs:

- o Update-Location-Request/Answer (ULR/ULA)
- o Cancel-Location-Request/Answer (CLR/CLA)
- o Authentication-Information-Request/ Answer (AIR/AIA)
- o Insert-Subscriber-Data-Request/Answer (IDR/IDA)
- o Delete-Subscriber-Data-Request/Answer (DSR/DSA)
- o Purge-UE-Request/Answer (PUR/PUA)

- o Reset-Request/Answer (RSR/RSA)
- o Notify-Request/Answer (NOR/NOA)

Also described in [\[TS29.272\]](#), the 3GPP S13 application specifies the following command pair:

- o ME-Identity-Check-Request/Answer (ECR/ECA)

#### [4.](#) IANA Considerations

This section provides guidance to the Internet Assigned Numbers Authority (IANA) regarding registration of values related to the Diameter protocol, in accordance with [BCP 26](#) [\[RFC2434\]](#).

This document defines values in the namespaces that have been created and defined in the Diameter Base [\[RFC3588\]](#). The IANA Considerations section of that document details the assignment criteria. Values assigned in this document, or by future IANA action, must be coordinated within this shared namespace.

##### [4.1.](#) Command Codes

IANA is requested to allocate the following command code values:

Code	Command Name	Abbreviation	Defined in
tbd	Update-Location-Request/Answer	ULR/ULA	3GPP TS 29.272
tbd	Cancel-Location-Request/Answer	CLR/CLA	3GPP TS 29.272
tbd	Authentication-Information-Request/Answer	AIR/AIA	3GPP TS 29.272
tbd	Insert-Subscriber-Data-Request/Answer	IDR/IDA	3GPP TS 29.272
tbd	Delete-Subscriber-Data-Request/Answer	DSR/DSA	3GPP TS 29.272
tbd	Purge-UE-Request/Answer	PUR/PUA	3GPP TS 29.272
tbd	Reset-Request/Answer	RSR/RSA	3GPP TS 29.272

tbd	Notify-Request/Answer	NOR/NOA	3GPP TS 29.272	
tbd	ME-Identity-Check-Request/Answer	ECR/ECA	3GPP TS 29.272	
+-----+-----+-----+-----+				

## 5. Security Considerations

This document describes command codes used in applications which build on top of the Diameter base protocol and the same security considerations described in [RFC3588] are applicable to this document. No further extensions are required beyond the security mechanisms offered by [RFC3588].

## 6. Acknowledgements

We would like to thank the 3GPP CT4 delegates for their review and comments.

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## 7. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), March 1997.
- [RFC2434] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", [BCP 26](#), [RFC 2434](#), October 1998.
- [RFC3588] Calhoun, P., Loughney, J., Guttman, E., Zorn, G., and J. Arkko, "Diameter Base Protocol", [RFC 3588](#), September 2003.
- [TS29.272] 3rd Generation Partnership Project, "3GPP TS 29.272 V8.0.0; Technical Specification Group Core Network and Terminals; Evolved Packet System; MME and SGSN Related Interfaces Based on Diameter Protocol (Release 8)", <http://www.3gpp.org/ftp/Specs/html-info/29272.htm>, 09 2008.

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