



ATIS-1000086.v002

ATIS Standard on -

**LTE and IMS Parameters for Supporting NS/EP Priority Services in
NGN**



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LTE and IMS Parameters for Supporting NS/EP Priority Services in NGN

Alliance for Telecommunications Industry Solutions

Approved May 22, 2024

Abstract

This Technical Report provides guidelines for provisioning relevant Long-Term Evolution (LTE) and IP Multimedia System (IMS) parameters and values (e.g., QoS/Priority Values), such that National Security / Emergency Preparedness (NS/EP) Priority Services communications receive the highest probability of delivery over other service traffic in Next Generation Networks (NGNs).

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The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes a optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

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At the time of consensus on this document, PTSC, which was responsible for its development, had the following leadership:

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Table of Contents

1	Scope, Purpose, & Application	1
1.1	Scope	1
1.2	Purpose	1
1.3	Application	1
1.4	ETS Relationship	1
2	References	2
3	Definitions, Acronyms, & Abbreviations	6
3.1	Definitions	6
3.2	Acronyms & Abbreviations	6
4	Reference Architectural Model	9
4.1	Reference End-to-End Architecture.....	9
4.2	Reference 3GPP Architecture for LTE Access	10
5	NS/EP Related Protocol Parameters	11
5.1	EPC, QoS, and PCC Related Parameters.....	11
5.1.1	EPC Related Parameters.....	11
5.1.2	QoS Related Parameters.....	18
5.1.3	PCC Related Parameters	21
5.2	Diameter Interface Parameters	23
5.2.1	Session-Priority AVP.....	23
5.2.2	DRMP AVP	24
5.3	Call Control Signaling	24
5.3.1	IP/NGN.....	24
5.3.2	PSTN/SS7.....	25
5.4	SS7 Transport.....	26
5.4.1	MTP Message Priority.....	26
5.5	IP Transport.....	27
5.5.1	IP DiffServ Code Point (DSCP)	27
5.6	Gateway Control	27
5.6.1	H.248.1 Priority Indicator	27

Table of Figures

Figure 1.1	- Relationship of Concept and Terms.	2
Figure 4.1	- Priority in IP-based Network – End-to-End Scenario.....	10
Figure 4.2	- 3GPP architecture for LTE access to the EPC, and interconnection with the GERAN/UTRAN, 1XRTT RAN, the IMS Core Network, and the Wireline Access network.....	11

Table of Tables

Table 5.1	- Mapping of Service User Priority Level to eMLPP Priority Level and TS 24.008 call priority.....	18
Table 5.2	- Mapping of Service User Priority Level to Call Priority.	18
Table 5.3	- Mapping of Service User Priority Level to Reservation-Priority AVP Value.....	23
Table 5.4	- Mapping of Service User Priority Level to Session-Priority AVP Value.	23

Table 5.5 - Mapping of Service User Priority Level to DRMP AVP Value.....	24
Table 5.6 - Mapping of Service User Priority Level to y value in wps namespace.....	25
Table 5.7 - Mapping of Service User Priority Level to ISUP Precedence Value.	26
Table 5.8 - Mapping of Service User Priority Level to H.248.1 Priority Indicator.	28

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1 Scope, Purpose, & Application

1.1 Scope

National Security / Emergency Preparedness (NS/EP) Priority Services requires priority treatment during network congestion. This treatment is required end-to-end (originating/transit/terminating) and from invocation to release in the IP-based Next Generation Network (NGN). Several parameters have been defined within Long-Term Evolution (LTE), IP Multimedia System (IMS) and supporting protocol standards applicable for providing network priority to NS/EP communications in the NGN environment. Examples include the LTE Allocation and Retention Priority (ARP), Access Class (AC), Multimedia Priority Service Identifier (MPS-Identifier), and Resource Priority Header (RPH). National specific values and/or the rules for their use need to be identified and reserved in order to effectively support NS/EP Next Generation Network Priority Service (NS/EP NGN-PS). At a minimum, operational rules need to be specified such that the values reserved for NS/EP priority communications are unique, where possible, and provide priority treatment over all other services.

This ATIS standard provides operational guidance on protocol parameters and values (e.g., QoS/Priority Values) relevant to NS/EP Priority Services support in NGN. It provides guidance on the national specific values and/or the rules for their use, such that NS/EP priority communications receive the highest probability of delivery over other service traffic.

1.2 Purpose

The purpose of this ATIS standard is to provide the best opportunity for interoperability and a common user experience regardless of the network or networks involved, i.e., end-to-end in the multiple service provider and equipment vendor public network environment.

1.3 Application

This ATIS standard is applicable to the support of NS/EP Priority Services in the evolved public IP-based NGN infrastructure.

1.4 ETS Relationship

This ATIS standard makes use of the terms and definitions described in [ATIS-1000057] and the description of the NS/EP Priority Services under the umbrella of Emergency Telecommunication Service (ETS).

National Security / Emergency Preparedness Next Generation Network Priority Service (NS/EP NGN-PS), Legacy Government Emergency Telecommunication Service (GETS), and Wireless Priority Service (WPS) are all facets of the U.S.A. instantiation of the international standard for Emergency Telecommunications Service (ETS) [E.107]. The relationship of the terms is portrayed in Figure 1.1.