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**5G;
5G System;
Usage of the Unified Data Repository services
for Subscription Data;
Stage 3
(3GPP TS 29.505 version 15.8.0 Release 15)**

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In the present document, modal verbs have the following meanings:

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- may** indicates permission to do something
- need not** indicates permission not to do something

The construction "may not" is ambiguous and is not used in normative elements. The unambiguous constructions "might not" or "shall not" are used instead, depending upon the meaning intended.

- can** indicates that something is possible
- cannot** indicates that something is impossible

The constructions "can" and "cannot" are not substitutes for "may" and "need not".

- will** indicates that something is certain or expected to happen as a result of action taken by an agency the behaviour of which is outside the scope of the present document
- will not** indicates that something is certain or expected not to happen as a result of action taken by an agency the behaviour of which is outside the scope of the present document
- might** indicates a likelihood that something will happen as a result of action taken by some agency the behaviour of which is outside the scope of the present document

might not indicates a likelihood that something will not happen as a result of action taken by some agency the behaviour of which is outside the scope of the present document

In addition:

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is not (or any other negative verb in the indicative mood) indicates a statement of fact

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1 Scope

The present document specifies the usage of the Unified Data Repository services for subscription data. It provides the resource definition and data model for subscription data used over the Nudr Service Based Interface. The protocol definition for Nudr Service Based Interface which is specific to subscription data is also specified in the present document.

The stage 3 protocol definition for Nudr Service Based Interface which is common for subscription data, policy data, structure data and application data for exposure is specified in 3GPP TS 29.504 [2].

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 29.504: "5G System; Unified Data Repository Services; Stage 3".
- [3] 3GPP TS 29.571: "5G System; Common Data Types for Service Based Interfaces Stage 3".
- [4] 3GPP TS 23.501: "System Architecture for the 5G System; Stage 2".
- [5] 3GPP TS 23.003: "Numbering, addressing and identification".
- [6] 3GPP TS 29.503: "Unified Data Management Services".
- [7] 3GPP TS 29.501: "5G System; Principles and Guidelines for Services Definition; Stage 3".
- [8] 3GPP TS 29.500: "5G System; Technical Realization of Service Based Architecture; Stage 3".
- [9] 3GPP TS 33.501: "Security architecture and procedures for 5G system".
- [10] 3GPP TS 33.102: "3G Security; Security architecture".
- [11] 3GPP TS 35.206: "An example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 2: Algorithm specification".
- [12] 3GPP TS 35.231: "A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 1: Algorithm specification".
- [13] 3GPP TS 29.518: "5G System; Access and Mobility Management Services; Stage 3".
- [14] 3GPP TR 21.900: "Technical Specification Group working methods".
- [15] 3GPP TS 29.509: "Authentication Server Services; Stage 3".
- [16] IETF RFC 3986: "Uniform Resource Identifier (URI): Generic Syntax".

3 Definitions and abbreviations

3.1 Definitions

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

pointer of attribute: The pointer of the attribute identifies the location of the attribute in the JSON object. The pointer of the attribute is a string with one or more segments, each segment is the name of an attribute within that JSON object, different segments are separated with a "/".

3.2 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].

5GC	5G Core
AMF	Access and Mobility Management Function
DNN	Data Network Name
GPSI	Generic Public Subscription Identifier
JSON	Javascript Object Notation
SMF	Session Management Function
SMS	Short Message Service
SMSF	SMS Function
SUPI	Subscription Permanent Identifier
UDM	Unified Data Management
UDR	Unified Data Repository

4 Overview

The resources, data model and usage defined in the present document are used by the 5GC NFs (e.g. UDM) to access the subscription data via the Unified Data Repository services specified in 3GPP TS 29.504 [2].

5 Usage of Nudr_DataRepository Service

5.1 Introduction

The following clauses specify the usage of Nudr_DataRepository service for subscription data. The principles specified in 3GPP TS 29.504 [2] are followed unless explicitly specified otherwise in the following clauses.

5.2 Resources

5.2.1 Overview

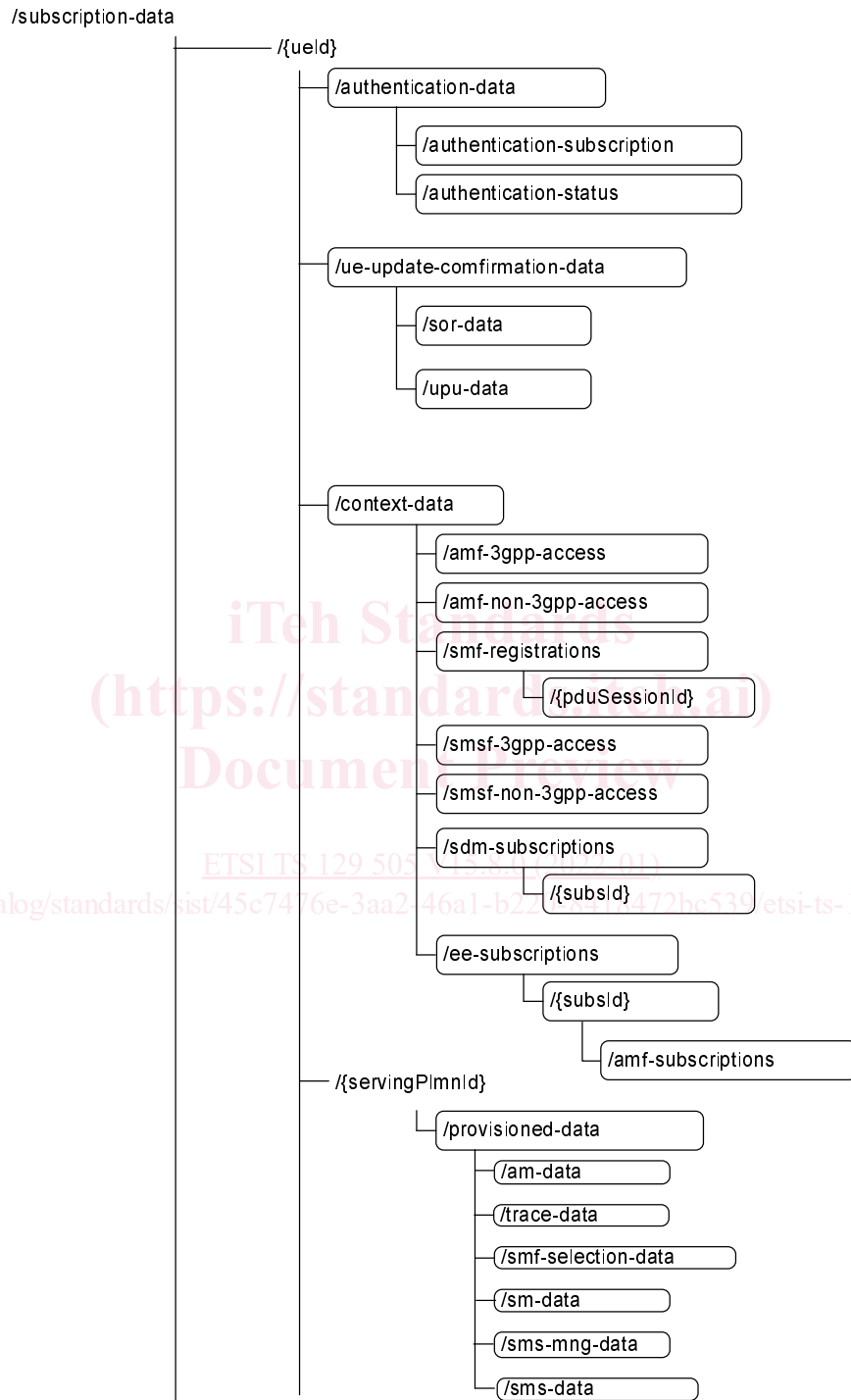


Figure 5.2.1-1: Resource URI sub-level structure for subscription data

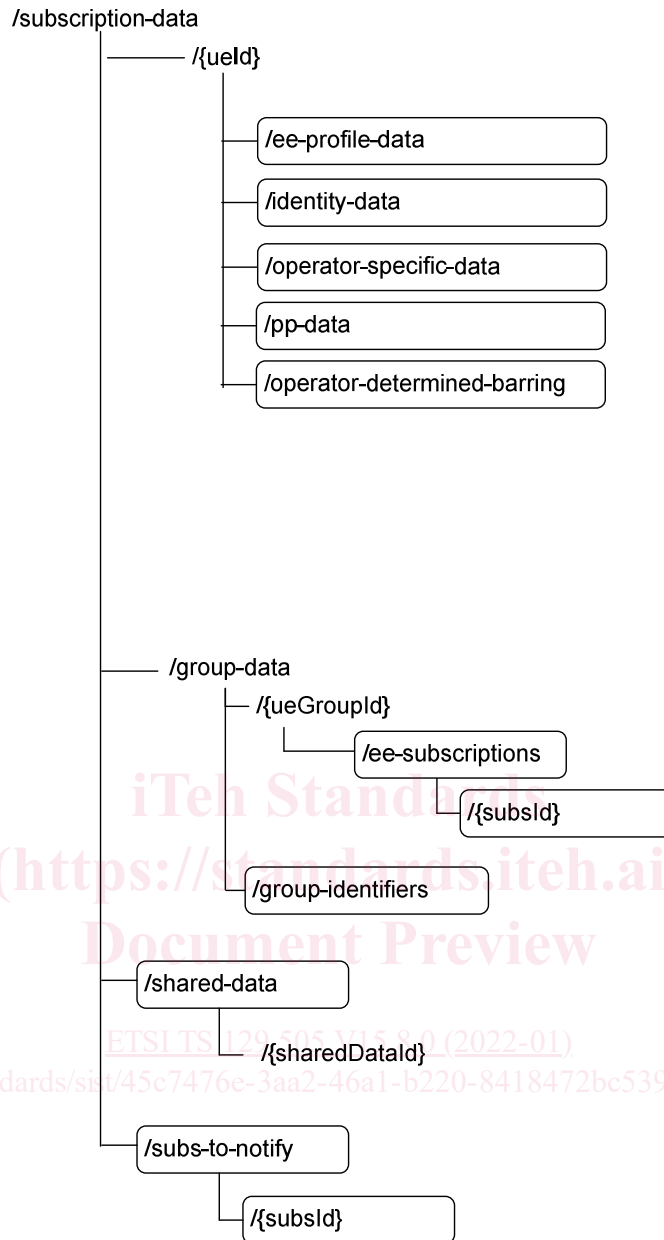


Figure 5.2.1-2: Resource URI sub-level structure for subscription data (cont.)

Table 5.2.1-1 provides an overview of the resources and applicable HTTP methods.