ATIS-0300251.2017

Structure for the Representation of Service Providers for Information Exchange

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American National Standard for Telecommunications

Structure for the Representation of Service Providers for Information Exchange

Alliance for Telecommunications Industry Solutions

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American National Standards Institute, Inc.

Abstract

This standard defines the format and structure of data elements necessary to provide a structure for the representation of service providers for information exchange.

Foreword

The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. As such, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Telecom Management and Operations Committee (TMOC) develops operations, administration, maintenance and provisioning standards and other documentation related to Operations Support System (OSS) and Network Element (NE) functions and interfaces for communications networks – with an emphasis on standards development related to U.S.A. communication networks in coordination with the development of international standards.

These codes are recognized as de facto industry standards for information exchange. They are embedded in records for circuit identifications, lease and mileage reports, tariffs and other documents and business process functions. They are also in widespread use in information exchange on ordering, provisioning, usage and billing records within the industry.

ANSI guidelines specify two categories of requirements: mandatory and recommendation. 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.

This standard contains two annexes, which is for information only and are not considered part of this standard.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, TMOC, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time it approved this document, TMOC, which is responsible for the development of this Standard, had the following members:

M. Usry, TMOC Chair [iconectiv]
B. Vrahnos, TMOC Editor [NECA]
M. Usry, TMOC Editor [iconectiv]

Trademark Acknowledgments

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American National Standard for Telecommunications –

Structure for the Representation of Service Providers for Information Exchange

1 Scope & Purpose

This standard is intended for general use to provide a common method of identification of service providers in order to help ensure the unambiguous exchange and interpretation of information. While the intended scope of this standard is for the identification of service providers in North America, the codes as defined may be applied to service providers in other countries and to unique designations.

The codes described in this standard are used to identify service providers across various information exchange processes for both humans and machines in business supporting functions such as:

- Planning, Forecasting, and Reporting.
- Engineering Management: Circuit/Design Layout Records (CLR/DLR).
- Ordering: Access/Local Service Request (ASR/LSR), Firm Order Confirmation (FOC).
- Billing: Carrier Access (CABS).
- Tariff Administration.
- Numbering Resource Administration.
- Trouble Administration.

This standard also defines the responsibilities of the maintenance agents.

2 Definitions, Abbreviations, & Acronyms

The following definitions establish understanding for the context of this standard.

2.1 A: Alpha character, A-Z.

2.2 Alphabetic code: Code made up of alpha characters, A-Z.

2.3 Area: A geopolitical zone – such as a province, state, etc. – in which a company operates and provides Information and Communications Technology (ICT) service, as determined by the applicable government regulatory agency(ies). This field is a required attribute of an area-specific Company Code.

2.4 Attribute: An inherent characteristic of a code set, such as company name, area, category, or country. Not all attributes described in this standard apply to all code sets governed by this standard. For application of attributes to code sets, see clause 5, *Code Assignment Process*.

2.5 Category: A classification of service provider, as determined by the applicable government regulatory agency's approval of the service provider (where appropriate), to provide a specific type of ICT service. This field is a required attribute of an area specific Company Code and an Overall Company Code. The Company Code maintenance agent maintains the list of industry-approved Company Code categories and definitions.

2.6 Code structure: The basic characteristics of a code; its length and generic representation.

2.7 Country: A nation in which a company operates and provides ICT service. Operators within a country are recognized and identified by the applicable government regulatory agency(ies) within that country. The country code and country code format match the 3-alpha country code abbreviation listed in ISO 3166-1. This field is a required attribute of an area specific Company Code and an Overall Company Code.

2.8 Data: A representation of facts, concepts, or instructions that are collected, organized, recorded, processed, and stored in a retrievable form suitable for communication, interpretation, or processing by human or automated means. (This definition refers to a group of facts taken as a unit; thus it is used with a singular verb.)

2.9 Data element: A single unit of data that in a certain context is considered indivisible. It cannot be decomposed into more fundamental segments of data that have useful meanings with the business.

2.10 Exchange access: The term "exchange access" means the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services.[1]

2.11 ICT: Information and Communications Technology.

2.12 Local exchange carrier: The term "local exchange carrier" means any person that is engaged in the provision of *telephone exchange service* or *exchange access*.[1]

2.13 N: Numeric character, 0-9.

2.14 Overall company code: A code that is an administrative aggregation of area-specific Company Codes within one category for a legal entity that has more than one area-specific Company Code in that category.

2.15 Service provider: Any person, firm, association or corporation, private, public or municipal, owning, operating, or providing ICT service.

2.16 Telephone exchange service: The term "telephone exchange service" means:

(A) Service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge; or

(B) Comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service. [1]

2.17 X: Numeric characters, 0-9, or alpha characters, A-Z.

3 General

Each data element shall consist of sequences of characters, each character being either alphabetic (A-Z) or numeric (0-9). In clause 4, character positions that require either alphabetic, numeric, or either alphabetic or numeric characters are represented by "A", "N", and "A/N" respectively. The alphabetic characters shall be considered as case insensitive; that is, there shall be no distinction made.

4 Data Elements & Format Structures

This standard specifies three data element structures. Each data element and its uses are as follows:

4.1 Exchange Carrier Code (EC Code)

A unique four-character alphabetic code (AAAA) that identifies the legal company name shall be assigned, as appropriate, to represent each exchange carrier. An exception is where 24 two-character codes representing companies of the former Bell System have already been assigned.

EC Codes are assigned to exchange carriers to facilitate the exchange of information between communications industry trading partners.

One code per legal company name shall be assigned in the event of a new code creation. Legal documentation is required to substantiate the existence and identity of the legal company name.

Table 4.1 – EC Code Format Structure

	Code
Character Positions	1 - 4

[1] *See* 47 U.S.C. 153, Definitions.