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VERTICAL SERVICE CODE ASSIGNMENT GUIDELINES

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The Industry Numbering Committee (INC) provides an open forum to address and resolve industry-wide issues associated with planning, administration, allocation, assignment and use of North American Numbering Plan (NANP) numbering resources within the NANP area.

This document is maintained under the direction of ATIS and the INC. Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, INC Staff, 1200 G Street NW, Suite 500, Washington, DC 20005. All changes to this document shall be made through the INC issue resolution process and adopted by the INC as set forth in the *ATIS Operating Procedures*.

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1 PURPOSE AND SCOPE

This document provides guidelines for the assignment of Vertical Service Codes (VSC) for which standardization or consistency is desired across all industry sectors in the Public Switched Telephone Network (PSTN). For the purposes of these guidelines, VSCs are customer-dialed codes in the *XX or *2XX dialing format for touch-tone and the 11XX or 112XX dialing format for rotary phones. They are used to provide customer access to features and services (e.g. call forwarding, automatic callback, etc.) provided by Network Service Providers such as local exchange carriers, interexchange carriers, Commercial Mobile Radio Service (CMRS), interconnected VoIP providers (iVoIP), etc. For example, Call Forwarding is activated by dialing *72 or 1172.

VSCs are assigned to features or services to enable consistent accessibility throughout the PSTN. The purpose of common/standard VSCs is to minimize customer confusion and provide a standard service access approach for features and services within multiple individual networks (multi-network applications).

VSCs may be required and assigned for use across and/or among two or more networks on an inter-network basis (inter-network applications), where multiple networks must act upon a VSC in a consistent manner on a given call. Such assignments are to be made using the same VSC resource, but will be identified separately from multi-network applications. It is not the intent of these Guidelines to allocate any specific range of VSCs for exclusive inter-network or multi-network use.

These guidelines do not address VSCs used for single network applications (intra-network applications) within individual networks. Such proprietary usage is at the sole discretion and determination of the individual network.

2 ASSUMPTIONS AND CONSTRAINTS

2.1 These guidelines address VSC assignments for PSTN features or services in multi-network and inter-network applications in the *XX or *2XX format.

2.2 It may be necessary at some point in time to expand the supply of VSCs in order to avoid exhaust of the * resource. VSC expansion plans will be treated separately and are not included in these assignment guidelines. To facilitate expansion planning, the *XX resource codes *2X are designated as “unassignable” (to avoid conflict with the *2XX format) and resource codes *3X are designated as “reserved for future expansion” unless the INC agrees on an expansion plan which negates such a restriction.

2.3 Network providers assigned VSCs under the terms of these guidelines will not act upon an end-user dialed VSC passed to an interconnecting network either before or after call answer unless agreed upon through individual business arrangements.

2.4 Inconsistency currently exists in the use of VSCs for specific features or services. These guidelines do not address or resolve this situation, but should be considered an attempt at standardizing future assignments to the extent possible or desirable. Therefore, the assignment of a VSC by NANPA for a particular service or feature should not be considered assurance the assigned code can be used without conflict anywhere in the NANP (North American Numbering Plan) area.

2.5 PSTN providers will have the option of using VSCs assigned according to these guidelines and in doing so will be responsible for making any necessary changes or modification to switches or dialing-instructions to accommodate code usage.

2.6 Assignments of this resource do not confer exclusive use of an assigned VSC upon the applicant, as any network/service provider may use any code on an intra-network, multi-network, or inter-network basis without an official NANPA assignment.

2.7 The same VSC may be assigned for both a multi-network and inter-network application. It is recognized that the use of a given code for both a multi-network and inter-network application may result in conflicts, and it is the responsibility of the Requester to be aware of that.

3 ASSIGNMENT PRINCIPLES

3.1 NANP resources, including those covered in these guidelines, are collectively managed by the North American telecommunications industry with oversight of the North American federal regulatory authorities.

The NANP resources are considered a public resource and are not owned by the assignees. Consequently, the resources cannot be sold, brokered, bartered, or leased by the assignee for a fee or other consideration.

If a resource is sold, brokered, bartered, or leased for a fee, the resource is subject to reclamation by the Administrator.

3.2 From a local switching system perspective the scope of these guidelines will address VSC assignment for Plain Old Telephone Service (POTS) features or services only, although use of the assigned codes in other environments, e.g., centrex or CPE/PBX is not precluded or prohibited.

3.3 VSCs will be assigned for features and services that have identical characteristics in multiple networks (i.e., available to a significant portion of the public) and have the potential for a high level of public interest or provide consistency in the use of assignments.

3.4 Any Network Service Provider may apply for assignment of a VSC under these guidelines. Codes will be assigned in a timely, impartial and fair manner.

3.5 In the assignment of VSCs, an attempt will be made to achieve maximum consistency of assignment for the same feature or service across the industry (e.g., IC, LEC, CMRS, iVoIP, etc.) in circumstances where there is broad regional or national interest in a feature or service, recognizing this will not be possible in all circumstances.

3.6 VSCs are a finite resource that should be utilized in the most efficient and effective manner by those applicants requesting codes. Applicants for VSCs may be requested to provide technical or other information describing the need for a VSC to determine if a new code assignment is warranted and if a multi-network or inter-network resource is appropriate.

3.7 Information that is submitted by applicants in request of VSC assignment shall be kept to a minimum, shall be uniform for all applicants, and on request shall be treated as proprietary and adequately safeguarded (See Section 4).

3.8 There will be no reservation of VSCs, i.e., assignments will be made on a first-come, first-served basis. Entities assigned VSCs are expected to implement the proposed VSC based service within a 6-month period from the date of assignment, or voluntarily return the VSC to the assignment pool.

3.9 VSCs will be assigned from the available pool of unassigned VSCs. Every attempt will be made to match a VSC assignment with a specific VSC request.

3.10 The NANPA is authorized to make VSC assignments in the following ranges: *00- *19, *40- *93 and *201- *299. For current VSC assignment information, access the NANPA website at www.nanpa.com or refer to the iconectiv® LERG™ Routing Guide.

3.11 A block of VSC's, from *94 to *99, has been reserved for local assignments and may be used at the discretion of any service provider. Assignment of VSCs in accordance with these guidelines will not be made in this range, or in similar local assignment ranges that are established in the future.

4 CRITERIA FOR THE ASSIGNMENT OF VERTICAL CODES

The assignment criteria in the following sections shall be used by the code administrator(s) in reviewing a Vertical Service Code Assignment request from a Network provider:

4.1 To obtain a Vertical Service Code, the Network Service Providers must certify that the service need is immediate and is either multi-network in nature within the NANP area or requires an inter-network assignment in order to implement the desired service.

4.1.1 Applicants for Vertical Service Code assignment will certify (see 4.1.2) that the feature/service is planned for use by at least two Network Service Providers. The applicant shall name the Network Service Providers that have planned to use the proposed VSC in its application.

4.1.2 Applicants for Vertical Service Code Assignment shall provide evidence that the feature/service will be provided within six months. Evidence requirements are satisfied by any of the following: proposed tariff filings, vendor provided feature/service descriptions, requirements documents or similar documentation.

5.0 RESPONSIBILITIES OF THE CODE ADMINISTRATOR

The code administrator shall:

5.1 Provide copies of the Vertical Service Code assignment guidelines when requested by applicants.

5.2 Review the documentation and determine if the code request is justified based on conditions set forth in these guidelines. In cases where a code application is denied, provide specific reasons to the applicant in writing with instructions on how and where to appeal the decision (see Section 7.0 - APPEALS).

5.3 Discuss the code request with the applicant to determine and assign a code from the appropriate resource pool (i.e., inter-network vs. multi-network) and determine, jointly with the applicant, if an existing assignment satisfies the applicant's need.

5.4 Send e-mail confirmation of the Vertical Service Code assignment after the code(s) is assigned. The length of time required for the allocation process is dependent on several factors; however, it is expected that it will normally take 5 to 10 business days from the date that all relevant information has been received.

5.5 Notify the iconectiv Telecom Routing Administration (TRA) within ten business days to publish the assigned code and its definition in the LERG Routing Guide. TRA will publish information in

the monthly LERG Routing Guide Information document that includes a listing of the most current standard multi-network and inter-network VSC assignments.

5.6 Publish, within ten business days of the new VSC assignment, a NANPA Planning Letter that identifies the new assignment and its definition, and also post the associated information to the NANPA website.

5.7 Consult with the INC to identify and develop industry recommendations related to the assignment and administration of VSCs and modification of these guidelines.

6.0 RESPONSIBILITIES OF CODE APPLICANTS

Network Service Providers applying for the assignment of a Vertical Service Code shall:

6.1 Apply to the code administrator, in writing, providing all necessary information requested by the code administrator as specified in these guidelines. The written request shall be forwarded to the North American Numbering Plan Administrator located at https://www.nationalnanpa.com/contact_us/index.html.

6.2 Written requests shall include the exact corporate name and address, contact name, e-mail address and telephone number, and the date each code is planned to be activated. Network Service Providers also shall include a service description or other appropriate information which facilitates the VSC assignment and its identification in the LERG Routing Guide VSC assignment table.

7.0 APPEALS

7.1 In the event a VSC request is not granted to the satisfaction of the applicant, an appeal of the administrator's actions may be taken to the INC for further review.

7.2 This appeal process does not preclude the right of any entity to take this matter to the appropriate legal and/or regulatory authorities for consideration and relief.

8.0 MAINTENANCE OF THESE GUIDELINES

It may be necessary to modify these assignment guidelines periodically to meet changing circumstances. The INC is the industry group responsible for reviewing and concurring on any modifications to these guidelines.

9.0 GLOSSARY

INC - (Industry Numbering Committee) - INC, a standing committee of Alliance for Telecommunications Industry Solutions (ATIS) that provides an open forum to address and resolve industry-wide issues associated with the planning, administration, allocation, assignment, and use of North American Numbering Plan (NANP) numbering resources within the NANP area.

Interconnected Voice over Internet Protocol (VoIP) Service Provider - The term "interconnected VoIP service provider" is an entity that provides interconnected VoIP service, as that term is defined in 47 U.S.C. §153(25) [47 CFR §52.5(b)]. A provider of a service that (1) enables real-time, two way voice communications, (2) requires a broadband connection from the user's location, (3) requires Internet protocol-compatible customer premises equipment, and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network (47 CFR §9.3).

Inter-network application VSC - A Vertical Service Code used to provide access to a feature or service that requires multiple individual networks to act upon the code in a consistent manner on a given call. The code must have the same meaning to more than one public switched telephone network on a single call. For example, a call originates from a LEC network, is delivered to an interexchange carrier, and is terminated on another network. An inter-network VSC dialed by the originating caller would be understood by each network involved with the call and acted upon within an individual network accordingly.

Intra-network application VSC - A vertical Service Code used to access a feature or service within an individual network provider's network. The use of this code is internal to a particular network. It does not require a standard assignment, nor is it dependent on a standardized assignment process.

Multi-network application VSC - A Vertical Service Code used to provide access to a feature or service that is common across more than one network. Multiple networks use the same code to access the same service, i.e. there is no interaction between networks. This allows for consistent accessibility throughout the PSTN of a feature or service. For example, Call Forwarding is a multi-network application since it is a service that is provided by several local exchange carrier providers.

NANP (North American Numbering Plan) - A numbering architecture in which every station in the NANP area is identified by a unique ten-digit address consisting of a three-digit NPA code, a three digit central office code of the form NXX, and a four-digit line number of the form XXXX, where N represents the digits 2-9 and X represents the digits 0-9.

It is the basic numbering scheme for the telecommunications networks located in Anguilla, Antigua, Bahamas, Barbados, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, Sint Maarten, St. Kitts & Nevis, St. Lucia, St. Vincent, Turks & Caicos Islands, Trinidad & Tobago, and the United States (including American Samoa, Puerto Rico, the U.S. Virgin Islands, Guam, and the Commonwealth of the Northern Mariana Islands) [See also 47 CFR 52.5 (c)].

NANPA (North American Numbering Plan Administration) - The NANPA is responsible for the neutral administration of NANP numbering resources, subject to directives from regulatory authorities in the NANP member countries (see also 47 CFR § 52.7 (e)). The NANPA is an impartial non-governmental entity that is not aligned with any particular telecommunications industry segment.[1] Under contract to

[1] Administration of the North American Numbering Plan, Report and Order, CC Docket No. 92-237, 11 FCC Rcd 2588, 2608 (1995) (NANP Order).

the FCC, NANPA's responsibilities include assignment of NANP resources, and, in the U.S. and its territories, coordination of area code relief planning and collection of utilization and forecast data. See also 47 CFR 52.13.

Network Service Provider – A facilities-based telecommunications carrier that is also a local exchange carrier, interexchange carrier, or provider of Commercial Mobile Radio Service (CMRS). Interconnected VoIP Providers are also considered network service providers.

POTS - Plain Old Telephone Service is a term used to refer to lines connected to local switching system that have basic service capability. Such lines are not identified within a closed user group such as centrex or connected to Customer Premises Equipment, i.e., PBX.

PSTN - Public Switched Telephone Network is a telecommunications network usually accessed by telephones, key telephone systems, private branch exchange trunks, and data arrangements. Note: Completion of the circuit between the call originator and call receiver in a PSTN requires network signaling in the form of dial pulses or multi-frequency tones. The worldwide network of public switched (circuit) telephone networks is based on ITU-T Recommendation E.164 ("The international public telecommunication numbering plan"). This document is available at: http://www.itu.int/rec/T-REC-E.164/en.