

**800 Service Management System (SMS800) Toll-Free
Number Registry (TFNRegistry™) Functions**

T
T

Regulations, Rates and Charges
Applying to the Provision of
TFNRegistry™
Functions and Support Services

T

x Issued under authority of Order, *In re Toll Free Service Access Codes*, 28 FCC Rcd 15328 (2013).
All matter in this tariff is new.

TFN REGISTRY FUNCTIONS

CHECK SHEET

Title page 1 and Pages 1 through 71 inclusive of this tariff are effective as of the date shown. Original and revised Pages as named below contain all changes from the original tariff that are in effect on the date hereof.

<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>
Title Page 1	3rd*	34	4th*	68	4th*
1	12th*	35	2nd	69	3rd
2	2nd	36	3rd*	70	9th*
3	3rd*	37	3rd*	71	9th*
4	3rd*	38	5th*		
5	3rd*	39	4th*		
6	2nd	40	2nd		
7	3rd*	41	2nd		
8	2nd	42	4th		
9	3rd*	43	4th		
10	9th*	44	3rd		
11	9th*	45	3rd*		
12	3rd*	46	3rd*		
13	2nd	47	3rd*		
14	2nd	48	3rd*		
15	2nd	49	2nd		
16	2nd	50	3rd		
17	2nd	51	3rd*		
18	2nd	52	4th*		
19	2nd	53	3rd*		
20	2nd	54	3rd*		
21	3rd*	55	4th*		
22	3rd	56	5th*		
23	3rd*	57	3rd*		
24	2nd	58	3rd*		
25	4th	59	5th*		
26	3rd	60	3rd*		
26.1	2nd*	60.1	2nd*		
27	2nd	61	5th*		
28	2nd	62	3rd		
29	2nd	63	3rd		
30	2nd	64	2nd		
31	3rd*	65	3rd*		
32	3rd*	66	4th*		
33	4th	67	5th		

* New or revised page

TFN REGISTRY FUNCTIONS**Table of Contents**

	Page No.
2. General Regulations (Cont'd)	
2.4 Payment Arrangements and Credit Allowances	39
2.4.1 Payment Arrangements	39
2.4.2 Credit Allowance for Service Interruption	44
2.5 TFN Registry Security Features	46
2.5.1 General	46
2.5.2 TFN Registry Environment	46
2.6 Proprietary Information	47
2.6.1 General	47
2.7 Definitions	51
Application Program Interface (API)	51
Area of Service (AOS)	51
Call Processing	51
Centralized Resp Org Change (ROC) Management System	51
Exchange	51
Exchange Access	51
Graphical User Interface (GUI)	51
Interexchange Carrier (IC)	51
Local Access and Transport Area (LATA)	51
Local Exchange	51
Local Exchange Carrier (LEC)	51
North American Numbering Plan (NANP)	52
Numbering Plan Area (NPA)	52
Proprietary Information	52
Responsible Organization (Resp Org)	52
Service Control Points (SCP)	52

D

TFN REGISTRY FUNCTIONS**Table of Contents**

	Page No.	
2. General Regulations (Cont'd)		
2.7 Definitions	53	
SMS800 (TFNRegistry™)	53	D
Terminal	53	T
Toll-free Number Administration	53	
Toll-free Number Search and Reservation	53	
Toll-free Service Provider	53	
Toll-free Service Provisioning	53	
Toll-free Subscriber	53	
Web Services Interface (WSI)	53	
3. Service Offerings	54	
3.1 Services Available to Toll-free Resp Orgs	55	
3.1.1 Number Search and Reservation	55	
3.1.2 Customer Record Creation and Modification	55	
3.1.3 Request Reports	56	
3.2 Service Assistance Corrective Actions	57	

TFN REGISTRY FUNCTIONS**Table of Contents**

	Page No.	
3. Service Offering (Cont'd)		
3.3 TFN Registry Access	57	
3.3.1 Non-Dedicated Access Requirements	58	
3.3.2 Dedicated Terminal Access Requirements	59	
3.3.3 Mechanized Generic Interface (MGI) Access Requirements	59	
3.3.4 Web Services Interface (WSI) Access	60	
3.3.5 TFN Registry API Interface	60	
3.3.6 TFN Registry GUI Interface	60	
3.4 Batch Update Process	60.1	
3.5 Mechanized Generic Interface (MGI) Testing	61	
3.5.1		D
3.5.2		D
3.5.3		D
3.5.4		D
3.6 Change of Resp Org	62	
3.6.1 Resp Org Change Using Centralized Resp Org Change Management System	62	
3.6.2 Resp Org Change Performed by Company	62	
3.7 Additional Copies of Monthly Bill	63	

TFN REGISTRY FUNCTIONS

CONCURRING CARRIERS

NO CONCURRING CARRIERS

CONNECTING CARRIERS

NO CONNECTING CARRIERS

OTHER PARTICIPATING CARRIERS

NO OTHER PARTICIPATING CARRIERS

REGISTERED SERVICE MARKS REGISTERED TRADE MARKS

TFNRegistry™
SOMOS®

D
T
T

TFN REGISTRY FUNCTIONS

EXPLANATION OF ABBREVIATIONS (Cont'd)

LEC	- Local Exchange Company	D
NANP	- North American Numbering Plan	
NPA	- Numbering Plan Area	
OS	- Operations System	
Resp Org	- Responsible Organization	
ROC	- Resp Org Change	
SCP	- Service Control Point	
SMS	- Service Management System	
SMS800	- 800 (Toll-free) Service Management System	T
SSP	- Service Switching Point	
STP	- Signal Transfer Point	
TFN	- Toll-Free Number	
TFN Registry	- SMS800 TFNRegistry™	T D D
WSI	- Web Services Interface	

TFN REGISTRY FUNCTIONS

REFERENCE TO TECHNICAL PUBLICATIONS

The following technical publications are referenced in this tariff and current issues may be obtained from the Somos Portal Website (<https://portal.somos.com>).

T

D
D

ROCGUIDEUSR01 User Guide: Resp Org Change System User Guide
Version 13, Issue 1 January 2022 Available: January 2022

T

TFNRegistry™ User Guide
Version 1, Issue 1 February 2022 Available: February 2022

T

T

SMS/800 TFN Registry API Overview
Version 3, Issue 7 June 2021 Available: June 2021

T

T

SMS/800 TFN Registry Reporting User Guide
Version 1, Issue 12 January 2021 Available: January 2022

T

T

D

D

D

TFN REGISTRY FUNCTIONS

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

The following technical publications are referenced in this tariff and current issues may be obtained from the Somos Portal Website (<https://portal.somos.com>).

T

D

D

Network Connectivity Guide

Version 1, Issue 1 January 2022

Available: January 2022

T

T

ROCSPECWSI01 Resp Org Change (ROC) System Web Service Interface
Specification

Version 2.29, Issue 1 January 2022

Available: January 2022

T

ROCSPECWSI02 Resp Org Change (ROC) System Notification Subscriber Web
Services Interface Specification

Version 2.20, Issue 1 January 2022

Available: January 2022

T

D

D

TFN REGISTRY FUNCTIONS

1. Application of Tariff

- 1.1 This tariff contains regulations, rates and charges applicable to the provision of the SMS800 TFNRegistry™ (formerly the 800 Service Management System (SMS800)) (Referred to as "TFN Registry") functions and support services for toll free telephone numbers. Somos, Inc., as the issuing carrier, is referred to hereinafter as the Company. T
T

TFN REGISTRY FUNCTIONS**2. General Regulations (Cont'd)****2.1 Undertaking of the Company (Cont'd)****2.1.6 Notice of Service Affecting Activities**

The Company will provide the Resp Org reasonable notification of service-affecting activities that may occur in normal operation of its business. Examples of service-affecting activities include, but are not limited to the following.

(A) Scheduled TFN Registry Downtime

Scheduled TFN Registry system downtime is neither an error nor a system malfunction. Routine scheduled system downtime is required for such activities as major software installations and environment maintenance and upgrades, and an annual disaster recovery exercise. The annual disaster exercise may last for up to twelve (12) hours. Resp Orgs will be notified of scheduled downtime at least fourteen (14) days in advance of the scheduled downtime event. Non-routine scheduled system downtime, required for such activities as database reorganizations and minor software installation, will be required from time to time, and Resp Orgs will be notified of such non-routine scheduled downtime at least twenty-four (24) hours in advance thereof by means of an TFN Registry electronic mail message. The Company will work with all Resp Orgs to ensure that routine and non-routine scheduled system downtime occurs at the time and in the manner least disruptive to all parties.

C

C

C

D

D

(B) NPA Splits/Overlays

Resp Orgs will be notified of NPA splits and overlays a minimum of one year before the effective date of the change, or as soon as the Company is notified by the NANP Administrator in those cases where a lead time of less than one year is given.

(C) TFN Registry Resp Org Format and Interface Changes

The Company will provide a minimum sixty (60) days advance notice to Resp Orgs of any significant specification changes in the API and WSI. The Company will also notify Resp Orgs of any significant retraining as may be required by a major update, modification, and/or enhancement to any TFN Registry procedures which affect the Resp Org. The scheduling of any necessary formal retraining will be handled by the Company.

D

TFN REGISTRY FUNCTIONS**2. General Regulations (Cont'd)****2.1 Undertaking of the Company (Cont'd)****2.1.8 Suspension and Discontinuance of Service****(A) When Service May Be Suspended or Discontinued**

If a Resp Org fails to comply with 2.2, 2.3.2, 2.3.4, 2.3.5 or 2.4.1 following, including any payments to be made by it on the dates and times herein specified, the Company may, on thirty (30) days written notice by certified mail to the person designated by that Resp Org to receive such notices of noncompliance, discontinue service and/or suspend service to the noncomplying Resp Org at any time thereafter. In the case of discontinuance all applicable charges shall become due. If the Company does not suspend service on the date specified in the thirty (30) days notice, and the Resp Org's noncompliance continues, nothing contained herein shall preclude the Company's right to discontinue service and/or suspend service to the noncomplying Resp Org without further notice, including reports and testing support.

If a Resp Org fails to comply with 2.3.7(D) following, Company may, without advance written notice, suspend service to the non-complying Resp Org. Service would be restored upon compliance with 2.3.7(D).

Z

(B) Transfer of Responsibilities When a Resp Org's Service is Discontinued

- (1)** If a Resp Org is denied TFN Registry access, or of its own volition ceases providing Resp Org services, the Resp Org is responsible for notifying its toll-free subscribers that it will no longer provide those services and that the toll-free subscribers must choose a new Resp Org within fifteen (15) business days. The Resp Org must provide written proof to the Company of such notification.
- (2)** If a Resp Org is suddenly unable to continue functioning as a Resp Org, the Resp Org must provide the Company with sufficient toll-free subscriber account information to allow for subscriber notification of the requirement to choose a new Resp Org within fifteen (15) business days.
- (3)** If a subscriber is required to choose a new Resp Org, as set forth in (1) or (2) preceding, and fails to do so within fifteen (15) business days, the subscriber's account will be reassigned as set forth in (C) following.

2. General Regulations (Cont'd)

2.2 Use (Cont'd)

2.2.3 Limitation on Resource Use (Cont'd)

Resp Orgs will be limited to five thousand (5,000) transactions per minute. Any transactions beyond that amount will result in the Resp Org's access being throttled, with the excess transactions permitted to be processed the following minute. This capacity is shared across all of the Resp Org's IDs. For example, the Resp Org BR has three Resp Orgs IDs: BRABC, BRDEF and BRGHI. All transactions of BRABC, BRDEF and BRGHI will be attributed to BR.

If a Resp Org is found to repeatedly exceed the 5,000 transaction per minute threshold, that Resp Org will be notified via certified mail that it is in violation of this tariff and must reduce its transactions per minute in the TFN Registry immediately on receipt. Subsequently, the Resp Org must provide the Company with written agreement to permanently reduce its level of TFN Registry CPU capacity utilization to the level described above within fourteen (14) days of the date of receipt.

If the Resp Org does not reduce its utilization and provide the required written agreement, that Resp Org's access to the TFN Registry will be suspended for a period of seven (7) days and the Resp Org will be notified via certified mail of the suspension, or until the Resp Org provides the written agreement to permanently reduce its level of TFN Registry CPU capacity utilization to the level described above, whichever is later.

Z

After a first suspension, if the Resp Org does not reduce its utilization in compliance with the tariff, that Resp Org's access to the TFN Registry will be suspended for a period of fourteen (14) days and the Resp Org will be notified via certified mail of the suspension.

After a second suspension, and for all subsequent suspensions, if the Resp Org does not reduce its utilization in compliance with the tariff, that Resp Org's access to the TFN Registry will be suspended for a period of twenty-eight (28) days and the Resp Org will be notified via certified mail of the suspension.

For access to the TFN Registry to be restored under this section, a fee equivalent to fifty percent (50%) of the charge for Service Establishment – First Logon ID (Section 4.2 [A]) will be assessed.

TFN REGISTRY FUNCTIONS**2. General Regulations
(Cont'd)****2.3 Obligations/Responsibilities of the Resp Org (Cont'd)****2.3.1 General Responsibilities (Cont'd)****(B) Trouble Reporting Responsibilities (Cont'd)**

- Advise the toll-free subscriber and affected LECs and ICs of the status of trouble clearance.

(C) Resp Org Changes

When a toll-free subscriber requests a change of Resp Org:

- (1) The current Resp Org will release the toll-free subscriber's TFN Registry records to the receiving (new) Resp Org within two (2) days of the receipt of the request unless the releasing (current) and receiving (new) Resp Orgs negotiate a different release date. Upon completion of the change, the receiving Resp Org will notify the toll-free subscriber that the change has been made.
- (2) As described in 3.6.2 following, when the receiving Resp Org requests the Company to make the change, upon request from the receiving Resp Org, which certifies that it has the required authorization of the subscriber, the Company will change an TFN Registry number record to reflect the receiving Resp Org as the Resp Org for that toll-free number.

C

TFN REGISTRY FUNCTIONS**2. General Regulations (Cont'd)****2.3 Obligations/Responsibilities of the Resp Org (Cont'd)****2.3.2 Service Establishment**

- (A) In order to access the TFN Registry, the Resp Org must first obtain a logon identification (logon ID) code from the Company. In order to obtain a logon ID, the Resp Org must demonstrate that one or more Resp Org employees have been adequately trained in TFN Registry system capabilities and features, including handling customer records, number administration and service provisioning. Requests for logon IDs should be made via the Service Establishment form, which is available on the Somos website, <https://www.somos.com>.

Z

Regardless of the method used for obtaining the necessary knowledge, in all cases the TFN Registry training manager will prepare, schedule, and administer a certification test that the prospective Resp Org must pass.

Subsequent to becoming certified by passing the certification test, the Resp Org is expected to use the Somos website to stay informed about the TFN Registry system.

Failure to pass the certification test will result in the following:

- (1) Any applicant that fails the certification test will be required to wait a period of at least one week before requesting that the test be repeated.
- (2) Any applicant that fails three (3) certification tests will have its application for access to the TFN Registry canceled.
- (3) After three (3) failures of the certification test, a period of at least six (6) months must elapse between the time the applicant is notified that their application has been canceled and the time the applicant re-applies. Such subsequent applications will be treated as first-time applications.

D
|
D

TFN REGISTRY FUNCTIONS**2. General Regulations (Cont'd)****2.3 Obligations/Responsibilities of the Resp Org (Cont'd)****2.3.2 Service Establishment (A) (Cont'd)**D
|
D

- Permission class(es) to be associated with each logon ID

(B) Assignment of Logon IDs and Passwords

When the required information has been received, the requested logon IDs will be assigned by the Company. At the time the logon ID is assigned, the Company will establish a temporary password to be associated with the ID. The first time the Resp Org uses the logon ID to access the TFN Registry, the temporary password must be changed to one selected by the Resp Org.

D

Certain material on this page originally appeared on page 33. This page filed under Transmittal No. 11.

TFN REGISTRY FUNCTIONS**2. General Regulations (Cont'd)****2.3 Obligations/Responsibilities of the Resp Org (Cont'd)****2.3.4 Claims and Demands for Damages (Cont'd)**

- (B) With respect to claims of patent infringement made by third persons, the Resp Org shall defend, indemnify, protect and save harmless the Company from and against all claims arising out of the combining with, or use in connection with, the services provided under this tariff, any circuit, apparatus, system or method provided by the Resp Org.
- (C) The Resp Org shall defend, indemnify, protect and save harmless the Company from and against any and all suits, claims, and demands by third persons arising out of the construction, installation, operation, maintenance, or removal of the Resp Org's circuits, facilities, or equipment connected to the Company's services provided under this tariff, including, without limitation, Workers' Compensation claims, actions for infringement of copyright and/or unauthorized use of program material, libel and slander actions based on the content of communications transmitted over the Resp Org's circuits, facilities or equipment, and proceedings to recover taxes, fines, or penalties for failure of the Resp Org to obtain or maintain in effect any necessary certificates, permits, licenses, or other authority to acquire or operate the services provided under this tariff.
- (D) The Resp Org shall defend, indemnify and save harmless the Company from and against any suits, claims, losses or damages, including punitive damages, attorney fees and court costs by the Resp Org or third parties arising out of any act or omission of the Resp Org in the course of using services provided under this tariff.

Z

2.3.5 System Security

Resp Orgs will adhere to the following:

- (A) Resp Orgs may access TFN Registry only to the extent required by and incident to the administration and management of their toll-free subscriber's telecommunications services.
- (B) Resp Orgs may not disclose or use information which may be learned as a consequence of access to TFN Registry except as may be directly required to insure the proper operation of the subscriber's telecommunications service. Resp Orgs must take all reasonable precautions to prevent any other person or entity who does not have a need to know from acquiring such information.

TFN REGISTRY FUNCTIONS

2. General Regulations (Cont'd)

2.3 Obligations/Responsibilities of the Resp Org (Cont'd)

2.3.5 System Security (Cont'd)

- (C) Resp Orgs shall take reasonable precautions to avoid disclosure, in whole or in part, of TFN Registry documentation, any related material or any other confidential material except to those who have a need to know incident to the operation of their toll-free subscriber's telecommunications service.
- (D) Resp Orgs shall take all reasonable precautions to maintain the confidentiality of TFN Registry information. Such precautions shall include the use of logon IDs and passwords known only to the Resp Org's individual authorized users and the Company (except that a portion of the logon ID is known to others for systems communications purposes). TFN Registry
- sign-on methodology shall not be posted or shared with others under any circumstances. Resp Orgs shall follow normal logoff procedures prior to leaving a terminal unattended. Resp Orgs should report any known or suspected attempt by others to obtain unauthorized access to TFN Registry.
- (E) Access into TFN Registry beyond that authorized may result in suspension and/or discontinuance of service as set forth in 2.1.8 preceding and in civil and/or criminal penalties.

2.3.6 Protection of TFN Registry Logon Identification Codes and Passwords

The Resp Org will be responsible for protecting and limiting access to its TFN Registry logon ID password(s), including API Key/secret and will be liable for all charges incurred from the use of its logon ID codes and/or password(s), unless such charges arise from the Company's breach of 2.1.1 (D)(2) preceding. Protection of logon ID password(s) requires that all passwords are changed at least every ninety (90) days. In the event the Resp Org suspects the compromise of the security of its logon ID password(s), the Resp Org should notify the Company within twenty-four (24) hours and may request new logon ID password(s). The Company shall effectuate such code(s) changes at no charge to the Resp Org within twenty-four (24) hours of the Resp Org's request thereof.

TFN REGISTRY FUNCTIONS

2. General Regulations (Cont'd)

2.3 Obligations/Responsibilities of the Resp Org (Cont'd)

2.3.7 Additional Responsibilities of the Resp Org

- (A) The Resp Org is responsible for accessing the TFN Registry to reserve numbers, to construct and modify toll-free subscriber records and to schedule the date for downloading each record to the necessary databases. The Resp Org is solely responsible for the accuracy of this information. D
D
D
D
- The Company may modify that format under the conditions set forth in 2.1.6(C) preceding.
- (B) The Resp Org will provide and maintain the hardware and connections needed for its interface with the TFN Registry pursuant to Section in 3.3 following. T
T
- (C) The Resp Org is responsible for assuring that its number search and number reservation activities are consistent with Section 2.2.2 of this tariff.
- (D) Pursuant to the requirement in the FCC's *Auction of Toll Free Numbers in the 833 Code; Notice and Filing Requirements, Upfront Payments, and Other Procedures for the 833 Auction; Bidding Scheduled to Begin December 17, 2019*, AU Docket No. 19-101, WC Docket No. 17-192, CC Docket No. 95-155, Public Notice, 34 FCC Rcd 6560 (2019), for all toll-free numbers purchased during the 833 Toll-Free Number Auction, and not subsequently obtained through the spare pool, that have been resold in the secondary market for all toll-free numbers involved in post-auction secondary market transactions, the Resp Org providing service to the purchasing subscriber will provide Company, within sixty (60) days of the Resp Org's actual knowledge of the transaction, the following contact information for both parties to the transaction: name; address; email; and phone number.

TFN REGISTRY FUNCTIONS**2. General Regulations (Cont'd)****2.4 Payment Arrangements and Credit Allowances****2.4.1 Payment Arrangements**

(A) The Resp Org shall pay the Company for services rendered pursuant to this tariff in accordance with the schedule of rates and charges set forth in Section 4 following. The bill cycle will close on the fourteenth day of the month. On or before the tenth work day of the following month, a bill to the Resp Org for services rendered and charges incurred as set forth in (C) following will be made available by the Company at the Somos Portal Website, <https://portal.somos.com>. Such bill will be based on the schedule of rates and charges and all other applicable provisions of this tariff. The customer shall pay to the Company, within thirty (30) days from the bill issue date, an amount equal to the amount of the bill in accordance with (G) following.

Z

If such payment date would cause payment to be due on a Saturday, Sunday or Holiday (i.e., New Year's Day, Juneteenth, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and a day when Martin Luther King Day, President's Day, Memorial Day, Columbus Day and Veteran's Day are legally observed), payment for such bills will be due from the customer as follows:

C

If such payment date falls on a Sunday or on a Holiday which is observed on a Monday, the payment date shall be the first non-Holiday day following such Sunday or Holiday. If such payment date falls on a Saturday or on a Holiday which is observed on Tuesday, Wednesday, Thursday or Friday, the payment date shall be the last non-Holiday day preceding such Saturday or Holiday.

TFN REGISTRY FUNCTIONS

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.2 Credit Allowance for Service Interruption (Cont'd)

(B) Application of the Credit Allowance

After the TFN Registry has been inaccessible for a period of three hours or more (except as specified in (A) preceding), a credit allowance shall be granted at the rate of 1/720 of the monthly rates for the following rate elements:

- Customer Record Administration

D

The credit allowance shall be granted for each hour or major fraction thereof of the total period that the interruption occurs.

D

|
D

TFN REGISTRY FUNCTIONS**2. General Regulations (Cont'd)****2.5 TFN Registry Security Features****2.5.1 General**

User accessibility and interface capability are administered by the Company through the assignment of logon identification codes and passwords. Logon identification codes are based on a combination of user classes and security groupings which are associated with each user's responsibilities/job functions.

In general, the TFN Registry security enables the Resp Org to select the appropriate user class to ensure that only authorized users can access specific data. This is accomplished through the establishment of different permissions for different user groups.

2.5.2 TFN Registry Environment

The TFN Registry database application operates within information management software environments on TFN Registry system. User access to the TFN Registry can be accomplished via the public Internet.

C
C
C

D

D

D

Access to the TFN Registry GUI & API Interfaces permits a Resp Org to connect to the TFN Registry directly via the public Internet by utilizing a UserID and password or API Key/Secret.

C
C
C

TFN REGISTRY FUNCTIONS

2. General Regulations (Cont'd)

2.5 TFN Registry Security Features (Cont'd)

2.5.2 TFN Registry Environment (Cont'd)

T

TFN Registry application access is independent of an end user's network access. TFN Registry application logons and passwords must be requested from and created by the Company. Each request for TFN Registry application access must be approved and signed by a predetermined, authorized individual of the Resp Org.

The password is independently controlled by the Resp Org and must be changed periodically. Failed logon attempts above a certain threshold will cause the system to lock a user's logon ID. The logon ID may be unlocked by contacting the Company.

T
T

T

User group permissions are defined by the Resp Org to match a specific user's needs. A user group can consist of multiple user classes. As such, each user group's access to the TFN Registry application is limited to a specified set of functionalities.

2.6 Proprietary Information

2.6.1 General

- (A) Without limiting the generality of Proprietary Information as defined in 2.7 following, the Company's Proprietary Information shall extend to cover all data regarding the operation of the TFN Registry, the interfaces that permit the Resp Org to connect to and use the TFN Registry, all of the Company's supporting software systems used in conjunction with the Company's provision of the services specified in this tariff and information displayed on all TFN Registry computer screens accessed by the Resp Org, except to the extent specifically excluded below.

TFN REGISTRY FUNCTIONS**2. General Regulations (Cont'd)****2.6 Proprietary Information (Cont'd)****2.6.1 General (Cont'd)**

- (B) Without limiting the generality of Proprietary Information, as defined in 2.7 following, the Resp Org's Proprietary Information includes the Resp Orgs' TFN Registry logon identification code(s) as well as individual and compiled listings of the Resp Org's customers, their call processing record(s) information and any other related information insofar as such information is capable of being displayed in tabular (or the electronic equivalent thereof) form, but the Company is granted a limited license to disclose Resp Org Proprietary Information to the extent that it is necessary for the provision of toll-free service to the Resp Org(s), including without limitation, the population of the TFN Registry database, the downloading (and updating) of this information to SCPs, and the disclosure of such information to the specific toll-free Resp Org(s) to which such information corresponds.
- (C) Information shall be considered Proprietary Information unless and only to the extent that the Receiving Party can demonstrate that such information:
- (1) was or becomes available to the public through no breach of this tariff;
 - (2) was previously known by the Receiving Party without any restrictions on its use and disclosure;
 - (3) is received from a third party free to disclose such information without restriction;
 - (4) is independently developed by the Receiving Party without the use of Proprietary Information of the Disclosing Party; or
 - (5) is approved for release by written authorization of the Disclosing Party, but only to the extent of and subject to such conditions as may be imposed in such written authorization.

Proprietary Information shall not include any 800 number, the status of any 800 number, the dates of the most recent status changes, the name of the entity which is the Resp Org for any 800 number and the Resp Org's trouble referral number.

C

- (D) With respect to Proprietary Information, the Receiving Party shall:

- (1) use the Proprietary Information only for the purpose(s) set forth in this tariff;

TFN REGISTRY FUNCTIONS

2. General Regulations (Cont'd)

2.7 Definitions.

Application Program Interface (API): A software intermediary that allows two computer applications to communicate with each other.

API Key/Secret: An Application Programming Interface (API) Key is a code and accompanying secret used to generate tokens, which then authenticates user API calls sent to the TFN Registry.

N
N
N

Area of Service (AOS): The geographical area from which a toll-free subscriber can receive calls dialed to its toll-free number.

Call Processing: The sequence of operations performed by a telephone switching system from the time a call is dialed through delivering it to its terminating location.

Centralized Resp Org Change (ROC) Management System: Enables Resp Orgs to administer Toll-Free Number Resp Org Changes and store the associated Letter of Agency (LOA) along with supporting documentation in a centralized location. This system standardizes the process of Resp Org Change management, submission and processing of the change requests as well as provides access to the history of the change transactions and supporting documentation.

Exchange: A unit generally smaller than a Local Access and Transport Area, established by the telephone company for the administration of communications service in a specified area which usually embraces a city, town, or village and its environs. It consists of one or more central offices together with the associated facilities used in furnishing communications service within that area. One or more designated exchanges comprise a given Local Access and Transport Area.

Exchange Access: The provision of local network facilities by local exchange carriers for the purpose of originating or terminating interexchange telecommunications.

Graphical User Interface (GUI): A Graphical User Interface is a computer interface that allows users to interact with a device through graphical elements such as pictures and animations, as opposed to text-based commands.

Interexchange Carrier (IC): Any common carrier authorized by the FCC and/or a state public utility commission to provide interexchange telecommunications.

Local Access and Transport Area (LATA): The geographic regions within which a local telephone company can offer exchange access services.

Local Exchange: The telephone exchange in which a group of subscriber's lines terminate and where those lines have access to other local exchanges and interexchange carrier networks, also known as an end office or local telephone office.

Local Exchange Carrier (LEC): A local telephone company that provides exchange access services.

TFN REGISTRY FUNCTIONS

2. General Regulations (Cont'd)

2.7 Definitions (Cont'd)

D
|
D

North American Numbering Plan (NANP): The system for assigning 10-digit telephone numbers in North America where the first three numbers represent an area code, the second three a Local Exchange within that area, and the final four digits a particular subscriber's line within the Exchange. NANP is the basic numbering scheme for the telecommunications networks located in American Samoa, Anguilla, Antigua, Bahamas, Barbados, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent, Turks & Caicos Islands, Trinidad & Tobago, and the United States (including Puerto Rico, the U.S. Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands).

Numbering Plan Area (NPA): In the U.S., a nationwide numbering program for accessing telephone service in geographical regions by area codes.

Proprietary Information: Any information or data of a party which is disclosed by that party (the "Disclosing Party") to the other party (the "Receiving Party") under or in contemplation of this tariff and which if in tangible form or other media that can be converted to readable form, is clearly marked as confidential or proprietary when disclosed; or if oral or visual, is identified as confidential or proprietary on disclosure and is summarized in a writing so marked and delivered within ten (10) days following such disclosure.

Responsible Organization (Resp Org): The entity that has total responsibility for the account management of a particular toll-free number, including maintaining its customer record in the TFN Registry system. Also, the entity to which logon IDs are assigned. An entity which accesses the TFN Registry to (a) search for and reserve toll-free numbers and (b) create and maintain toll-free number customer records, including call processing records for Exchange and Exchange Access toll-free service.

Service Control Points (SCP): The real-time data base systems in the toll-free service network that contain instructions on how subscribers wish their calls to be routed, terminated, or otherwise processed.

Certain material previously on this page now appears on Page 53
This page filed under Transmittal No. 4

TFN REGISTRY FUNCTIONS

2. General Regulations (Cont'd)

2.7 Definitions (Cont'd)

SMS800 TFNRegistry™ (TFN Registry): The main administrative support system of toll-free service. It is used to create and update subscriber toll-free records that are then downloaded to SCPs for handling subscriber's toll-free calls. The system is also used by Resp Orgs to reserve and assign toll-free numbers.

D
D

T

Terminal: Any device capable of sending or receiving information over the Public Internet.

T
T
T

Toll-free Number Administration: The process of assigning, reserving, and releasing toll-free telephone numbers for public use.

Toll-free Number Search and Reservation: The process of searching the TFN Registry data base to obtain and reserve available toll-free numbers for subscribers.

Toll-free Service Provider: A telecommunications company that offers toll-free services to subscribers; A toll-free Service Provider may be an Interexchange Carrier or a Local Exchange Carrier.

Toll-free Service Provisioning: The process of entering a new toll-free subscriber record into the TFN Registry data base; also deleting or updating any such existing record.

Toll-free Subscriber: Any individual, business, or government agency that has arranged with a LEC or an IC to have a toll-free service, and that has been assigned a toll-free number.

Web Services Interface (WSI): An access method for utilizing the Centralized ROC Management System which transports ROC-related data between a Resp Org's system and the TFN Registry system.

Certain material on this page originally appeared on Page 52
This page filed under Transmittal No. 4

TFN REGISTRY FUNCTIONS

3. Service Offerings

TFN Registry is a system which is used to update deployed databases. TFN Registry is the focal point for initial service provisioning and all subsequent changes to the toll-free subscriber's service. TFN Registry supports number administration, creation and modification of customer records.

D

D

TFN REGISTRY FUNCTIONS

3. Service Offerings (Cont'd)

3.1 Service Available to Toll-free Resp Orgs

3.1.1 Number Search and Reservation

The TFN Registry provides the Resp Org the ability to search for and reserve ten digit toll-free (NPA-NXX-XXXX) numbers that reside within the database. The results of the search are the current status of a specified number or a display of a spare number. Unless specific instructions are given by the Resp Org, the TFN Registry does a random selection of spare numbers. If the number is spare, the Resp Org can reserve that number for up to 45 calendar days.

The status of a toll-free number can be changed by the Resp Org, or in limited cases by the Company. The status can also be changed automatically by the system, based on predetermined criteria contained in the toll-free subscriber's record.

Number statuses recognized by TFN Registry are defined in the TFNRegistry™ User Guide.

T
T

3.1.2 Customer Record Creation and Modification

The Resp Org will have the ability to create new and modify existing toll-free Customer Records in the TFN Registry and schedule the date and time that the records are to be activated at the affected databases. The TFN Registry will update network databases, consistent with the effective date and time stated on the Customer Record.

The toll-free Customer Record contains all data relevant to a particular toll-free number, including:

- a unique toll-free number
- the date the toll-free Service activation or change is to become effective (Effective Date)
- the time the service becomes effective (Time)

TFN REGISTRY FUNCTIONS**3. Service Offerings (Cont'd)****3.1 Services Available to Toll-free Resp Orgs (Cont'd)****3.1.3 Request Reports**

Various types of reports are available to the Resp Org. Reports are described in detail in SMS/800 TFN Registry Reporting User Guide.

T
D
D

(A) On-line reports are available to specific user classes and can be selected for viewing or printing, depending on the report.

(B) Various off-line reports are also available.

(C) Exception reports are generated by the TFN Registry whenever the TFN Registry is unsuccessful in its attempt to send a subscriber record to one or more SCPs.

TFN REGISTRY FUNCTIONS**3. Service Offerings (Cont'd)****3.2 Service Assistance Corrective Actions**

As part of the service provided to Resp Orgs, the Company will provide assistance and/or take corrective actions, as necessary, 24 hours daily if the Resp Org experiences difficulty logging on to TFN Registry or performing number search and reservation functions or when the Resp Org cannot create or modify call processing records.

If the Company is unable to solve a problem immediately, Company personnel will advise the Resp Org of the status of the problem at agreed-upon intervals until the problem is resolved or an alternative access arrangement is put into place, whichever occurs first.

3.3 TFN Registry AccessD
|
D

Access permits a Resp Org to connect to the TFN Registry, via the Public Internet and the ability to download certain reports.

T
T
T

Access to the TFN Registry GUI & API Interfaces permits a Resp Org to connect to the TFN Registry directly via the Public Internet by utilizing a UserID and password or API Key/Secret.

T
T
T

TFN REGISTRY FUNCTIONS

3. Service Offerings (Cont'd)

3.3 TFN Registry Access (Cont'd)

3.3.1 Non-Dedicated Access Requirements (Deleted TN 13)

D
|
D

(Page Intentionally Blank)

TFN REGISTRY FUNCTIONS

3. Service Offerings (Cont'd)

3.3 TFN Registry Access (Cont'd)

3.3.2 Dedicated Terminal Access Requirements (Deleted TN 13)

3.3.3 Mechanized Generic Interface (MGI)* Access Requirements (Deleted TN 13)

D

D

(Page Intentionally Blank)

TFN REGISTRY FUNCTIONS

3. Service Offerings (Cont'd)

3.3 TFN Registry Access (Cont'd)

D
D
D

3.3.4 Web Service Interface (WSI) Access

Resp Orgs may elect to use the Web Service Interface (WSI) to access the Centralized ROC Management System. The WSI facilitates the use of the Centralized ROC Management System with methods such as search, submit, process, attach LOA and/or documents, and retrieve documents to Resp Org Change requests. The interface is a two-way interface in the sense that data will flow to and from the TFN Registry system.

The WSI is described in detail in the ROC WSI Specification and ROC Notification Subscriber WSI Specification. Instructions on how to access the TFN Registry system using ROC are described in detail in the User Guide: Resp Org Change System

3.3.5 TFN Registry API Interface

Resp Orgs may access the TFN Registry in a machine to machine manner by using the TFN Registry APIs. This access is available over the Public Internet and the user will submit credentials (User ID and password or API Key/Secret) to authenticate themselves before a connection is established and access is allowed. Details for using the TFN Registry API interface is documented in SMS/800 TFN Registry API Overview.

T
T
T
T

3.3.6 TFN Registry GUI Interface

Resp Orgs may access the TFN Registry via a web services GUI accessible via the Public Internet using URL <https://tfnregistry.somos.com>. The user will submit credentials (user ID and password) to authenticate themselves and those credentials will be validated by the system before access is granted. Details for accessing the TFN Registry GUI are available in the TFNRegistry™ User Guide.

T
T

TFN REGISTRY FUNCTIONS

3. Service Offerings (Cont'd)

3.4 Batch Update Process (Deleted TN 13)

(Page Intentionally Blank)

TFN REGISTRY FUNCTIONS

3. Service Offerings (Cont'd)

3.5 Mechanized Generic Interface (MGI) Testing (Deleted TN 13)

D

D

(Page Intentionally Blank)

TFN REGISTRY FUNCTIONS**4. Schedule of Rates and Charges (Cont'd)****4.1 Rate Regulations (Cont'd)****4.1.2 Rate Elements**

Following is a brief description of the rate elements applicable to services provided under this tariff.

(A) Service Establishment

Service Establishment charges apply for each TFN Registry logon ID assigned to a Resp Org. A nonrecurring charge will be assessed for each logon ID established, except when a new code is established subject to the provisions in 2.3.6 preceding. Different nonrecurring charges will apply for first and additional logon IDs established for the same Resp Org.

D
|
D

If a Resp Org's access to TFN Registry service is suspended pursuant to 2.1.8 preceding, access will be restored only after the Resp Org is in compliance with 2.1.8 and a non-recurring service restoration fee will be assessed. This charge does not apply to those companies whose TFN Registry service has been discontinued pursuant to 2.1.8. Those companies are required to reapply for new TFN Registry access and pay all fees associated with becoming a Resp Org.

(B) TFN Registry Access (Deleted TN 13)

D
|
D

TFN REGISTRY FUNCTIONS**4. Schedule of Rates and Charges (Cont'd)****4.1 Rate Regulations (Cont'd)****4.1.2 Rate Elements (Cont'd)****(C) Customer Record Administration**

The Customer Record Administration Charge applies for each toll-free number associated with a Resp Org. This includes reserved as well as active toll-free numbers.

This element provides for number search and reservation functions, as well as activation and modification of toll-free numbers. When toll-free numbers are activated or discontinued, or information for a toll-free number is changed in the TFN Registry, this element also provides for updating the appropriate databases.

As part of the Customer Record Administration function, the Resp Org may also request on-line reports. Reports which do not require the Company to create or print the report are provided as part of this function.

Exception reports as described in 3.1.3(C) preceding are generated by the TFN Registry and are provided to the Resp Org at no additional charge.

The Customer Record Administration Charge begins on the day after the Resp Org takes control of a toll-free number and ends when the Resp Org relinquishes control of the number or when the number's status is changed to unavailable by the Company for operational or administrative reasons.

(D) Resp Org Reports

On-line reports are routinely prepared and delivered to customers or are created by TFN Registry vendors using the TFN Registry Reporting System and delivered to customers. The effort to produce the on-line reports is very consistent and requires a minimum of effort. Due to these factors and to maintain consistency and predictability for the customer, a "per report" charge is used.

T
T

Off-line reports are customized reports whose creation requires technical analysis and development support by the Company's help desk and/or vendors. This support may include preparation of datasets and development of software needed to provide the requested report. The effort required to fulfill each customer request may be different. An hourly charge will apply for the time required to prepare and deliver each off-line report.

D
T

TFN REGISTRY FUNCTIONS

4. Schedule of Rates and Charges (Cont'd)

4.1 Rate Regulations (Cont'd)

4.1.2 Rate Elements (Cont'd)

(E) WSI Testing

T

D

D

WSI Testing is available at the request of the Resp Org.
Charges for such additional testing will apply on a "per staff hour"
basis.

T

(F) Miscellaneous Functions

D

D

Resp Org Changes

T

Rates apply per toll-free number, when the Company implements a Resp Org change, as described in 3.6, preceding.

TFN REGISTRY FUNCTIONS

4. Schedule of Rates and Charges (Cont'd)

4.2 Rates and Charges

Following are the rates and charges applicable to TFN Registry functions. T

	Monthly Rate	Per Request Rate	Nonrecurring Charge	
(A) Service Establishment				
- Per Logon ID assigned				
- First Logon ID			\$ 684.61	R
- Each Additional Logon ID			\$ 108.54	R
				D
				D
- Service restoration (post suspension)			\$ 124.90	R
(B) (Deleted TN 13)				T
				D
				D
(C) Customer Record Administration				
- Per Toll-free Number	\$ 0.1223			R
(D) Resp Org Reports				
(1) On-line				
- Per report		\$ 19.08		R
(2) Off-line				
- Per Hour		\$ 49.35		R

All rates and charges on this page expire on February 14, 2023

Issued: January 31, 2022

Effective: February 15, 2022

President and CEO
Two Tower Center Boulevard, 20th Floor
East Brunswick, NJ 08816

TFN REGISTRY FUNCTIONS

4. Schedule of Rates and Charges (Cont'd)

4.2 Rates and Charges (Cont'd)

	Monthly Rate	Per Request Rate	Nonrecurring Charge	
(E) Web Services Interface (WSI) Testing				T T
				D D
- Per Staff Hour of Testing			\$ 100.00	
(F) Miscellaneous Functions				D
				D
Resp Org Change Charge				T
- Per Toll-free Number Changed		\$ 12.11		D R

All rates and charges on this page expire on February 14, 2023

Issued: January 31, 2022

Effective: February 15, 2022

President and CEO
Two Tower Center Boulevard, 20th Floor
East Brunswick, NJ 08816