ENUM Forum Contribution – GEN0115R0

TITLE: Scenarios for Registration of Toll-Free Numbers in ENUM

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ABSTRACT: This contribution outlines three scenarios for registration of toll-free numbers in ENUM, distinguished by the relationship between the registrant, registrar, and Responsible Organization for the toll-free number. The implications of such relationships for proper validation of the registration are discussed.

NOTICE:

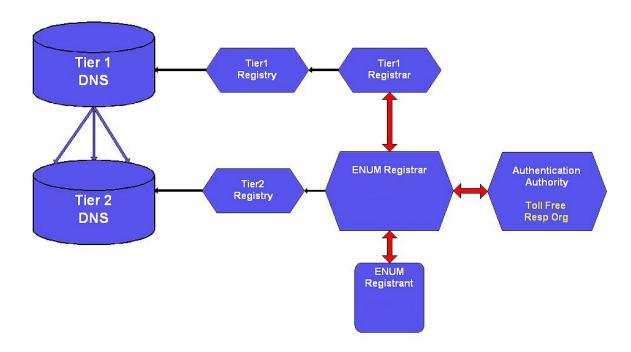
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Introduction

At the ENUM Forum meeting of August 13, 2004, discussion of registration procedures for toll-free numbers centered around the relationship between the Registrant, Registrar, and the Responsible Organization (RespOrg or RO) that maintains the records for the toll-free number in the SMS/800 database that controls routing of toll-free numbers to the proper carrier in the PSTN. This contribution outlines three potential scenarios for registration based on these relationships and details the implication for registration in each.

The scenarios are:

- 1. The Registrant for the toll-free number is the RO for the toll-free number, acting as agent for the toll-free number subscriber and also the ENUM Registrar.
- 2. The Registrant is the RO for the number acting as agent for the subscriber, but the Registrar is an unrelated entity.
- 3. The Registrant is either the toll-free number subscriber or its agent and the registrar and RO are unrelated parties.



Registrant is Registrar and RespOrg

In this scenario the Registrant is acting as agent for the toll-free subscriber and is both RespOrg for the number and an ENUM Registrar. Accordingly, authentication of Registrant by Registrar is moot as they are one in the same. As agent, the Registrant knows the toll-free subscriber identity and must be acting on their authority. As the RO/Agent entity knows the number assignment and has verified subscriber's request to register for ENUM, this entity can register the toll-free number with the Tier 1 Registry without interacting with other entities to achieve authentication and authorization.

Registrant is RespOrg but not Registrar

In this scenario the registrant is acting as agent for the toll-free subscriber and is RespOrg for the number but the ENUM Registrar is a different party. The Registrar thus needs to validate:

- 1. The registrant is the party they claim to be (authentication).
- 2. That that party is the agent of the subscriber (this can be presumed if the registrant is verified as the RO for the toll-free number since the RO is bound to act only at the subscriber's direction). If the Registrar is an RO (though not the RO for the number being registered) they may determine RO identity from SMS/800. If the Registrar is not an RO, they will need to otherwise establish the RO identity or the subscriber relationship, e.g. through a toll-free service provider or documentation supplied by the registrant from such an entity. (For example, the Registrar might be presented with a letter of agency from the subscriber along with documentation from the toll-free service provider that associates the subscriber with the toll-free number to be registered.)

Registrant, Registrar, and RespOrg Are Unrelated

This is the most complicated case. The Registrar needs to verify that:

- 3. The registrant is the party they claim to be (authentication).
- 4. The registrant is the toll-free number subscriber or their agent.² This may require identifying the RO who should be able to verify number assignment.³ If the Registrar is an RO (though not the RO for the number being registered) they may determine RO identity from SMS/800. If the Registrar is not an RO, they will need to otherwise establish the RO identity or the subscriber relationship, e.g. through a toll-free service provider or documentation supplied by the registrant from such an entity.

¹ The current SMS/800 tariff may limit the RO in this regard and require modification to permit use of SMS/800 by an RO to verify ENUM registrations. If SMS/800 management transitions to an LLC, the user agreement said LLC requires of ROs will need to provide for such use.

² Verification of agency status should follow normal procedures for any ENUM registration.

³ It is recognized that there may be cases where the RO does not know the subscriber because of resale relationships. In such cases the Registrar will have to follow the chain from the RO though the reseller(s) verify the ultimate identity of the subscriber.