

INTERNET-DRAFT  
February 19, 2007  
Expires August 19, 2007

Edward Lewis  
NeuStar, Inc.

**E.212 ENUMService Type Definition**  
**draft-lewis-enum-enumservice-e212-00.txt**

By submitting this Internet-Draft, each author represents that any applicable patent or other IPR claims of which he or she is aware have been or will be disclosed, and any of which he or she becomes aware will be disclosed, in accordance with [Section 6 of BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF), its areas, and its working groups. Note that other groups may also distribute working documents as Internet-Drafts.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

The list of current Internet-Drafts can be accessed at  
<http://www.ietf.org/1id-abstracts.html>

The list of Internet-Draft Shadow Directories can be accessed at  
<http://www.ietf.org/shadow.html>

Abstract

This document registers the Enumservice "e212" using the URI scheme "tel:" as per the IANA registration process defined in the ENUM specification, [RFC 3761](#). This Enumservice may be used to indicate International Mobile Subscriber Information with a telephone number.

## **1 Introduction**

This document registers the Enumservice "e212" using the URI scheme "tel:" as per the IANA registration process defined in the ENUM specification, [RFC 3761](#) [[RFC3761](#)]. This Enumservice may be used to indicate International Mobile Subscriber Information with a telephone number. Parameters to include this information in the "tel" URI [[RFC3966](#)] are defined in [[TELE212](#)]. The IANA application is presented in [Appendix A](#).

An example of the usefulness of this service is the ability to identify the service provider for a telephone number for billing purposes.

To identify the provider of +1-571-555-9586 as Ficticious Company, the following NAPTR record will be stored somewhere in the DNS.

\$ORIGIN 5.5.5.1.7.5.1.e164.arpa.

**6.8.5.9** IN 900 NAPTR (  
10 ; preference  
10 ; order  
"u" ; flags  
"E2U+e212" ; service type  
"!^(.)\*\$!tel:\1@fictitious.example.;mcc=999;mnc=00!"  
. ) ; replacement domain name

MCC 999 and MNC 00 identify Fictitious Company through look ups in tables holding these parameters. MCC are assigned by the ITU, MNC assignments are national matters.

## **2 Terminology**

The key words "MUST," "SHOULD," and "MAY" in this document are to be interpreted as described in [RFC 2119](#) [[RFC2119](#)].

## **3 Details**

Details of the definition are contained in the ENUM service application in [Appendix A](#).

## **4 Security Considerations**

The one concern raised in this document is the potential concern over the privacy required for the MSIN that appears in the IMSI. If the IMSC parameter is used, the operator must understand the exposure that may be had by the data. The full IMSI ought to be restricted to situations in which the exposure of the MSIN is acceptable.

To alleviate this concern, the MCC and MNC parameters are defined, these are expected to be what appears in a public or otherwise widely (or externally) distributed environment.

## **5 IANA Considerations**

This document requests registration of the "e212" Enumservice according to the guidelines and specifications in [RFC 3761](#) and the definitions in this document. This Enumservice is intended for use with the "tel:" URI scheme.

## **6 Internationalization Considerations**

There are no internationalization considerations in these parameters. All data are numeric.

## **7 References**

### **7.1 Normative**

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), March 1997.

[RFC3761] Falstrom, P. and M. Mealling, "The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)", [RFC 3761](#), April 2004.

[RFC3966] Schulzrinne, H., "The tel URI for Telephone Numbers", [RFC 3966](#), December 2004.

[ITUE212] ITU-T Recommendation E.212, "The International Identification Plan for Mobile Terminals and Mobile Users, " May 2004.

[TELE212] "E.212 Parameters for the "tel" URI", Internet Draft work in progress, [draft-enum-teluri-e212-00.txt](#).

## **[7.2](#) Informative**

none

## **[8](#) Author's Address**

**Edward Lewis**

NeuStar

46000 Center Oak Plaza

Sterling, VA

20166, US

Phone: +1-571-434-5468

E-Mail: [ed.lewis@neustar.biz](mailto:ed.lewis@neustar.biz)

## **[Appendix A](#). ENUM Service Registration**

Enumservice Name:

e212

Enumservice Type:

e212

Enumservice Subtype:

N/A

URI Schemes:

"tel:"

Functional Specification:

This Enumservice indicates that the remote resource identified can be addressed by the associated URI scheme.

Security Considerations:

e.g. "see Section something"

Intended Usage:

COMMON

Author(s):

Edward Lewis <ed.lewis@neustar.biz>

Any other information the author(s) deem(s) interesting:

None

Copies of IPR disclosures made to the IETF Secretariat and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this specification can be obtained from the IETF on-line IPR repository at <http://www.ietf.org/ipr>.

Copyright (C) The IETF Trust (2007).

This document is subject to the rights, licenses and restrictions contained in [BCP 78](#), and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY, THE IETF TRUST AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.