

THE ROLE OF CARRIER ENUM IN SERVICE DISCOVERY ACROSS MULTIPLE INTERCONNECTED NETWORKS

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The Neustar logo is positioned on a green trapezoidal background that tapers to the right. The word "neustar" is written in a white, lowercase, sans-serif font, with a registered trademark symbol (®) to its upper right.

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QUESTIONS

How do we find out which number ranges support IMS/VoLTE/RCS ? (mainly asked by IPXs)

How do we share interconnect information...
is there a global way to do this? (mainly asked by operators)

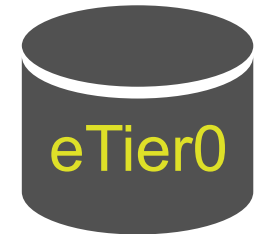
And....

Does the GSMA's IR67 Carrier ENUM address this??

HOW SHOULD IT WORK... THE IR67 WAY??

You have a destination number

- Where can you get IMS destination information?
- Who is responsible for the number?



Query +447700900123

```
$ORIGIN 0.0.7.7.4.4.e164enum.net.  
3.2.1.0.0.9 IN NS dns1.mnc001.mcc234.3gppnetwork.org
```



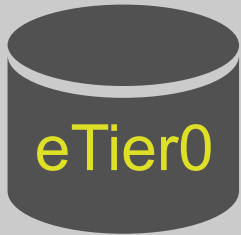
You know who is responsible for the number

- Find out which services are supported
- Find destination gateway address
- Find out if it has been ported, and to where



```
$ORIGIN 0.0.7.7.4.4.e164enum.net.  
3.2.1.0.0.9 NAPTR 100 10 "u" "E2U+SIP"  
"!^.*$!sip:\1@ims.mnc001.mcc234.3gppnetwork.org;user=phone!" .
```

WHERE DOES THE INFORMATION COME FROM?



Operator registers
IMS number ranges
with eTier0

- Option to delegate responsibility

Operator identifies
who is “authority”

- Operator
- Operator Group
- National Authority
- IPX
- 3rd party provider

User queries eTier0

- Local slave
- IPX slave
- GSMA PathFinder



“Authority” populates
number ranges in
eTier2

- Service type
- Gateway addresses
- “Ported to” exceptions
- Read permission

eTier2 information
maintained by
authority

- New ranges
- New services
- Porting

User queries eTier2

- ENUM/DNS query across GRX/IPX

QUESTIONS

How do we find out which number ranges support IMS/VoLTE/RCS ? (mainly asked by IPXs)

Encourage operators to populate eTier0

- Or offer to do it for them

How do we share interconnect information... is there a global way to do this? (mainly asked by operators)

Implement eTier2 Carrier ENUM

- Or get your IPX to do it
- Or use hosted service

And....
Does the GSMA's IR67 Carrier ENUM address this??

Use IR67 model

- Global registry of authority
- Mutilocal registries
 - Address discovery
 - Service discovery
 - Porting resolution