



# ENUM Next Generation

- ← SAS Operations
- ← Novia Operations
- ← Internet
- ← Passkontroll  
Passport control

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(With ideas from Olaf Kolkman)



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# Do you feel lost?

- Do you know how to contact your friends?
- ENUM is (supposed to be) the solution to that problem



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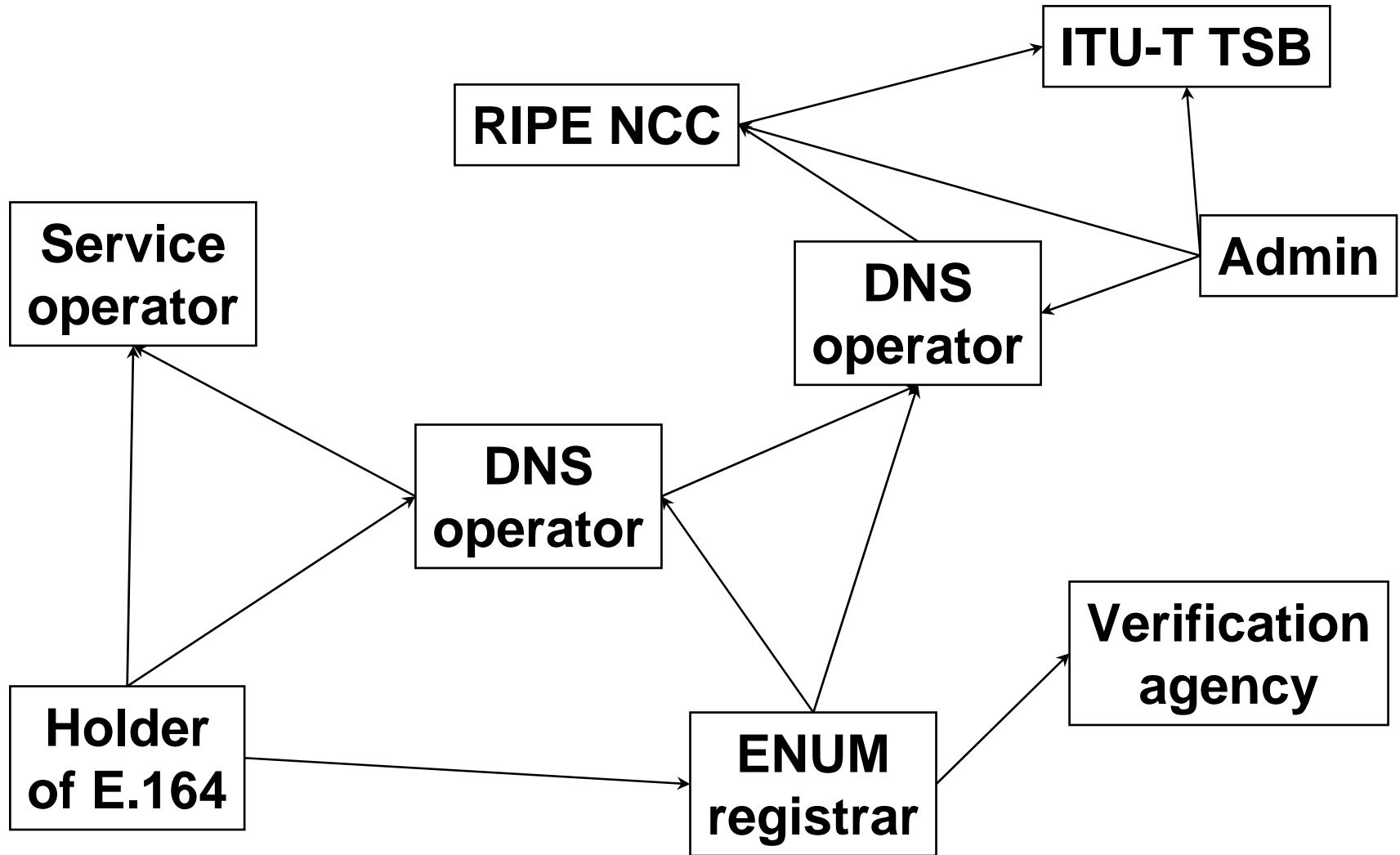
# It does not really solve the problem...

QuickTime™ and a  
TIFF (Uncompressed) decompressor  
are needed to see this picture.

Source: ISC, where you can buy this sh

# Administrative model

Delegation on CC I



Delegation on Customer level

# ENUM for infrastructure

- Convergence of telcos to ENUM
  - Infrastructure information in the public DNS
  - Publish routing information
- ENUM was always intended for the public
  - 0.5.6.0.2.2.2.0(...) NAPTR
    - <point to SIP service for user>
  - 0.5.6.0.2.2.2.0(...) NAPTR
    - <point to SIP service for infrastructure>
- Two owners of the same record in the same zone?

# Problems

- Different ASPs for services, but only one delegation

Do you want your mms:mailto record to be maintained by your cell phone operator?

Do the cell phone operator let you maintain your mms:mailto record?

# Current idea...

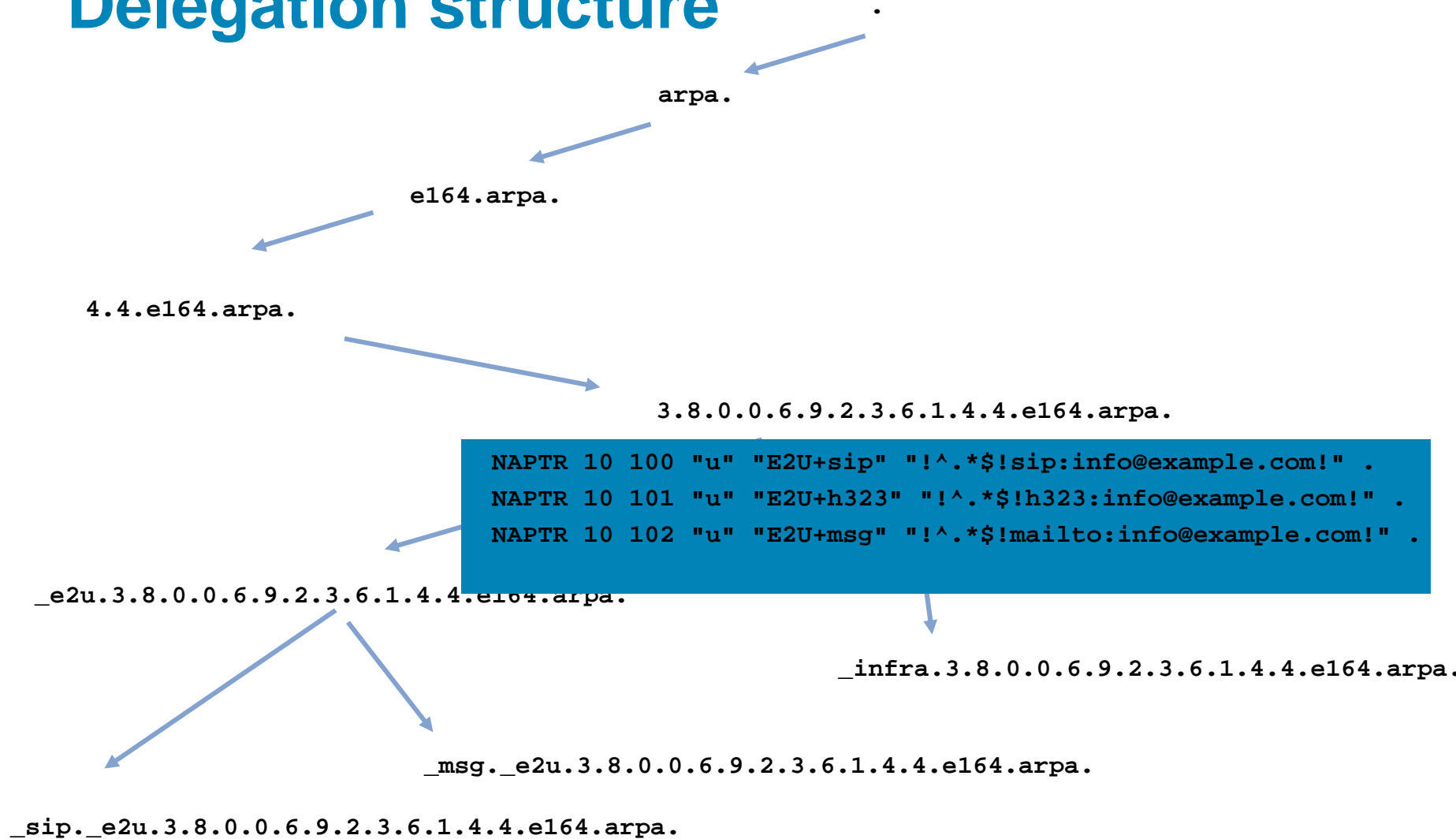
```
$ORIGIN 3.8.0.0.6.9.2.3.6.1.4.4.e164.arpa.
```

```
NAPTR 10 100 "u" "E2U+sip" "!^.*$!sip:info@example.com!" .  
NAPTR 10 100 "d" "E2U+sip" "" 3.8.0.0.6.9.2.3.6.1.4.4.e164.arpa.  
NAPTR 10 102 "u" "E2U+msg" "!^.*$!mailto:info@example.com!" .  
NAPTR 10 102 "d" "E2U+msg" "" 3.8.0.0.6.9.2.3.6.1.4.4.e164.arpa.
```

```
$ORIGIN 3.8.0.0.6.9.2.3.6.1.4.4.e164.arpa.
```

```
_sip._e2u    URI 10 10 "sip:info@example.com"  
_sip._e2u    URI 10 10 "sip:info@example2.net"  
_h323._e2u   URI 10 10 "h323:info@example.com"  
_msg._e2u    URI 10 10 "mailto:info@example.com"
```

# Delegation structure



```
NAPTR 10 100 "u" "E2U+sip" "!^.*$!sip:info@example.com!" .
NAPTR 10 101 "u" "E2U+h323" "!^.*$!h323:info@example.com!" .
NAPTR 10 102 "u" "E2U+msg" "!^.*$!mailto:info@example.com!" .
```

```
URI 10 10 "sip:info@example.com"
URI 10 10 "sip:info@example2.net"
```



# ENUM Next Generation

- Today, query for NAPTR and get back every URI “connected” to the domain
- Should we separate between
  - What services exists for this domain?
  - What URI should I use for this service?
- Will this at the same time make delegation possible of separate URI specifications to different organisations?
- Backward compatibility?

# Documents

- draft-ietf-enum-uri-00.txt  
Me, Olaf Kolkman and Niall O'Reilly
- draft-ietf-enum-3761bis-00.txt  
Me, ...

# Q and A



