

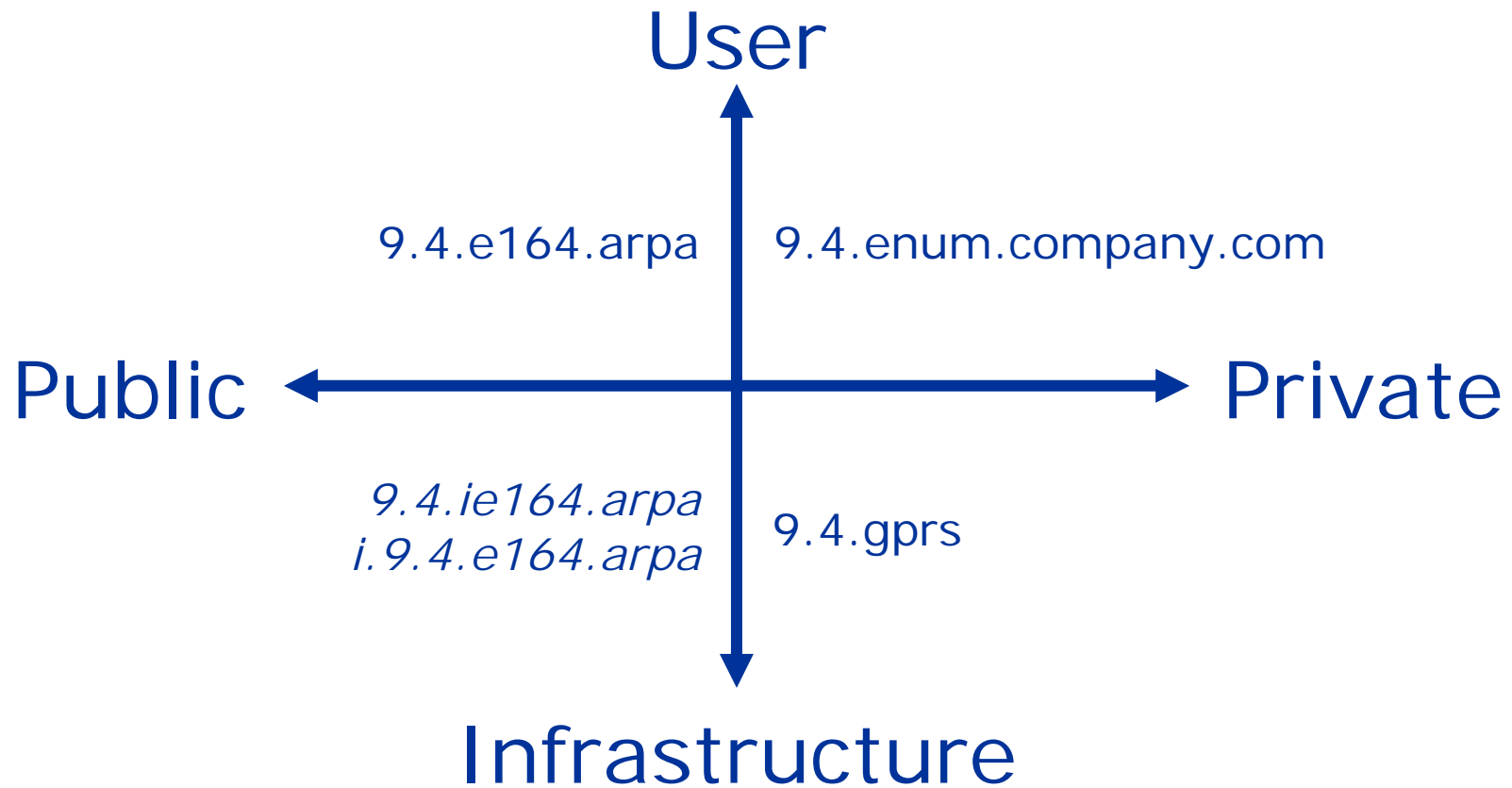


ENUM activities in the RIPE region

ENUM Day Australia – November 15th, 2006
Carsten Schiefner, Deutsche Telekom AG T-Com



ENUM – what are we talking about anyways?





ENUM and the various Internet bodies

- IETF - Internet Engineering Task Force
<http://www.ietf.org/html.charters/enum-charter.html>
- IAB - Internet Architecture Board
<http://www.iab.org/>
- ITU-T - International Telecommunication Union / Telecom Standardization
<http://www.itu.int/ITU-T/>
- RIPE NCC - RIPE Network Coordination Centre
<http://www.ripe.net/enum/>
- RIPE - Réseaux IP Européens
<http://www.ripe.net/ripe/wg/enum/>
- ETSI - European Telecommunications Standards Institute
<http://www.etsi.org/>

IETF - Internet Engineering Task Force

- The ENUM Working Group developed a set of DNS extensions – new Resource Records – to map E.164 numbers into the DNS for associating new, IP based services with these numbers
- Defined by various RFCs (Request for Comment) of which the most important one is RFC 3761: this one defines the mapping itself
- Others are eg. RFC 3764 (SIP AoR), RFC 3762 (H.323 URL), RFC 3764 (SIP AoR), RFC 3953 (presence services) oder RFC 4002 (web and ft services)

➔ Standardization and protocol definition

- <http://www.ietf.org/html.charters/enum-charter.html>



IAB - Internet Architecture Board

- „Guardian“ of the DNS name space, „responsible“ for ENUM on the Internet side
- MoU partner of ITU-T wrt. ENUM
- Definition of the procedures the Tier 0 registry operator has to follow when processing and answering registration requests of E.164 Country Codes
 - > <http://www.ripe.net/rs/enum/instructions.html>

➔ Preserving integrity

- <http://www.iab.org/>



ITU-T - International Telecommunication Union / Telecom Standardization

- „Guardian“ of the E.164 numbering plan, „responsible“ for ENUM on the PSTN side
- MoU partner of IAB wrt. ENUM
- SG2 (Study Group 2) defines the procedures ITU-T TSB (Telecommunication Standardization Bureau) has to follow when answering registration requests of E.164 Country Codes
 - > <http://www.itu.int/ITU-T/inr/enum/procedures.html>
 - > <http://www.itu.int/ITU-T/inr/enum/procedures-02.html>

➔ Preserving integrity

- <http://www.itu.int/ITU-T/>



RIPE NCC - RIPE Network Coordination Centre

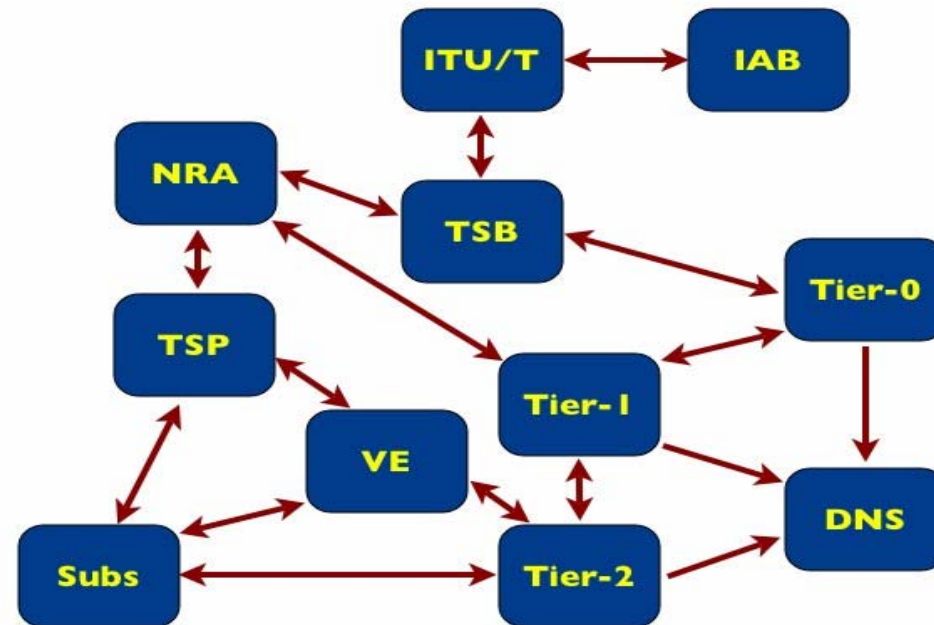
- Tier 0 registry operator of the ENUM root e164.arpa
 - Reasons for the selection of the RIPE NCC were described by John Klensin in the informational RFC 3245 „The History and Context of Telephone Number Mapping (ENUM) Operational Decisions: Informational Documents Contributed to ITU-T Study Group 2 (SG2)“:
 - Important DNS based infrastructure services require the same QoS as the Root Server System
 - The registry operator should be experienced in running reliable DNS operations and be a fair and neutral, impartial and independent Non-Profit organisation
 - The RIPE NCC good working relationships with both administrative and technical bodies and has a long-standing history of co-ordination services
- > <ftp://ftp.rfc-editor.org/in-notes/rfc3245.txt>

➔ Operations

- <http://www.ripe.net/enum/>

How Niall O'Reilly sees all this...

ENUM



So sieht der ganze Tier-Garten aus



RIPE - Réseaux IP Européens

- „The ENUM Working Group discusses developments relating to Internet resource mapping using E.164 telephone numbers as identifiers, commonly known as ENUM. The working group monitors and promotes initiatives to advance this technology. It also identifies ways for the RIPE community to develop and nurture the use of ENUM.“

➔ Exchange, discussion and documentation

- <http://www.ripe.net/ripe/wg/enum/>



ETSI - European Telecommunications Standards Institute

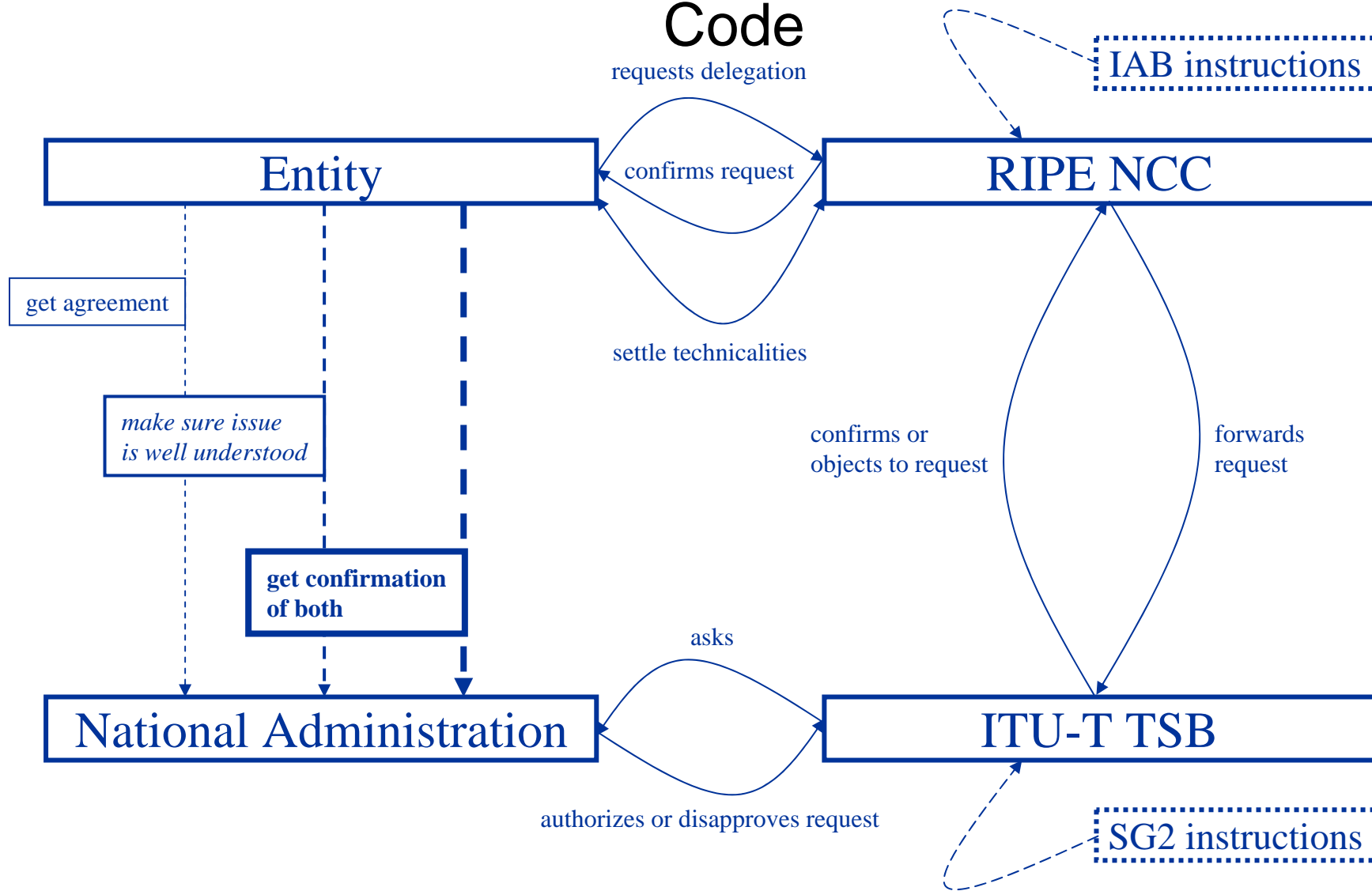
- ETSI has published three documents – a Technical Report and two Technical Specifications – so far:
 - TS 102 051: „ENUM Administration in Europe“
 - TR 102 055: „ENUM scenarios for user and infrastructure ENUM“
 - TS 102 172: „Minimum requirements for interoperability of ENUM implementations“
- ETSI runs so called „Plugtests“ wrt. various topics und standards of telecommunications, as eg. for ENUM
 - > <http://www.etsi.org/plugtests/ENUM.htm>

➔ Exchange, discussion and Hands-On testing

- <http://www.etsi.org/>



The procedure of registering an E.164 Country Code





RIPE ENUM WG

Regular topics:

- Updates and reports from the IETF ENUM WG and other relevant WGs, such as SPEERMINT; as well as from other activities, such as eg. the ETSI ENUM Plugtest
- Update and report from the RIPE NCC
- Updates and reports from the various national trials and deployments, such as from the NANP/+1, Netherlands/+31, Ireland/+353, Austria/+43, Czech Republic/+420, UK/+44, Sweden/+46 and Germany/+49

Special topics:

- ENUM provisioning: processes, procedures and information flows between the registry, registrars and registrants
- Infrastructure ENUM and VoIP peering or interconnect, respectively
- Walking an ENUM tree: results and oddities
- Improving the DNS quality on the Tier 0/1 level: Task Force formed
- Security aspects and issues related to ENUM



RIPE ENUM WG

Why should you participate?

You are a registry?

- Your registrars might ask you for new features, improved procedures etc.

You are a registrar?

- You might learn about new features your customers will soon request.

You are a not-yet-registrar?

- You might become one.

You are a registrant?

- You might learn about new features you'll soon want to request from your registrar.

You are a not-yet-registrant?

- You might become interested in all this ENUM stuff.



RIPE ENUM WG

You are a regulator?

- You might want to be in close contact with the industry and their discussions.

You are not amongst the before mentioned folks?

- Never mind – you'll hear and see something interesting, for sure.

Participation is open to everybody!

- online via the website and the mailing list
- onsite during RIPE meetings twice a year

<http://www.ripe.net/ripe/wg/enum/>



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