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History

Participants / Responsibilities

Contractual relationship

Validation and ENUM-COMPLAINT

**ENUM** registry system

**ENUM** information systems

Outlook



## General Principles

Principles for operating the 9.4.e164.arpa

- Highly available and efficient operation
- Consideration of / Compliance with all relevant national and international standards, laws and ordinances
- Open, non-discriminating and equal access for ENUM-domain registration
- Involvement of stakeholders at all levels
- Keeping E.164 and DNS in synch
- Data protection
- Create and conserve a competitive environment



### History

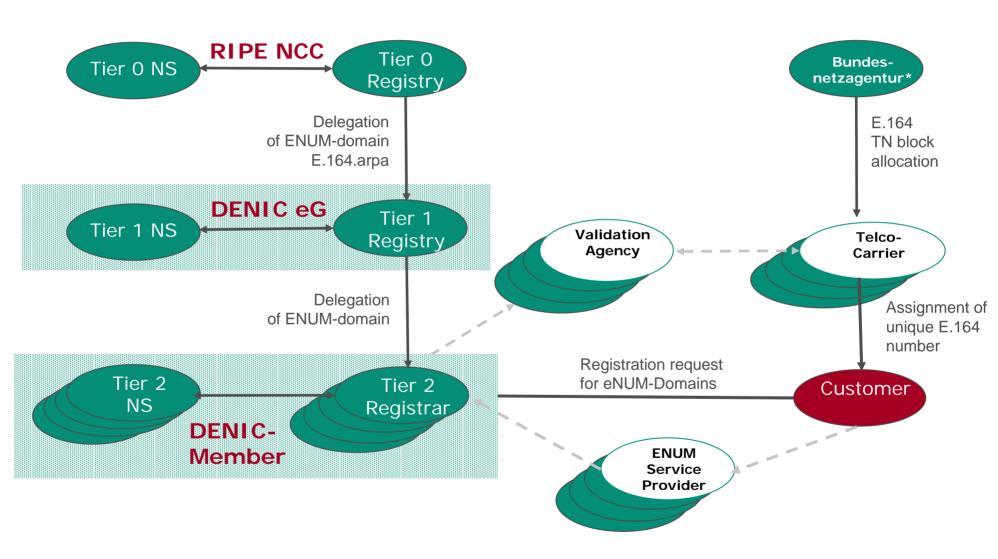
- September 2002: Start of the DENIC ENUM trial
- August 2003: Contract with "Bundesnetzagentur"
- Januar 2006: ENUM enters "Production"
- Number of ENUM domains 5693 (26. April)

### **DENIC's tasks**

- Name server service for 9.4.e164.arpa
- Providing an ENUM Registration System
- ENUM information services and mailing list
- ENUM Promotion
- Create Contractual Relationship



# DENIC Involved Parties



<sup>\*</sup> Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway



If you are interested in the details, see

-> DENIC-Domain Terms and Conditions

(http://www.denic.de/en/enum-domainbedingungen.html)

-> DENIC-Domain Guidelines

(http://www.denic.de/en/enum-domainrichtlinien.html)



## DENIC Contract Highlights

An ENUM domain can only be registered if there is a corresponding E.164 phone number. Thus it must be ensured,

- that the one who registers a domain has the right to use the corresponding phone number
  - -> initial validation
- that the right to use the phone number still exists. Therefore a validation is only valid for one year
  - -> revalidation with renewal

The registrar has to ensure a proper validation

The registrar must be able to prove his validation

Examples for proper validation see:

http://www.validierung-enum.de (T-Systems)

http://www.enum-validierung.de (Portunity)



## More Contract Highlights

Following +49 E.164 phone number ranges entitle to register the +49 ENUM equivalent:

Geographic Phone Numbers

Mobile Network Phone Numbers (i.e. 015, 016, 017)

Free Phone Service Numbers (i.e. 0800...)

Service Numbers (i.e. 018...)

Personal Phone Numbers (i.e. 0700...)

Non Geographic National Phone Numbers (i.e. 032...)



## DENIC COMPLAINT-Procedure

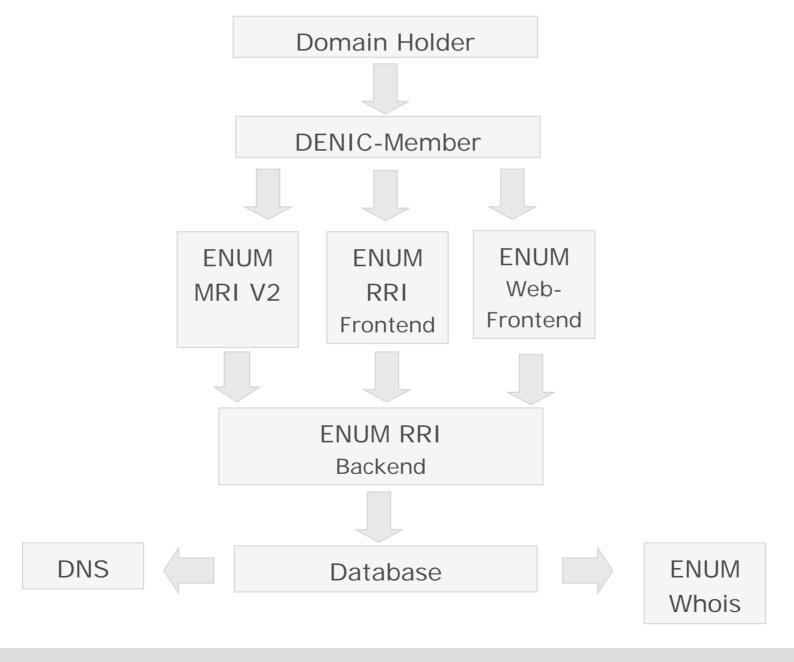
There is a "COMPLAINT-Procedure" in order to clarify potential errors in ENUM domain delegations.

Entitled to start an ENUM-COMPLAINTS are

- the beneficial owner of the E.164 number
- a DENIC member
- the Telco Carrier
- other third parties with justification



# DENIC ENUM Registration System





## Public ENUM Web whois

http://www.denic.de/en/enum-whois/index.jsp



DENIC Domains Background ENUM FAC

### ENUM Domain Query (whois)

You can use DENIC's domain-query function (whois) to find out whether an ENUM domain has already been registered and what contact data has been saved for it.

To make the usage more easy, you can type into the first text box the phone number of the corresponding ENUM domain you whish to be informed about. Please use the international coding (+4969272350), i. e. without the leading 0. Do not use spaces or other signs to structure the number. For instance, for the phone number 069-272350 you must type 69272350. In the lower text box the corresponding ENUM domain is displayed. This function will only work if your browser allows Java script.

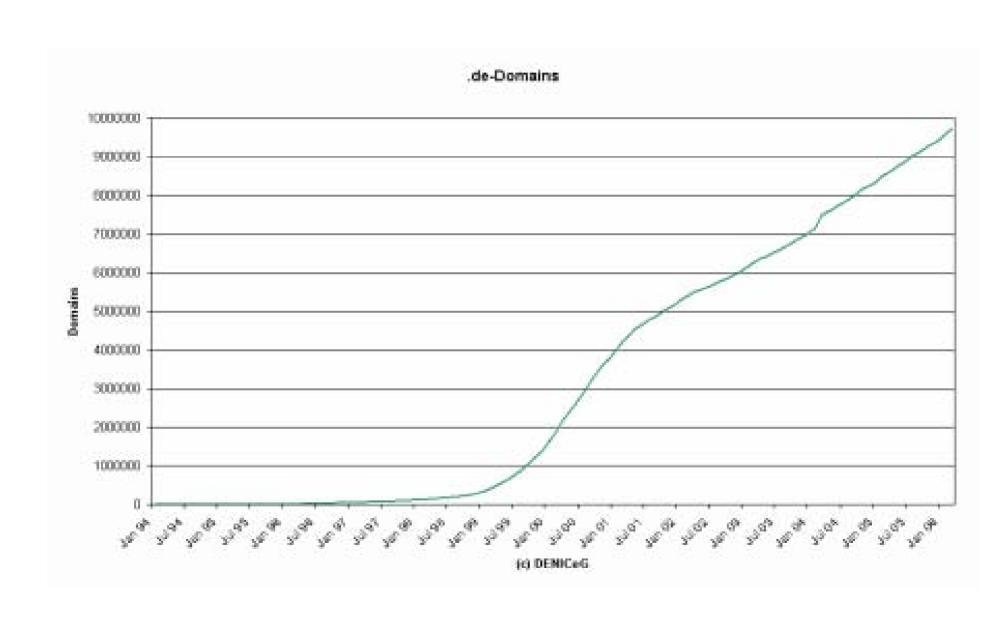


If the ENUM domains is not displayed in the lower text box, you must type it in by yourself. To do so, you must change the order of the digits of the phone number, put dots inbetween, and add .9.4.e164.arpa.

Example: For +49 69 27 2350 you have to type 0.5.3.2.7.2.9.6.9.4.e164.arpa.

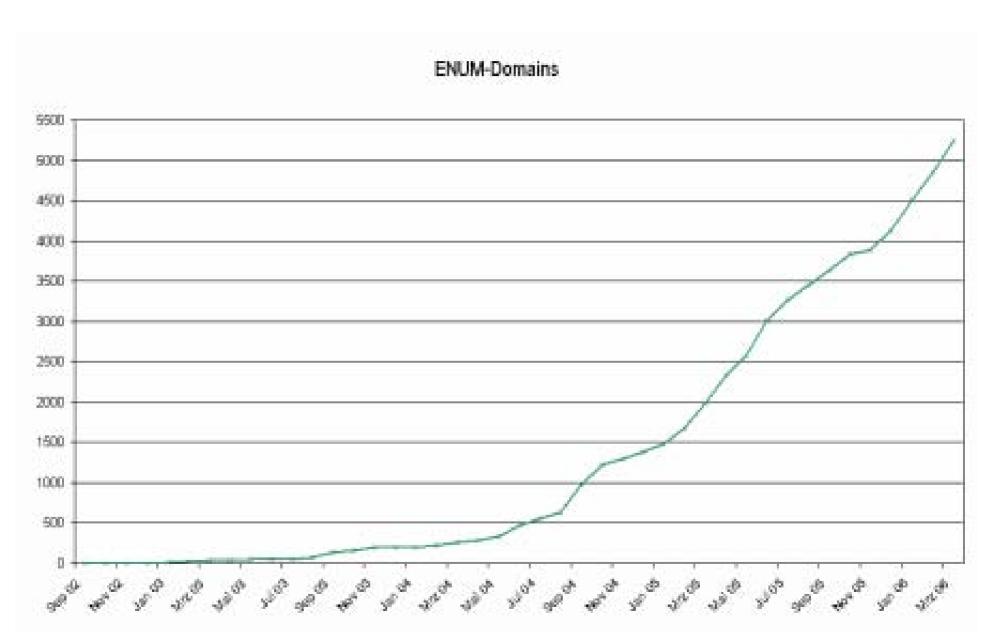


# DENIC From the history of .de





## ... into the future of +49 ENUM





# Questions?

http://www.denic.de/en/enum

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