



**ENUM +46**

**RIPE'49**

Jakob Schlyter  
NIC-SE



# Scenario I

- PTS (NA) assigns number block to TSP
- User gets number from TSP
- User goes ENUM
- User cancels subscription from TSP
- Number is no longer assigned to a user but is still in ENUM - this is bad



# Scenario 2

- User gets number and telephone services from TSP1
- User goes ENUM and get SIP services from TSP2 using the number from TSP1
- This could be very confusing



# Questions

- Who to blame when incoming calls does not work?
- TSP1 or TSP2 depending on caller?
- What to do when TSP1 upgrades and goes ENUM?
- Coexistence?



# Proposed initial model

- Only TSPs can become ENUM registrars
- TSPs can only register their own numbers



# Rationale

- Only the TSP knows which number is allocated to a subscriber
- SNPAC (NPDB) has information about which TSP has a specific number or block

SNPAC = Swedish Number Portability Administrative Center



# Delegation

- The user contacts its TSP for delegation
- TSP requests ENUM delegation to Tier I
- Tier I consults SNPAC (NPDB) for number and TSP validation



# Deregistration

- User cancels contract with TSP
- TSP requests ENUM deregistration from Tier I



# Number Portability

- User moves to new TSP
- Unless the new TSP is a ENUM registrar, the ENUM delegation is removed



[jakob@nic.se](mailto:jakob@nic.se)