



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

IPv6 on Mobile networks BCOP

Helping mobile operators



IPv6 is moving fast on mobile networks

- Lack of guidance for operators
- RIPE NCC ER Team identified the issue some time ago

Structured approach



- Built a list of operators
- Contacted some of them

Findings



Quite uniform distribution of issues

Preparation work



- Proof of concept
- Receiving your allocation from the RIPE NCC

Vendor support



- Handsets

- Android
- Apple

- Infrastructure

- Cisco
- Huawei
- Ericsson
- ZTE

APNs



- Single
- Multiple

Implementation scenarios



- Dual-Stack
- NAT64
- 464XLAT

Billing



- Not all software supports IPv6
 - Chances are, IPv6 data will not be billed
- Upgrade or modifications required

Roaming



- A network will most likely have roaming users with IPv6
- Then billing issues might

Filtering



- Filtering software needs to be updated
- Legal issues might rise

Next steps



- Talk to more operators to identify smaller issues
- Work on the document and make it public for review



Questions



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