



**RIPE NCC**

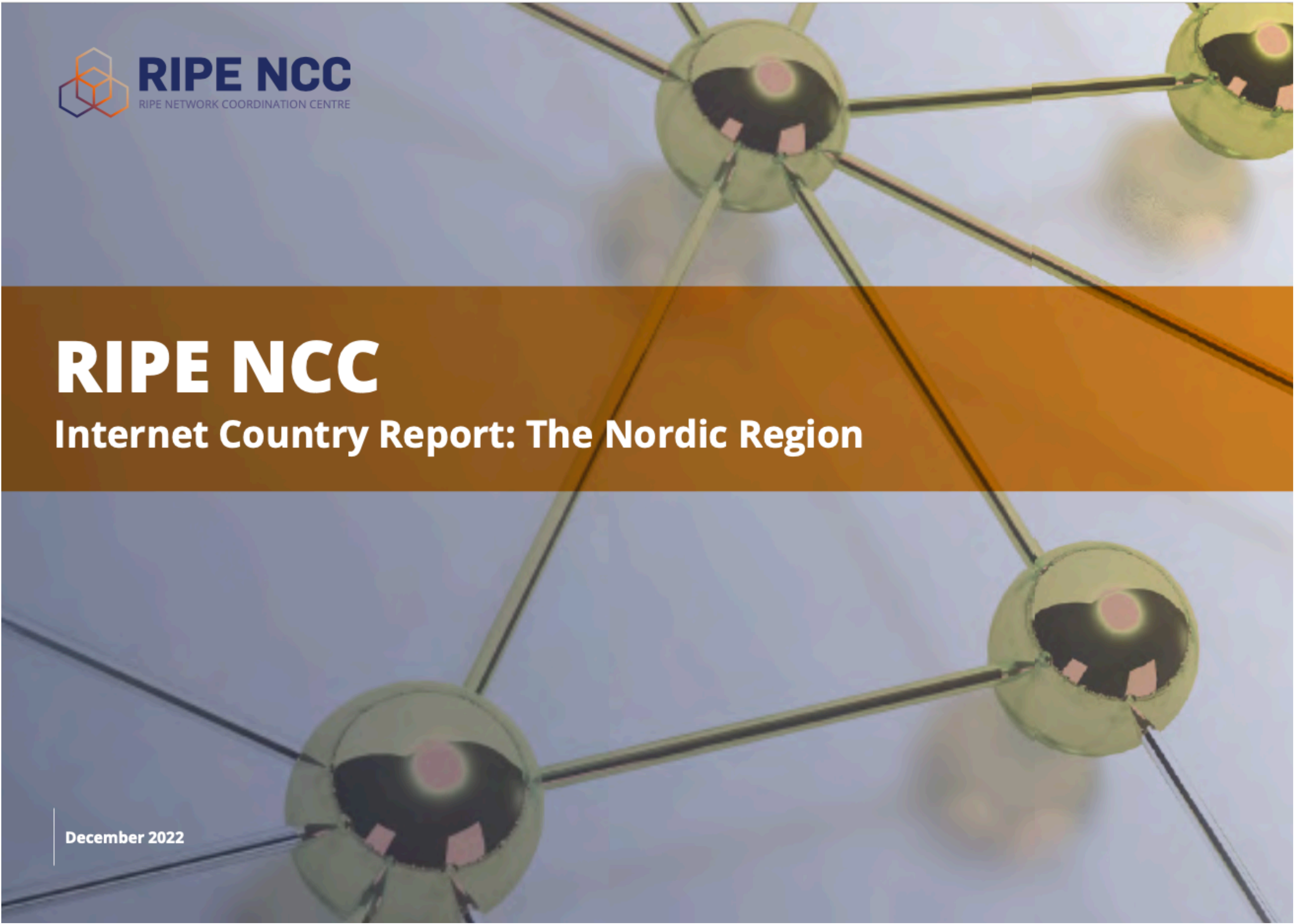
RIPE NETWORK COORDINATION CENTRE

# Finland Internet Country Report

From the RIPE NCC Perspective

Alena Muravska | [nbg.fi](https://nbg.fi) | 22 June 2023

# Internet Country Report: The Nordic Region

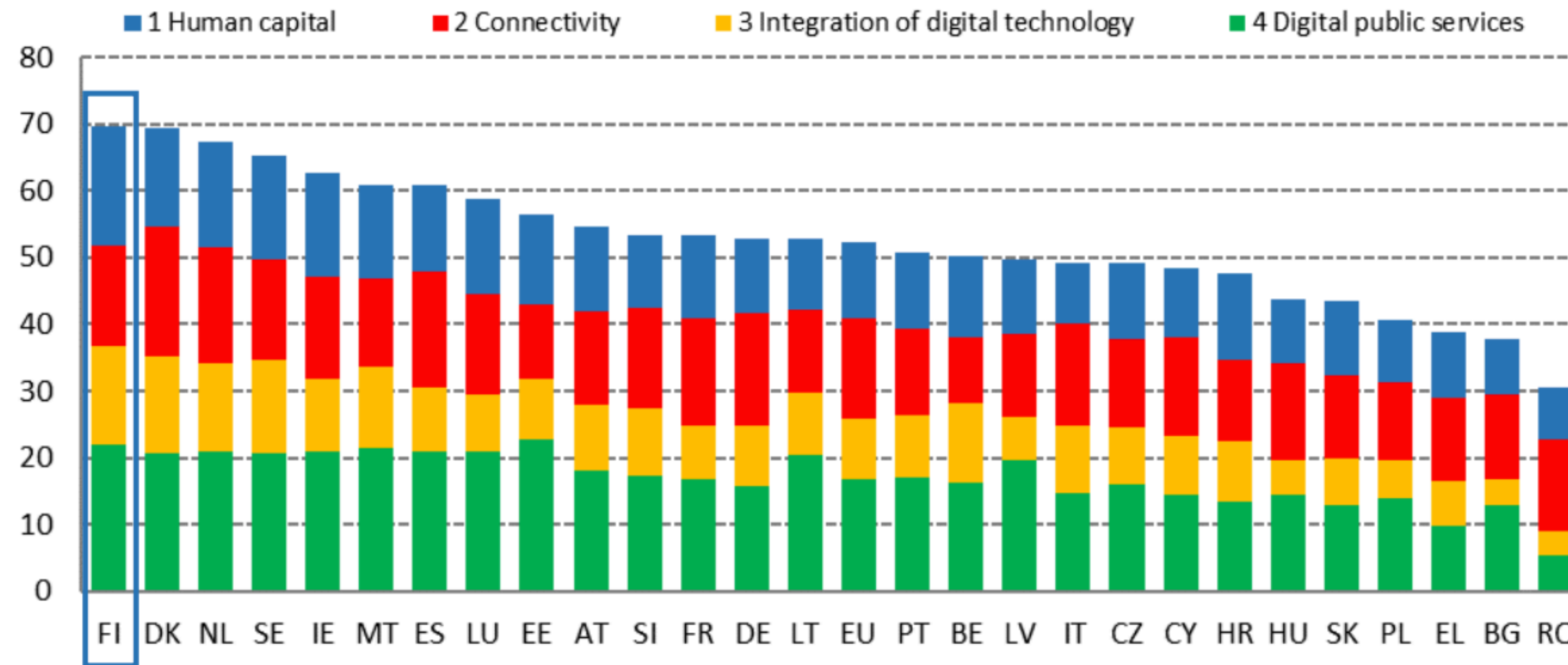


# Finland: First in EU by DESI 2022



|           | Finland | EU    |
|-----------|---------|-------|
|           | rank    | score |
| DESI 2022 | 1       | 52.3  |
|           |         | 69.6  |

Digital Economy and Society Index (DESI) 2022 ranking



# Finland by EU DESI 2022



- Eighth in connectivity
  - With 61% overall fixed broadband use (EU average of 78%)
- Behind EU average in:
  - Fast broadband
  - Very high capacity network (VHCN) coverage
- Above EU average in:
  - Mobile broadband use
  - 5G coverage



# IPv4 Holdings



Figure 3:  
IPv4 holdings over time

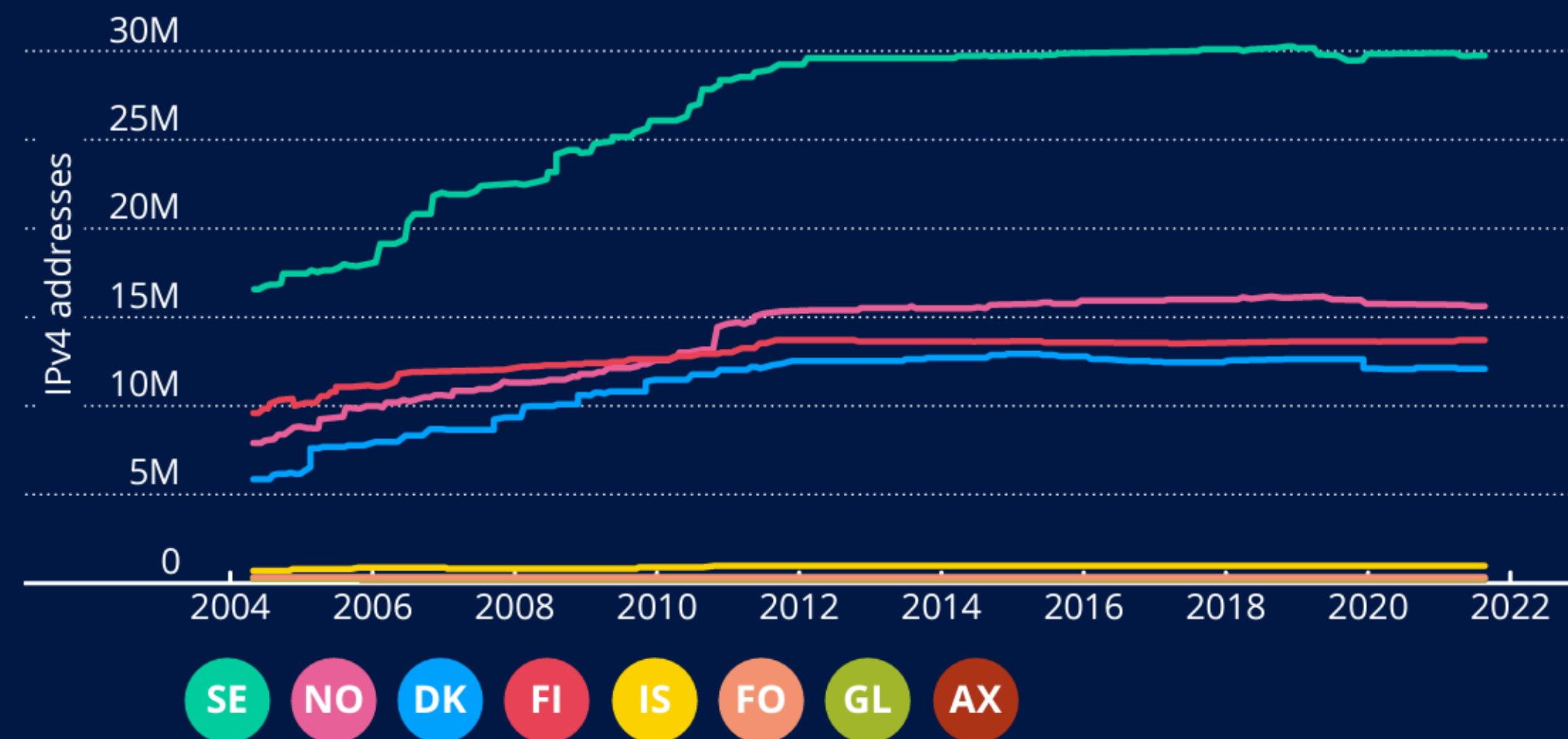
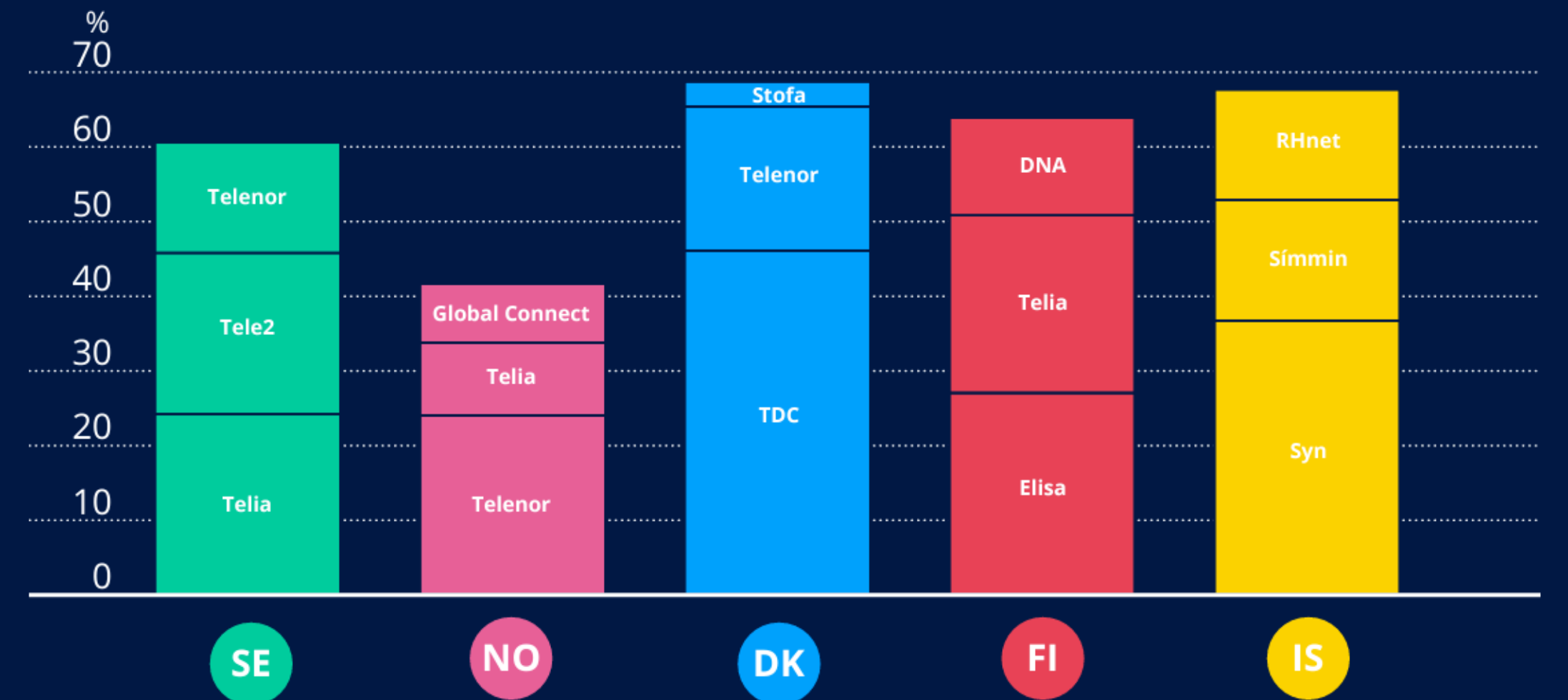
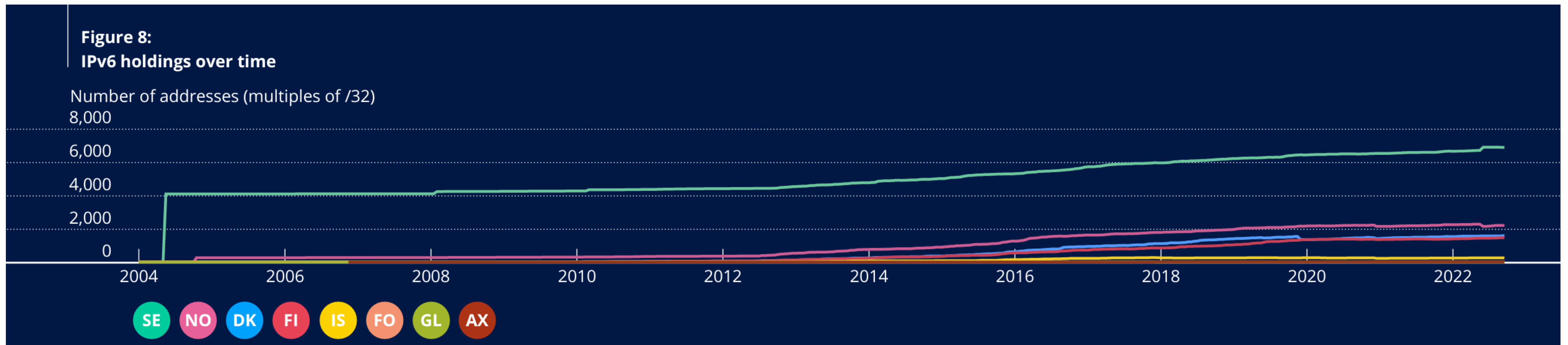


Figure 4:  
Top 3 IPv4 holders



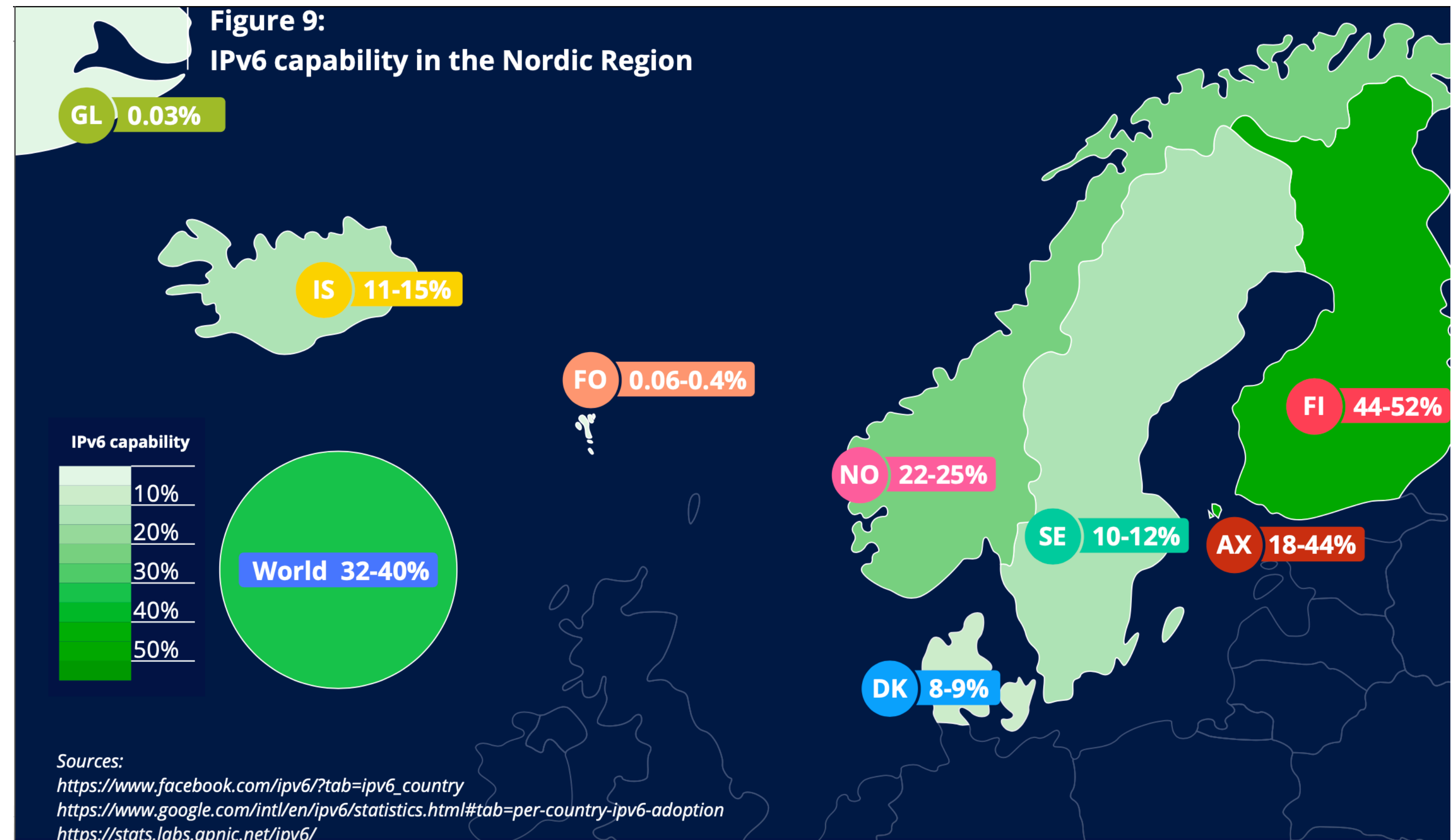
# IPv6 Holdings



# IPv6 Capability



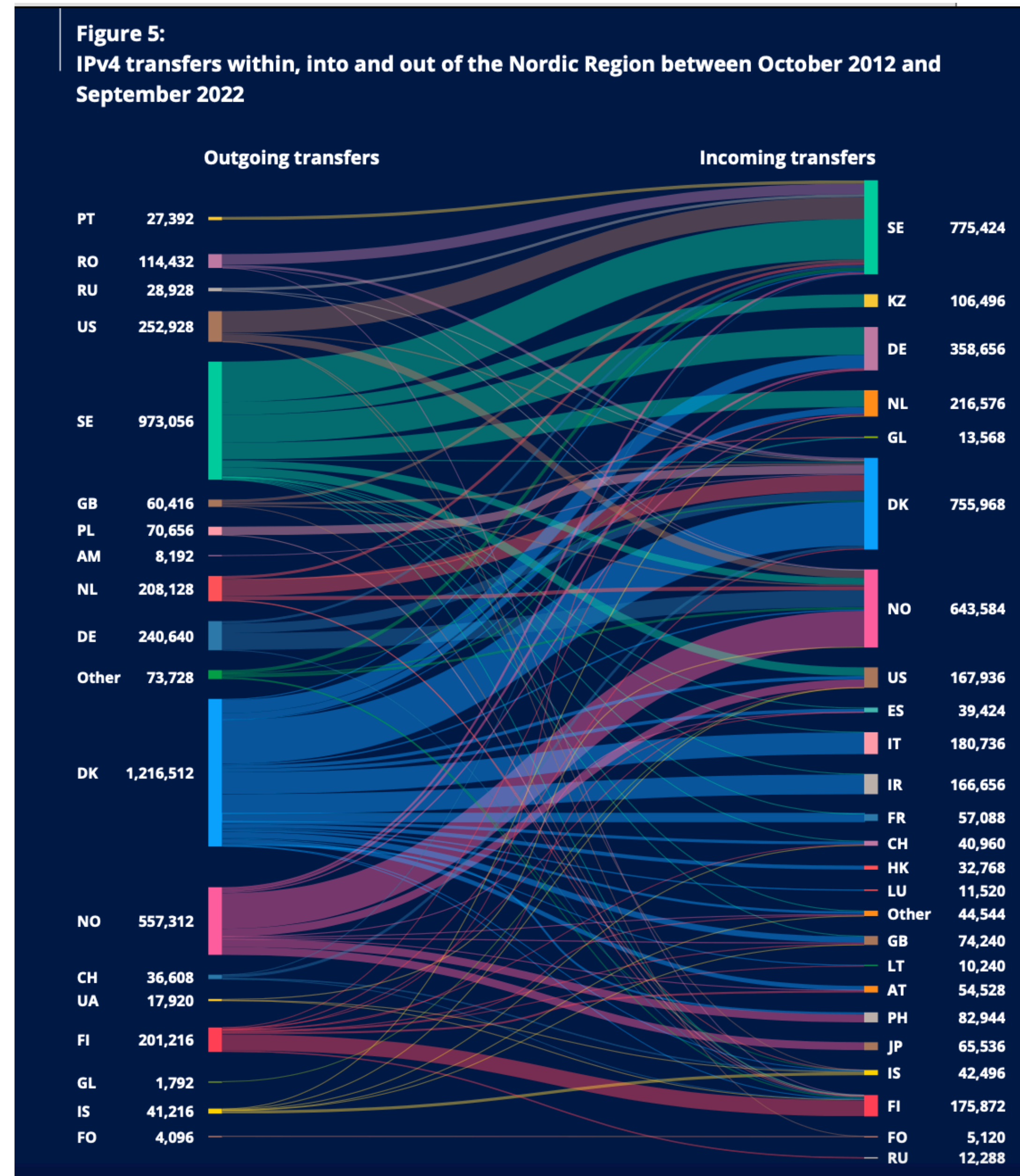
- The highest IPv6 adoption rate in the Nordic region
- Above the world average of 32-40%
- nog.fi played a role





# IPv4 Transfers

- Outgoing: 201,216
- Incoming: 175,872

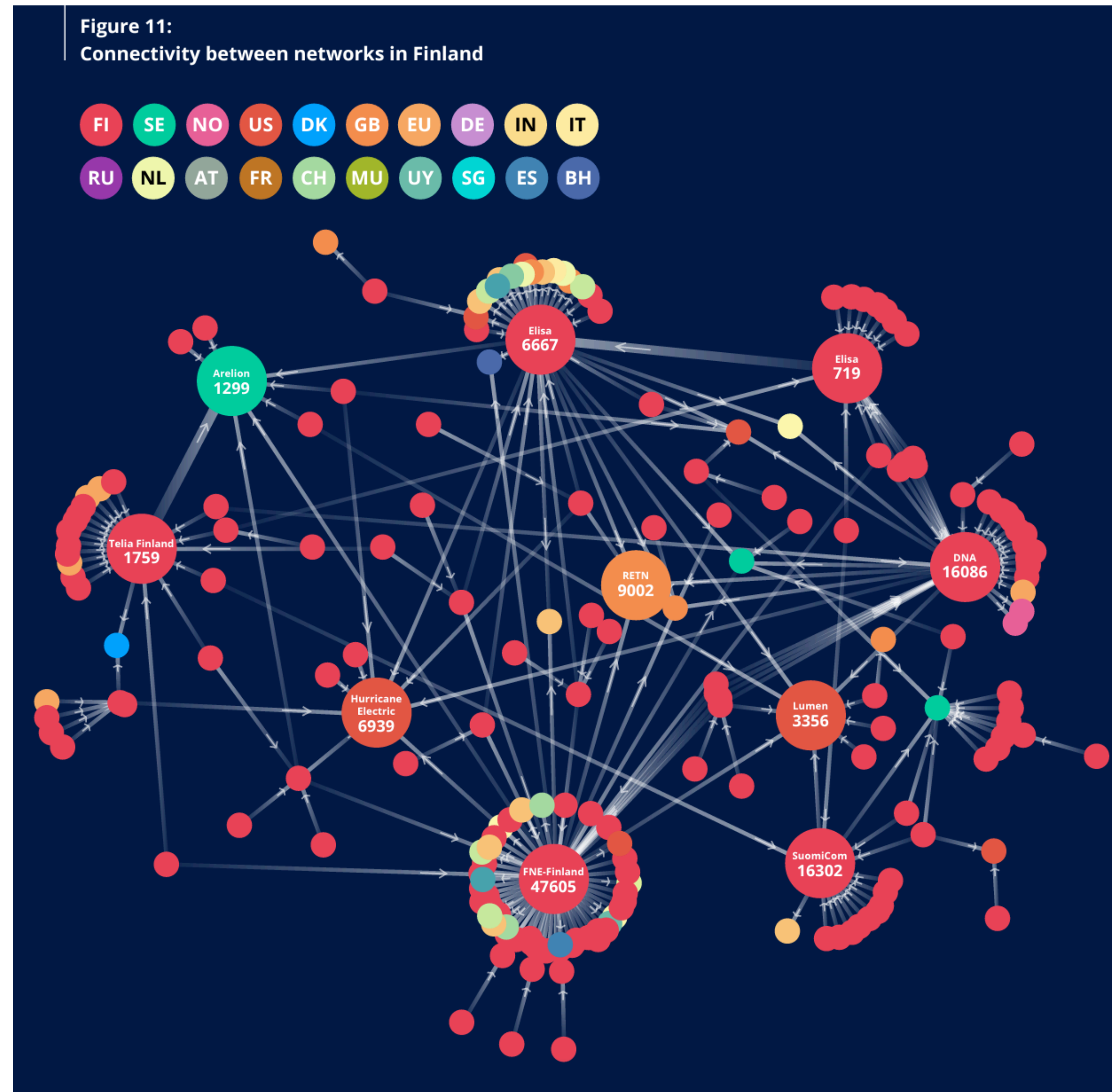




# Connectivity Between Networks in Finland



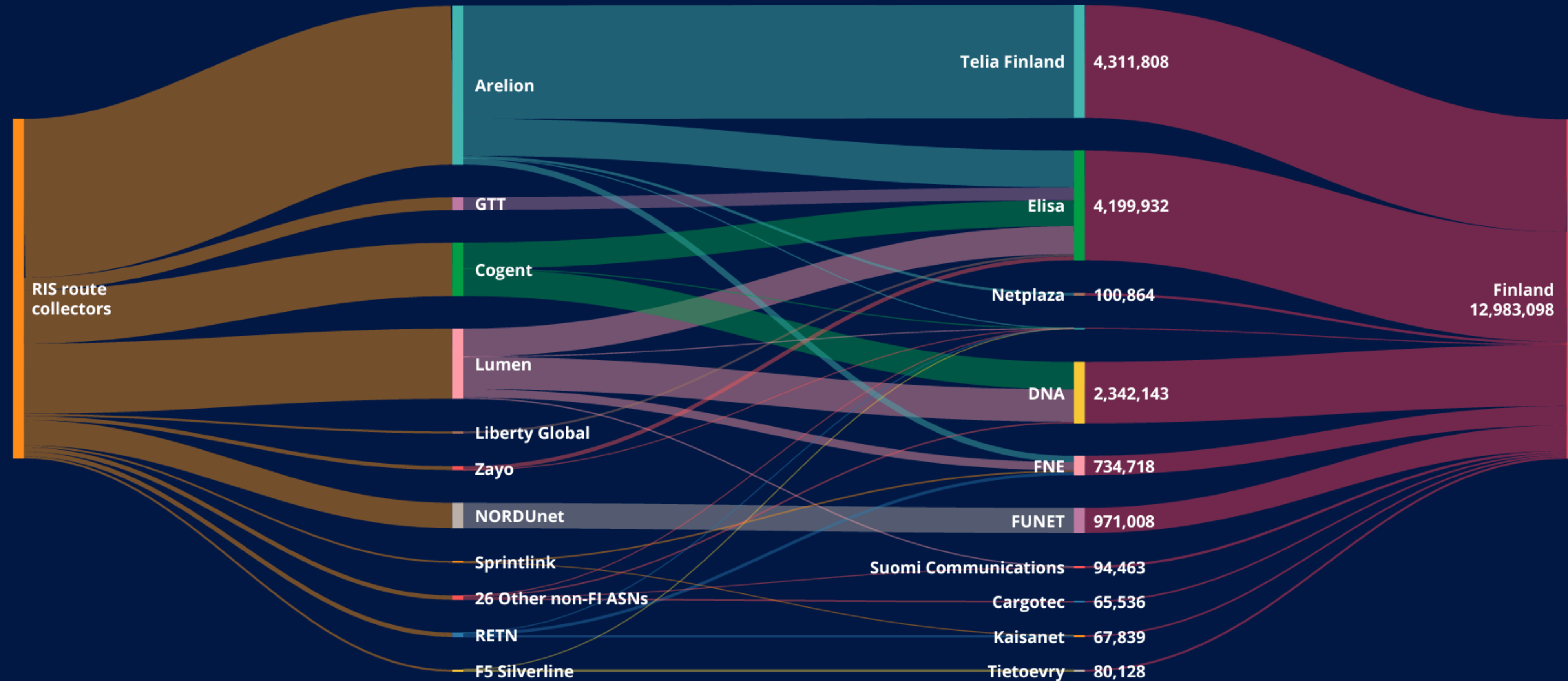
- A large number of networks connect to FNE-Finland (AS47605) and SuomiCom (AS16302), while holding a modest number of IPv4 addresses itself



# Finland's international connectivity



Figure 16:  
Finland's international connectivity

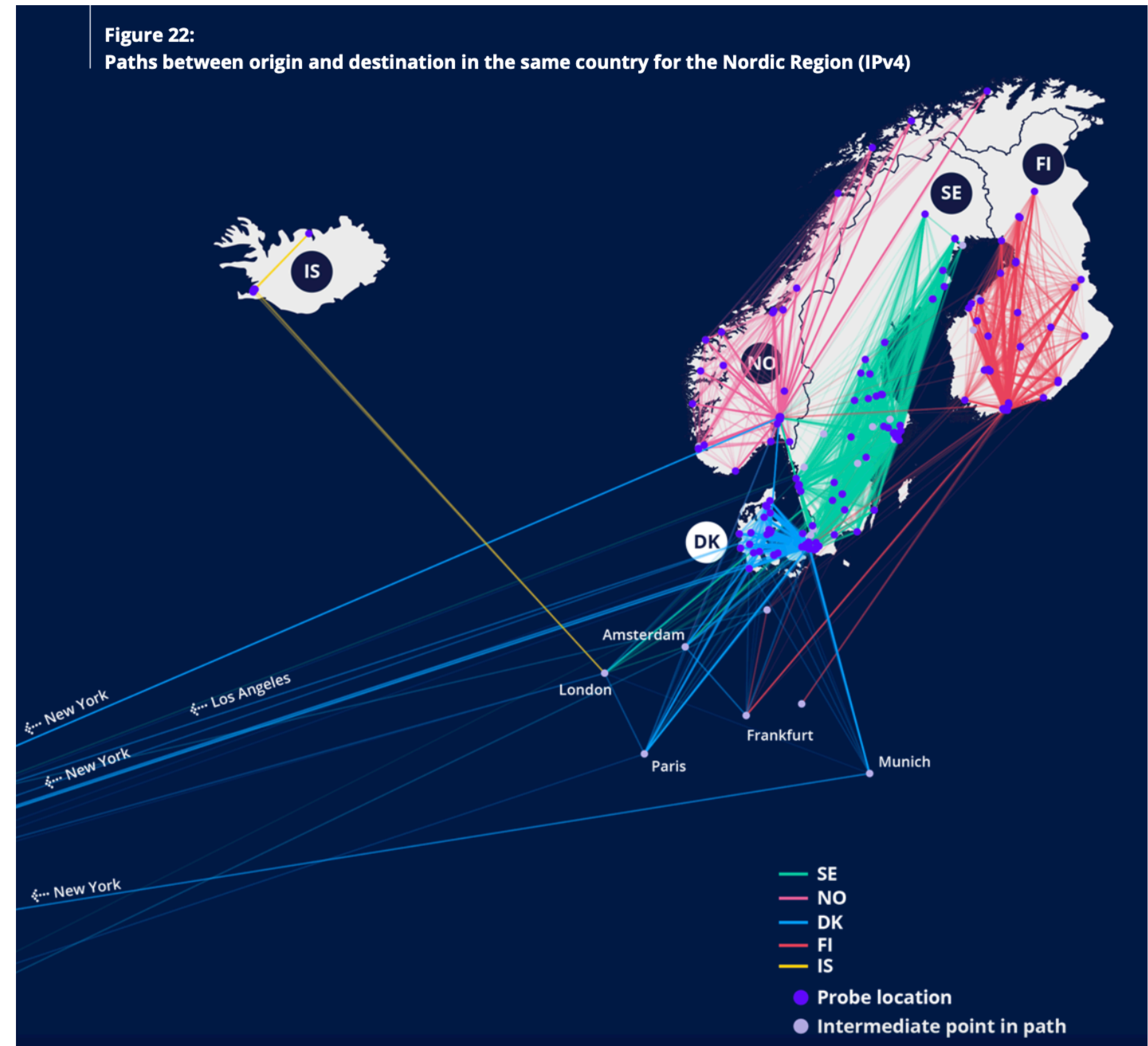




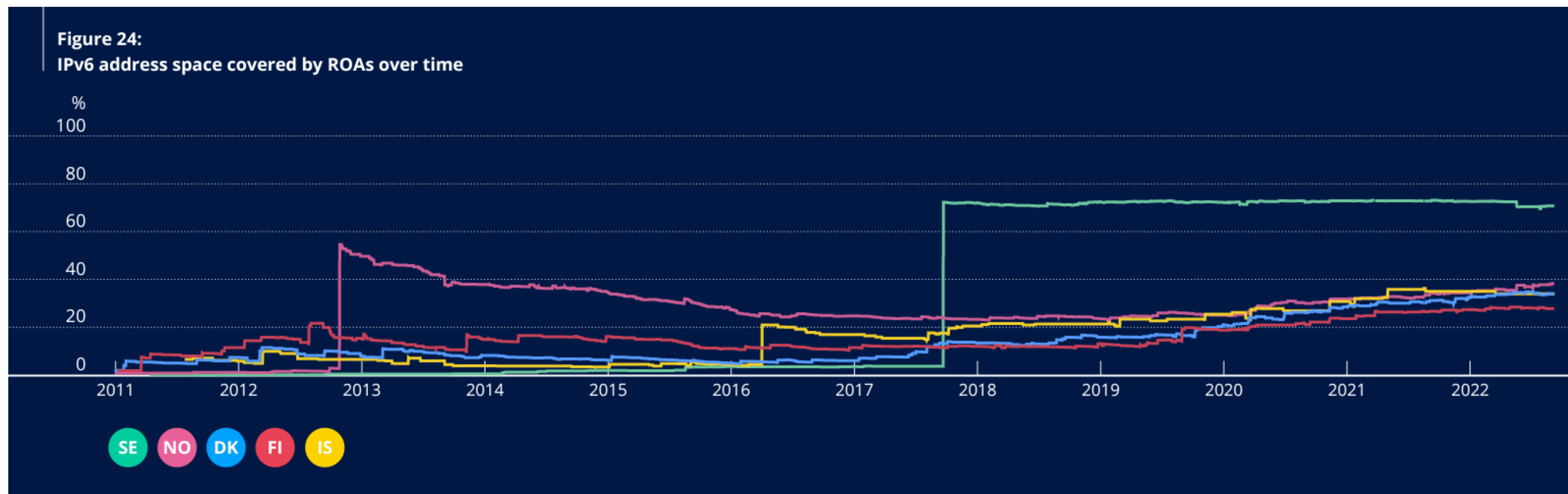
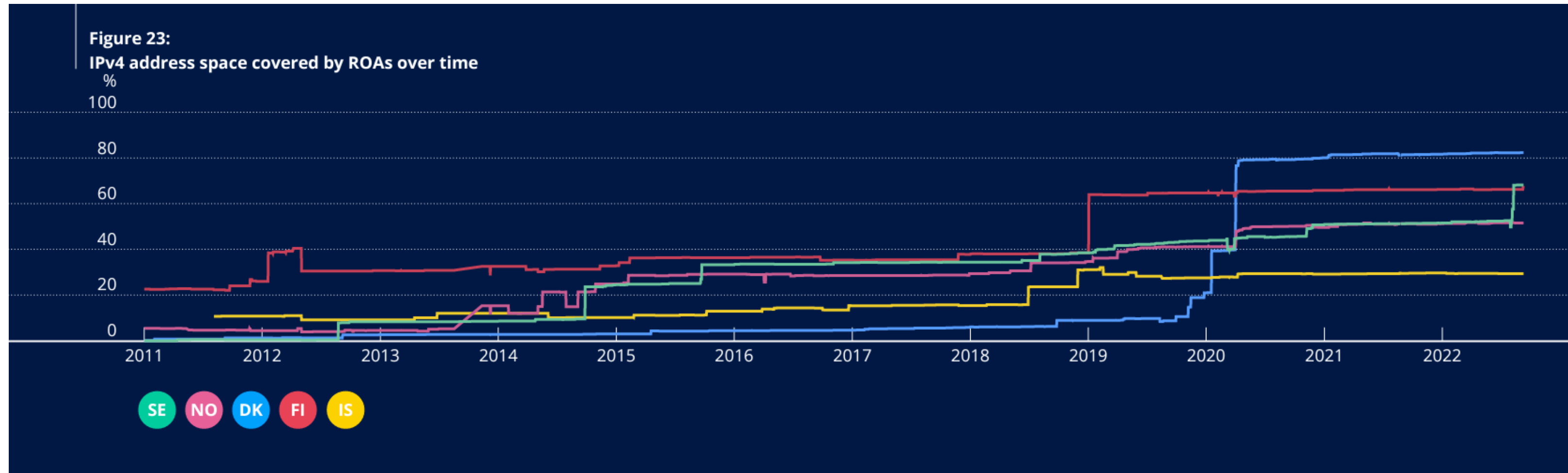
# Traceroute Paths



- Data from RIPE Atlas probes mesh
- Most paths stay local, a few detour via Denmark
- Explore for yourself:
  - IXP-Country-Jedi
  - <https://jedi.ripe.net/>



# ROA Coverage Over Time





# RIPE NCC Data Sources



- RIPE Registry <https://whois.ripe.net>
- Routing Information Service (RIS) <https://www.ripe.net/ris>
- RIPE Atlas <https://atlas.ripe.net>
- RIPEstat <https://stat.ripe.net/>
- RIPE IPmap: <https://ipmap.ripe.net/>
- K-root: <https://www.ripe.net/analyse/dns/k-root>

# External Data Sources



- Digital Economy and Society Index (DESI) 2022
- World Bank
- Various sources for IPv6 capability
- Special thanks to Aleksi Suhonen, Internetworking Consulting



# Survey 2023



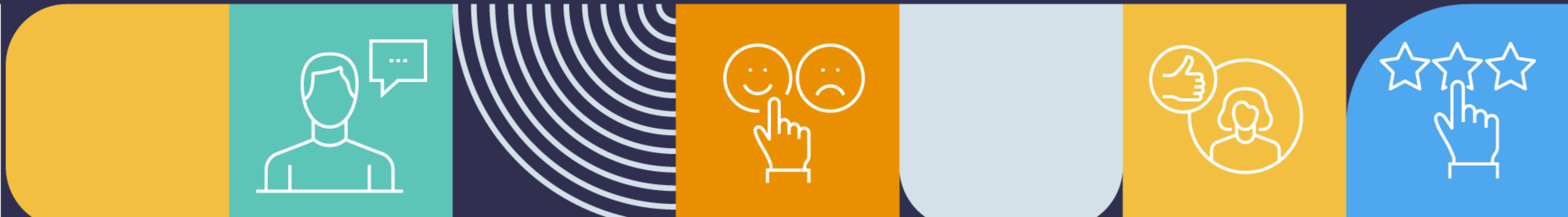
15 minutes  
can make a  
big difference

Take the survey for a chance to win  
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tech gadgets.



[www.ripe.net/survey](http://www.ripe.net/survey)

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A photograph of the Colosseum in Rome, Italy, during sunset. The sun is low on the left, creating a warm orange glow and lens flare. The Colosseum's iconic arches are silhouetted against the bright sky. A semi-transparent orange banner is overlaid in the center, containing event information.

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# Questions



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