



**RIPE NCC**

RIPE NETWORK COORDINATION CENTRE

# **Southeast Europe Country Report**

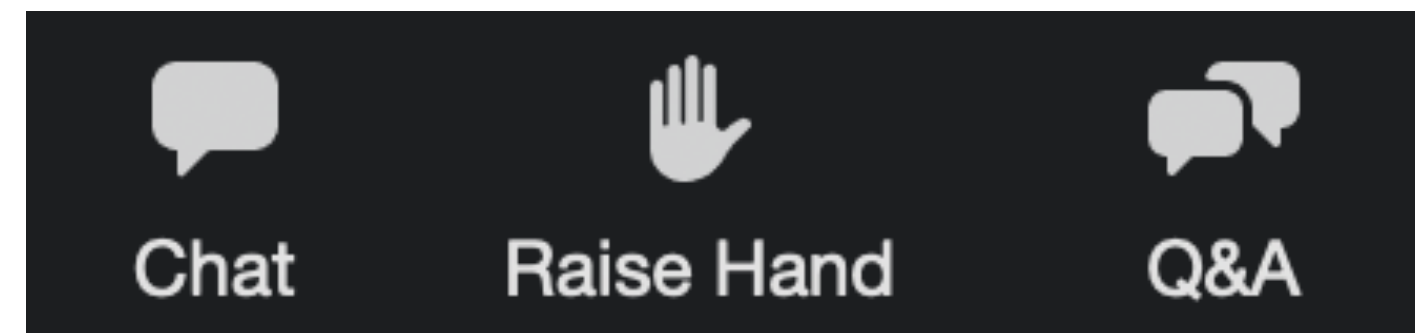
Gergana Petrova / Marco Hogewoning

28 April 2020

# Housekeeping



- All attendees are muted



- Use **Chat** for discussion or to report technical problems
- **Raise your hand** if you want to ask a question or comment
- The **Q&A** allows you to do this anonymously



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# RIPE NCC

## Southeast Europe Country Report

<https://www.ripe.net/s/seereport>

# What We Will Cover?



- Market Development
- IPv4 and IPv6
- Traffic and Routing
- How to Get Involved

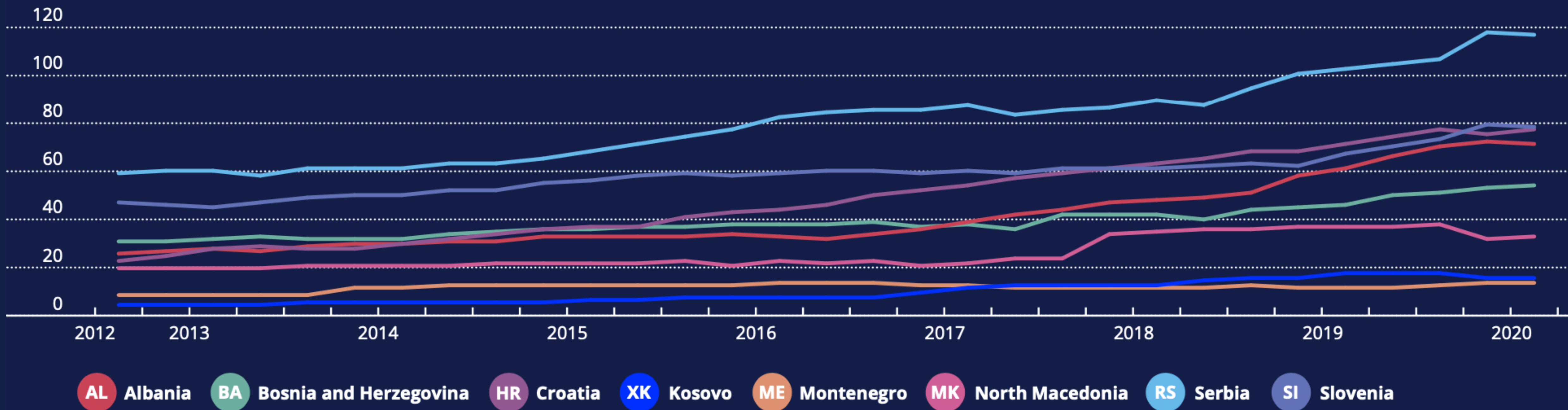


# Market Development



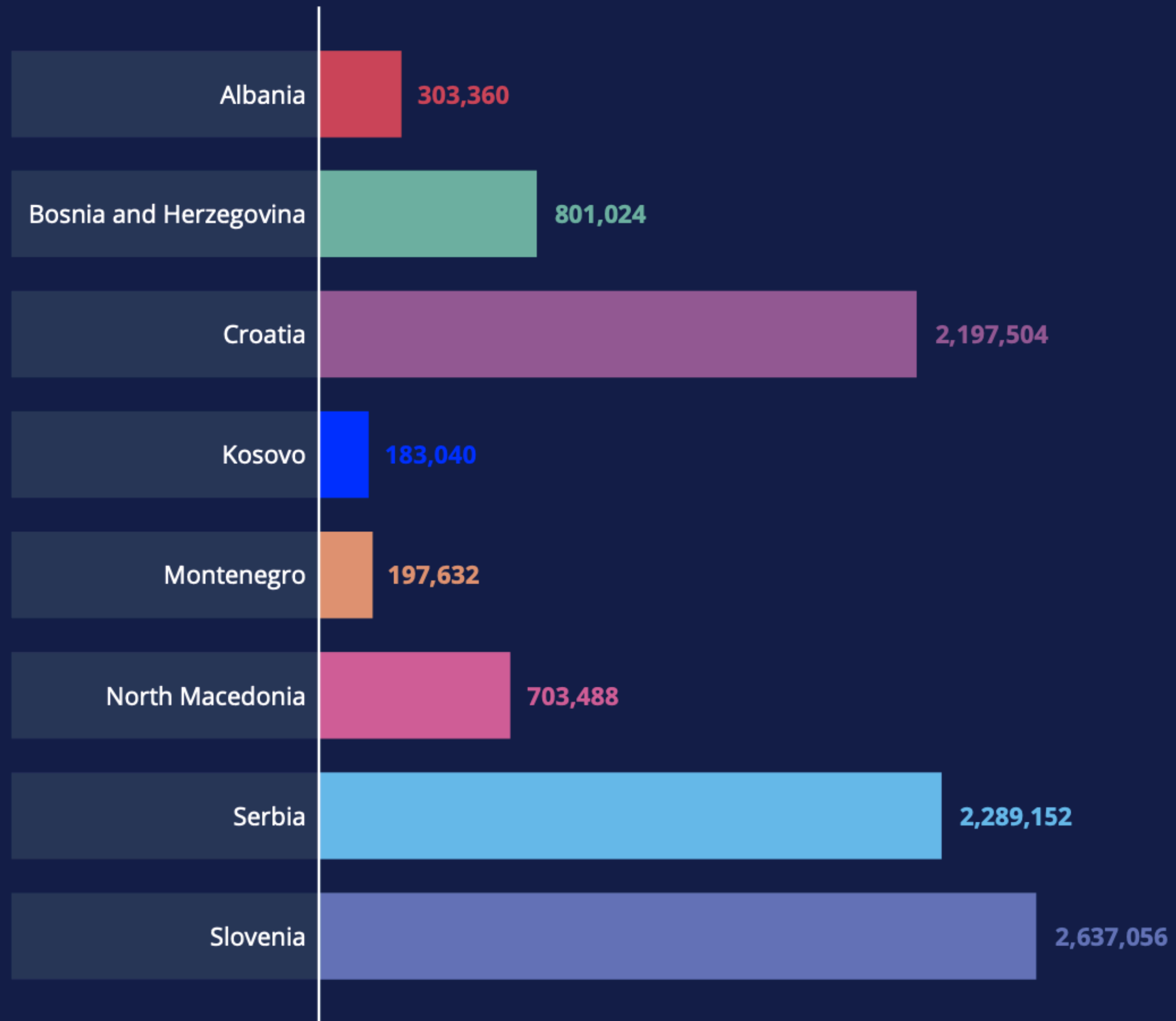


**Figure 1:**  
**Growth in the number of Local Internet Registries over time**

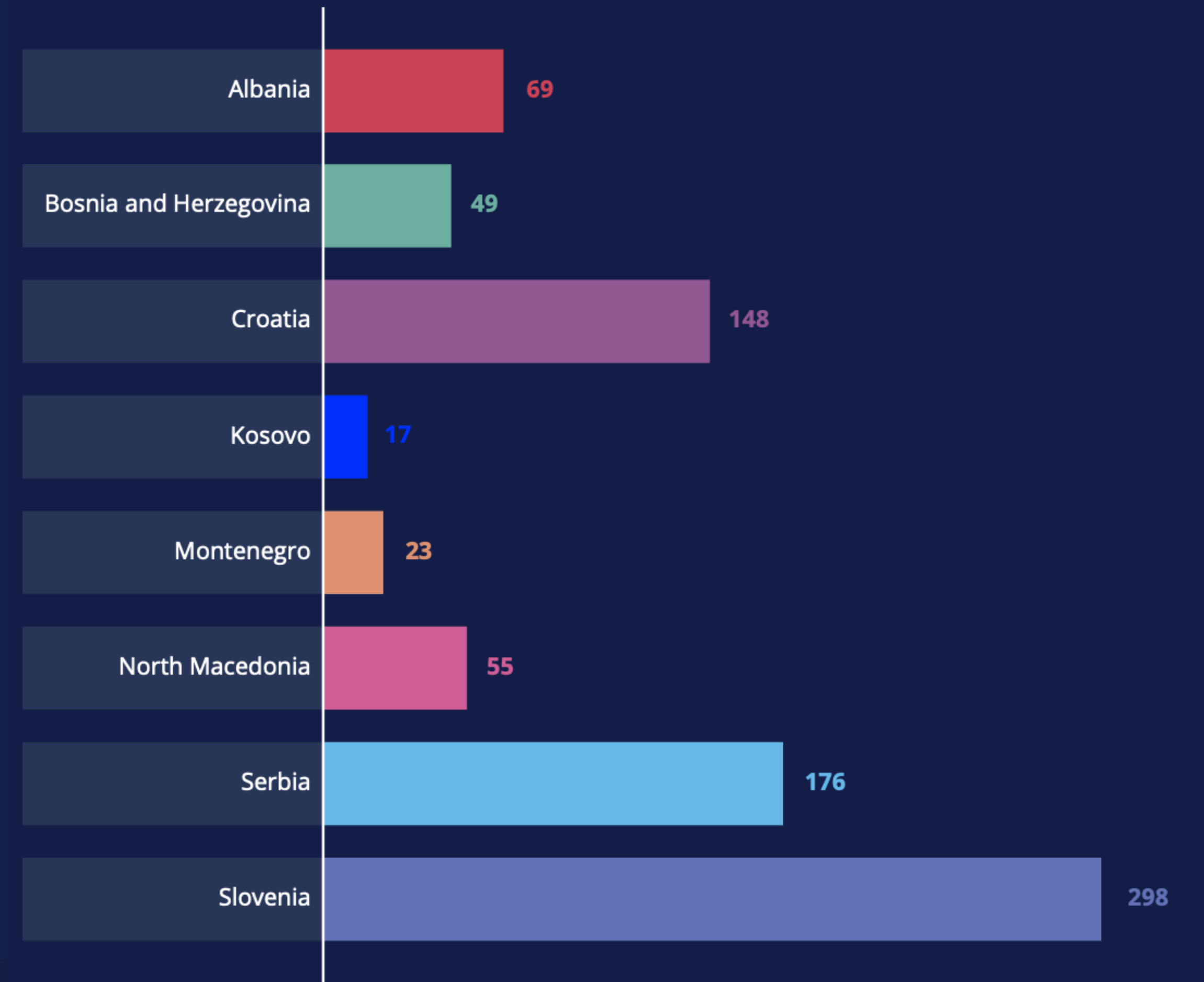




**Figure 2:**  
IPv4 address holdings by country



**Figure 8:**  
Number of networks by country





## **Discussion:**

**What's the ISP market like  
in your country?**

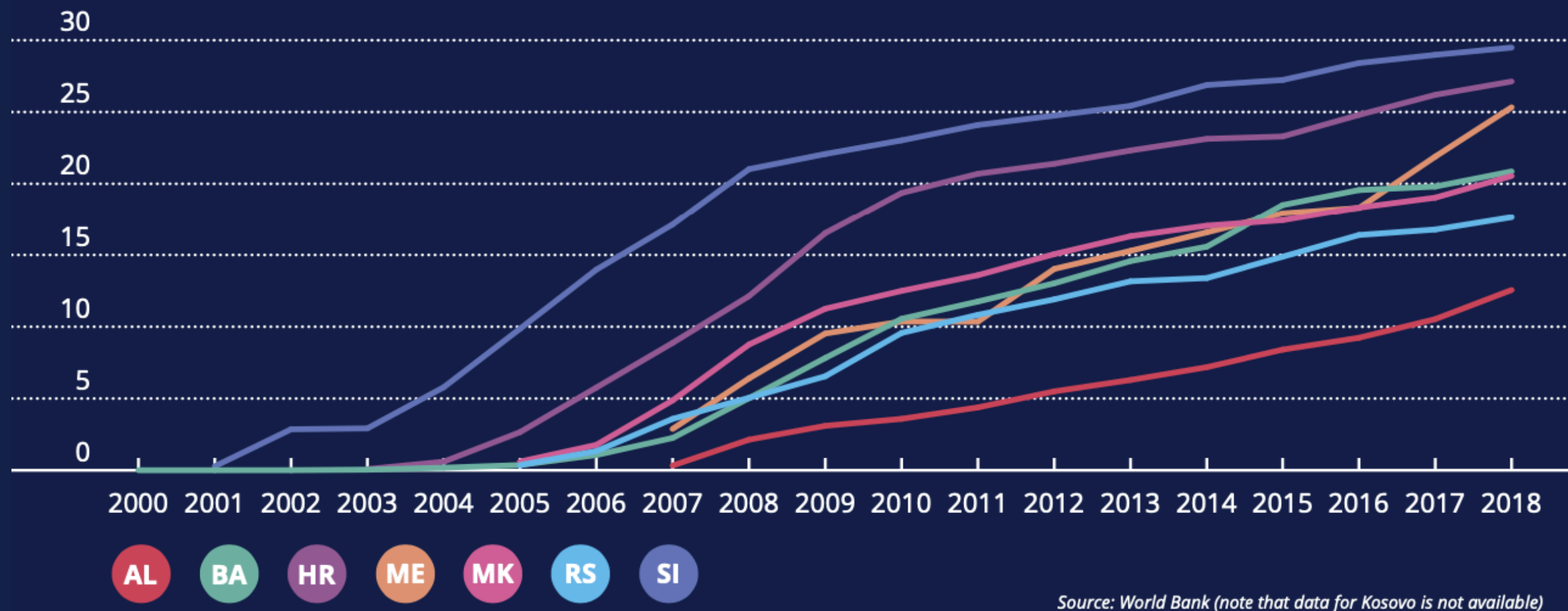




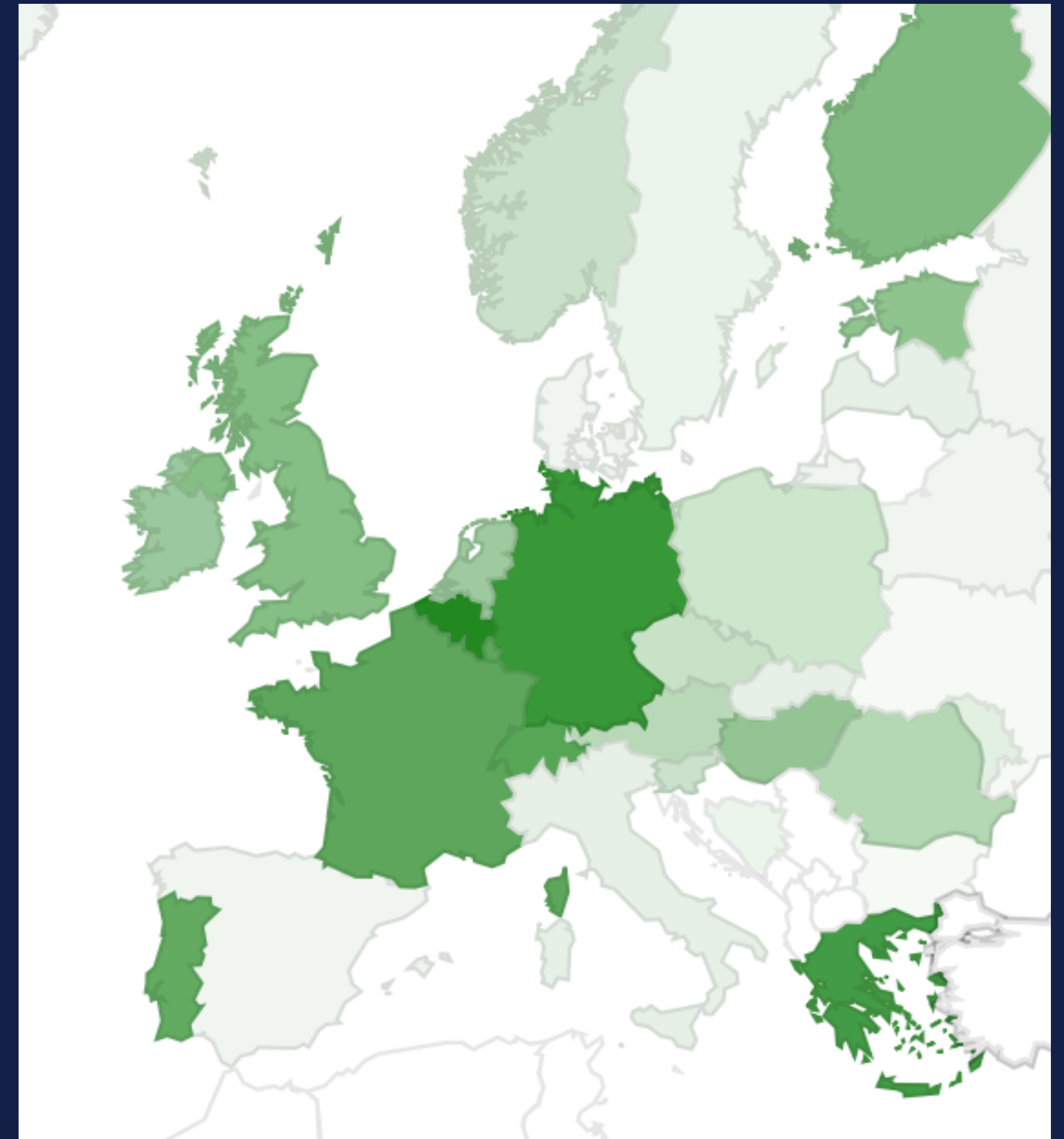
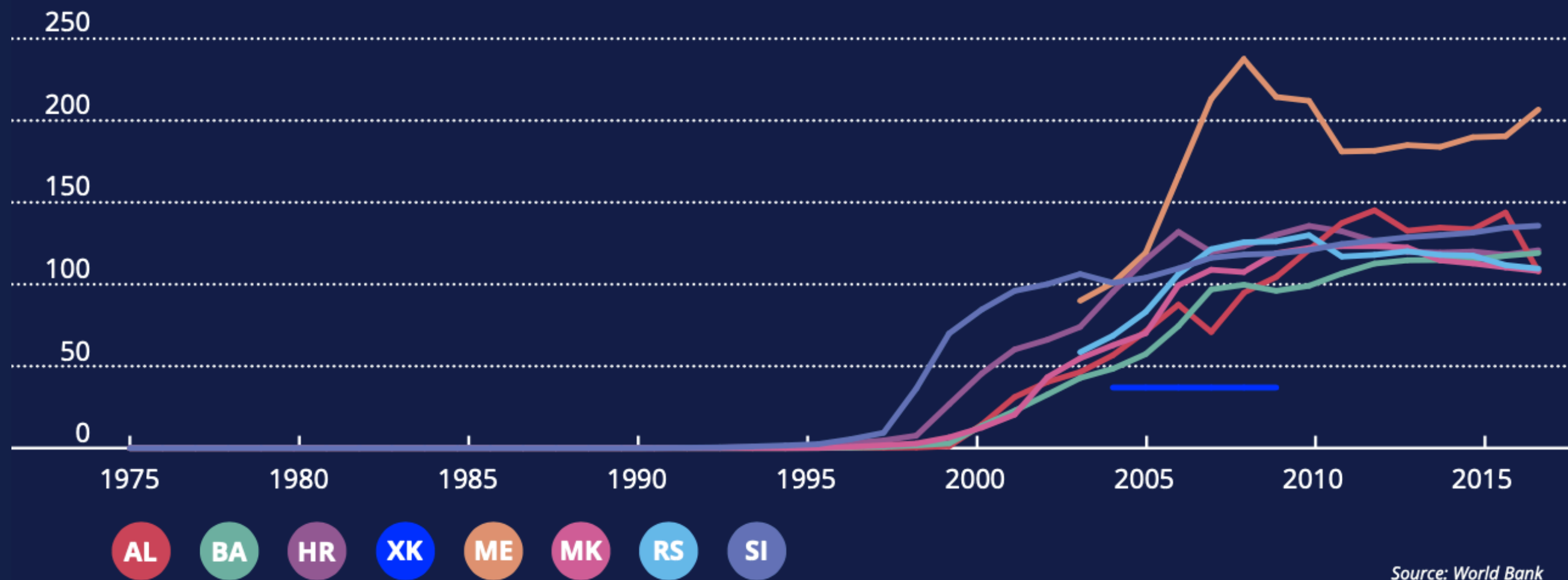
# IPv4 and IPv6



**Figure 3:**  
Fixed broadband subscriptions per 100 people over time

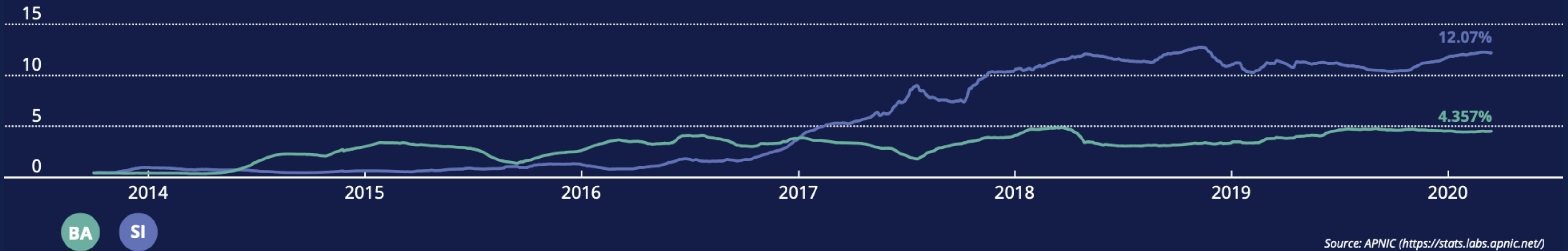


**Figure 4:**  
Mobile subscriptions per 100 people over time





**Figure 7:**  
**Percentage of Internet users with IPv6 capability in Slovenia and Bosnia and Herzegovina**



Source: APNIC (<https://stats.labs.apnic.net/>)



# Discussion:

**How will you deal with IPv4  
scarcity?**

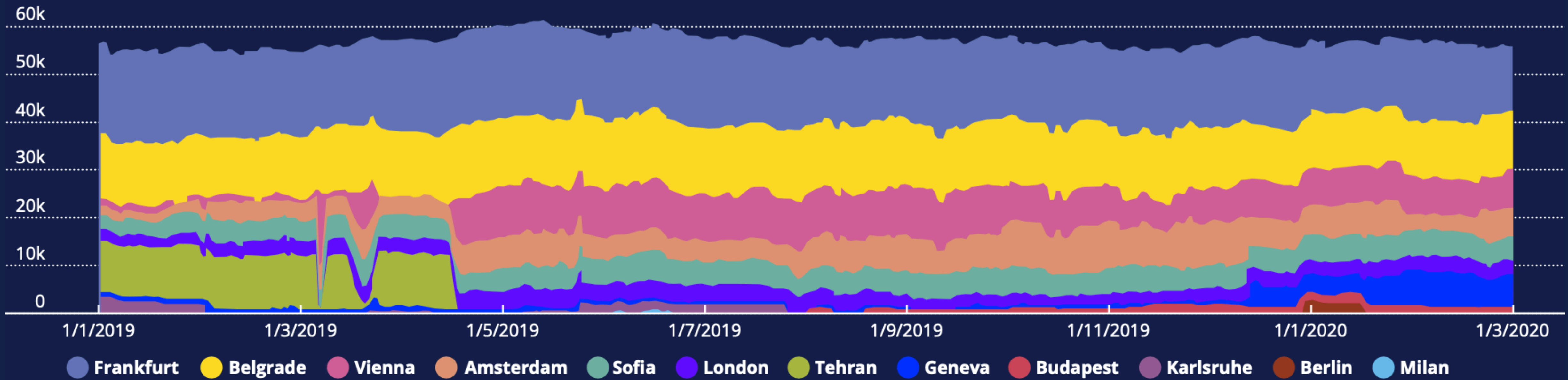


# Traffic and Routing





**Figure 9:**  
**K-root locations reached from within Southeast Europe (IPv4)**







**Figure 10:**  
**Average round-trip times to most-used K-root locations (IPv4)**

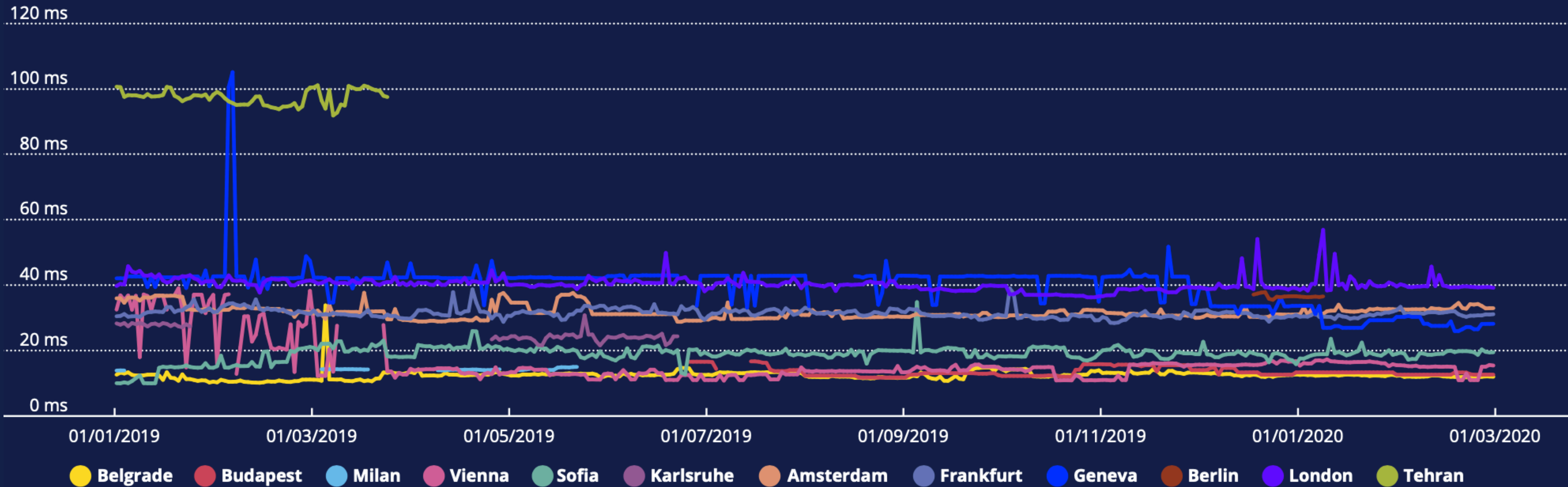
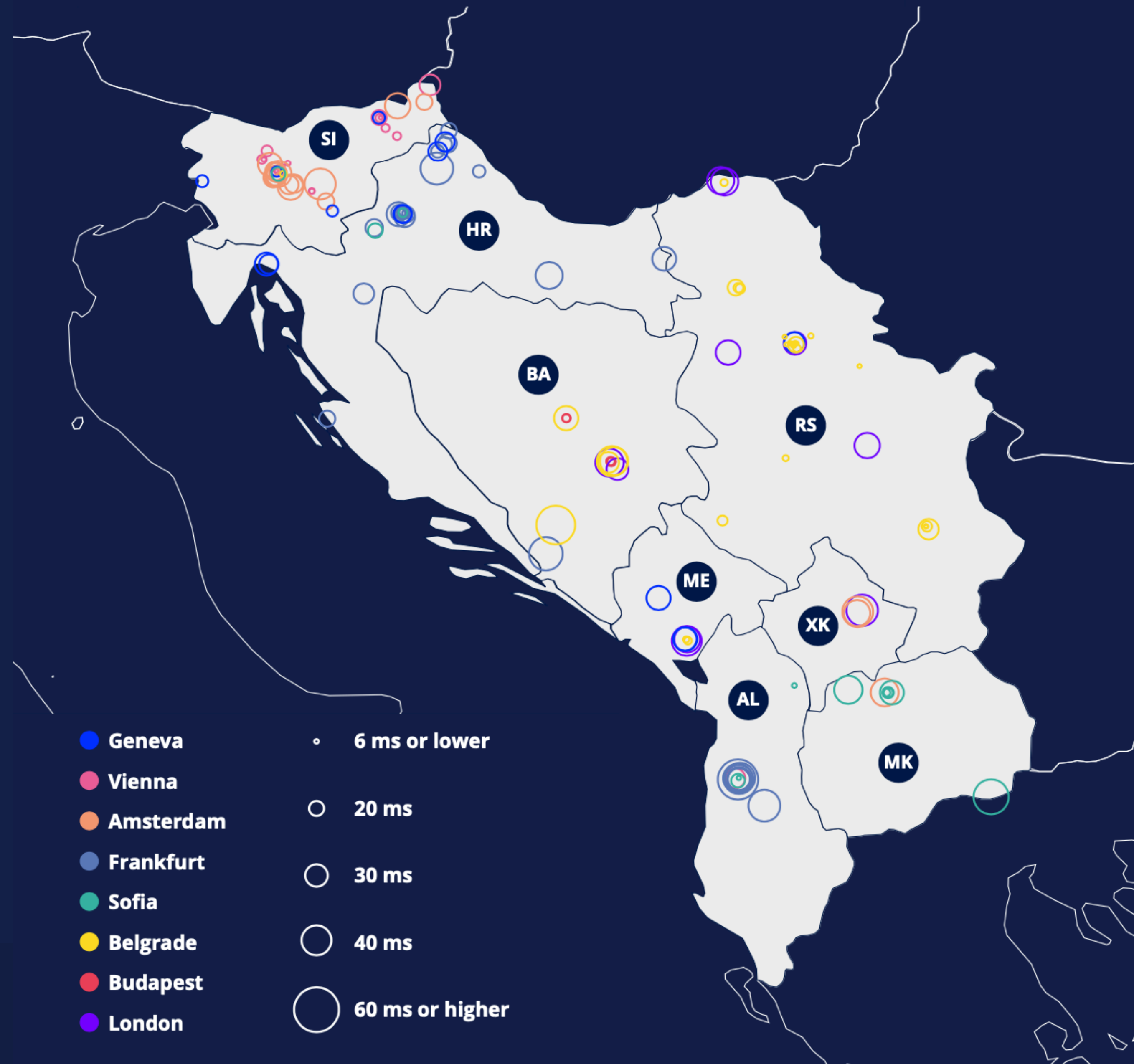
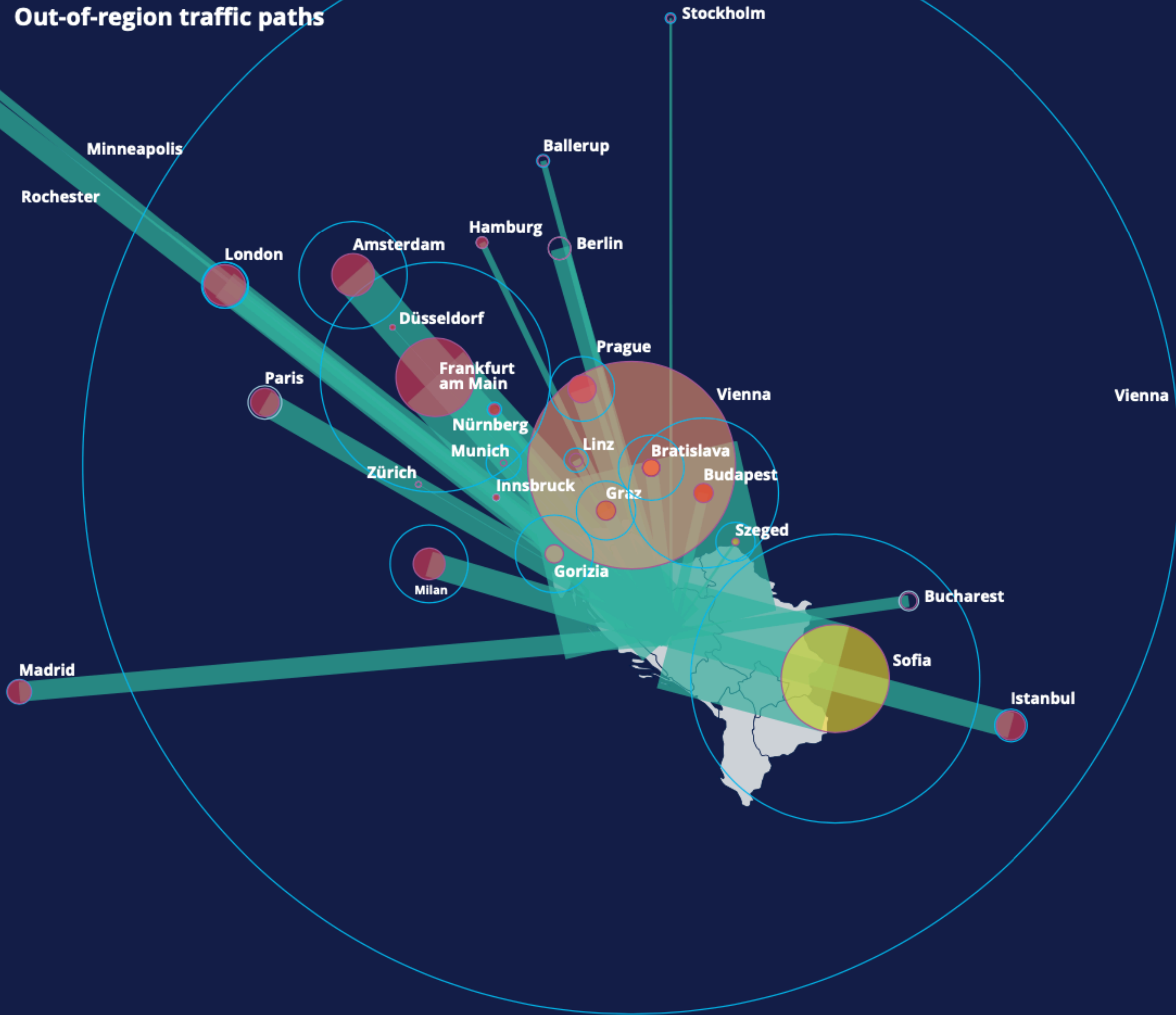



Figure 11:  
K-root locations reached from vantage points throughout Southeast Europe (IPv4)






**Figure 13:**  
**Out-of-region traffic paths**



 Colour of circle indicates path length, from shortest (green) to longest (red)

 Width of line indicates number of paths

 Size of circle indicates number of paths passing through this point

 Farthest location reached by a path







 Size of circle indicates number of paths with this location as their farthest point

Figure 14:  
In-region traffic paths



-  Colour of circle indicates path length, from shortest (green) to longest (red)
-  Width of line indicates number of paths
-  Size of circle indicates number of paths passing through this point
-  Farthest location reached by a path
-  Size of circle indicates number of paths with this location as their farthest point



**Discussion:**

**What's your experience?**



# **Discussion:**

**Are you affected by  
regulation?**



# Internet Governance: SEEDIG



- Sixth meeting: 22–23 September in Chişinău
  - Governance challenges of an open and decentralised Internet
  - Environment
  - 5G
  - Privacy and data protection
  - Cybercrime
  - Artificial intelligence
- Youth School and Fellowship





# How to Get Involved

# How Can You Get Involved?

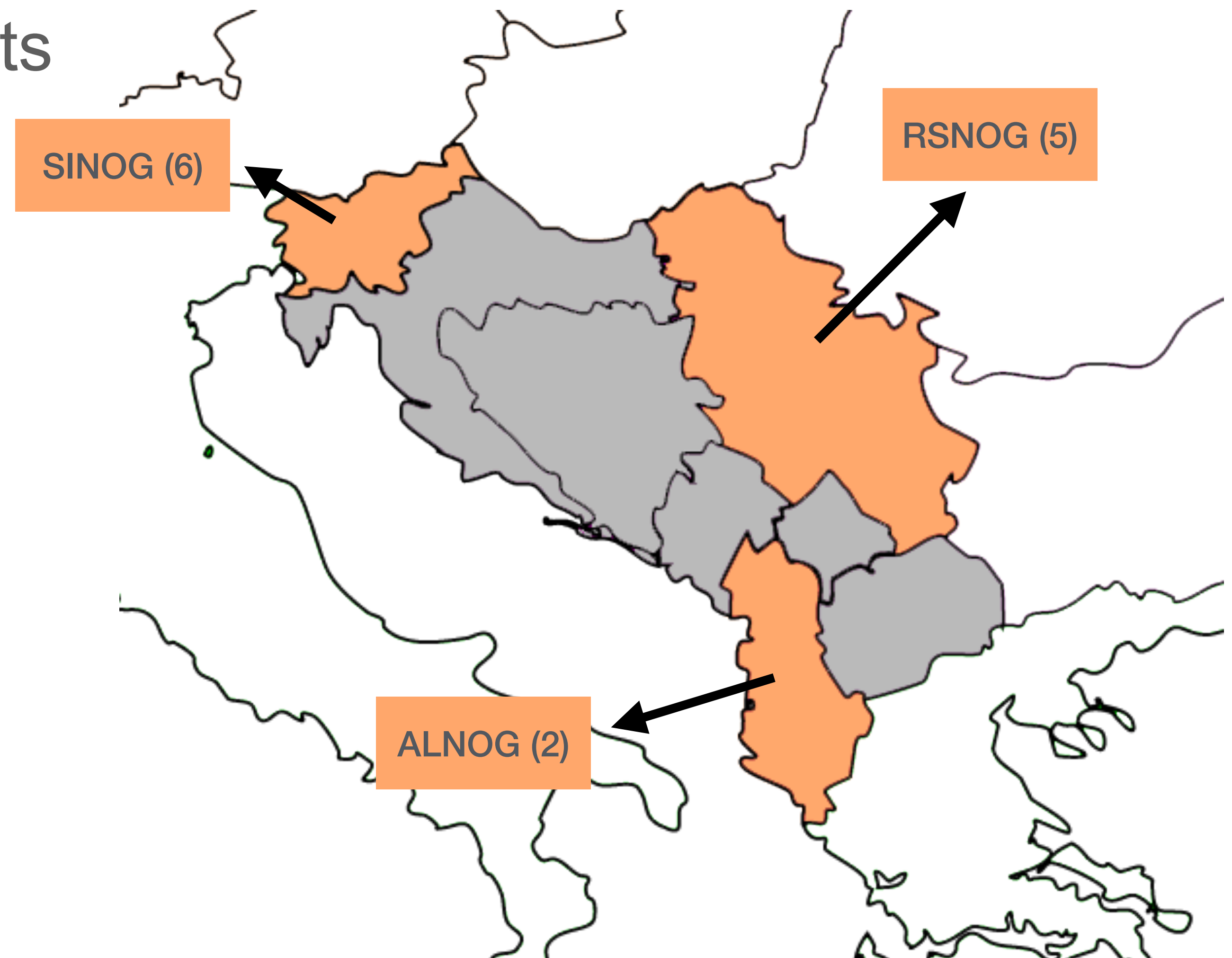


- Mailing list: [see-regional@ripe.net](mailto:see-regional@ripe.net)
- Annual SEE Meetings
- RIPE Meetings twice a year
- In-person training courses and online learning options
  - <https://www.ripe.net/support/training>
- Member Lunches

# Support for NOGs



- Guidance, expertise, contacts
- Attend, speak, fund
- [labs.ripe.net/nogs](https://labs.ripe.net/nogs)





# Resources

- RIPE Atlas: global Internet measurement platform
  - Host a probe!
- RIPEstat: everything about Internet number resources

# Funding

- Fellowships and RACI
  - RIPE, SEE, MENOG and ENOG Meetings
- RIPE NCC Community Projects Fund



# Questions



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