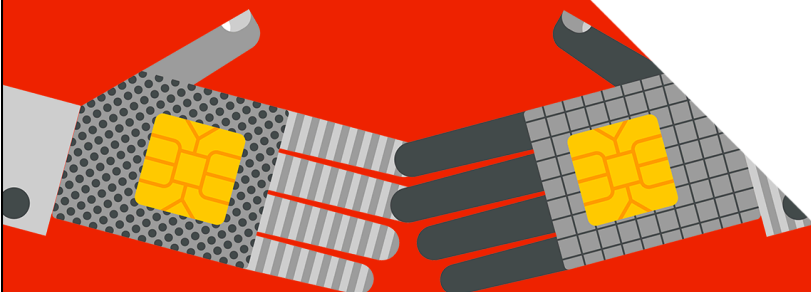


# IPv6: which are the challenges?

Introducing IPv6 in the Portuguese public administration

09 April 2015  
Victor Calçada  
Vodafone Portugal



## IPv6: which are the challenges?

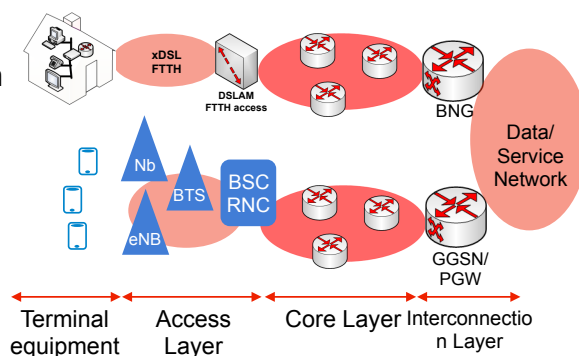
1. Technical challenges
2. Investment and Budget challenges
3. The final challenge (?)



## IPv6: Technical challenges

Technical challenges to deploy IPv6 in a Telecommunications Operator network are:

- IPv6 in terminal equipment: new SW/HW
- Core Layer: new SW/HW
- Interconnection layer: new SW/HW



➔ Deploying IPv6 is a big change in current network architecture

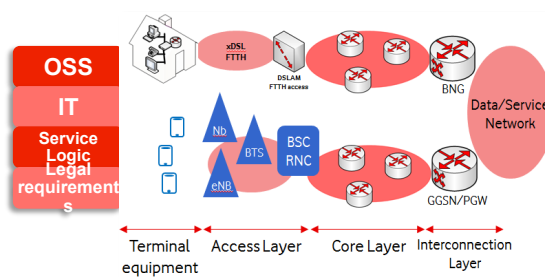
3



## IPv6: Technical challenges

Several other domains need to be aware of IPv6 deployment:

- OSS systems
- IT systems
- Service logic
- Legal requirements



➔ Deploying IPv6 is a big change in current network architecture

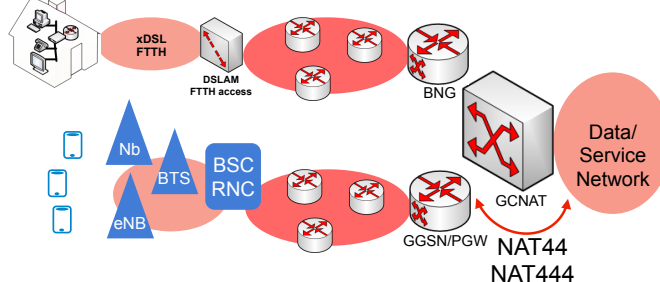
4



## IPv6: Investment/Budget challenges

- ➔ If IPv6 deployment is a big change in current network architecture, are TelCos ready to invest?
- ➔

Which other options do Telcos have?



**Is NAT a long term solution? It minimizes network investment?**

5



## IPv6: Investment/Budget challenges

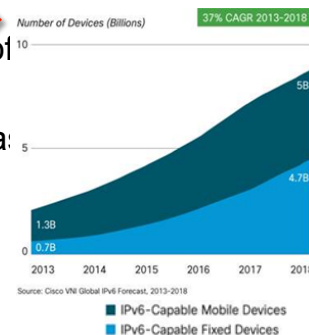
IPv6 implies a big investment in Telco Networks however:

- Is the only technology that support the expected growth of users
- Isn't impacted by the increase of volume or number of users as NAT
- Forecast of IPv6 capable devices shows a big increase

**So, what's missing?  
Where's the big challenge?**

IPv4  
FAST

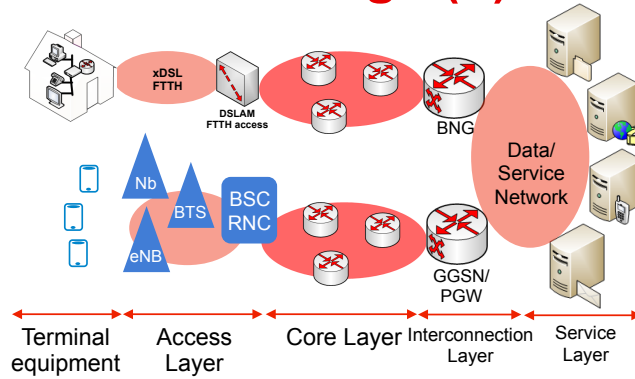
IPv6  
FUTURE



6



## IPv6: the final challenge (?)



**Without applications and services supporting IPv6 we will never have a full end to end solution!**

