



#### IPv6 in Germany





### IPv6 in Germany

**Our Mission Our Basis Our Challenges Our Needs Our Actions Our Implementations Our Next Steps** 

**\*** 

Bundesministerium des Innern

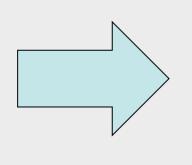
### **Our Mission**

...is to prepare for the growth in Internet usage and for future innovation and maintaining competitiveness

Based on the "Action Plan for the deployment of IPv6 in Europe of the European Commission in 2008

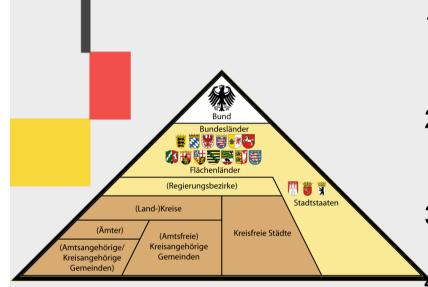
Based on agreement between the government, federal states and municipalities







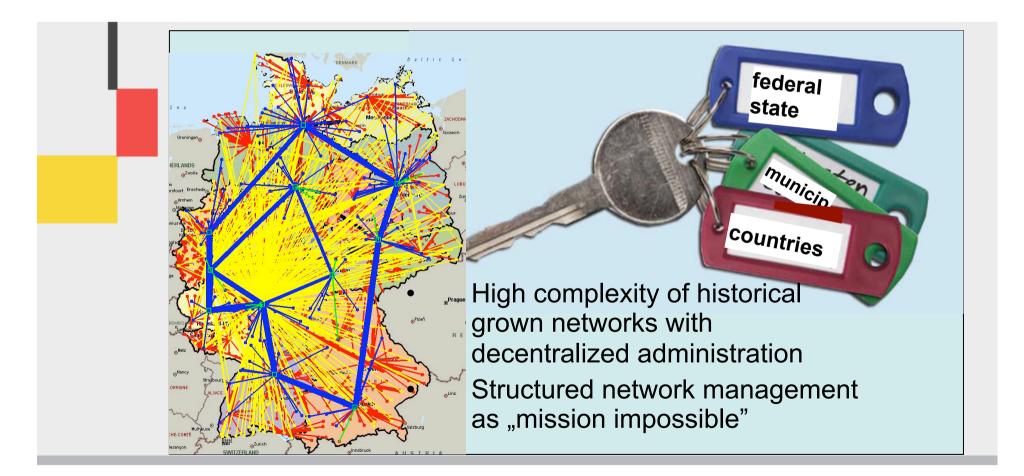
### **Our Basis**



- 1. Consensus within decision boards representing all administration levels to apply for a common IPv6 address space
- RIPE membership / LIR de. government / Assignment of a /26 address space
- Core topic in the final declaration of the 4th German IT summit
  - . Representative Working group
    - Address concept
    - Organization concept
- 5. Formal approval of the planned approach within Ministry of Interior



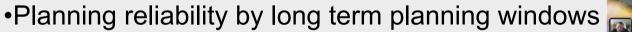
#### **Our Challenges**





### **Our needs**

- •Migration to future-proofed converged IPv6 enabled "Next Generation Networks (NGN)" with high security, high stability and high performance.
- Government communication requires extremely high security architecture and security standards



•High flexibility to react rapidly on political, economical and social developments









# **Our Actions**

Address Concept (final discussion, 5/2010)

- Breakdown of the /26 address space in 64 blocks of size /32
- First assignments to federal states, DOI (including public IT service providers), NdB, Ministry of Defense

Organization Concept (in process, 6/2010)

- Independent administration of the /32 blocks by Sub LIRs
- de.government: coordination / RIPE interface, Policies / sub allocations

Toolset for the Users (started, 12/2010)

- Operation guideline
- Configuration checklists
- Address templates





# **Our Implementations**

Programs were started to modernize the communication infrastructure of the public administration based on IPv6.

DOI: Infrastructure serving federal government, states and municipalities

- IPv4/IPv6 Dual Stack (10/2009)
- Network protection devices –firewalls- (6/2010, test version available)
- Encryption devices- (12/2010, IPv6-only test version available)

NdB: Common network for the federal administration (in planning)





# **Our Next Steps**

- Finalization of address concept and organization concept
- Approval by the german "IT Planning Board"
- Starting IPv6 address distribution
- Starting research project
- Supporting and facilitating IPv6 pilots
- Supporting European IPv6 initiatives





# Thank you for your attention!