



Bundesministerium
des Innern

IPv6 in the public administration of Germany



Constanze Bürger,
Federal Ministry of the Interior
Department Federal IT Infrastructures
and IT Security Management



Our Basis

Our Challenges

Our Needs

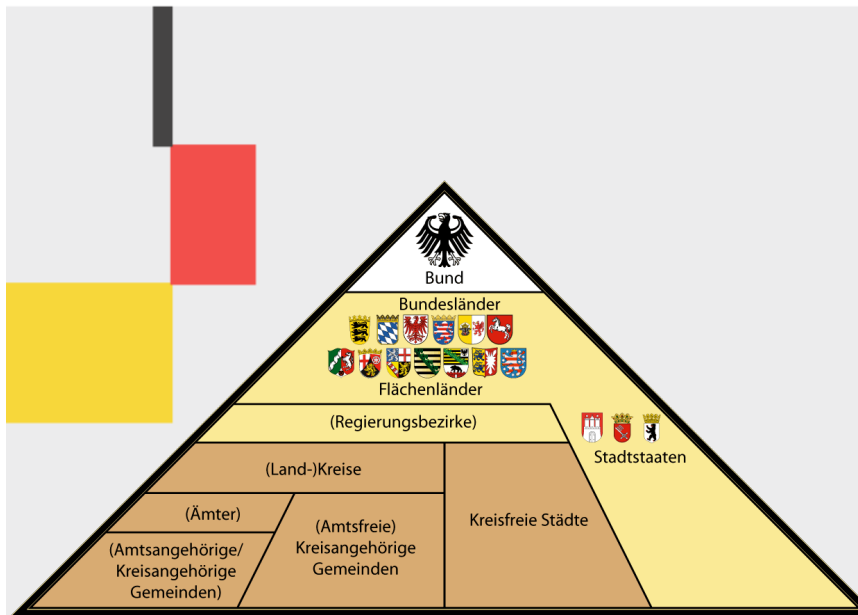
Our Actions

Our Implementations

Our Experience

Our Support

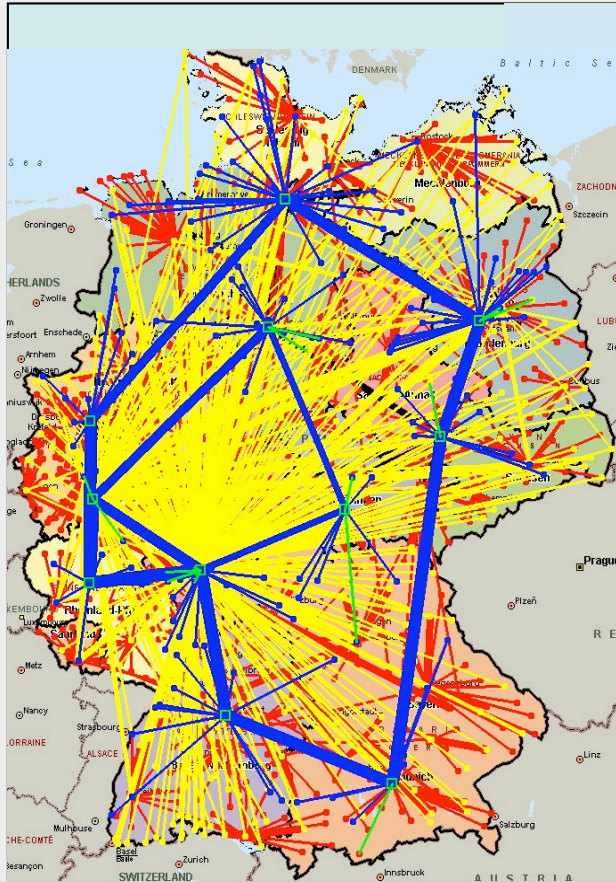
Our Basis



1. Consensus within decision boards representing all administration levels to apply for a common IPv6 address space
2. Prediction of the address need in heterogeneous infrastructures
3. RIPE membership / LIR de. government / Assignment of a /26 address space
4. Topic in the final declaration of the 5th German IT summit
5. IPv6 Working group
 - Address management
 - Organization concept



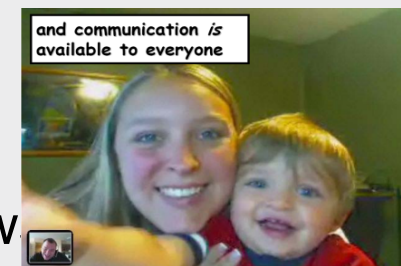
Our Challenges



- High complexity of historically grown networks with decentralized administration
- Structured network management as „mission impossible”

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
- Planning reliability by long term planning window
- High flexibility to react rapidly on political, economical and social developments



Our Actions

Address Concept

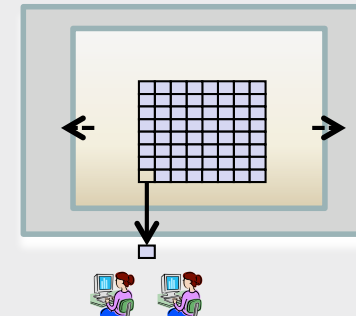
- Breakdown /26 address space in 64 blocks
- First assignments

Organization Concept

- Independent administration by Sub LIRs
- coordinated by de.government

Toolset for the Users

- Operation guideline, Configuration checklists, Address templates
- Guide „Secure IPv6 Network Architecture”
 - Fed. Office for Information Security
 - Guidelines for secure IPv6 network architecture (soon available in English)



Our Experience

IPv6 profile for ICT equipment (RIPE proposal) is necessary
Research and Development Project for German public administration

- IPv6 Profile-NIST analogue gov US
- Requirement specification
- IPv6 specifications / purchasing guideline
we would propose to extend it for Europe later
- Transparent Industries /Users
- Influence to public IT infrastructure framework

Our Cooperation

IGF in September:

- Information about the IPv6 activities in the German public administration
- Discussion about role of governments and industry
- learn from each other

RIPE Meetings

- Important platform to inform, to learn, to bring in the needs

Active contact between Slovenia, Sweden, Netherlands

Stay in touch with EU COM



Our Implementations

Federal level, 2 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

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

Countries and Municipalities

Hamburg starts with VoIP (v6) in spring 2011

Sachsen, Jena, Iserlohn pilot v6 Services in DOI

For your Patience with
Public authorities



Our Support



World IPv6 day

Lorenzo Colitti
lorenzo@google.com

Basic idea

- Major websites **enable IPv6** together for one day
- User perceives a problem with Internet connection
 - Calls ISP
 - Disables IPv6
- Benefits of coordination
 - Content providers share the impact
 - OS vendors have time to work around problems
 - Network operators can be prepared
 - Users can be warned in advance
 - Marketing and media can be involved

http://ripe61.ripe.net/presentations/223-World_IPv6_day.pdf



Bundesministerium
des Innern



**Thank you
for
your attention!**