DNS and Universal Acceptance in the Public Administration of Germany

Berlin, 10/2019
Digitization of the public administration in Germany

- Important topic of this political legislation period
- All layers of the OSI Model are involved
Digitization program

• Until 2022 every public administration service in Germany has to be provided online
• „Joint Portal Network“ bundles the access to several different portals into a single access platform
• IT service providers of the federal government support punycode domains and UTF-8 for unicode characters

First step to grant Universal Acceptance!
Network infrastructures are essential for the public administration.

Strong security and high-availability for all use levels.

Consolidation of networks to

- respond to the threat level
- prevent future attacks
- create transparency and reduce complexity
Universal Acceptance as part of the IT architecture

Federal IT infrastructure supports Universal Acceptance in

- DNS- domain names
- Webservers, Proxy server systems
- Firewalls

Special character domains are hardly used. Domain names of the public administration usually are based on abbreviations. Special character domains are however fully supported by the existing infrastructure.

But not already guaranteed for each municipality or federal state infrastructure.
DNS Issues with strategic relevance

- Digital sovereignty is affected by upcoming DoH
  - Cross-border information leakage
  - Business case DoH data mining?
- Strengthen online reputation of public administration IT services
  - Internal DNS namespaces must have a chain of resolution up to the root zone on the internet
  - DNS namespaces (internal and external) must have a DNSsec signature chain up to the root zone's certificate on the internet
  - Reverse DNS must be set up via the LIR de.government
- Public administrations have to take over responsibility for their own DNS infrastructure
Thank you for your attention.

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