

# **DNSSEC in Bulgaria**

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# Implement DNSSEC now or wait?

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## ■ Pros

- Securing the BG domain
- New DNS service, creating new market for Registrars and operators
- Fits well in the new automated system

## ■ Cons

- Root zone not yet signed.
  - No demand for the technology – slow start.
  - Need for additional efforts to educate the community, stakeholders and users.
- **Decision: Implement DNSSEC immediately to facilitate faster acceptance by industry.**

# Research on DNSSEC deployment and state of current technology

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- Activity since 2002. Many tools developed and tested in lab environment (NLnet Labs, RIPE DISI, CADR others).
- DNSSEC is rarely deployed in the public Internet
- Many TLD DNSSEC initiatives abandoned or postponed
- Only one TLD administrator brave enough to fully deploy DNSSEC (.SE)

# Evaluation of necessary technologies and required resources

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- Technology readily available: BIND9 and NSD
- Available tools for keeping track of signed zones
- Signing relatively small zones does not require expensive equipment
- Scalable signing technology
- Security considerations: protecting sensitive key material

# DNSSEC as standard DNS service

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- Integrate DNSSEC delegation in standard service provided by Registry
- Service providers offer signing/storing of zone data
- Fully integrated in the BG Registry/Registrar automated system

# Time line

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- July 2006: announced DNSSEC deployment plan for BG
- 15 January 2007: BG zone signed and live on Internet
- 2 March 2007: Announced end of experimental and testing period
- Today: over 30 signed and securely delegated zones within BG

# Future plans and events

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- Move the automated registry tools to handle secure signature delegation for BG to production system
- Invite industry, government and other stakeholder to discuss mass deployment of DNSSEC in BG. Event date to be announced
- Provide technology and tools: stand-alone key-management/signing appliance, software tools and documentation
- Build higher-performance platform for signing customer zones.

# Comments

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