DNSSEC in Bulgaria

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Implement DNSSEC now or wait?

**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

- 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

- 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

- 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

- 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

- 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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