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#### **DNSSEC.CZ**

#### **DNSSEC Workshop**

#### Ondrej Filip • ondrej.filip@nic.cz • 25 Jun 2014 • London



#### **DNSSEC.CZ** - history

- April 4, 2008 ENUM (0.2.4.e164.arpa)
- September 2, 2008 .CZ signed
- September 30, 2008 .CZ open for end-user public key registration (KEYSET records)
- July 15, 2010 root zone signed
- NSEC->NSEC3
  - 0.2.4.e164.arpa Jun 2010
  - CZ August 2010
- NSEC3 w/o OPT-OUT (high % of signed)

### **DNSSEC.CZ – Key points**

- Incentives for registrars
- Direct communication with major stakeholders – registrars, ISPs, and Government, major websites
- Open source supporting tools DANE
- Long term DNSSEC related PR/Campaigns
- Technical conferences



# **Incentives for registrars**



- Technical DNSKEY object shared by multiple domains – bulk operations
- Marketing Registrar certification hard to get 5 stars without DNSSEC support
- Financial Co-marketing 50% expenses covered if campaign related to .cz – DNSSEC penetration means higher caps

Registrar	Website	Technologies	Certification
KRAXNET s.r.o.	http://www.xnet.cz	💳 IV <sub>6</sub> 🔛	****
IGNUM, s.r.o.	http://www.domena.cz	IP V6	****
ZONER software, a. s.	http://www.regZone.cz	IP v6	****
Web4U s.r.o.	http://www.spravadomen.cz	💳 🐶 🔛	****
ACTIVE 24, s.r.o.	http://www.active24.cz	• IP v6	****



- Browser DNSSEC TLSA validator browser addon - Firefox, Chrome, IE
- Bogus domain checks ISPs
- DNSSEC HTML widget
- Turris project Secure CPE
- Check http://labs.nic.cz
- Open source





# Campaigns

- Good domain IT Crowd style guy explaining why is important to have a (signed) domain
- Twins strange video played by people looking like some celebrities secure domains
- Internet how to 2 minutes educational spots prime time – major Czech TV, DNSSEC and IPv6



### **Current situation**



- 38% of all Czech domains (433k of 1.1M) growing
- All major registrars (with 90% of market share) support DNSSEC – many sign by default
- Many major ISPs validate 2 of 3 cell phone operators; majority of B2B; major xDSL provider
- Many important sites signed news, banks, ...
- DNSSEC in gov. strategy Digital Czech 2.0

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# **Thank You!**

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