



### **DENIC's First Year in DNSSEC**

- attempts to observe and conclude -

Peter Koch <koch@denic.de>

DNSSEC Panel, Praha, 2012-06-27



DNSSEC testbed started	2010-01
Child DNSKEYS accepted for testbed	2010-03
DNSSEC enabled for DE TLD	2011-05-31
DE DS RR appears in root zone	2011-06-07



## 15,000,000

domains registered in the DE TLD



## 150,000

- domains with data authoritative in the DE zone
- ... instead of delegated
- that's a DENIC special for historic reasons
- these domains benefit from DNSSEC without registrar/registrant action



# 1,500

- domains signed by registrar/registrant (or reseller)
- that is the current demand baseline



## 500

domains signed and key material registered

#### Needles in a haystack (2012-06, log scale!)









#### Signed & registered domains per registrar (2012-05)



#### Advantage: Follower





<http://www.flickr.com/photos/michael-panse-mdl/3707169164/> (CC BY-ND 2.0)



- Customers have indeed changed registrars
  - ... to get their keys registered
  - not yet under DNSSEC operator change issue not yet relevant
- Little to no technical issues
  - however, automation has ist cost
  - ... and installed base is still small!
- No prominent customers, yet
  - maybe except paypal.de, but CDNs need to play nice
- Most customers use KSK/ZSK split
  - some try full automation appliances need attention

#### First Year DNSSEC – First Conclusions

#### Limited uptake

- growth mainly due to enthusiast customers/resellers
- DNSSEC "support" comes in different flavours
- still competing with IPv6 for (engineering) resources
- Moving targets are bad
  - DLV, NTA (negative trust anchors), late "little" changes ...
- Waiting for the killer app
  - DANE hard to sell
  - ... also hard to keep the promise





# ?

## Thanks!

#### koch@denic.de

<http://www.denic.de>