

DNSSEC deployment - progress status in ccTLDs

Domain Names Secondary Market
25th January 2008

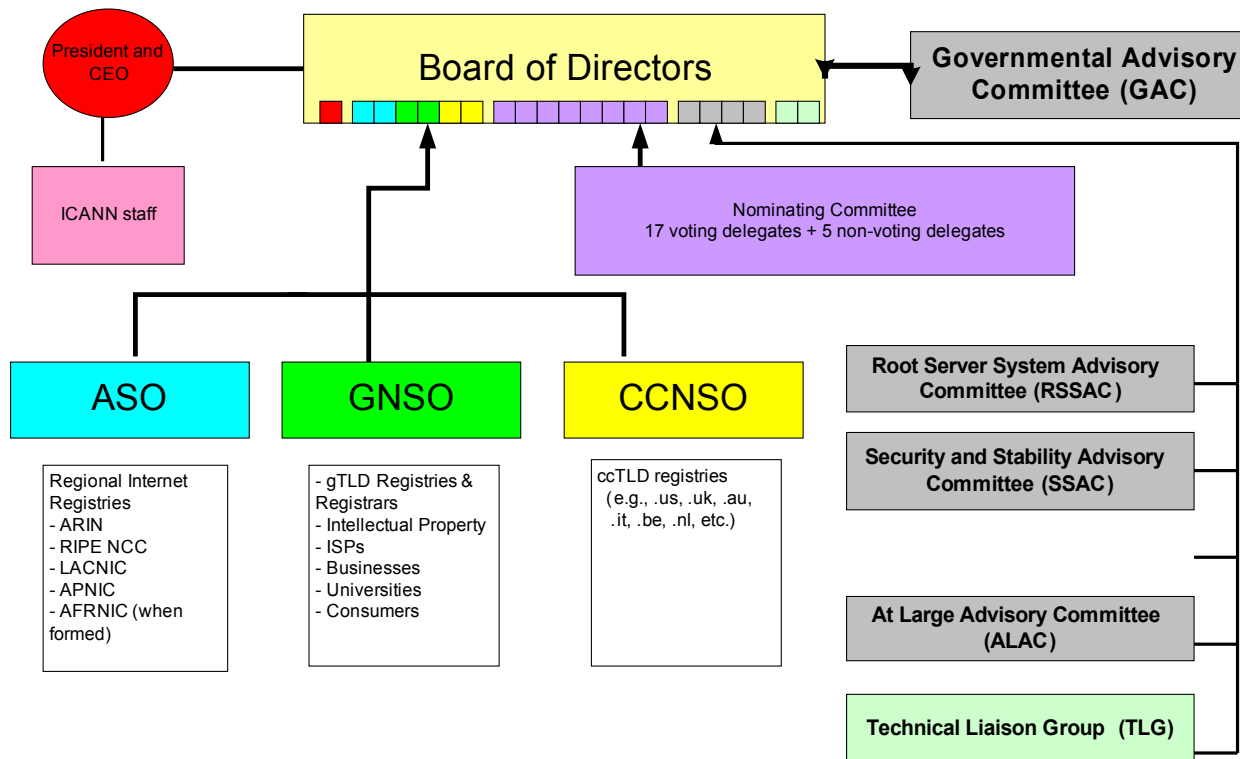
Gabriella Schitteck, ccNSO Secretariat

What is the ccNSO (1)

- **C**ountry **C**ode **N**ames **S**upporting **O**rganisation
- Policy development body for global ccTLD issues within the ICANN structure.
- Responsible for developing and recommending global policies relating to country-code top-level domains to the ICANN Board
- Nurture consensus across the ccNSO's community, coordinating with other ICANN Supporting Organisations, committees, and constituencies under ICANN.
- Currently 71 world-wide members

What is the ccNSO? (2)

ICANN Organisational Chart



ccNSO Members (January 08)

Africa	Asia-Pacific	Europe	Latin America and Caribbean	North America
<p>.bi Burundi .ci Cote d'Ivoire .cm Cameroon .et Ethiopia .ga Gabon .ke Kenya .ma Morocco .mg Madagascar .ml Mali .mr Mauritania .mw Malawi .ng Nigeria .sd Sudan .sn Senegal .tg Togo .ug Uganda</p>	<p>.af Afghanistan .au Australia .cn China .cx Christmas Island .fj Fiji .hk Hongkong .jo Jordan .jp Japan .kr Korea .mv Maldives .nu Niue .nz New Zealand .pw Palau .sa Saudi Arabia .sb Solomon Islands .sg Singapore .th Thailand .tr Turkey .tw Taiwan</p>	<p>.cz Czech Republic .fi Finland .fr France .gi Gibraltar .gp Guadeloupe .ky Cayman Islands .nl Netherlands .no Norway .rs Serbia .sk Slovakia .uk United Kingdom</p>	<p>.ar Argentina .br Brazil .cl Chile .cr Costa Rica .cu Cuba .do Dominican Republic .ec Ecuador .gt Guatemala .gy Guyana .hn Honduras .ht Haiti .jm Jamaica .lc Saint Lucia .mx Mexico .ni Nicaragua .pa Panama .pe Peru .tt Trinidad and Tobago .uy Uruguay .ve Venezuela</p>	<p>.ca Canada .pr Puerto Rico .us United States .vi US Virgin Islands</p> <p>(According to ICANN Regions)</p>

Background

- Survey conducted in September & October 2007
- Initiated after request from ccNSO Council

Background

- 61 replies received

Africa: 18

Asia-Pacific: 19

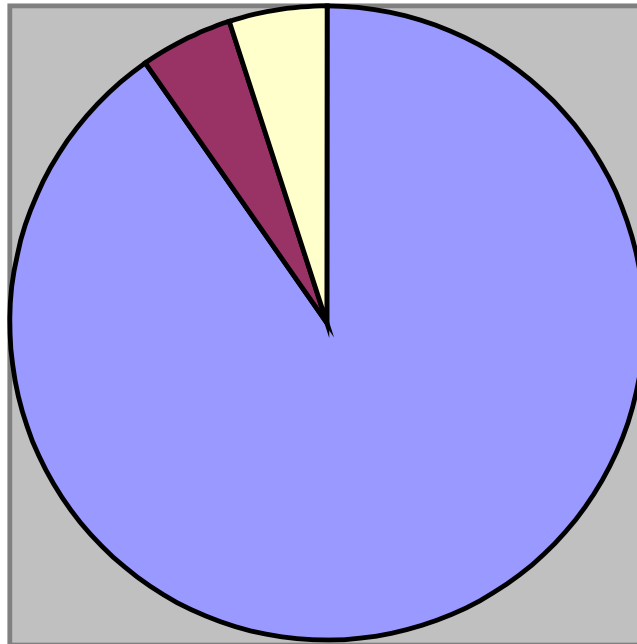
Europe: 12

Latin America: 8

North America: 4

(following ICANN Regions)

Do you know what DNSSEC is?

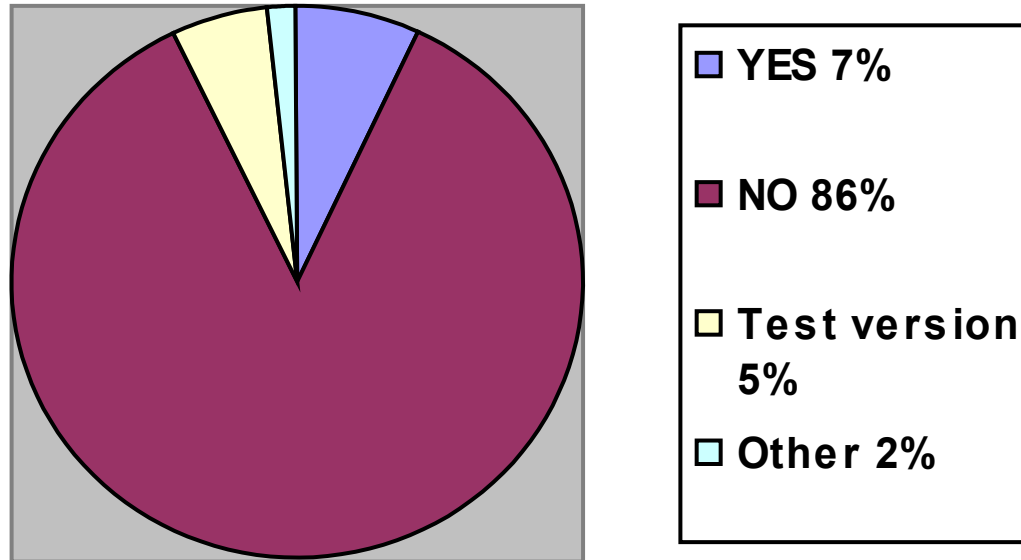


■ YES 90%

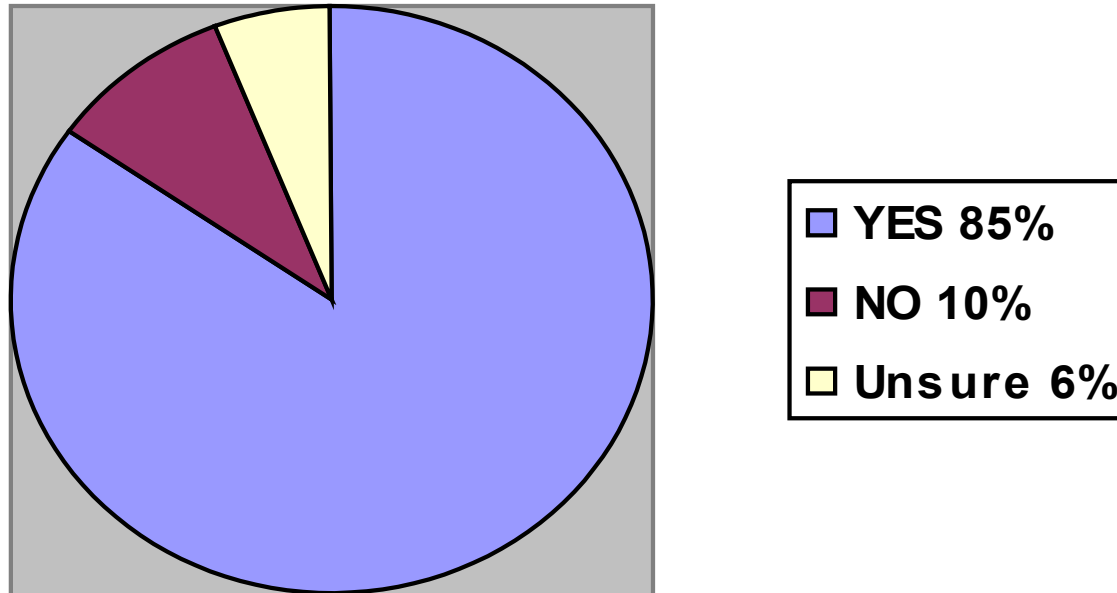
■ NO 5%

■ I know what it is, but don't know how it works 5%

Has your registry implemented DNSSEC?

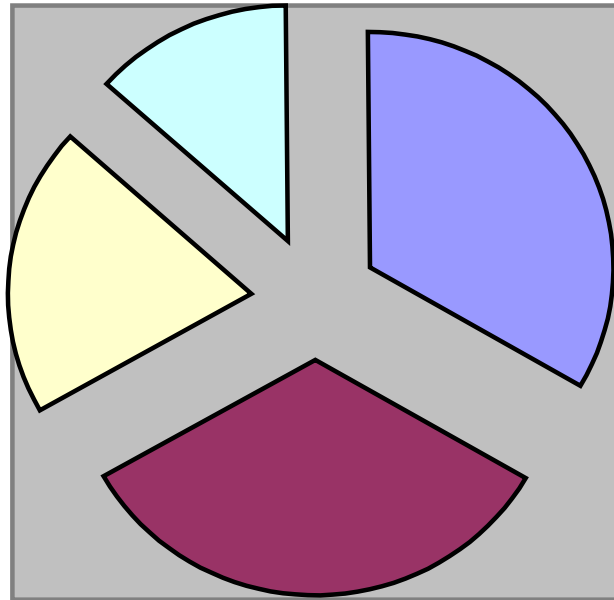


If you have not implemented DNSSEC, do you plan to?



If you have not, or do not intend to implement DNSSEC in the next three years, please briefly explain why you do not intend to do so:

Most frequently mentioned reasons:



- Lack of resources
- Waiting for DNSSEC to mature
- Other projects have higher priority
- Root Zone not signed

If you have implemented DNSSEC, please briefly describe the technical environment you use:

- Mostly: Own developed systems to help signing their zones, often using a combination of known software applications (BIND and/or NSD) on UNIX compatible platforms.
- Spectrum from Fully manual signing to Hardware Signing Modules

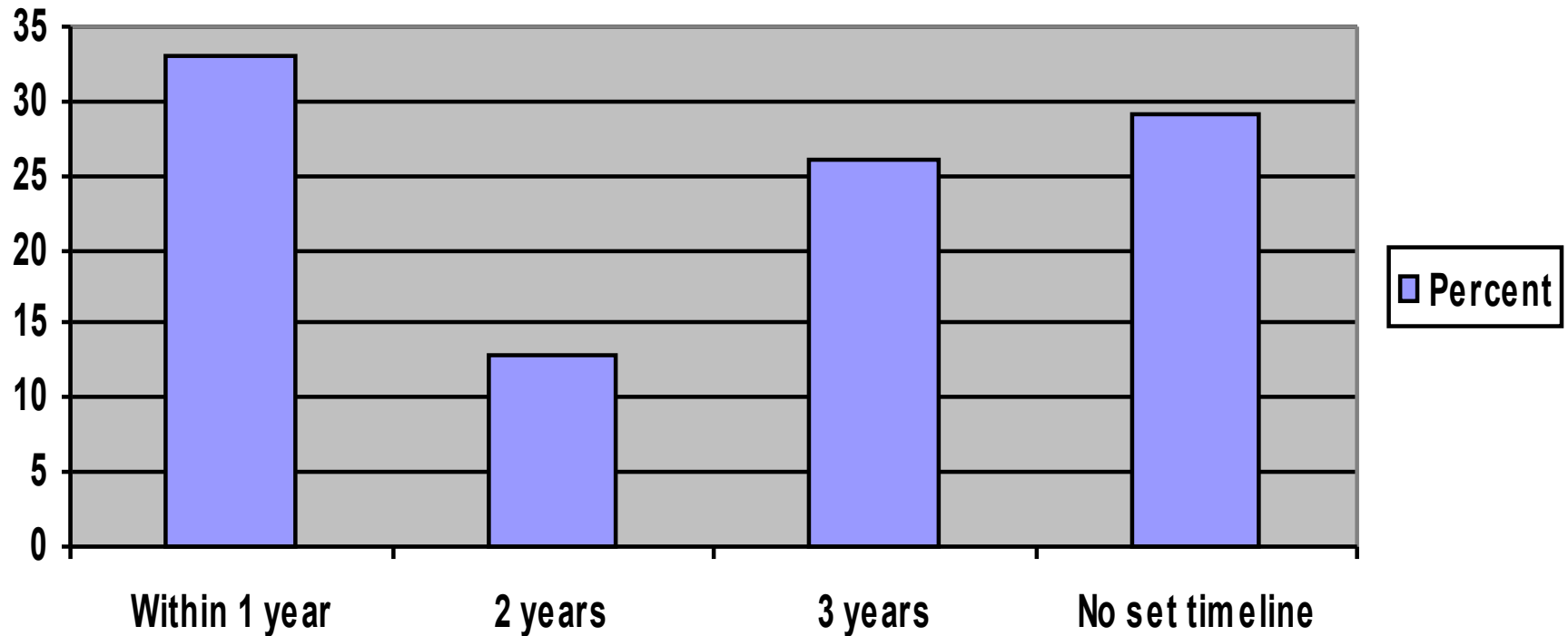
If you have implemented DNSSEC, please briefly describe your experience:

- Little to no adoption of DNSSEC by customers, either in production or in testing.

Possible factors:

- Limited end-user application support
 - Tool-chain immature and limited.
-
- Zone walking issue
 - Key management procedures crucial and need careful thought.
 - Much effort required to train staff and implement appropriate systems to properly support the technology.

If you are planning to implement DNSSEC, what is the planned timeline?



If you are planning to implement DNSSEC, please briefly describe the technical environment you use:

- Many: Not yet decided
- Most mentioned operating system/software: BIND, Linux

Please describe how strategically important you consider DNSSEC to be:

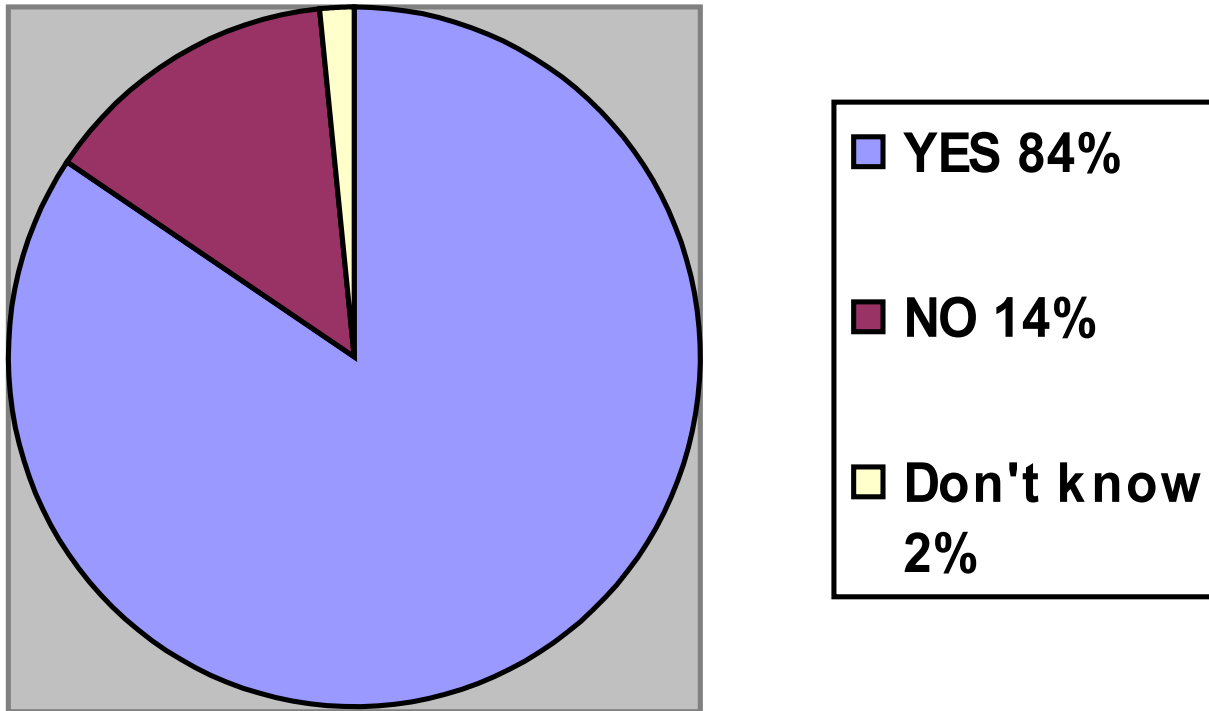
Driver/Goals:

- Most mentioned: Improve DNS by ensuring the integrity of data transmission.
- Expectations that the technology can improve business confidence in the Internet
- Help protecting against fraudulent use of the Internet.

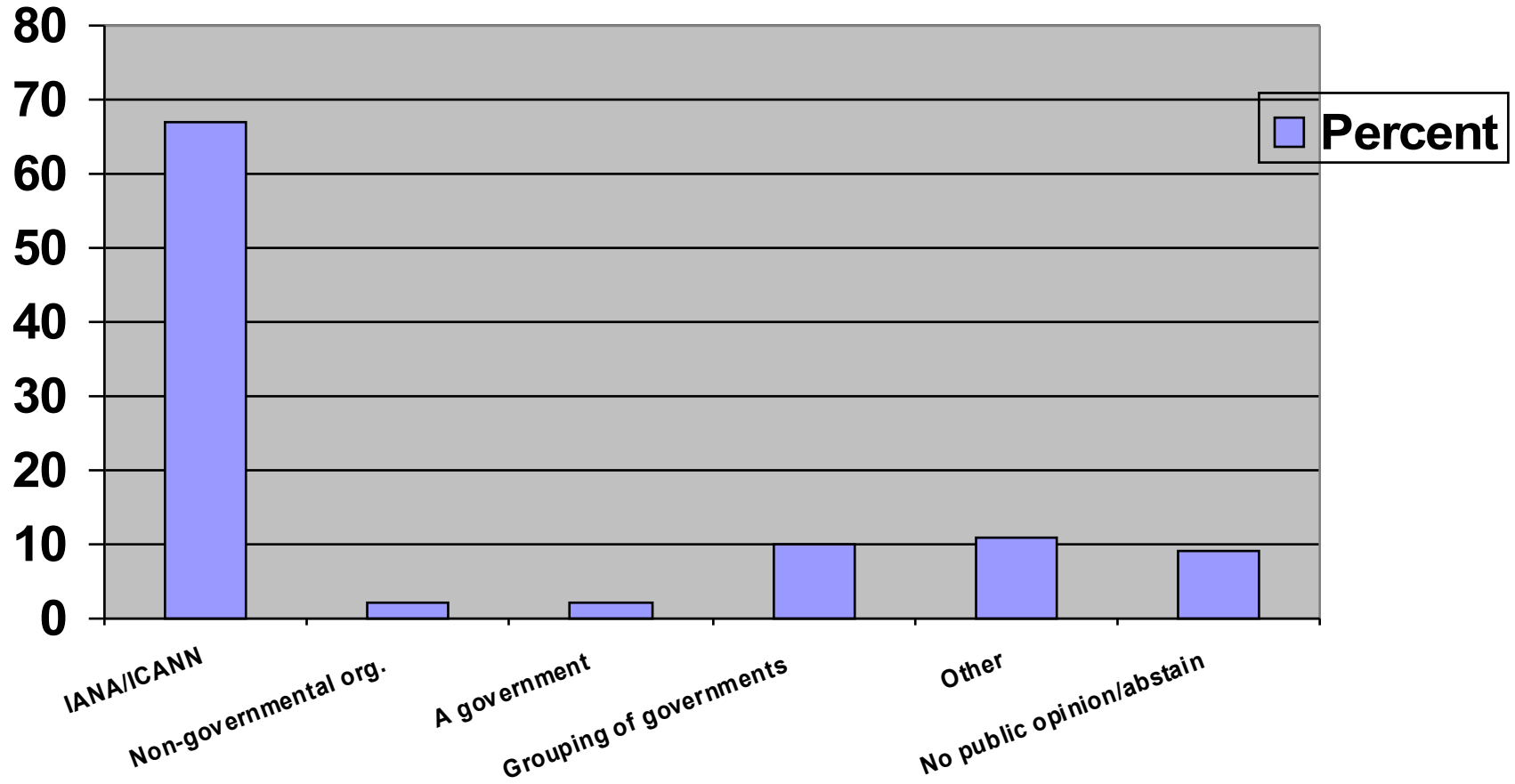
Obstacles:

- Root not signed
- Complexity of the technology – particularly for the end user
- Technology may overly complicate registry-registrar relationships

Is it important to you that the DNS root zone is signed?



Who should be the signer of the DNS root zone?



Finally...

- Thank you .se!
- Survey results ccnso.icann.org/surveys/
- ccnsosecretariat@icann.org