.SE-DNSSEC

Plan for the Commercial Launch

Staffan.Hagnell@iis.se
Soft launch of service
Sept 2005

Signing of the .SE-zone
Sept 2005

Start of project
2001

Commercial Launch of .SE-DNSSEC
2006
Activities during the soft launch

• Marketing
  – Analyze the value chain for DNSSEC
  – Market research
  – Education of DNS-operators
  – Persuade ISP to provide resolvers with DNSSEC
  – Persuade Registrars/DNS-operators to provide a DNSSEC-service

• Administration
  – Establish new routines, e.g. billing
  – Establish a DPS, DNSSEC Policy and practice Statement
  – Special agreements for DNSSEC
  – Monitoring for the DNSSEC service
  – Education of our staff
Does anybody want DNSSEC?

• Market research November 2006
  – Sent to 1 406 randomly chosen .SE domain name holders, 259 answers (20%).

• Questions
  – Is there an awareness of that DNS-data can be modified?
  – How interesting is .SE’s coming DNSSEC-Service?
  – What is the willingness to pay for the service?
  – What is the need to get help with the DNSSEC administration?
How aware are you and your company about the threat that your domain name can be modified and causing your traffic being redirected to an other domain?

- Not at all: 17%
- Not particularly: 41%
- Not particularly: 259 answers
- Quite familiar: 32%
- Very familiar: 10%
Have you any experience of having your e-mail or web being redirected to a false recipient?

- Yes 5%
- No 94%
- No answer 1%

259 answers
.SE is planning the Commercial Launch of .SE-DNSSEC. How interesting do you find that for you/your company?

259 answers

- Quite 51%
- Not particularly 29%
- Very 14%
- Not at all 6%

Staffan Hagnell | ICANN 2006-12-06 | #
How do you consider a yearly charge of €50 for this service?

- Very high: 22%
- Rather high: 54%
- Quite low: 22%
- Very low: 2%

259 answers

The comments given indicated €20-€30 as a reasonable price!
What is your need to get help with the DNSSEC administration (key handling, zone signing etc) from Name Server Operators, Registrars and/or .SE?

- Quite important: 37%
- Very important: 14%
- Not at all, we can do it our self: 15%
- Not particularly important: 32%
- No answer: 2%

259 answers
How interested are you to be a test pilot for .SE-DNSSEC during a year?

- Not at all: 23%
- Not particularly: 32%
- Quite: 24%
- Very: 19%
- No answer: 2%

259 answers
The value chain for DNSSEC

- Important to analyze all parts of the value chain
  - Who are the players in the local market?
  - Who much time do they need to provide their service?
  - Who pays them?

Registrants \[\rightarrow\] Registrars \[\leftrightarrow\] .TLD registry \[\rightarrow\] Resolve \[\leftarrow\] Internet Users

Internet Users

Registrars

Registrants

ICANN/IANA

DNS operators

Applications

Resolve
What service are the different parties supposed to provide?

- *It would be helpful to have service definitions!*
What is .SE-DNSSEC

• .SE’s DNSSEC service
  – An add on service to .SE:s domain name service, where .SE gives the Registrants the opportunity to publish their DS RR in the .SE-zone. The purpose of the service is to make Internets DNSSEC service possible.

• .SE-DNSSEC is the name of .SE’s DNSSEC-service

• “Internets DNSSEC service”
  – The Domain Name System (DNS) security extensions provide origin authentication and integrity assurance services for DNS data, including mechanisms for authenticated denial of existence of DNS data. [RFC 4033]
The same contacts objects as for the basic service shall be used

<table>
<thead>
<tr>
<th>Operations</th>
<th>Authoritative contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order the service .SE-DNSSEC</td>
<td>Domain name holder</td>
</tr>
<tr>
<td>Cancellation of .SE-DNSSEC</td>
<td>Domain name holder</td>
</tr>
<tr>
<td>Administration of DS RR in the .SE-zon</td>
<td>Tech-C</td>
</tr>
<tr>
<td>Billing</td>
<td>Billing-C</td>
</tr>
<tr>
<td>Status and statistics</td>
<td>All contacts for the domain name</td>
</tr>
</tbody>
</table>
Pricing

• We have decided to put a price tag to .SE-DNSSEC because
  – DNSSEC should be a deliberate choices by the Registrant
  – The Registrars should be able to have a margin to finance their services
  – We would like to be able to steer the growth and customer uptake. The price is good steering mechanism!
  – The pilot customers are not assume to be price sensitive
  – The pricing ensures an emotional connection to the importance of the service and its quality
## New tasks for the value chain

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registrants</td>
<td>Responsible to order and cancel the add on service .SE-DNSSEC.</td>
</tr>
<tr>
<td>Registrars</td>
<td>Selling of .SE-DNSSEC</td>
</tr>
<tr>
<td>DNS-operator</td>
<td>Handles the administration of the Registrants DNSKEY’s and signing its zone.</td>
</tr>
<tr>
<td>Resolver operator</td>
<td>Validate DNS-data</td>
</tr>
<tr>
<td>Application</td>
<td>Validate DNS-data</td>
</tr>
<tr>
<td>Internet user</td>
<td>Validate DNS-data</td>
</tr>
</tbody>
</table>

### Diagram

- Registrants
- Registrars
- ICANN/IANA
- TLD registry
- DNS operators
- Applications
- Resolver
- Internet Users
The users of DNSSEC?

The domain name tree

- Root-zone
- TLD-zone
- Registrants domain

User

Resolver

User Application

Server Applications

- As a first step
  - Make the ISP’s resolvrar validate the DNS-data!
- Later steps
  - Applications and the end user visibility
Prerequisite for .SE-DNSSEC

1. That some one actually validate DNS-data
2. That Registrants can get DNSSEC administration from its DNS-operator

- How to get the market moving?
How to stimulate DNS-operator?

- On going work
- Possibilities, we will gladly help the DNS-operators with
  - some sort of a common “DNS-operator tool” for DNSSEC
    - CADR?
    - Zonesigner, Rollerd, Trustman?
    - ...
  - education
  - other support needed
Summary

• There is a large interest for DNSSEC in Sweden!
• .SE-DNSSEC have a momentum and we shall increase it
  – Finding Pilot customers
  – Stimulating resolver operators
  – Stimulation registrars/DNS-operators

• We don’t have a complete roadmap
  – But we are now trying our way
  – We be live that what is right in Sweden is not necessary right elsewhere and vice versa (local flavor)

• It is now important to discuss DNSSEC as a service!