RU-CENTER DNSSEC Experience and Expectations
(Registrar Point of View)

Vasily Dolmatov - Head of R&D
ICANN 47 DNSSEC Workshop, Durban, 17 July 2013

A Leading Russian Domain Name Registrar

RU-CENTER DNSSEC Experience and Expectations
(Registrar Point of View)
Current DNS System

- Domain Registrant
- Hosting Operator
- DNS Operator
- Registrars
- TLDs
- .root
- Registrars
- Registrars
- Registrars
- Registrars
- Registrars
DNSSEC Participants

- **Domain Registrar**
- **DNS Operator**
- **Hosting Operator**
- **Registrar RU-CENTER**
- **TLDs**
- **.root**
What We See
Part 1 - DNS Operators

Different set of used algorithms  NOT A PROBLEM
Different number of keys  NOT A PROBLEM
Different key rollover procedures  NOT A PROBLEM
Lack of DNSSEC operation understanding  IS A PROBLEM
## What We See
### Part 2 - Registries

<table>
<thead>
<tr>
<th>Different protocols (EPP parameters, web interfaces, etc.)</th>
<th>IS A PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different set of accepted algorithms</td>
<td>IS A PROBLEM</td>
</tr>
<tr>
<td>Different number of keys</td>
<td>NOT A PROBLEM</td>
</tr>
<tr>
<td>Different rules (DS or DS+DNSKEY)</td>
<td>IS A PROBLEM</td>
</tr>
<tr>
<td>Different key rollover procedures</td>
<td>NOT A PROBLEM</td>
</tr>
</tbody>
</table>
What We Feel
Part 3 - Registrar to Registry

- Developing and testing own subset of protocols for every registry
  *(soon there will be hundreds of them)*

- Implementing different lifecycles and rollover procedures for every registry
  *(hundreds)*

- Different sets of algorithms and different rules
  *(DS or DS+DNSKEY)*
Clients do not understand DNSSEC functionality and processes
(tons of questions to support, lots of configuring errors)

Problems if a DNS operator is not in the business chain

Registrar is considered responsible by the clients for all unclear DNSSEC procedures
What We Need
Part 1 - Registrar to Registry

- **UNIFICATION**
  identical set of protocols, algorithms and DNSSEC lifecycles for all registries (new RA seems to address this), possibility to connect to new registries quickly without creating unique interface modules for every new registry

- **COMMUNICATION MECHANISMS**
  between registry and registrars better than “periodically consult registry website”
What We Need
Part 2 - Registrar to Clients

- **EDUCATIONAL MATERIALS FOR CLIENTS**
  describing DNSSEC and its usage in simple words (not RFC-style)

- **RECOMMENDED PRACTICES FOR END USER DNS OPERATORS**
  for implementing DNSSEC, performing key rollovers, etc.

- Recommendation to
  **PUT DNS OPERATOR IN BUSINESS CHAIN**
Any questions?

Thank you!

v.dolmatov@hostcomm.ru