Starting DNSSec deployment for .RU

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DNSSec testbed

- We started work on DNSSec project at the end of 2009

- Testbed started at Febrary 2010

- We are now at first stage of deployment with 2 major goals:

  1. Check for DNSSec availability at users DNS.

  2. Compare different DNSSec products

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Are users ready for DNSSec?

Methodology of test based on RFC4035 "A security-aware name server MUST support the EDNS0"

1. Check resolvers for EDNS0 support (message size extension, MUST support a message size of at least 1220 octets, and SHOULD support a message size of 4000 octets) analyzing requests logs for our current gTLD domains for .RU and .SU

2. Use IPGeoBase for binding IP addresses to ISP/AS/Russian region.

3. We don't want to point out, that servers without EDNS0 queries doesn't support it. We want to say, that at the time of testbed, they doesn't send "long" queries to us, that we suppose as 'not supported DNSSec now'

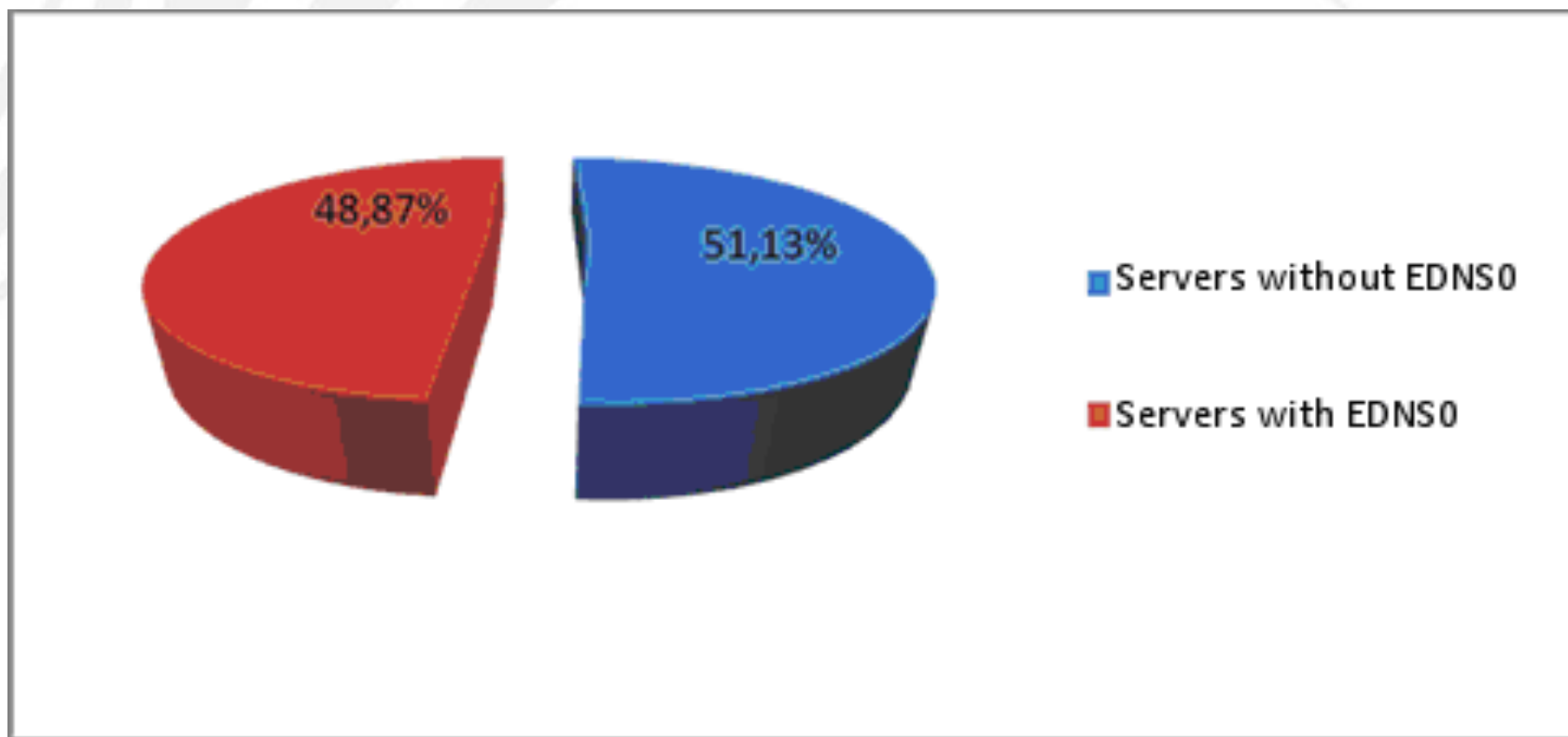*DNSSec Workshop,Brussels, Belgium, 23 June 2010*

Are users ready for DNSSec?

Number of DNS resolvers in .RU, using EDNS0

- Servers without EDNS0 — 51,13%
- Servers with EDNS0 — 48,87%

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Are users ready for DNSSec?

Number of DNS queries with EDNS0 for .RU and .SU gTLD
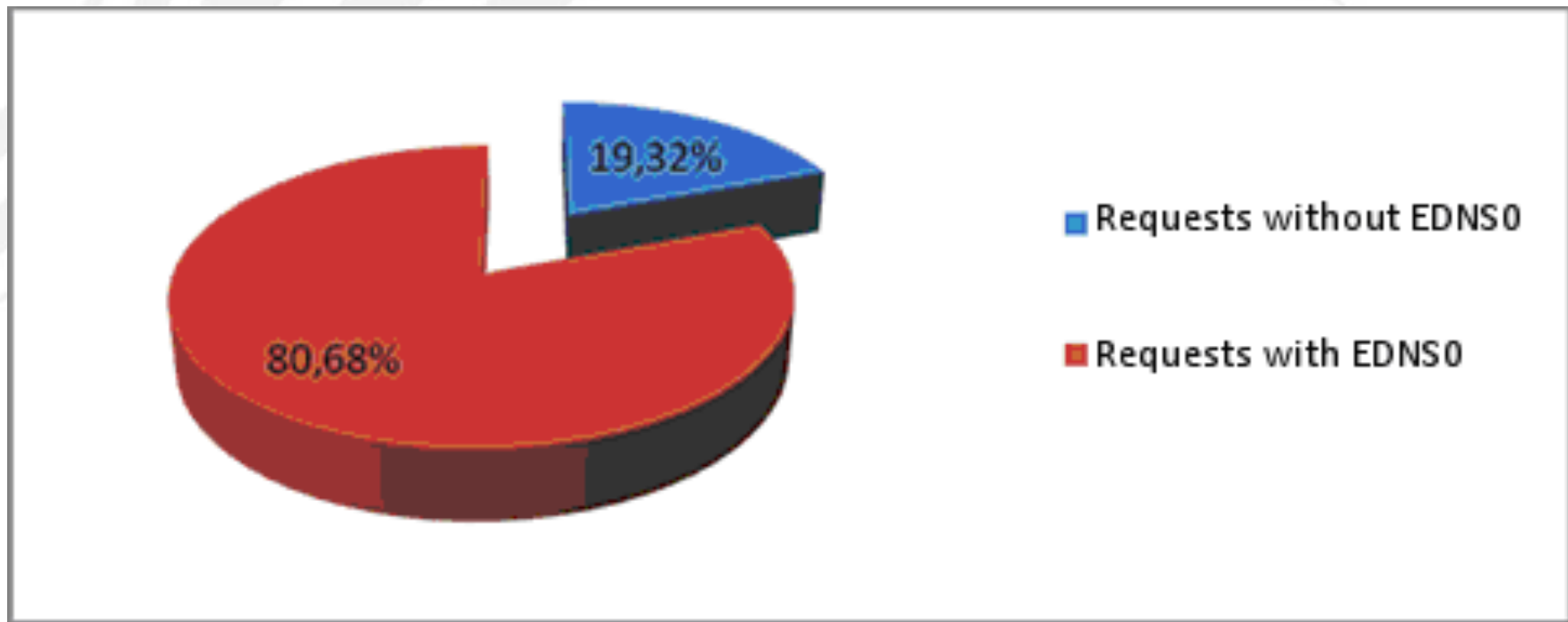
19,32%

80,68%

■ Requests without EDNS0

■ Requests with EDNS0

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Stage 1 testbed

1. Build own testbed for full experiments

3. Analyze DNSSec software

- BIND DNSSec (ISC)

- AlfaDNSSEC (RU-CERT Development)

- OpenDNSSec

- DNSSec from NLnet Labs

3. Check and select zone sign algorithm

- GOST and RSA

4. Look for infrastructure changes requirements for distributed DNS platform.

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Questions?

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