DNSSEC Deployment:

NIC Senegal Challenges

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Agenda Outline

- NIC Senegal Registry

- NIC Senegal Experience on DNSSEC

- DNSSEC Considerations

- Challenges

- Goals

NIC Senegal Registry

- .sn ccTLD is managed by NIC Senegal which depends on the University Cheikh Anta DIOP of Dakar

- 3 162 domains names registered in 0ctober 2011

- 2 732 at first level and 430 at second level

  - .edu.sn: 227   .art.sn:58

  - .org.sn:21   .com.sn:119

  - .univ.sn:5

NIC Senegal Registry

- About 10 registrars:

  - Sonatel Multimedia : 443 domains

  - Kheweul.com : 395 domains

  - Verisign/Melbournes : 196

  - OVH : 156

- 5 secondaries (IRD, RIPE NCC, SONATEL, UCAD, NIC FR)

- .sn is secondary of .ml and .gq

NIC Senegal Experience on DNSSEC

- NIC Senegal held its first DNSSEC tutorial in collaboration with NSRC in October 20-22 (Friday-Sunday) 2006

- 10 Participants from NIC SENEGAL, UCAD, BCEAO, ADIE and SONATEL

- Instructors:

    Alain Aina and Peter Koch

- More details at

https://nsrc.org/workshops/2006/dnssec-dakar/

NIC Senegal Experience on DNSSEC

New training session: **NIC Senegal/NSRC/ICANN** DNSSEC hands on workshop during this ICANN meeting 23-25 October 2011

- Instructors:

    Phil Regnauld, Joe Abley and Alain Aina

- 14 participants from   ML, TZ, GA, .SN (SONATEL, ADIE, NIC Senegal)

- More details at:

- http://nsrc.org/workshops/2011/dakar-dnssec

DNSSEC Considerations

Technical: Training network engineers

Learning many new concepts: Keys, ZSK, KSK

- Key management : rollover, security

- Key size,Key storage

- Chain of trust: what impact in name resolution?

- TSIG, NSEC, NSEC3, …

Policy:

Documentation (DPS), Communication, responsabilities

Challenges

- Employee retention

- Dedicated employees

- Politics: Things move slowly in our multi-stakeholder model we set up since 2008

- Have an operational ccTLD, even if we use DNS only

Goals

- Deploy DNSSEC test bed at the end of 2011

- First draft of the DPS in early 2012

- Communication plan to end users and registrars to help them improve processes and practices, by the end 2012:

  DNSSEC does not eliminate phishing and spams, but DNSSEC main advantage is to help prove authenticity and data integrity of DNS DATA

  Sign .sn planned late June 2012

THANK YOU FOR YOUR ATTENTION

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