

# Building the DNSSEC Deployment Road Map

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# Overview: Motivation

- DNSSEC specification “done”
- Discussion of deployment less formal and less well documented than spec
- Operational considerations have been discussed– less mature, less documented
- Tying it together
- ICANN SSAC looked at this, decided it was too big and needed to be new effort

# Objectives

- Spec is necessary but not sufficient to deployment. (Obvious. Often forgotten.)
- What hurdles? What interdependencies?
- We want to bring the issues to the surface, so we're attempting to define:
  - Roadmap or lifecycle model
  - Measuring progress: how do we know when we've succeeded?

# Deployment Steps

(rough cut)

- **Design & Specification**
- **Implementation**
- **Product**
- **Education (Marketing)**
- **Procurement and Installation**
- **Training**
- **Operational Procedures**
- **Error and Incident Handling**

# Phases

- Empty
- Isolated – a few signed zones
- Sparse – many signed zones but still rare
- Dense – many signed zones
- Complete – (virtually) all zones signed

# Meeting: Expected Output

- Raise awareness and support from key people and organizations
  - Increased clarity on existing topics
  - Identification of new topics
  - Formation of small groups to focus attention on these topics
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- Rough Cut Road Map

# Some Specific Topics

- Key Management Procedures and Tools
  - Special emphasis on the root key and root zone
- Trust anchors: creation, promulgation
- End system tools and procedures
- Training
- Privacy considerations (zone walking)

# Talks

- Overview: body parts of DNSSEC
- Sequencing, dependencies, chicken/egg
- View From the Root
- ccTLD Registry Impact, Registrar view
- Key Management, special emphasis on root
- Last hop: end systems
- Operational Deployment
- Root key mgmt & distribution, IANA view



# Conclusions(?)

- Haven't laid the privacy issue to rest yet
  - Zone walking via NSEC
- Server side looks pretty good
  - Some question re very large zones
- End systems will be the biggest headache
  - Getting code
  - Local policies
  - Treatment of failures

# More Conclusions(?)

- Lots of operational details to work out
  - Key distribution and roll over schemes
  - Time to live
- Training material, policy advice is crucial
  - Vast majority of operators and users won't have an independent sense of what policies to adopt.

# Next Steps

- Parallel meeting in San Francisco May 23
- Formation of steering group to build, maintain road map
- Road map
  - Sequence of steps
  - Identification of risks
  - Milestones and measures of progress

<http://www.sdl.sri.com/other/dnssec>