Pre-Delegation Testing

Documentation DPS Test Cases

Version **G**

File name: PDT_Documentation_TC_DPS.docx
Last saved: 2014-10-10

Document control

Document information and security

Made by	Responsible for fact	Responsible for document
Björn Sjöholm	Björn Sjöholm	Björn Sjöholm

Security class	File name
External	PDT_Documentation_TC_DPS.docx

Revisions

Date	Version	Name	Description
2013-02-05	PA1	Björn Sjöholm	Initial document
2013-02-08	PA2	Rickard Bellgrim	Review text
2013-02-11	PA3	Lennart Bonnevier	Review text
2013-03-01	PA4	Rickard Bellgrim	"key handling" to "key management" "key changes" to "key rollovers" "DNSSEC Policy Statement" to "DNSSEC Practice Statement" "KSK/ZSK keys" to "cryptographic keys"
2013-03-26	PA5	Björn Sjöholm	DocDPS05 Details added.
2013-04-08	B	Staffan Hagnell	Delivery D2 for production
2013-05-03	C	Mats Dufberg	Released
2013-05-15	PD1	Lennart Beckman	Test cases consolidated. New test cases are DocDPS01 (structure) and DocDPS02 (content)
2013-05-23	D	Lennart Beckman	Released
2013-06-12	PE1	Lennart Beckman	PASS/FAIL criteria added
2013-06-17	PE2	Lennart Beckman	Test case titles added. References to gTLD Application removed.
2013-06-25	E	Lennart Beckman	Release
2013-07-04	F	A. Thulin	ICANN modification made
2014-10-10	G	Alexandra Adelöf, Mats Dufberg	'Section 8 – Legal Matters' has been added as step 4 e. – Section 8 must include information about jurisdiction. Released.

LIST OF CONTENTS

1.   Introduction

1.1   Scope

The Pre-Delegation Testing Provider will test documents regarding DPS and verify that the requirements are fulfilled.

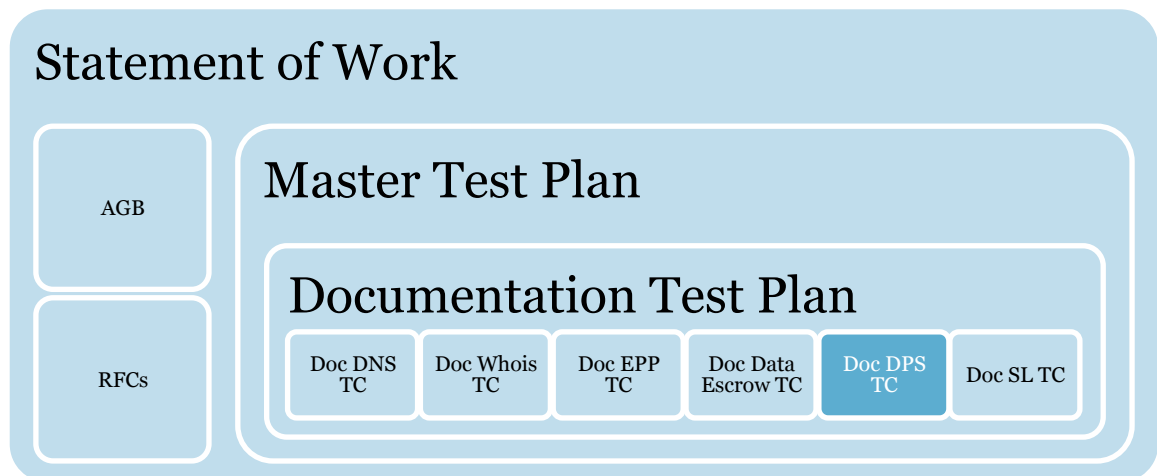## 1.2   References

1.2.1   External

- IEEE 829-2008
- ICANN gTLD Applicant Guidebook, Version 2012-06-04
- IETF A Framework for DNSSEC Policies and DNSSEC Practice Statements, RFC 6841

1.2.2   Internal

- Pre-Delegation Testing, Statement of Work
- Pre-Delegation Testing, Master Test Plan
- Pre-Delegation Testing, Document Test Plan

1.2.3   Document Hierarchy

1.3   Context

N/A

1.4   Notation for description

Each test case for the Documentation DPS is described in its own chapter. The test procedures are described directly in the test case.

2. Document DPS 01, RFC 6841 Structure

2.1 Test case identifier

DocDPS01   RFC 6841 Structure

2.2 Objective

The test verifies that the structure of the DNSSEC Practice Statement (DPS) is compliant with RFC 6841.

2.3 Inputs

The following information will be needed as input for this test case:

Id	Description	Type
gTLDDPS	The Applicant's DNSSEC Practice Statement	Document

2.4 Outcome(s)

The documents MUST include the required information.

2.5 Environmental needs

N/A

2.6 Special procedural requirements

Suspend test if applicant documentation is missing or incomplete for most parts.

2.7 Intercase dependencies

This test has no intercase dependencies.

2.8 Ordered description of steps to be taken to execute the test case

1. Identify the DNSSEC Practice Statement, DPS. Expected document is: document gTLDDPS.
2. Verify that the DPS essentially follows the structure described in the IETF A Framework for DNSSEC Policies and DNSSEC Practice Statements, RFC 6841.
3. Verify that the DPS essentially includes the 8 main sections and all applicable second level subsections of these, stated in RFC 6841, section 5 "Contents of a Set of Provisions".

The outcome of the testcase is PASS if all criteria for PASS and no criteria for FAIL are fulfilled.

Criteria for PASS:

- The DPS follows the structure given in RFC 6841 with only minor deviations (step 2).
- The DPS includes all 8 main sections and all applicable second level subsections stated in RFC 6841 section 5, with only minor deviations (step 3).

Criteria for FAIL:

- Greater than minor deviations from RFC 6841 exists in the DPS, e.g. missing sections.
- Part of the requested information is unclear or missing.

3. Document DPS 02, RFC 6841 Contents

3.1 Test case identifier

DocDPS02   RFC 6841 Contents

3.2 Objective

The test verifies that the contents of the DNSSEC Practice Statement (DPS) is compliant with RFC 6841.

3.3 Inputs

The following information will be needed as input for this test case:

Id	Description	Type
gTLDDPS	The Applicant's DNSSEC Practice Statement	Document

3.4 Outcome(s)

The documents MUST include the required information.

3.5 Environmental needs

N/A

3.6 Special procedural requirements

Suspend test if applicant documentation is incomplete for most parts or missing completely.

3.7 Intercase dependencies

This test has no intercase dependencies.

3.8 Ordered description of steps to be taken to execute the test case

1. Identify the DNSSEC Practice Statement, DPS. Expected document is: document gTLDDPS.
2. Verify that the DPS essentially follows the contents described in the IETF A Framework for DNSSEC Policies and DNSSEC Practice Statements, RFC 6841.
3. Verify that the DPS essentially follows the guidelines given in RFC 6841, section 4 "Contents of a Set of Provisions".
4. Verify specifically that the DPS includes the following content:
   a. "Section 1 Introduction", including Document identification and Version.
   b. "Section 2 Publication and Repositories".
   c. "Section 5 Technical Security Controls" including:
      i. What keys are going to be used
      ii. Key pair generation and installation
      iii. Private key protection
      iv. Life cycle technical controls
   d. "Section 6 Zone Signing" including:
      i. Key lengths and algorithms
      ii. Authenticated denial of existence (NSEC/NSEC3)
      iii. Signature format
      iv. Key rollover (for each present key type)
      v. Signature lifetime and re-signing frequency
   e. "Section 8 Legal Matters", must include information about under what jurisdiction the registry is operated.

The outcome of the testcase is PASS if all criteria for PASS and no criteria for FAIL are fulfilled.

Criteria for PASS:

- The DPS contains the contents given in RFC 6841 section 4, with only minor deviations (step 2 and 3).
- The DPS contain all of the contents stated above (step 4).

Criteria for FAIL:

- Greater than minor deviations from RFC 6841 section 4 exists in the DPS, e.g. more than one missing information.
- One or more of the information requested in step 4 is missing or unclear.
- Part of the otherwise requested information is unclear or missing.
- Information about under what jurisdiction the registry is operated is not specified.

4. Global

4.1 Glossary

The glossary is available in the Master Test Plan.

4.2 Document change procedures

Document change procedures are documented in the Master Test Plan.