Registry System Testing

IDN RST Test Plan

Version ~~B~~<u>C</u>

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Revisions

Date	Version	Name	Description
2017-07-27	A	Mats Dufberg	First release version.
2017-07-27	B	Mats Dufberg	Updated to match changed name of IDNvalid13.
2021-06-10	C	Mauro Lozano	Update references.

LIST OF CONTENTS

1.   Introduction

This document describes a Registry System IDN Test (RSTIDN). IDN testing is part of the Registry System Testing framework.

1.1   Background

A Registry Operator may apply to ICANN to amend its Registry Agreement for an already delegated TLD, to either offer new services or retract services currently offered. If the requested amendment affects Registry Operator's support for IDN, an RST IDN test is called for before the amendment can be authorized.

1.2   Purpose

The purpose of an IDN RST test is to verify that the Registry Operator's registry system handles IDN registrations in accordance with the submitted policy statements and IDN tables.

1.3   Scope

Only the test cases listed in this document will be included in an IDN RST Test. For details about a test case, refer to the relevant Test Area Specification document.

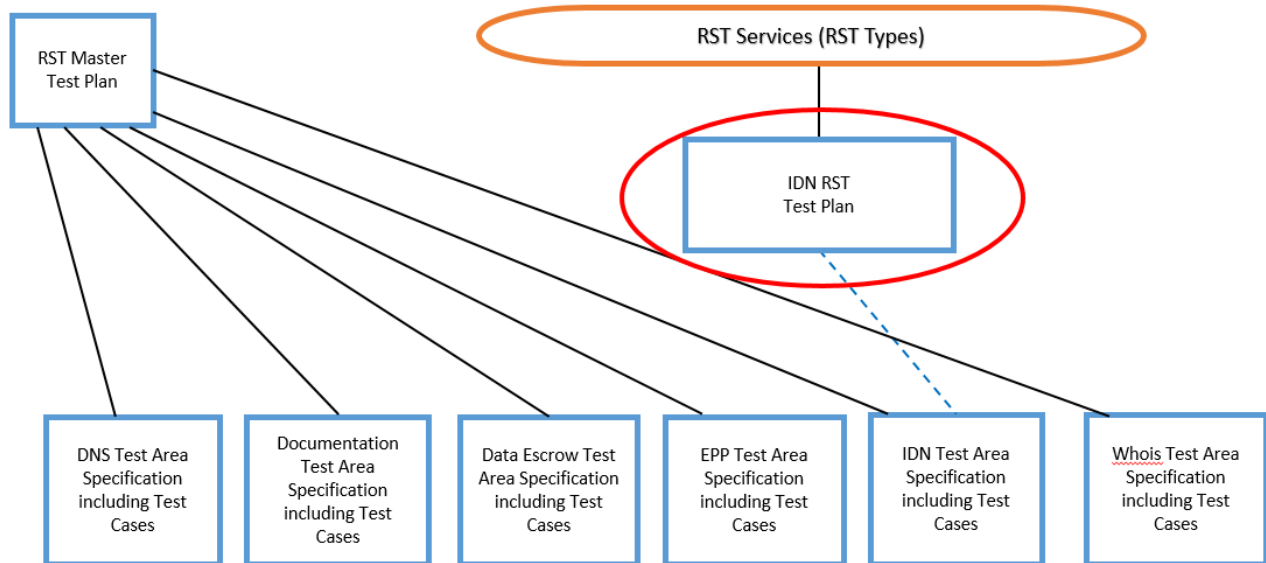## 1.4   References

1.4.1   External

- IEEE 829-2008
- ICANN gTLD Applicant Guidebook, Version 2012-06-04

1.4.2   Internal

- ~~Pre-Delegation Testing, Statement of Work~~
- Registry System Testing, IDN Test Area Specification

1.4.3 Document Hierarchy

This document is one of many that specifies the Test Plan for a specific RST Type (circled in red in the above graphic).

1.5 System overview and key features

A Registry Operator who wishes to modify IDN support for a TLD by adding and/or removing scripts and languages will undergo RST IDN Testing to verify the new IDN implementation and online registration functionality.

There is also a set of technical documentation that needs to be reviewed. This set includes:
- Amended Exhibit A of Registry Agreement
- IDN tables

2. Details of the RST IDN Test Plan

2.1 System requirements

The initial requirements are found in the Statement of Work. Some of the requirements are also referring to requirements in the ICANN gTLD Applicant Guide Book and the IANA Technical Requirements.

2.2 Two variants

The RST IDN RST Type comes in two variants, with or without test registration over EPP, referred to as EPPIDN. If EPPIDN is not included, then IDNvalid11 and IDNvalid10 are not applicable and IDNvalid07 is only partly applicable. See the IDN Test Area Specification document for details.

2.3 Test Areas included in a IDN RST Test

1. IDN

2.4 Test Cases included in a IDN RST Test

2.4.1 IDN

- IDNvalid00   IDN documentation validation
- IDNvalid01   IDN Table validation
- IDNvalid02   IDNA Code Point validation
- IDNvalid03   Contextual Rule validation
- IDNvalid04   IDN Script validation
- IDNvalid05   IDN Script Mixing Rule validation
- IDNvalid06   IDN Language validation
- IDNvalid07   Variant Code Point validation
- IDNvalid09   Variant Management Policy
- IDNvalid10   Basic IDN compliance
- IDNvalid11   IDN online registry response validation
- IDNvalid12   Asymmetrical and intransitive variant rule verification
- IDNvalid13   Pre-composed vs. decomposed character equivalence verification

3. General

3.1 Glossary

The glossary is available in the RST Master Test Plan.

3.2 Document change procedures

Document change procedures are documented in the RST Master Test Plan.