# Technical Policy for Root Zone Management
## CENTR Technical Meeting, Amsterdam 2006

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# Day 1

# Today marks the beginning of:

▸ New IANA Contract
October 1, 2006 through September 30, 2007 (12-60 months)

▸ New kind of agreement for ICANN
October 1, 2006 through September 30, 2009 (18-36 months)
Agreed self-governance principles replace milestones

▸ Operational Improvements

  ▸ Ability to improve operational procedures
  ▸ Better statistics reporting
  ▸ More to come

# Interesting technical topics to tackle

▸ Technical check methodology for root zone changes

▸ What to do about glue

▸ Any ongoing monitoring or (eek) compliance testing

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# Technical Checks

▸ Aim is to create an unambiguous operational procedure on what IANA will check to pass/fail root zone alterations.

   ▸ Should be sufficiently objective to be automatable - represents a mandatory dependency before we can 'automate' RZM.

▸ Discussion paper released mid-August 2006

▸ Initial comment period, just closed

# *Disclaimer*

‣ What follows is a hotel-room distillation of comments received via web forum

‣ Apologies for any errors, and the necessary oversimplification

# Terminology and Process

| | Mandatory | Warning | VRSN Only |
|---|---|---|---|
| **Today**<br>(Manual processing) | IANA will refuse to implement change | IANA emails requestor advising of issue, allowed with valid explanation. | Dialogue between VRSN, IANA and Requestor; usually proceeds |
| **Goal**<br>(Automated) | Requestor can not submit request until remedied | Issue raised on web form. Can click "Proceed" to accept they understand consequences. | Such anomalies do not exist. |

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# 1. Minimum of 2 Name Servers

Test Type: **MANDATORY**

General view of
appropriateness:

| | |
|---|---|
| Afilias | ✔ |
| ccNSO | no consensus |
| CENTR | ✔ |
| DENIC | ✔ |
| IIS | ✔ |

Observation:
*Seems rather uncontentious, despite the pathological case of a single
anycasted server*

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# 2. 512-byte threshold

Test Type: **MANDATORY**

General view of appropriateness:

| | |
|---|---|
| Afilias | ✔ |
| Auerbach | ✔ |
| ccNSO | ✔ |
| CENTR | ✔ |
| DENIC | ✔ |
| IIS | ✔ |
| NIC Chile | ✔ |

Observation:
*When correctly respecified as a 512-byte limit, rather than the current methodology, seems to have almost universal support.*

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# 3. Hostname validity

Test Type: **MANDATORY**

General view of
appropriateness:

Afilias ✔

ccNSO ✔

CENTR ✔

DENIC ✔

IIS ✔

Observation:
*Uncontentious.*

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# 4. Name server reachability

Test Type: **MANDATORY**

General view of
appropriateness:

| | |
|---|---|
| Afilias | ✔ |
| ccNSO | no consensus |
| CENTR | ✔ |
| DENIC | ✔ |
| IIS | ✔ |
| NIC Chile | ✔ |
| SWITCH | ✘ (make warning) |

Observation:
*Some view it as not a role of IANA to check that authorities work.*
*Some in ccNSO believed only 2 should need to work.*

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# 5. Name server authority

Test Type: **MANDATORY**

General view of
appropriateness:

| | |
|---|---|
| Afilias | ✔ |
| ccNSO | ✔ |
| CENTR | ✔ |
| DENIC | ✔ |
| IIS | ✔ |
| SWITCH | ✘ (make warning) |

Observation:
*General Consensus*

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# 6. Name server coherency

Test Type: **WARNING**

General view of
appropriateness:

| | | |
|---|---|---|
| Afilias | ✔ | |
| ccNSO | ✔ | (make mandatory) |
| CENTR | ✔ | |
| DENIC | ✔ | (make mandatory) |
| IIS | ✔ | |

Observation:
*General consensus, with a number suggesting it be mandatory.*

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# 7. Glue Coherency (parent/child)

Test Type: **WARNING**

General view of appropriateness:

| | | |
|---|---|---|
| Afilias | ✔ | (make mandatory) |
| ccNSO | ✔ | (make mandatory) |
| CENTR | ✔ | |
| DENIC | ✔ | (make mandatory) |
| IIS | ✔ | |

Observation:
*General consensus, with most suggesting it be mandatory.*

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# 8. Glue must be agreed by all affected children

Test Type: **MANDATORY**

General view of
appropriateness:

| | |
|---|---|
| Afilias | ✘ |
| ccNSO | ✔ |
| CENTR | ✘ |
| DENIC | ✘ |
| IIS | ✔ |
| SWITCH | ✘ (make warning) |

Observation:

*Clearly this is an issue, as was known before. It is not really a technical requirement, rather a management problem that is highlighted by technical observation. IANA will solicit views on an appropriate shared glue policy in the near future.*

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# 9. Serial Coherency

Test Type: **WARNING**

General view of
appropriateness:

| | |
|---|---|
| Afilias | ✔ |
| ccNSO | no consensus |
| CENTR | ✔ |
| DENIC | ✘ |
| IIS | ✔ |

Observation:
*No real consensus, although it should be noted this has always been informational.*

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# 10. Network Diversity

Test Type: **WARNING**

General view of appropriateness:

| | |
|---|---|
| Afilias | ✔ |
| ccNSO | no consensus |
| CENTR | ✔ |
| DENIC | ✘ |
| IIS | ✔ |
| NIC Chile | ✔ |
| SWITCH | ✘ |

Observation:
*No strong consensus.*

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# 11. Splitting substantial changes

Test Type: **WARNING**

General view of appropriateness:

| | |
|---|---|
| Afilias | ✔ |
| ccNSO | ✔ |
| CENTR | ✔ |
| DENIC | ✔ |
| IIS | ✔ |

Observation:
*General consensus that this is a useful warning to give.*

# Other notable comments

▸ Checks for EDNS0 capability (warning)

▸ TCP transport checks (warning)

▸ Should IANA's/ccTLD Role be to demonstrate best practice?

# Do you have comments?

‣ Feel free to send any last minute submissions today to

<div align="center">techcheck-comments@icann.org</div>

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# Ongoing role

‣ There have been significant comments that IANA should do informational periodic testing

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# Next steps

▸ Will draft an operational procedure for further review.

  ▸ I-D or not I-D?

▸ Hopeful for implementation by São Paulo?

# Thank you for your attention!

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