# Stability – Best Practice for ccTLDs

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## IANA Perspective

- TLD operations should follow the well established industry best practices
- Not ICANN/IANA's responsibility to dictate or micro manage TLD operations
- ICANN's role of technical coordination requires us to discuss issues that have global impact with the larger Internet community
- ccNSO has a critical role in this discussion



### Best Practices – SSAC

- http://www.icann.org/committees/security/dnsrecommendation-01nov03.htm
  - 1. A parent zone is responsible for defining its points of delegation (sub-zones), ensuring the availability of a server to respond with the appropriate referrals (NS records) for those sub-zones, updating the referral information upon request from the child sub-zone in a timely fashion, and ensuring the child honors its responsibilities.



#### Best Practices – SSAC

- http://www.icann.org/committees/security/dnsrecommendation-01nov03.htm
  - 2. The child zone is responsible for ensuring the availability of a server to respond to queries about it and ensuring its parent zone is up-to-date with respect to the referral information it maintains on behalf of the child.



## Best Practices – Delegation Data

- http://www.iana.org/procedures/delegation-data.html
  - The complete list of intended name servers for the domain's delegation is compared against the list of NS (Name Server) records reported by the existing and proposed authoritative servers for the domain to be sure that the two lists match. DNS best practices, as well as significant operational experience demonstrate that this is a crucial aspect of good zone management at all levels of the delegation tree. In the event that there is a discrepancy, and the request does not contain the requisite changes to bring the delegation and the NS records in the zone into alignment, the TLD manager is contacted with this information and asked to clarify the request.

## Best Practices – Delegation Data

- http://www.iana.org/procedures/delegation-data.html
  - Each of the servers in the request that is intended to become or remain part of the delegation is checked to be sure that the serial numbers and other information in the SOA (Start Of Authority) record match what is returned by the master (also known as primary) server for the domain. Experience shows that when these records do not match it is likely that there are other operational problems with the name server(s) that are not properly synchronized, especially when the unsynchronized server is intended to be added to the delegation.



## Best Practices – New sTLD Application

- http://www.icann.org/tlds/new-stld-rfp/newstld-application-parte-15dec03.htm
  - Backup
  - Escrow
  - System recovery
  - Business continuity

