

Working with IANA for ccTLDs

Caribbean ccTLD Policy Workshop, June 2007

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Internet Assigned Numbers Authority



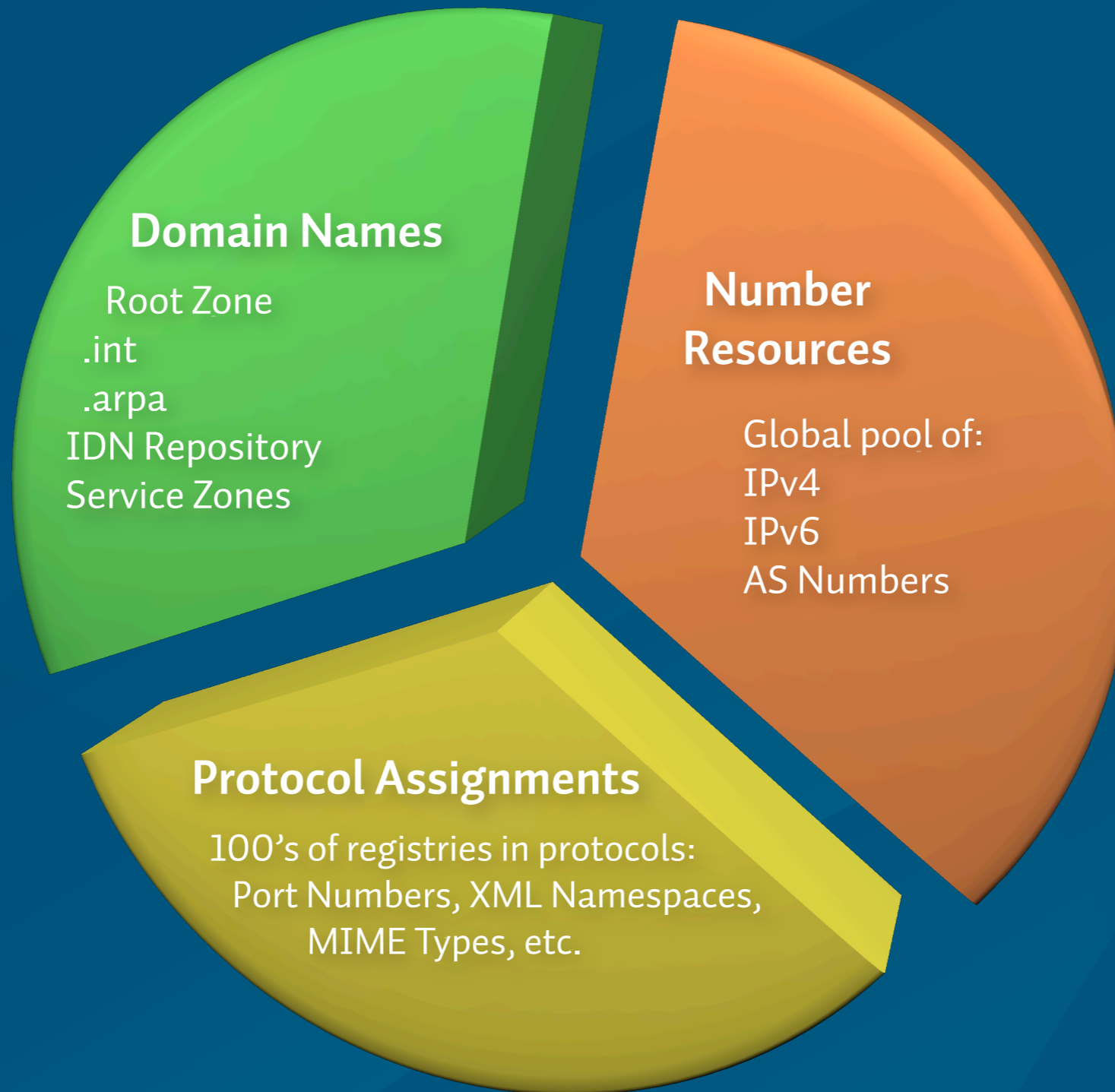
Agenda

- ▶ What is IANA? What does it do?
- ▶ Are are ccTLD Managers obligations to IANA?
- ▶ Redelegations

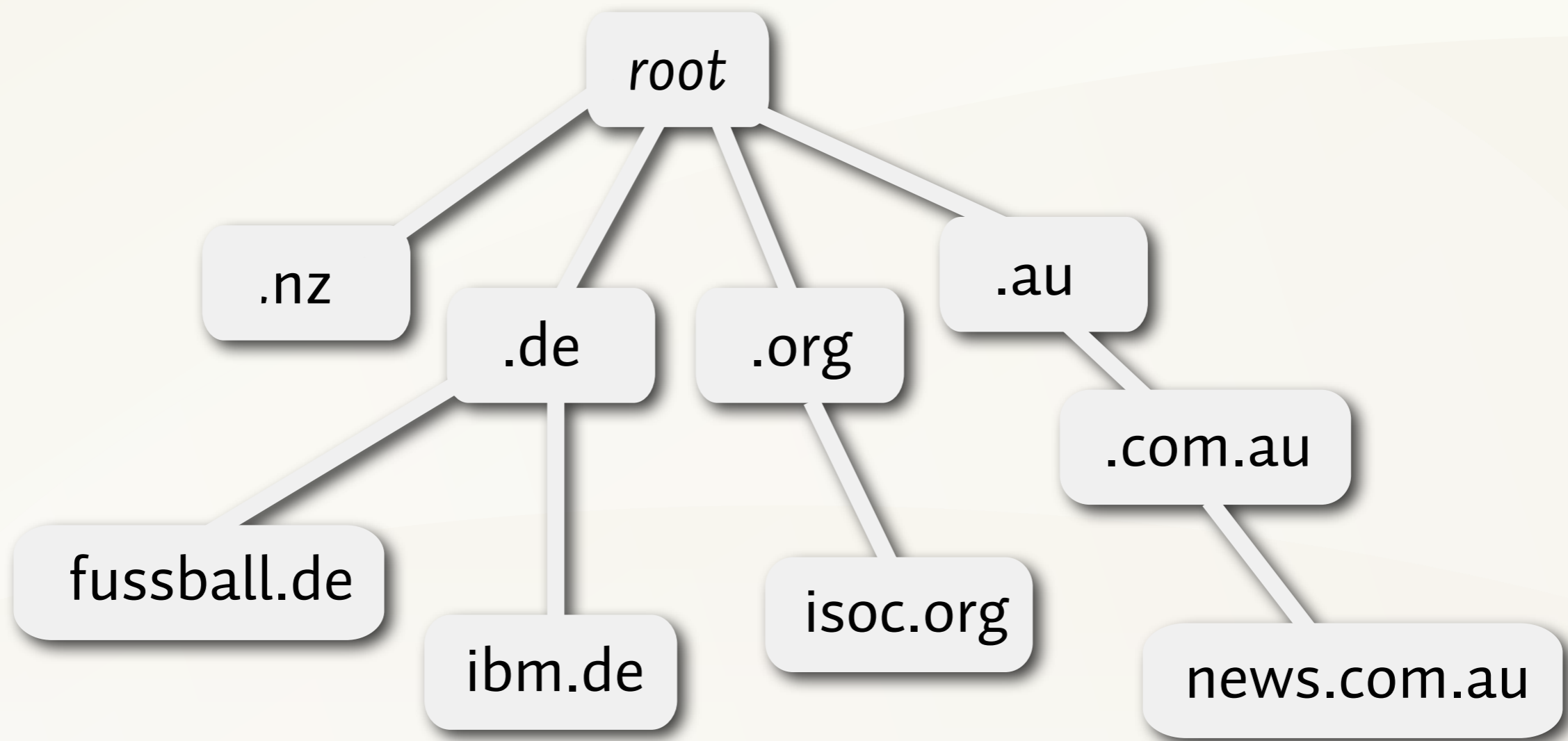
What is IANA?

- ▶ “Internet Assigned Numbers Authority” is responsible for global Internet unique identifier systems.
- ▶ One of the oldest Internet institutions, its role dates back to 1970s.
- ▶ Since 1998, operated by ICANN - a non-profit internationally-organised entity setup by the global community as the steward for the IANA functions.
- ▶ Today, “IANA” may refer to either the functions, or the department within ICANN that runs the IANA functions.

IANA's areas of responsibility

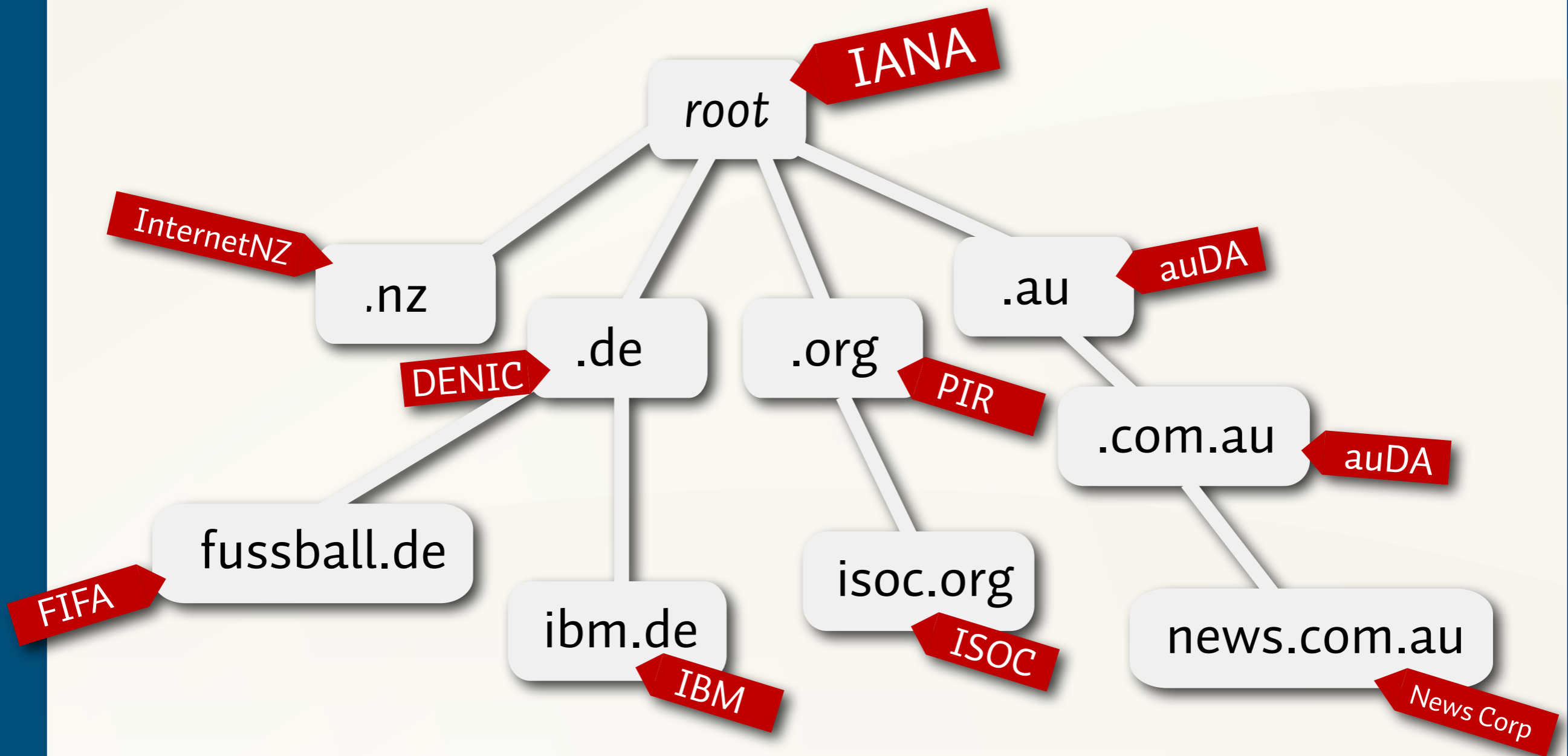


IANA's Root Zone Management



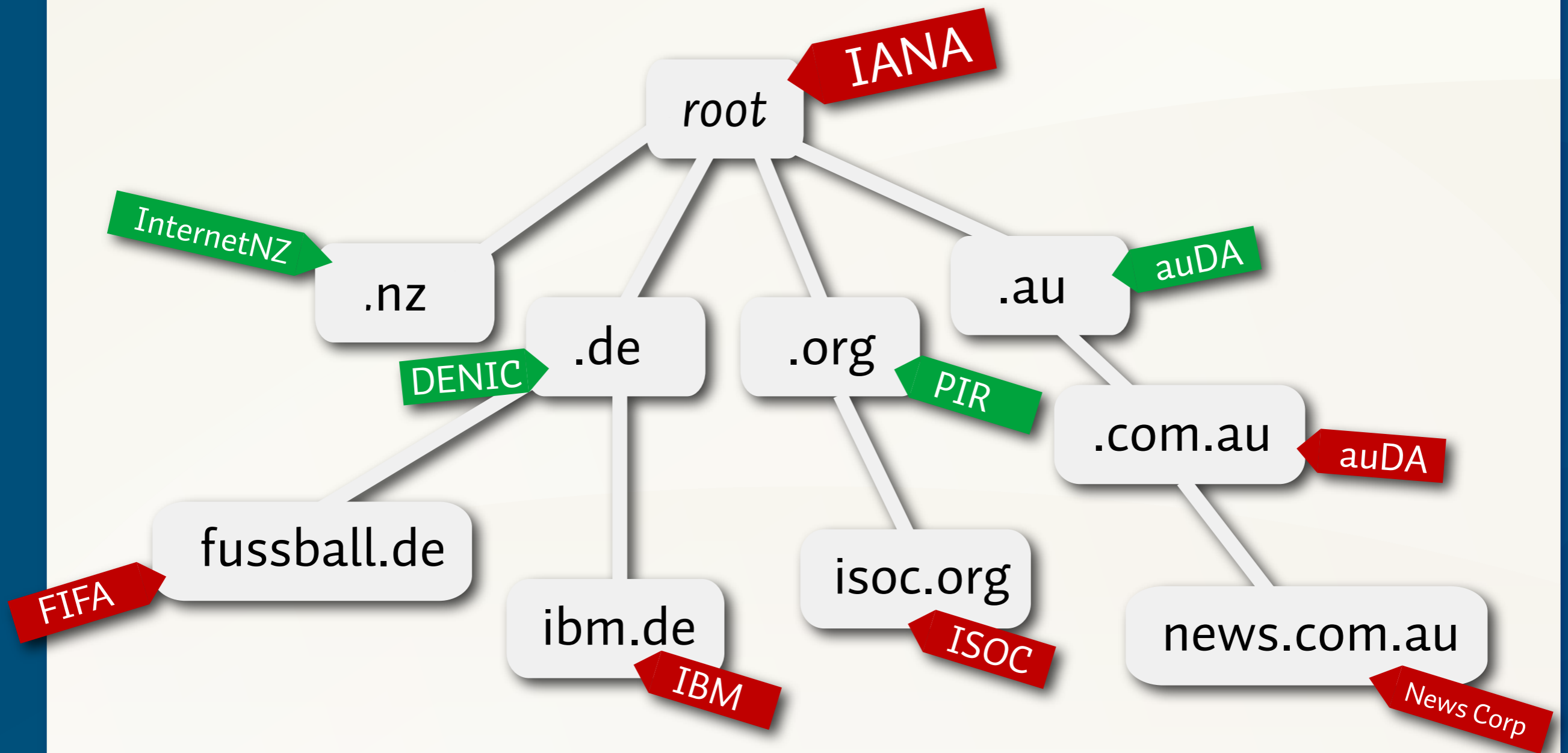
The DNS Tree

- ▶ As we know, domain name authority involves delegating authority ‘down the tree’



The DNS Tree (2)

- ▶ Each zone has a party responsible for it, and responsible for making any delegations below their zone.



The DNS Tree (3)

- ▶ As operator of the 'root', IANA is responsible for the assignment of top-level domain operators

How we manage the root

- ▶ Maintain data for the DNS root
 - ▶ Technical data (NS records, “glue”)
 - ▶ Social data (admin and tech contacts, sponsoring organisations, WHOIS, Registration URL)
- ▶ Two types of changes
 - ▶ Routine Changes (easy)
 - ▶ confirm authenticity, check for technical problems, implement
 - ▶ Redelegations (easy-to-hard)
 - ▶ perform evaluation, submit to board, implement
 - ▶ we can streamline certain requests so they are much quicker and simpler

What we don't do

- ▶ Don't set root zone management policy
 - ▶ We follow precedent where possible, encourage review of our operations by community.
- ▶ Don't unilaterally decide what the two letter codes should be
 - ▶ ISO 3166 standard provides these, ISO Maintenance Agency makes revisions
 - ▶ ICANN is one of ten members of the ISO 3166 MA
- ▶ Don't decide who runs a ccTLD
 - ▶ ccTLD Operators are decided by the local Internet community
 - ▶ IANA performs due diligence to ensure the community's opinion is represented in its changes. Also performs baseline technical checks.
 - ▶ IANA performs due diligence.



What are the obligations a ccTLD Manager has to IANA?

The IANA-ccTLD Parent/Child Relationship

- ▶ ccTLDs are responsible for setting policy and operating domains according to their local community's needs.
- ▶ However, IANA needs to have accurate details on who is running the ccTLD:
 - ▶ Technical details - to ensure correct and robust operation of the DNS
 - ▶ Social details - to ensure we know who to verify changes with, and for public policy reasons

Therefore:

ccTLD Operators should ensure IANA has the correct details for your ccTLDs. You should provide timely updates to us to ensure our records are current.

Take a moment to review your ccTLD's entry at whois.iana.org and check your details



Redelegations

(the complicated changes)

Redelegations

- ▶ Assignment of a new operator of a top-level domain
- ▶ Unlike routine requests to alter the root zone, tested for public interest criteria in addition to the normal processing checks.

Guiding Documents

- ▶ Domain Name Structure and Delegation (1994)
 - ▶ <http://www.rfc-editor.org/rfc/rfc1591.txt>
- ▶ Domain Name Structure and Delegation (1999)
 - ▶ <http://www.icann.org/icp/icp1.htm>
- ▶ The Governmental Advisory Committee Principles for Delegation and Administration of ccTLDs.

Redelegation Procedure

- ▶ Request for redelegation is sent to IANA
- ▶ IANA performs evaluation
 - ▶ consultations with:
 - ▶ requestor to understand situation, seek additional documentation
 - ▶ current operators to determine consent
 - ▶ local Internet actors to confirm assertions on LIC support
 - ▶ governments to identify support
 - ▶ ICANN staff who have insight into local situation
- ▶ If assessed to proceed, considered by ICANN board
- ▶ Upon approval, implement normally (incl. USDOC, VeriSign)
- ▶ Report published on website

Criteria for assessing applicant (1 of 2)

1. Operational and technical skills

- a. The prospective manager has the requisite skills to operate the TLD appropriately. (ICP-1 §a, RFC 1591 §3.5)
- b. There must be reliable, full-time IP connectivity to the nameservers and electronic mail connectivity to the operators; (ICP-1 §a; RFC 1591 §3.1)
- c. The manager must perform its duties in assigning domains and operating nameservers with technical competence (ICP-1 §d; RFC 1591 §3.5)

2. Operator in country

- a. The prospective manager supervises and operates the domain name from within the country represented by the TLD; (ICP-1 §a; RFC 1591 §3.1)
- b. The prospective administrative contact must reside in the country represented by the TLD. (ICP-1 §a; RFC 1591 §3.1)

Criteria for assessing applicant (2 of 2)

3. Equitable treatment

a. The prospective manager must be equitable and fair to all groups encompassed by the TLD that may request domain names (ICP-1 §c; RFC 1591 §3.3)

4. Community/Governmental support

a. The prospective manager has the requisite authority to operate the TLD appropriately, with the desire of the government taken very seriously. (ICP-1 §a, GAC Principles)

b. Significantly interested parties in the domain should agree that the prospective manager is the appropriate party to receive the delegation (ICP-1 §a; RFC 1591 §3.4)

Other evaluation considerations

- ▶ Transition plan
- ▶ Consent of the current operator
- ▶ Malfeasance by the current operator

Summary

What you should do

- ▶ Operate your ccTLD in the public interest
- ▶ Ensure IANA's details are correct:
 - ▶ If they are wrong, start a discussion with IANA/ICANN on how best to remedy the deficiencies.
 - ▶ Simple changes: regular change request approved by contacts
 - ▶ More complex: administrative redelegation or a redelegation
 - ▶ If there is an anticipated change of management in your country, IANA and ICANN can advise on our requirements
- ▶ Maintain minimum technical standards
 - ▶ Bad configurations can hurt the root (i.e. the whole Internet, not just in your country)

Thank you for your attention!

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