Working with IANA for ccTLDs

Caribbean ccTLD Policy Workshop, June 2007

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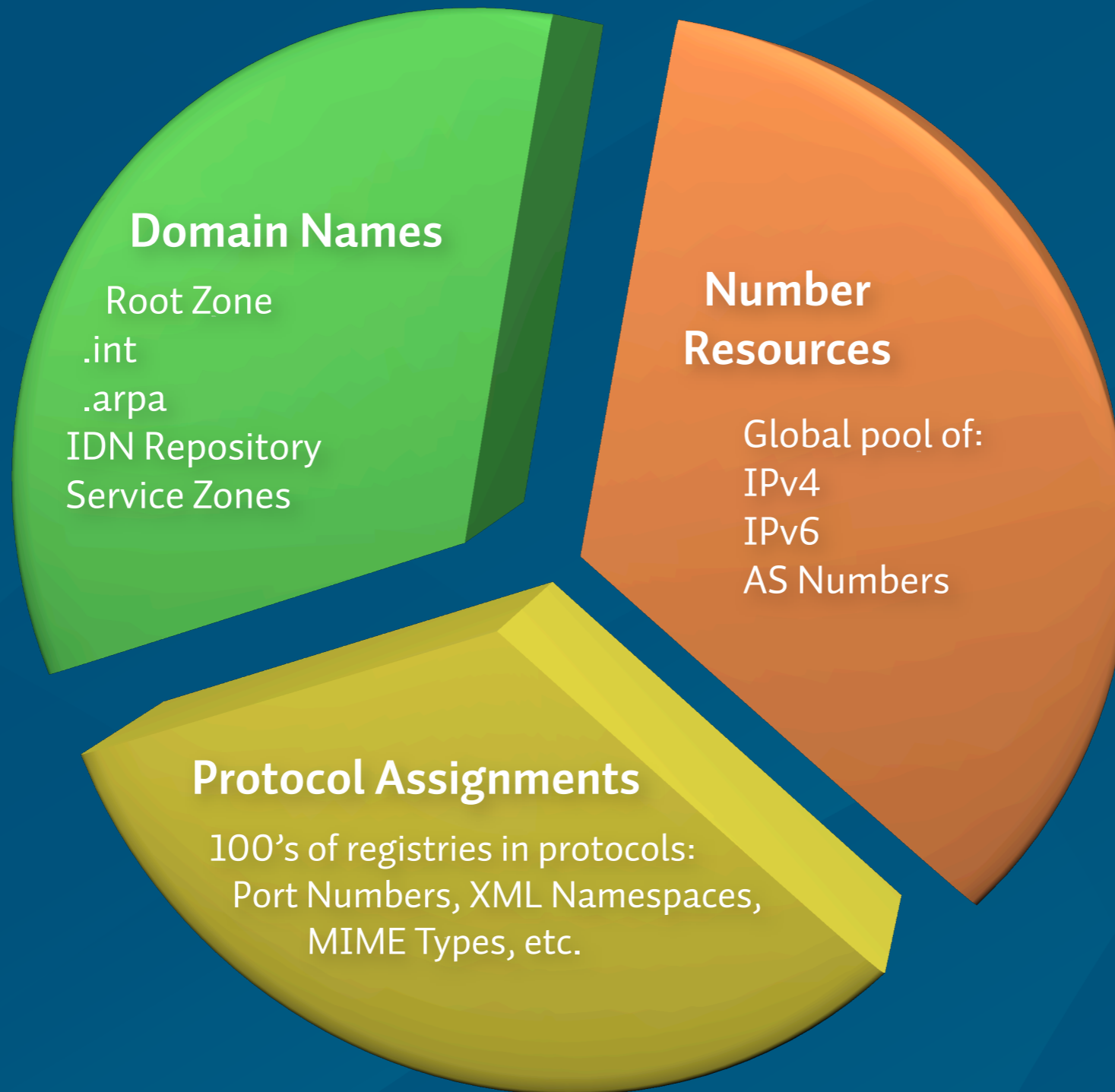
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Agenda

▸ What is IANA? What does it do?

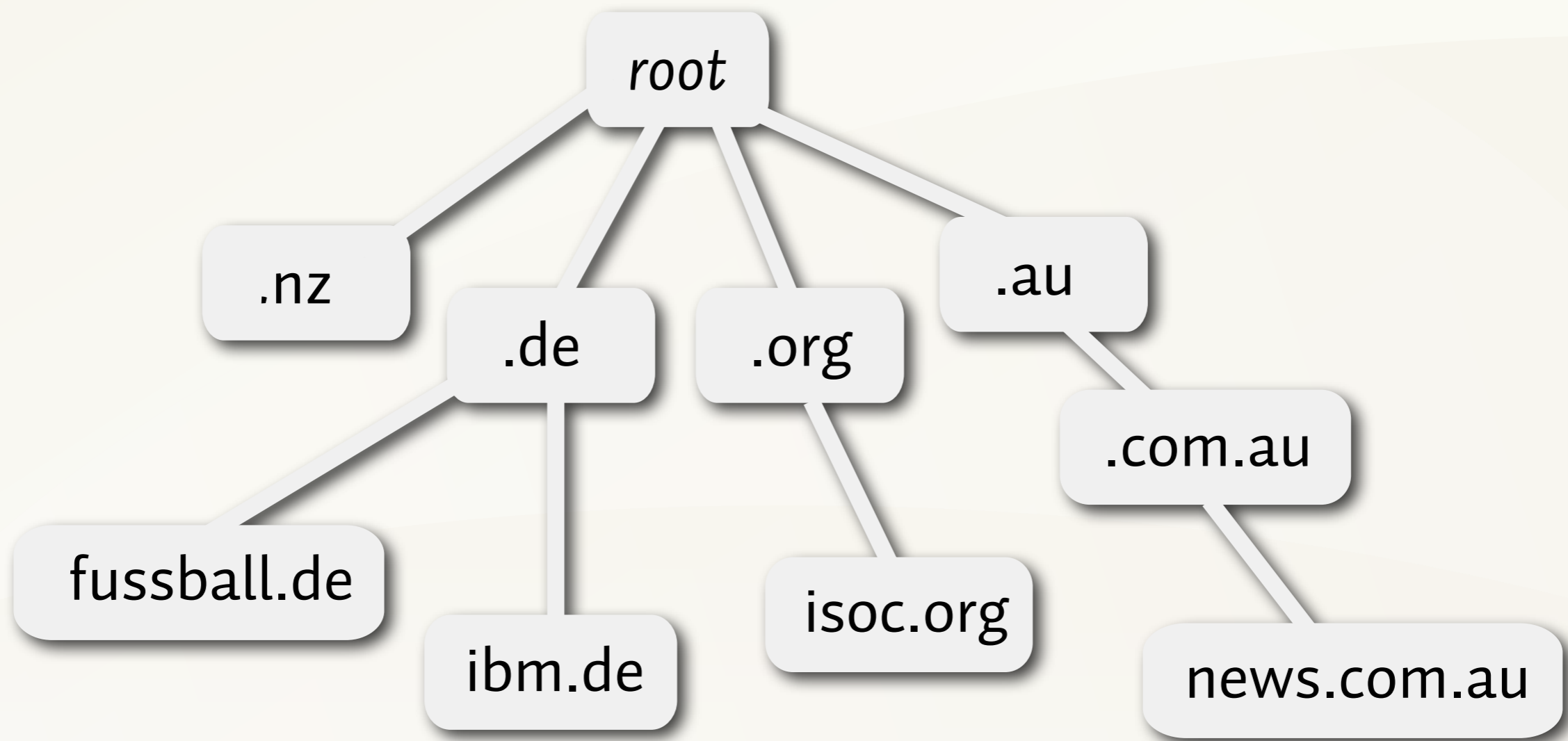▸ Are are ccTLD Managers obligations to IANA?

▸ 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.

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IANA's areas of responsibility

Domain Names

Root Zone
.int
.arpa
IDN Repository
Service Zones

Number Resources

Global pool of:
IPv4
IPv6
AS Numbers

Protocol Assignments

100's of registries in protocols:
Port Numbers, XML Namespaces,
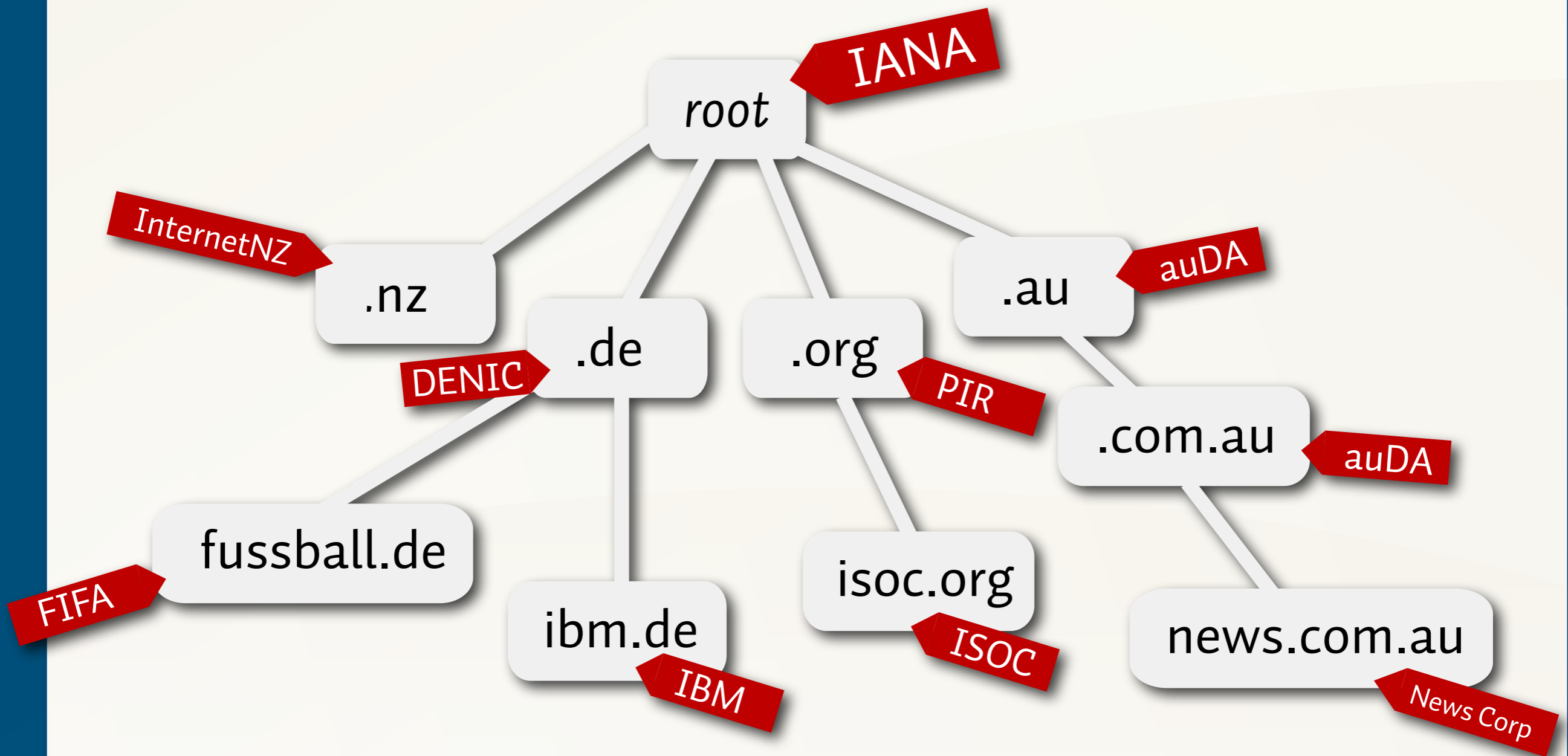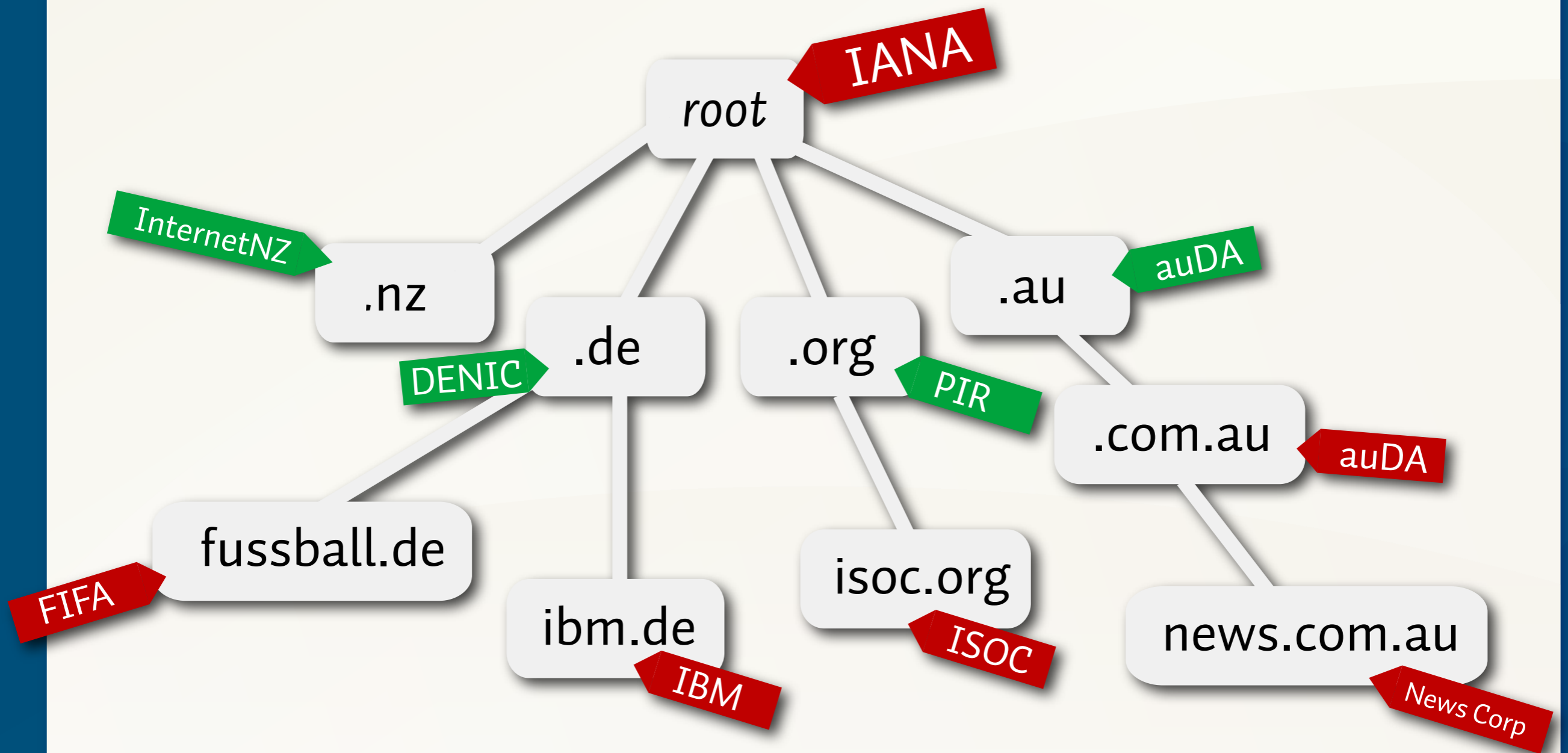MIME Types, etc.

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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

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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.

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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 <u>equitable and fair</u> 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 <u>the requisite authority</u> 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 <u>the appropriate party</u> 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)

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Thank you for your attention!

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