ICANN/IANA: Role and Structural Considerations

24 March 2014

The announcement[1] by NTIA that it seeks to transition its role in the Internet's Domain Name System to the "global multistakeholder community" opens an important debate. NTIA's role is broad. All the components of the role are inextricably linked.

NTIA's role as steward of the DNS has been noteworthy, culminating in the nature of the transition we are now starting to discuss. Its role as contractee for the IANA and RZM (root zone management) agreements has been critical to that stewardship. They allow direct influence (the contracts can be changed), and indirect influence arising from those contracts' existence. NTIA has used that influence effectively in this stewardship role, helping guide the DNS and its institutions, ICANN included, to today's position.

ICANN has been asked to convene global stakeholders to develop a proposal to transition the current role played by NTIA. This development process must be a multistakeholder one, with all those touched by this debate included as part of it, and no existing institution seeking to dominate the debate or preclude options at the beginning of the conversation.

We draw the community's attention to four things in particular:
- The components of the role NTIA is giving up, which includes these elements:
  - Contractee for the IANA function and the RZM function
  - Administrative role in various IANA processes
  - Overall steward of the Internet's DNS
- The necessity of a settlement that deals with all these components, not just some
- The importance of accountability throughout the new settlement
- The importance of not taking for granted the existing institutional settlement in developing the new settlement

ICANN has a rational self-interest as a well-resourced stakeholder in this discussion to try and shape it in its own interests – in a range of obvious and subtle ways. In whatever process for this conversation emerges, all stakeholders should be aware of the interests of all the others.

In starting the conversation, it is important to consider a very wide range of possible models. The attached set of diagrams is intended to spur your thinking. They set out the array of functions involved in the DNS at a global level, and present some options for how these functions might be divided between current or future actors.

We hope to stimulate helpful discussion, and we welcome any feedback.

InternetNZ

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[1] Media release 14 March 2014: http://www.ntia.doc.gov/press-release/2014/ntia-announces-intent-transition-key-internet-domain-name-functions

Overview of functions

OVERSIGHT
Stewardship through top-level principles:
- Multistakeholderism
- Competitive market
- Public accountability
- Security and stability

Contractual oversight:
- Issue and monitor the IANA contract
- Issue and monitor the RZM contract
- Specific DNS root operations:
- Authorise changes

POLICY

Common to all areas:
- Monitor IANA SLA

gTLD contracts:
- Authorise, contract and regulate gTLDs
- Authorise, contract and regulate Registrars

gTLD policy:
- Set policy by multistakeholder consensus
- Issue delegation / re-delegations instructions to IANA in line with policy

IP / AS Address
- Set **local** policy by community consensus
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Protocol parameters
- Set policy by community consensus
- Issue change instructions to IANA

IANA FUNCTIONS

Operate all registries:
- Implement changes in line with published policies.
- Measure performance against SLA
- Refer complex / unclear changes.
- Publish all change requests

Specific DNS root operations:
- Implement delegations / re-delegations in line with policies.
- Check changes are technically compliant
- Sign root.

RZM FUNCTIONS

Specific DNS root operations:
- Check changes are technically compliant (second pair of eyes)
- Publish root.

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Current overlay of organisational split

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NTIA

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VERISIGN

ICANN

RIRs

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Proposed by ICANN to SO/AC chairs

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IETF/IAB

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IGP proposal

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- ~~Security and stability~~
~~Contractual oversight:~~
- ~~Issue and monitor the IANA contract~~
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DNSA

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Option: New oversight entity and structural separation
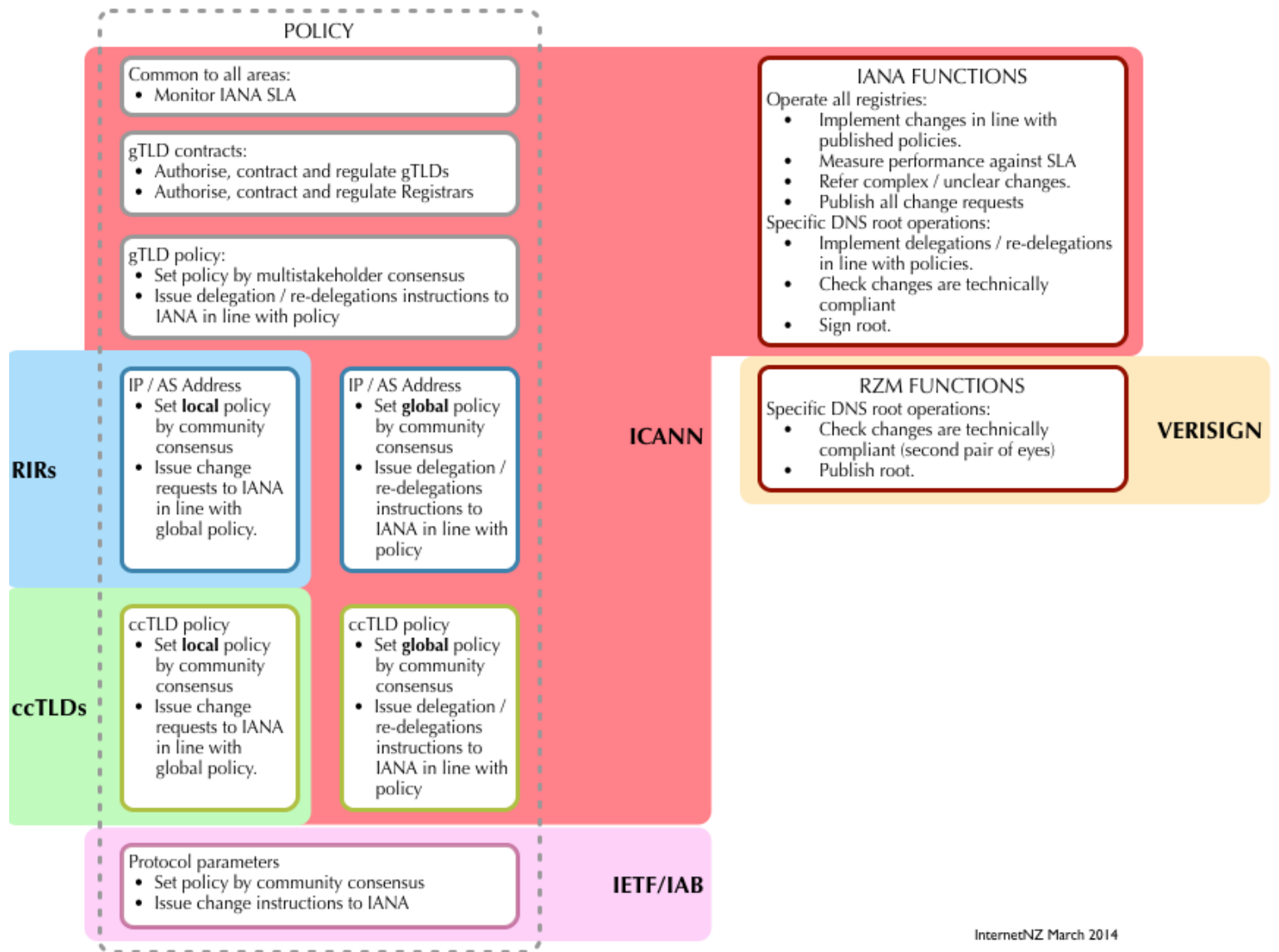
OVERSIGHT

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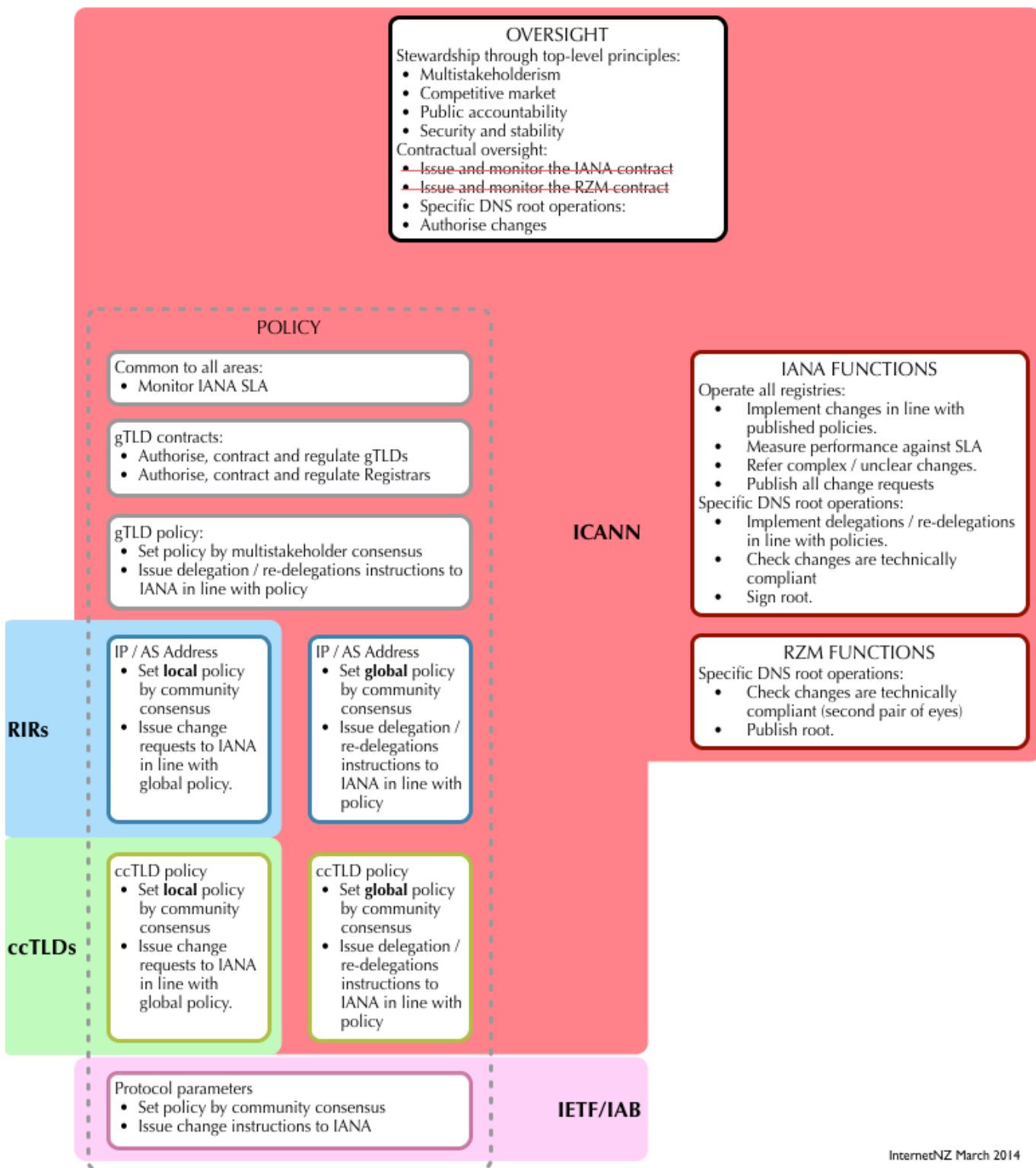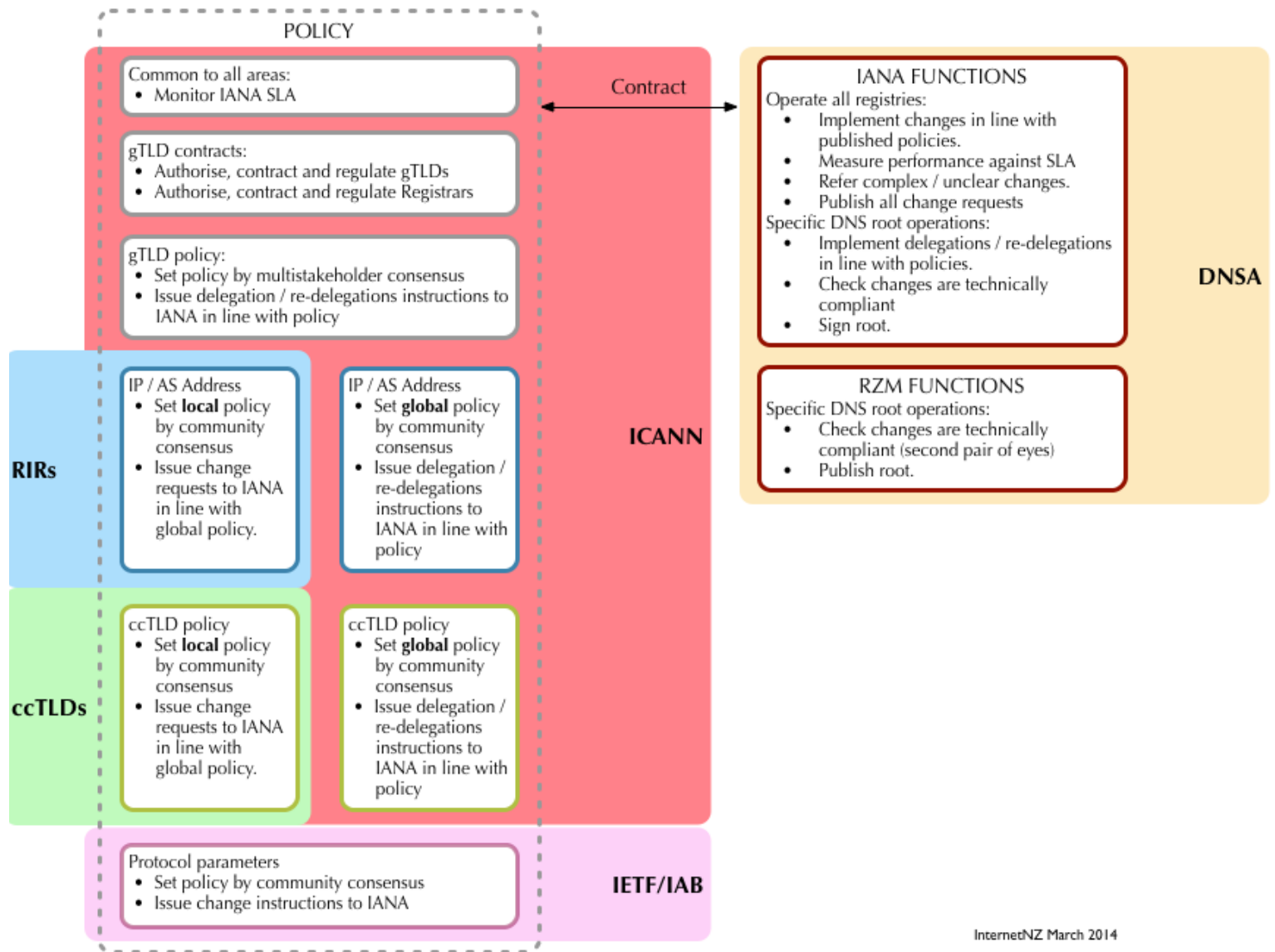- Competitive market
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Contractual oversight:
- Issue and monitor the IANA contract
- Issue and monitor the **POLICY** contract
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NEW ENTITY 1

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IETF/IAB

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NEW ENTITY 2

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Option: New policy entity (1) and structural separation
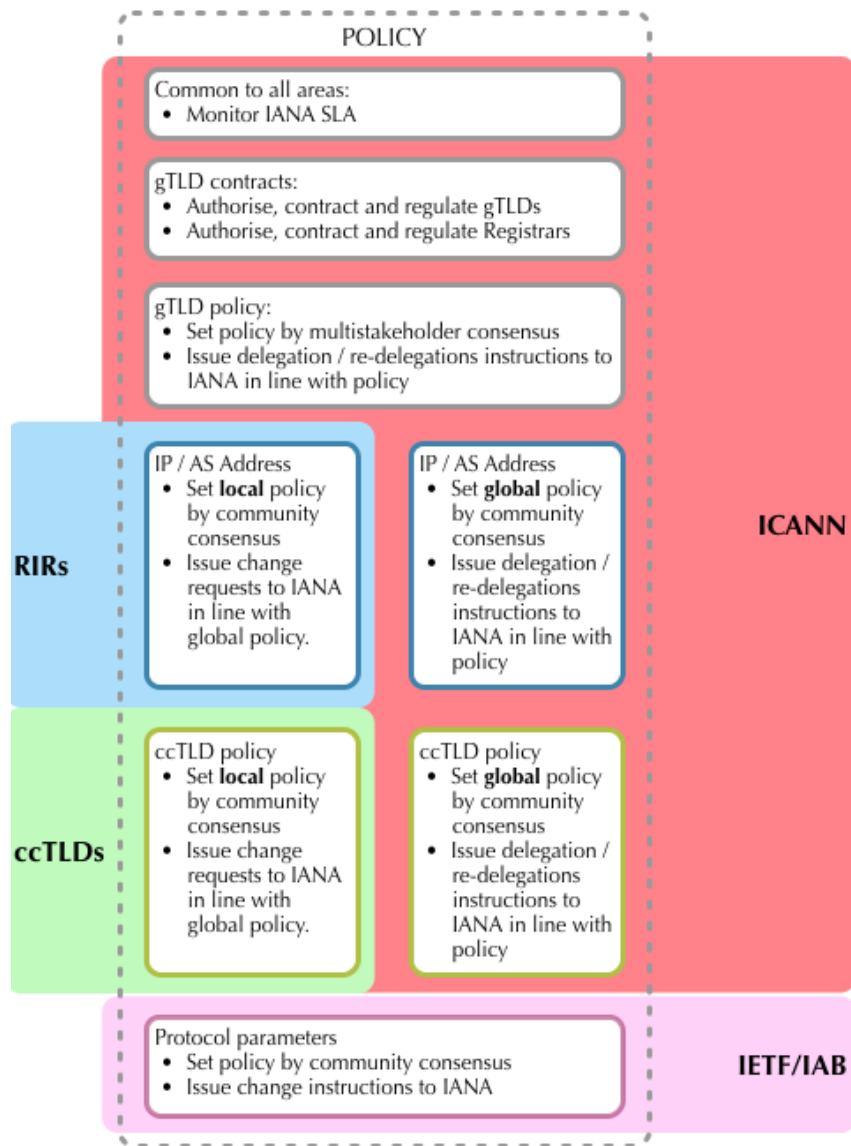
ICANN

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IETF/IAB

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Option: New policy entity (2) and structural separation

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NEW ENTITY 2

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Option: Multiple policy entities and structural separation

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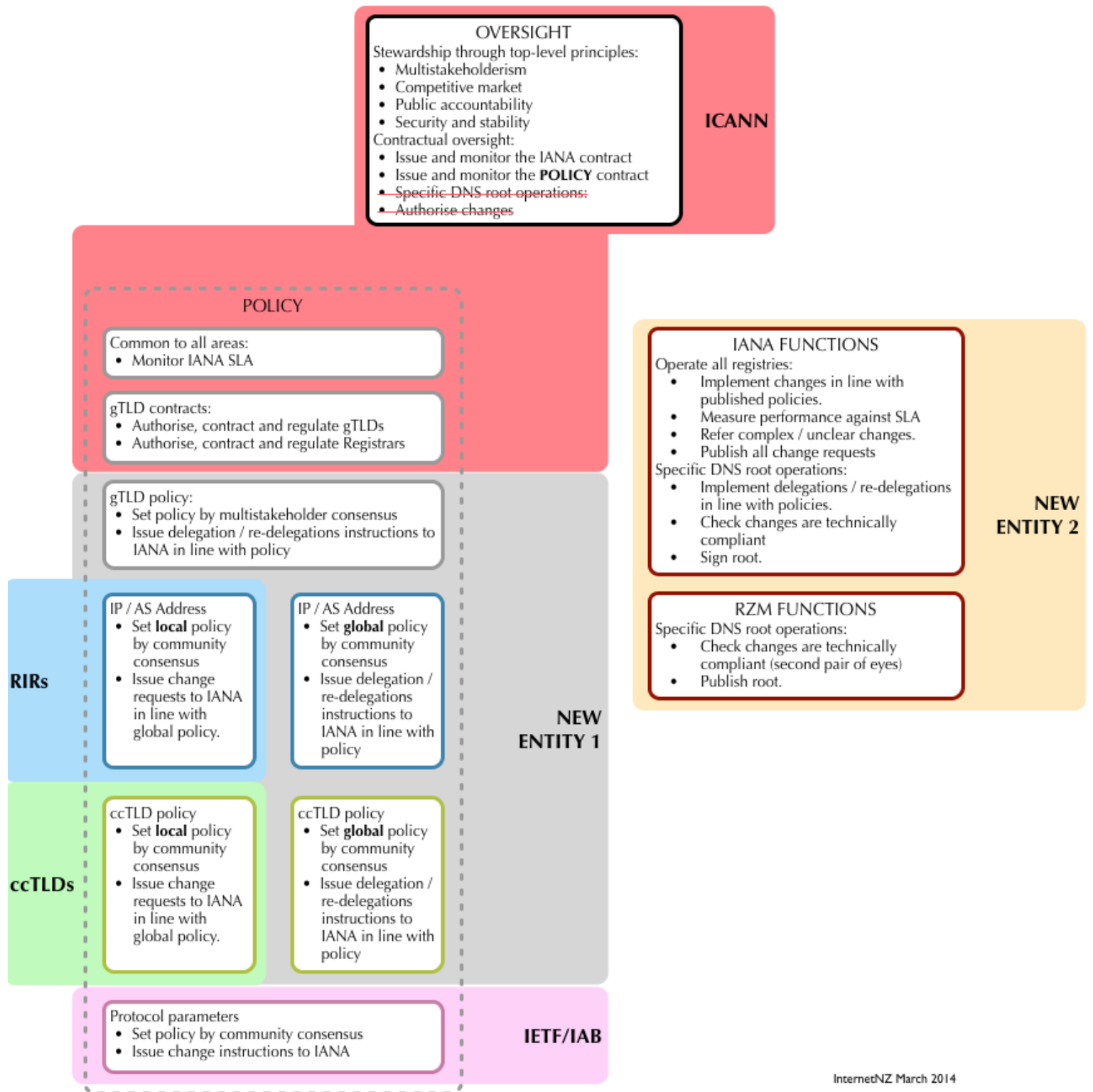- Check changes are technically compliant
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