Integrated IANA model - Draft

Proposed immediately after the Singapore meeting, the Integrated model attempts to reconcile the internal and external models. This hybrid model enhances separation between policy making and IANA registry implementation activities, strengthens accountability, and creates parity between all of the policy making communities (grounded in ICANN for names, the RIRs for numbers, and IETF for protocol parameters) with regard to the operation of the IANA functions. It keeps the IANA function within an IANA ecosystem that includes ICANN and optionally other operational communities. The model attempts to take the major concerns of both those supporting internal solutions and those supporting external solutions, as well as those who do not yet subscribe to any model, and to integrate them into a model that can be configured in various ways, depending on the consensus viewpoint.

The model proposes the creation of an independent Post-Transition IANA (PTI) entity that would:

- be comprised of ICANN's existing IANA functions department resources and processes, in order to ensure continuity, stability, security and resiliency;
- respond to Customer Standing Committees as defined by the mainstream transition process established within the policy making communities, which would develop and monitor service level expectations of the PTI;
- be contracted (e.g., through one or more Memorandum of Understanding, etc.) by the policy making organizations (e.g., ICANN, RIRs, etc.) to maintain the respective IANA registries according to policies approved by those organizations, thereby being consistent with existing numbers and protocol communities approaches to the transition, and maintaining portability of the registries if ultimately needed;
- overseen by a Community Board, preferably no larger than 7 seats, optionally
 representing the three policy communities equally along with the director of the PTI. The
 respective policy making communities would determine the selection mechanism(s) for
 their community board representatives, thereby ensuring that each community had a clear
 understanding of delegation to their representatives, and maintaining direct accountability
 to each policy community.
- be responsive to any Independent Appeals mechanism that may be set up as part of the transition process.

Highlights:

 Post transition IANA (PTI)¹ services sit at the center of the names, numbers and protocols ecosystem

- Offer parity of relationships between the three policy-making communities and the IANA functions operator
- Enhances separation between policy-making and policy implementation
- Allows direct accountability of Post Transition IANA to the three communities through a "Community Board"
- Transfer² of the ICANN IANA team to the Post Transition IANA to ensure continuity, stability, security and resiliency
- Relationships between IETF and RIR and Post Transition IANA remain substantially the same; additionally ICANN establishes SLAs/MoU with Post Transition IANA
- Each community may appoint an equal number of members to the Post Transition IANA "community board"
- Minimizes opportunity for capture and manipulation
- Uses elements of models already under discussion in CWG Stewardship
- Simplifies overall model design.

Detail

The overall model is integrated as follows:

- 1. it integrates the 3 operational communities in the board of Post Transition IANA (PTI)
- 2. it integrates elements of the current external and internal CWG models

The Integrated model provides functional and structural separation of the IANA functions. The Post Transition IANA community board draws its membership from names, numbers, protocol communities.

Benefits of overall model

- Blends external/internal models, drawing on various elements of the proposals to date.
- Allows parity between the names, numbers and protocol policy developing entities (ICANN, RIRs, IETF) and IANA implementation function (Post Transition IANA)
- Ensures the independence of the IANA function and its oversight. Yet, its accountability to the names, numbers and protocols communities is also ensured.
- Ensures a coordinated and coherent IANA function into the future through a Post Transition IANA entity that involves the interested and affected parties directly.

¹ Referred to as NEW IANA in the first sketch of the proposal

² This transfer could be virtual, depending on which configuration of the model was implemented

• Enables continued operations for stability, security and resilience of DNS operations

- Consistent with principle of separability, establishes the operational separation necessary for policy development entities to separate their registries from Post Transition IANA if needed, while allowing for a greater opportunity to affect the operations than in the current model
- Consistent with existing numbers and protocol proposals, allows for numbers and protocols to remain ICANN clients, but offers them the opportunity to become direct counterparty of MOUs to Post Transition IANA and assigning members to the community board.

Structure

- The ICANN IANA department transfers from ICANN to a Post Transition IANA. This eliminates the need for the **Contract Company (ConCo)**
- A community board comprising representatives from the 3 communities is created to oversee Post Transition IANA operation.³ Optionally, additional participants, possible as liaisons, may be added from the global multistakeholder community.
- Previously proposed Multistakeholder Review Team (MRT) is subsumed by the Post Transition IANA board (includes representation of RIRs and IETF)
- Previously proposed Customer Standing Committee (CSC) exists as largely described and is internal to ICANN, ensures that the SLA/MoU between ICANN and Post Transition IANA are met.
- Previously proposed Independent Appeals Panel (IAP) remains part of the model.
 Work on this continues in the CWG Stewardship and CCWG-Accountability.
- This model adds no new architectural considerations.
- ...

Role of the community Board

- Responsible for ensuring funding for operations
- Budget approval for Post Transition IANA
- Oversight of the IANA team, operations
- Addressing escalation issues from IANA customers, i.e those with MOUs with Post Transition IANA.

<u>Funding</u>

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³ While the composition of the Community board is open in the model, one suggestion is an arrangement that allows each of the organizations to pick the number of people they think are required but which normalizes the votes on the community board to 3-5 for each operational community. Other arrangements are possible and as in the discussion of the MRT there are many possible variations. Among the principles that stem from the model, however, is parity among the operational community members. It is also important to remember that this not a policy making board and that there are only 12 employees currently on IANA staff at ICANN. Note that without parity amongst the 3 operational communities, the Community Board becomes identical with the MRT.

- Funding is shared among the members.
- Funding structure, and changes to funding structure, needs to be agreed to by the members, and must be reconsidered as part of the process of adding a new member.
- Funding structure could include both financial arrangements and in-kind arrangements, such as agreements to host the PTI staff and activities.
- In a single member configuration funding arrangements would be be the same as for a fully owned subsidiary.

Post Transition IANA configuration options

This hybrid Integrated model can be structured in several fundamental configurations, each representing a different degree of separation, some of the configurations explored include:

- 1. fully owned subsidiary of ICANN
- 2. shared services arrangement between ICANN, IETF and RIRs
- free-standing entity (e.g, member association or other ownership between ICANN, IETF and RIRs

The preference of the authors is for the shared services arrangement model as outlined below:

IANA Ecosystem ICANN ICANN IETF Post Transition IANA Community board Ownership & Oversight SLA/MOU IANA Staff IANA Staff IANA Staff IANA IAN

Shared Services Arrangement between ICANN, IETF, RIRs

Benefits

- Advantages as described in Subsidiary model above
- Structure least susceptible to capture through parity of oversight and ownership all three parties would need to be captured
- Enhanced separation between policy development and policy implementation mitigating manipulation
- Equal accountability to each community ensuring checks and balances
- Stable due to all three parties needing to agree to substantive changes in Post Transition IANA governance
- Little reliance on outcomes of ICANN CCWG Accountability

Risks that would need mitigation

- Possible instability due to one of the parties leaving the services arrangement
- Expectation of shared funding
- Additional overhead to manage

However, since this model would require buy in from the other operational communities, we are also offering an opt in model that would allow for a evolution to a SSA arrangement - a membership based variant of the SSA as follows:

Membership based SSA evolutionary configuration

This configuration allows for the evolution from an ICANN sole ownership model to a shared membership model if desired.

Membership based shared services arrangement

- Multistakeholder direct operational community customers of IANA (currently Protocols, Numbers, Names) may apply for membership status.
- Membership includes:
 - 3, [5,n] seats on the Community Board picked according to the member's internal multistakeholder processes
 - shared decision making among members
 - shared financial responsibility unless a member's need to contribute is waived by other participants.
 - ability to take on clients for the service, E.g. ICANN currently has several clients including IETF, RIRs, gTLDs, participating ccTLDs, non-participating ccTLDs.
- Except for charter members, at time of transition, membership applications are subject to unanimous vote of acceptance by existing members.
- Can be initiated with a single member.
- SLA/MOUs established between PTI and each member.

Attributes

- This is an opt in model that puts no obligations on the Protocol or Numbers
 communities. If ICANN were to opt for this model they could keep the IETF/IAB and
 RIRs as clients. The other operational communities would have the option of joining as
 charter members or be admitted as members later if they wished.
- Starts essentially equivalent to wholly owned subsidiary with a single member, if necessary, and can evolve in a multi-member Shared Services Arrangement.

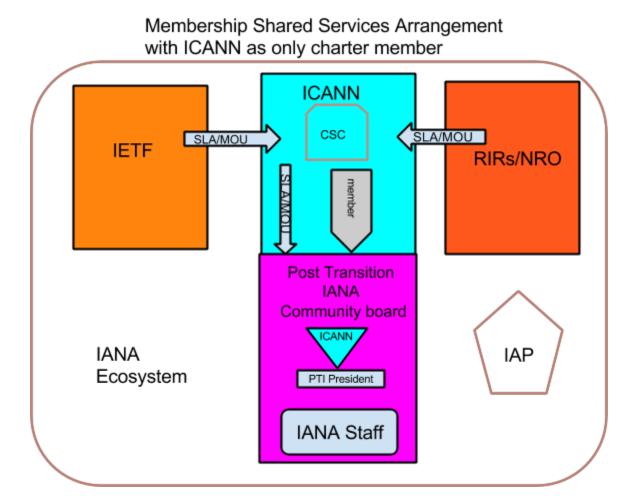
 Starts with same accountability values as the wholly owned Subsidiary but can add additional accountability anchors by adding new members. In the single member model, may have greater reliance on CCWG accountability stream 1 solutions.

Community Board

Consist of

- 3 representatives from each member
- In single member configuration could use the MRT or a MRT like body

Membership based Shared Service Arrangement



This single member configuration is a degenerate case of the membership SSA configuration that closely resembles an fully owned subsidiary model, but which leaves the door open for

migrations into a full membership based SSA. It takes into account the possible necessity for a solution that does not require a decision by the Numbers and Protocol communities to participate, but, hopefully, provides an incentive for them to decide to do so, either at transition time or at a future time

IANA Ecosystem ICANN ICANN

Membership Shared Services Arrangement with 3 members & Stakeholders

This is the optimal case for a membership based SSA. It provides 3 accountability anchors, the membership being composed of multistakeholder organizations with their own accountability structures and give all operational communities oversight of the IANA function on an equal footing.

Accountability in the Integrated Post Transition IANA model

In addition to the initial NTIA requirements, Under Sec. Strickling has asked for description of the accountability mechanisms for anything new that was created.

And the last one I would just mention is the concern that whether the proposal can avoid recreating existing concerns in a new form or creating new concerns. It is pretty clear that there is concern about the accountability, the existing system. And, again, we ask: Does creating new committees or structures simply create a new set of accountability questions? And we do expect that these and similar questions will be addressed and resolved prior to the presentation of any transition plan to the U.S. government. (Strickling, Singapore 8 February 2015)

We believe that all of the configurations of the Integrated IANA model meet the accountability tests, especially the fully owned subsidiary (which really isn't something all that new) and the Shared Service Arrangement. The Shared Service Arrangement, in the opinion of the authors meets the requirements best.

At one level, each of the 3 operational communities participates in the controlling Community Board of the Post Transition IANA, and each brings its owns full flavored multistakeholder accountability solution to its decisions by the IANA Community Board. Each of the three operational communities has its own multistakeholder derived processes

- IETF as defined in RFC 2026
- ICANN as defined in bylaws, the AOC and the improvements to be determined in CCWG accountability
- The RIRs each in their own definitions as well as in the NRO structure as shown in the CRISP work? need references

Another layer of accountability can be achieved by requiring the Post Transition IANA bylaws to require that all, or at least 2/3, of the Community Board agrees to any substantive decisions. This creates the same checks and balances in PTI Board that we see in the ICG.

Beyond this, in the Shared Service Arrangement configuration, the joint ownership by the three operational communities provides a strong degree of stability since by-laws changes could need the approval of the three owners, depending on how the articles of incorporation were crafted, i.e in terms of the powers and responsibilities of the owners.

A third layer of accountability can be achieved by giving the IAP, the responsibility/capabilities of binding arbitration for the PTI and those who bring appeals.

Additionally a periodic review, simlar to the current iAOC reviews, organized by the 3 operational communities, could be added to the accountability package as could an ombudsman function specifically focused on dealing with IANA customer issues.

Accountability and the 3 configurations

The Shared Service Arrangement is a bit more accountable in that it is a membership organization owned by the the 3 operational communities. That is a pretty solid anchor for a tent even in the worst of storms.

The Free standing may be a bit less accountable as it might have more degrees of freedom though its Community Board has the same constraints as the other configurations. It may, therefore need, some additional mechanisms to keep its Board from expanding its scope and authority.

The Fully owned subsidiary may be a little weaker in terms of accountability as well because it relies on ICANN accountability as the sole owner. While ICANN may have a strong underlying structure for accountability already, it is far from trusted. The CCWG Accountability will have difficulty creating a solution in stream 1 that will be trusted in time, though the solution could be provided. There will be those who argue that "we have been here many times before, but in the end it never quite worked out as planned." It will take time for stream 1 solutions to be deployed and experienced and thus for ICANN to be seen as trustworthy. One advantage that the fully owned subsidiary would have over the other configurations is that it would have access to the services of the ICANN Ombudsman. (In the other configurations, one of the decisions that could be made was on a requirements for an Ombudsman function specific to the PTI.) Questions have also been raised as to whether the same accountability mechanisms that are appropriate for a diverse organization like ICANN would also be reasonable for a very specific function like the IANA function. These issues need to be explored further.

Other configurations are possible in this model, we have only explored three clearly differentiated examples:

- Full ICANN subsidiary
- Joint owned Share Service Arrangement
- Free Standing Post Transition IANA with a Community Board

Variations on the example configurations can be crafted.

Transparency

The bylaws of Post Transition IANA would need to include the default transparency clauses that ATRT has developed and been trying to introduce into ICANN. Default Transparency is defined as a situation in which everything is made transparent except for things which meet a certain pre defined set of condition of opacity to be established in the bylaws. The only exceptions to default transparency are subject to a specific decision to either make confidential or to subject to the Chatham House rule. In each case, these would need to be documented separately and would need to time out some number of years later.

Board Composition

Many different arrangements are possible and as was shown in the discussions on the MRT and its variations. The key principle that stems from the Integrated IANA model, however, is parity among the participating organizations of the operational community. It is also important to remember that this not a policy making board and that there are only 12 employees currently on IANA staff at ICANN.

Our recommendation:

Each of the operational organizations picks the number of people they think are required but any decision making, i.e voting when necessary and as defined in the bylaws, is normalized giving 3-5 for each operational community. This allows for each of the communities to picks its participants according to the dictates of their own multistakeholder model.

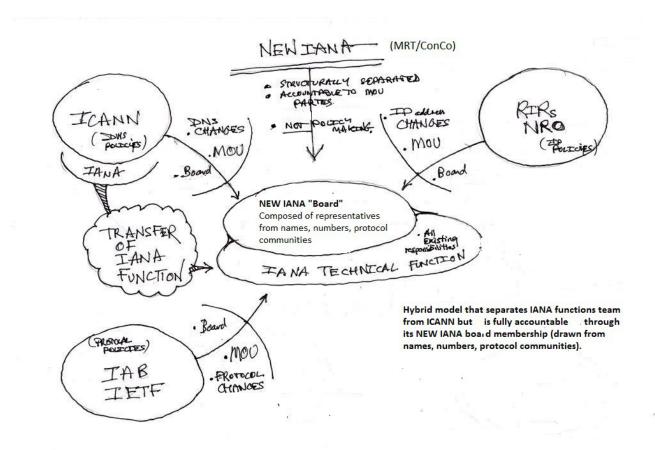
External Oversight and the Integrated IANA model

This model does not create a new external oversight. Instead, the function of external oversight in this distributed governance model, is provided by three possible mechanisms:

- That the Community Board of the Post Transition IANA is composed of representatives from the 3 multistakeholder operational communities
- That the IAP be given the power of binding arbitration
- That any bylaws changes made are subject to the owners in the Subsidiary and Shared Services Arrangement configurations.
 - In the Shared Service Arrangement, the shared ownership provides an example of distributed governance
 - In the free standing model, further oversight would be provided by the owners/investors in the Free Standing configuration and would need to be included in its founding documents.

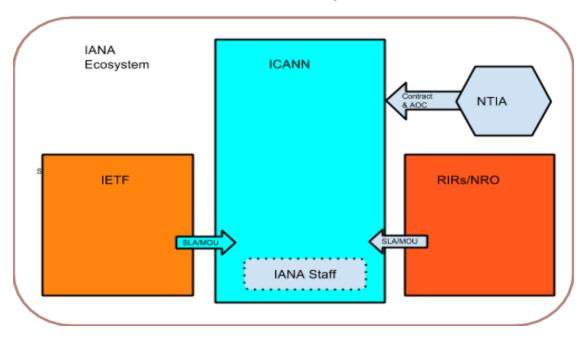
Drawings for other configurations that have been discussed

Functional model

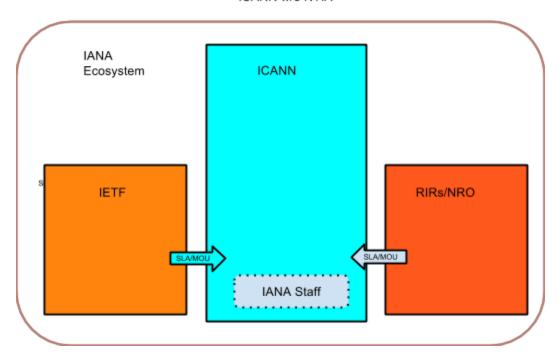


Current structure:

ICANN Today



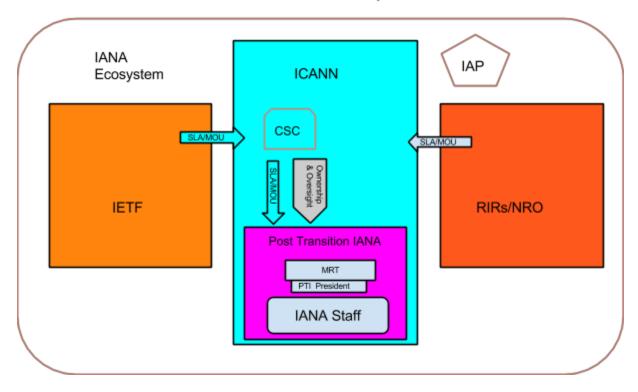
ICANN w/o NTIA



Risks and advantages as discussed in CWG

ICANN Subsidiary:

ICANN Subsidiary

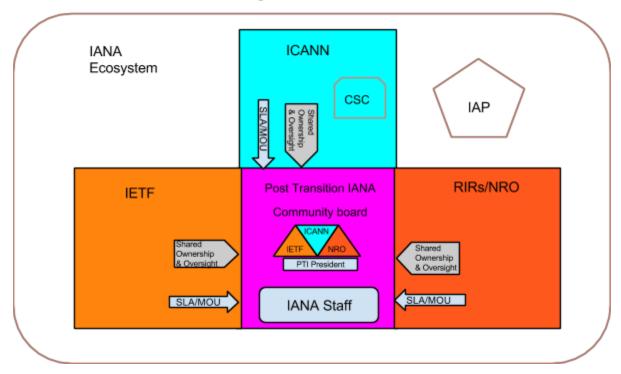


Risks that would need mitigation

- If ICANN captured there is no defense against IANA capture since ICANN is the parent company for IANA,
- Primary IANA accountability mechanism for IETF and RIRs is cessation of MOU and moving elsewhere
- Strong reliance on outcomes of the ICANN CCWG Accountability

Shared Services Arrangement among ICANN, IETF⁴ and RIRs

Shared Services Arrangement between ICANN, IETF, RIRs



Benefits

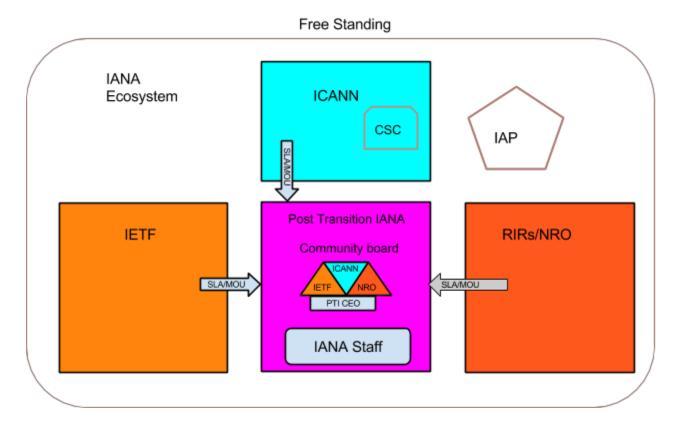
- Advantages as described in Subsidiary model above
- Structure least susceptible to capture through parity of oversight and ownership all three parties would need to be captured
- Enhanced separation between policy development and policy implementation mitigating manipulation
- Equal accountability to each community ensuring checks and balances
- Stable due to all three parties needing to agree to substantive changes in Post Transition IANA governance
- Little reliance on outcomes of ICANN CCWG Accountability

Risks that would need mitigation

- Possible instability due to one of the parties leaving the services arrangement
- Expectation of shared funding
- Additional overhead to manage

⁴ It is noted that since the IETF is not an established legal entity, it may be the Internet society that formalizes the role on the IETF/IAB's behalf.

Free Standing



Benefits:

- Greatest degree of separation between policy development and policy implementation mitigating manipulation
- Equal accountability to each community ensuring checks and balances
- Stable due to all three parties needing to agree to substantive changes in Post Transition IANA governance
- Little reliance on outcomes of ICANN CCWG Accountability

Risks that would need mitigation:

- Possible instability due to one of the parties leaving the services arrangement
- Expectation of shared funding
- Additional overhead to manage
- Entity management and administration will add costs to overall function and would probably require additional staff.
- Additional accountability mechanisms may be needed due to independence of entity.
- Major organizational and legal change

• As the Board is the only mechanism for checks and balances, less defence against capture.