## **Version Control**

DATE	DRAFT	DESCRIPTION	URL
	VERSION		
2015/01/08	2	- Additional description on contract details, review committee and intellectual property rights - Description revised on Section V. NITA Requirements and VI. Community Process for more clarity - No changes are made to key elements of the proposal.	https://www.nro. net/crisp- proposal-second- draft
2014/12/24	1.1	Editorial Changes	https://www.nro. net/crisp- proposal-first- draft-1-1
2014/12/19	1.0	First draft for comments	https://www.nro. net/crisp- proposal-first- draft

## Draft Response to the Internet Coordination Group Request for Proposals on IANA from the RIR community

## 1. Proposal type

Identify which category of the IA	ANA functions this submiss	ion proposes to address:
[ ] Names	[ ] Numbers	[ ] Protocol Parameters

## I. Description of Community's Use of IANA

This section should list the specific, distinct IANA services or activities your community relies on. For each IANA service or activity on which your community relies, please provide the following:

- A description of the service or activity.
- A description of the customer(s) of the service or activity.
- What registries are involved in providing the service or activity.
- A description of any overlaps or interdependencies between your IANA requirements and the functions required by other customer communities

## **I.A.** A description of the service or activity.

The IANA activities relevant to the number resource communities are the maintenance of the global Internet number resource registries, including the allocation of IPv4 addresses, IPv6

addresses, and Autonomous System Numbers ("ASNs") to the Regional Internet Registries ("RIRs") as well as the delegation of subdomains below the "IN-ADDR.ARPA" and "IP6.ARPA" domains in accordance with the allocation of IPv4 and IPv6 addresses.

**I.B.** A description of the customer(s) of the service or activity.

The RIRs manage the registration and distribution of Internet number resources (IPv4 and IPv6 addresses and ASNs) to members within their service regions. The five RIRs in operation at this point in time are:

AFRINIC	Serving Africa	Founded in 2005
APNIC	Serving the Asia Pacific region	Founded in 1993
ARIN	Serving North America	Founded in 1997
LACNIC	Serving South America and the Caribbean	Founded in 2001
RIPE NCC	Serving Europe, Central Asia and the	Founded in 1992
	Middle Fast	

Midule Last

The five RIRs manage the distribution and registration of Internet number resources at the regional level, having received blocks of unused resources from the global pools managed by the IANA operator. The RIRs also facilitate the policy development processes of their respective communities, providing secretariat roles.

The five RIRs have a long-standing and straightforward operational relationship with IANA. IANA maintains the global pools of Internet number resources from which the RIRs receive allocations to distribute to their communities. The RIRs also coordinate with IANA to correctly register any resources that are returned to the global pools. Collectively, the system for administering Internet number resources is referred to as the "Internet Number Registry System" and is described in detail in RFC 7020.

**I.C.** What registries are involved in providing the service or activity.

The most relevant IANA registries are the IPv4 address registry, the IPv6 address registry, and the ASN registry. Provision of reverse DNS services in "IN-ADDR.ARPA" and "IP6.ARPA" domains may also require interaction with the .ARPA zone registry.

**I.D.** A description of any overlaps or interdependencies between your IANA requirements and the functions required by other customer communities.

The Internet Engineering Task Force ("IETF") is responsible for policy relating to the entire IP address space and AS number space. Through the IANA protocol parameters registries, the IETF delegates unicast IP address ("IANA IPv4 Address Space Registry" and "IPv6 Global Unicast Allocations Registry") and AS number space ("ASN Registry) to the RIR system [RFC7020]. These registries are generally accessed via references based on the iana.org

domain name. Note that within each IANA registry, there are also reserved values or ranges, and special-purpose registries, which are outside the Internet Numbers Registry System and instead administered under the direction of the IETF. The delineation of the specific ranges delegated to the Internet Number Registry system is provided in RFC 7249. It is expected that the boundary between IETF-managed and Internet Number Registry-managed parts of the number spaces may change from time to time, with agreement between the IETF and the RIRs. Potential reasons for changes include the possibility that the IETF may release some previously reserved space for general use, or may reserve some previously unused space for a special purpose.

The global Internet community also depends upon the IANA operator for administration of the special-purpose "IN-ADDR.ARPA" and "IP6.ARPA" DNS zones which are associated with IPv4 and IPv6 number resources respectively. These zones are delegated to IANA by the Internet Architecture Board ("IAB") and "[s]ub-delegations within this hierarchy are undertaken in accordance with the IANA's address allocation practices" (RFC3172). The IANA operator administers these zones as "agreed technical work items" per the IETF- Internet Corporation for Assigned Names and Numbers ("ICANN") IANA MoU. It is important to note that this work is outside the scope of the National Telecommunications and Information Administration ("NTIA") contract.

The RIR communities also make use of the term "IANA" in the description of their processes, policies and public database records.

#### Relevant links:

IETF-ICANN MoU Concerning the Technical Work of the Internet Assigned Numbers Authority: https://www.icann.org/resources/unthemed-pages/ietf-icann-mou-2000-03-01-en "The Internet Numbers Registry System", RFC 7020: https://tools.ietf.org/html/rfc7020 "Internet Numbers Registries", RFC 7249: https://tools.ietf.org/html/rfc7249

## II. Existing, Pre-Transition Arrangements

This section should describe how existing IANA-related arrangements work, prior to the transition.

## II.A. Policy Sources

This section should identify the specific source(s) of policy which must be followed by the IANA functions operator in its conduct of the services or activities described above. If there are distinct sources of policy or policy development for different IANA activities, then please describe these separately. For each source of policy or policy development, please provide the following:

- Which IANA service or activity (identified in Section I) is affected.
- A description of how policy is developed and established and who is involved in policy development and establishment.
- A description of how disputes about policy are resolved.

- References to documentation of policy development and dispute resolution processes.
- II.A.1. Which IANA service or activity (identified in Section I) is affected.

The Internet number resource registries.

It is important to note that allocations of Internet number resources from IANA to the RIRs and its registrations in IANA registries, as well as delegations of "IN-ADDR.ARPA" and "IP6.ARPA" domains, described in Section I, are conducted between IANA and the RIRs without involvement by the NTIA.

**II.A.2.** A description of how policy is developed and established and who is involved in policy development and establishment.

The policies under which the IANA operator manages the global pools of Internet number resources (excluding those address ranges reserved by the IETF for specific technical purposes) are developed and agreed by the five RIR communities via open, transparent and bottom-up policy development processes. Each RIR community engages in its own regional policy development process; these processes are open to all stakeholders regardless of specific background or interest. Links to each of the five regional Policy Development Processes ("PDPs") are included under in the RIR Governance Matrix published on the Number Resource Organization ("NRO") website [www.nro.net/about-the-nro/rir-governance-matrix].

Any individual may submit a global proposal. Each RIR community must ratify an identical version of the proposed policy. The NRO Executive Council ("NRO EC") then refers the coordinated proposal to the Address Supporting Organization ("ASO") Address Council ("ASO AC"), which reviews the process by which the proposal was developed and, under the terms of the ASO Memorandum of Understanding ("ASO MoU"), passes it to the ICANN Board of Directors for ratification as a global policy.

There are currently three global policies relating to management of the global pools of IPv4 addresses, IPv6 addresses and AS Numbers [https://www.nro.net/policies]:

- (a) IANA Policy for Allocation of IPv6 Blocks to Regional Internet Registries;
- (b) IANA Policy for Allocation of ASN Blocks to Regional Internet Registries; and
- (c) Global Policy for Post Exhaustion IPv4 Allocation Mechanisms by the IANA.

There is a fourth global policy agreed by the RIR communities, ICP-2, "Criteria for Establishment of New Regional Internet Registries".

The global Policy Development Process ("gPDP") described in "Global Policy

Development Process Document" [https://www.nro.net/documents/global-policy-development-process] is used for all of the number-related IANA activities described in Section I, but the policy that "IN-ADDR.ARPA" and "IP6.ARPA" domains must be delegated following IPv4 and IPv6 address allocations is specified by the IETF (most recently in RFC 3172).

## **II.A.3.** A description of how disputes about policy are resolved.

The gPDP is formally described in "Attachment A" of the ASO MoU, signed by ICANN and the RIRs in 2004 (and signed by AFRINIC when it was established as the fifth RIR in 2005). This MoU includes provisions for resolving disputes between ICANN and the RIRs or their communities. It is important to note that while the gPDP allows for the ICANN Board to dispute the outcome of a consensus community decision (escalating to mediation between ICANN and the RIRs), it does not include any role for the IANA contract holder (currently the NTIA). The ASO MoU is an agreement between the RIR communities and ICANN; NTIA has no oversight role in policy-making as regards management of the global Internet number resource pools, and its transition out of its current role would have minimal effect on the policy-making framework.

A separate MoU, the NRO MoU, establishes the NRO as "a coordinating mechanism of the RIRs to act collectively on matters relating to the interests of the RIRs", and includes provisions for dispute resolutions between RIRs on issues relating to global policy development or implementation.

It is the responsibility of the NRO Number Council ("NRO NC"), a group comprising three community members selected by each of the five RIR communities, to confirm that the documented RIR PDPs have been followed in the development and approval of a new policy or policy change. Further, this group reviews the policy followed by each of the RIR communities to assure itself that the significant viewpoints of interested parties were adequately considered, and only after this confirmation does it then consider forwarding global policy proposals to the ICANN Board for ratification.

The NRO NC also acts in the role of the ICANN ASO AC, and as such, presents the agreed global policy proposal to the ICANN Board for ratification and operational implementation.

The ICANN Board reviews the received global number resource policy proposals and may ask questions and otherwise consult with the ASO Address Council and/or the individual RIRs acting collectively through the NRO. The ICANN Board may also consult with other parties as the Board considers appropriate. If the ICANN Board rejects the proposed policy, it delivers to the ASO ACa statement of its concerns with the proposed policy, including in particular an explanation of the significant viewpoints that were not adequately considered during the regular RIR processes. By agreement of all RIRs, the ASO AC may forward a new proposed policy (either reaffirming the previous proposal or a modified proposal) to the ICANN Board. If the resubmitted proposed policy is rejected for a second time by ICANN, then the RIRs or ICANN shall refer the matter to mediation.

In case of disputes where mediation has failed to resolve the dispute, the ICANN ASO MoU agreement provides for arbitration via International Chamber of Commerce (ICC) Rules of Arbitration in the jurisdiction of Bermuda or such other location as is agreed between the RIRs and ICANN. It is also worth noting that the RIRs have been participating (as the ASO) in the periodic independent review processes for Accountability and Transparency (ATRT) that is called for per ICANN's Bylaws.

**II.A.4.** References to documentation of policy development and dispute resolution processes.

#### Relevant links:

ICANN ASO MoU: <a href="https://www.nro.net/documents/icann-address-supporting-organization-aso-mou">https://www.nro.net/documents/icann-address-supporting-organization-aso-mou</a>

NRO MoU: <a href="https://www.nro.net/documents/nro-memorandum-of-understanding">https://www.nro.net/documents/nro-memorandum-of-understanding</a>

About the NRO Number Council: <a href="https://www.nro.net/about-the-nro/the-nro-number-council">https://www.nro.net/about-the-nro/the-nro-number-council</a>

RIR Governance Matrix: https://www.nro.net/about-the-nro/rir-governance-matrix

Global Policies: https://www.nro.net/policies

## II.B. Oversight and Accountability

This section should describe all the ways in which oversight is conducted over IANA's provision of the services and activities listed in Section I and all the ways in which IANA is currently held accountable for the provision of those services. For each oversight or accountability mechanism, please provide as many of the following as are applicable:

- · Which IANA service or activity (identified in Section I) is affected.
- If the policy sources identified in Section II.A are affected, identify which ones are affected and explain in what way.
- A description of the entity or entities that provide oversight or perform accountability functions, including how individuals are selected or removed from participation in those entities.
- A description of the mechanism (e.g., contract, reporting scheme, auditing scheme, etc.). This should include a description of the consequences of the IANA functions operator not meeting the standards established by the mechanism, the extent to which the output of the mechanism is transparent and the terms under which the mechanism may change.
- Jurisdiction(s) in which the mechanism applies and the legal basis on which the mechanism rests.
- **II.B.1.** Which IANA service or activity (identified in Section I) is affected.

The Internet number resource registries.

**II.B.2.** If the policy sources identified in Section II.A are affected, identify which ones are affected and explain in what way.

A decision by the NTIA to discontinue its stewardship of the IANA functions, and therefore its contractual relationship with the IANA functions operator, would not have any significant impact on the continuity of Internet number-related IANA services currently provided by ICANN. However, it would remove a significant element of oversight from the current system.

There is no contractual obligation directly to the Internet number resource community for the IANA operator to provide IANA registry services for the Internet number registries. ICANN has historically provided IANA services for the Internet number registries under the terms of the NTIA IANA Functions contract and therefore IANA services for the Internet number registries are presently subject to change per that agreement.

**II.B.3.** A description of the entity or entities that provide oversight or perform accountability functions, including how individuals are selected or removed from participation in those entities.

All institutional actors with a role in management of Internet number resources are accountable to the open communities that make and agree on the policies under which those resources are distributed and registered. The mechanisms used to ensure and enforce this accountability differ for each of these actors.

#### II.B.3.i. NTIA

ICANN, as the current operator of the IANA functions, is obligated by the NTIA agreement to carry out management of the global IP address and AS Number pools according to policies developed by the communities.

While the IANA operator escalation and reporting mechanisms are public in nature, the Internet number community is primarily represented in oversight of the IANA operator performance by the RIRs, which are member-based based organizations with elected governance boards. Currently, the NTIA does not have an oversight role in this regard.

The ultimate consequence of failing to meet the performance standards or reporting requirements is understood to be a decision by the contracting party (the NTIA) to terminate or not renew the IANA functions agreement with the current contractor (ICANN).

## II.B.3.ii. The Regional Internet Registries

Administration by the IANA operator consists predominantly of processing of requests from the RIRs for issuance of additional number resources. The five RIRs are intimately

familiar with global number resource policies under which the requests are made and maintain communications with the IANA operations team throughout the request process.

The RIRs are not-for-profit membership associations, and as such are accountable to their members by law. The specific governance processes for each RIR differ depending on where they have been established and the decisions made by their membership, but in all RIRs, members have the right to vote individuals onto the governing Board and to vote on matters related to the respective RIR.

At the same time, an RIR's registration and allocation practices are directed by policies developed by its community. Each RIR community's PDP defines how these policies are developed, agreed and accepted for operational implementation.

The corporate governance documents and PDPs of each RIR and its community are accessible via the RIR Governance Matrix, published on the NRO website.

**II.B.4.** A description of the mechanism (e.g., contract, reporting scheme, auditing scheme, etc.). This should include a description of the consequences of the IANA functions operator not meeting the standards established by the mechanism, the extent to which the output of the mechanism is transparent and the terms under which the mechanism may change.

The NTIA IANA Agreement currently defines obligations of the IANA operator for Internet number resources.

This obligation is specifically noted in section C.2.9.3 of the NTIA agreement:

C.2.9.3 Allocate Internet Numbering Resources -- The Contractor shall have responsibility for allocated and unallocated IPv4 and IPv6 address space and Autonomous System Number (ASN) space based on established guidelines and policies as developed by interested and affected parties as enumerated in Section C.1.3.

The NTIA agreement also lays out specific deliverables for the IANA operator (ICANN) to produce as a condition of the agreement (see "Section F – Deliveries and Performance"), including performance standards developed in cooperation with the affected parties (in the case of the Internet number resource pools, the affected parties include the RIRs and their communities), customer complaint procedures and regular performance reporting.

These deliverables are met by ICANN via monthly reporting on their performance in processing requests for the allocation of Internet number resources; these reports include IANA operator performance against key metrics of accuracy, timeliness, and transparency, as well as the performance metrics for individual requests. The IANA operations team also provides escalation procedures for use in resolving any issues with requests, as per the "IANA Customer Service Complaint Resolution Process".

**II.B.5.** Jurisdiction(s) in which the mechanism applies and the legal basis on which the mechanism rests.

Jurisdiction for this current mechanism is the United States of America under applicable Federal government contracting laws and regulations.

#### Relevant links:

NTIA IANA Agreement: <a href="http://www.ntia.doc.gov/page/iana-functions-purchase-order">http://www.ntia.doc.gov/page/iana-functions-purchase-order</a>
ICANN ASO MoU: <a href="https://www.nro.net/documents/icann-address-supporting-organization-aso-mou">https://www.nro.net/documents/icann-address-supporting-organization-aso-mou</a>

NRO MoU: <a href="https://www.nro.net/documents/nro-memorandum-of-understanding">https://www.nro.net/documents/nro-memorandum-of-understanding</a>
IANA Customer Service Complaint Resolution Process: <a href="http://www.iana.org/help/escalation-procedure">http://www.iana.org/help/escalation-procedure</a>

IANA Performance Standards Metrics Report:

http://www.iana.org/performance/metrics

RIR Governance Matrix: https://www.nro.net/about-the-nro/rir-governance-matrix

## III. Proposed Post-Transition Oversight and Accountability Arrangements

This section should describe what changes your community is proposing to the arrangements listed in Section II.B in light of the transition. If your community is proposing to replace one or more existing arrangements with new arrangements, that replacement should be explained and all of the elements listed in Section II.B should be described for the new arrangements. Your community should provide its rationale and justification for the new arrangements.

If your community's proposal carries any implications for the interface between the IANA functions and existing policy arrangements described in Section II.A, those implications should be described here.

If your community is not proposing changes to arrangements listed in Section II.B, the rationale and justification for that choice should be provided here.

**III.A.** The elements of this proposal are as follows:

- ICANN to continue as the IANA functions operator on number resources;
- (2) Intellectual property rights (IPR) related to the provision of the IANA services stay with the community;
- (3) Service level agreement with the IANA functions operator on number resources; and
- (4) Establishment of a Review Committee, with representatives from each RIR, to advise the NRO EC on the review of the IANA functions operator's performance and meeting of identified service levels.

## III.A.1. ICANN to continue as the IANA functions operator on number resources

To maintain stability and continuity in operations of the Internet number-related IANA services, very minimal changes to the arrangements listed in Section II.B are proposed, including the identification of the proposed initial IANA functions operator. As noted in numerous NRO communications over the past decade, the RIRs have been very satisfied with the performance of ICANN in the role of IANA functions operator. Taking this into account, and considering the strong desires expressed in the five RIR communities' IANA stewardship discussions for stability and a minimum of operational change, the Internet numbering community believes that ICANN should remain in the role of IANA functions operator for at least the initial term of the new contract.

A decision by the NTIA to discontinue its stewardship of the IANA functions, and therefore its contractual relationship with the IANA functions operator, would not have any significant impact on the continuity of Internet number-related IANA services currently provided by ICANN. However, it would remove a significant element of oversight from the current system.

While there are no concrete needs or plans at this point, the NRO EC may in the future determine that the IANA functions related to number resources should be transferred to a different contractor. In such a case, selection of a new contractor shall be conducted in a fair, open and transparent process, in line with applicable industry best practices and standards.

## III.A.2. IPR related to the provision of the IANA services stay with the community

There are several intellectual properties related to the provision of the IANA services whose status should be clarified as part of the transition. Namely, the "IANA" trademark, the "IANA.ORG" domain name, and public databases related to the performance of the IANA function.

It is important that through the stewardship transition the IPR status of the registries is clear and ensures free unlimited access to the public registry data. It is the expectation of the RIR communities that the public number resource registries are in the public domain.

It is also the expectation of the RIR communities that non-public information related to the IANA number resource registries and corresponding services, including the provision of reverse DNS delegation in IN-ADDR.ARPA and IP6.ARPA, is managed by the IANA operator and will be transferred to its successor(s) along with relevant rights.

It is the preference of the RIR communities that all relevant parties acknowledge that fact as part of the transition.

With regards to the IANA trademark and the iana.org domain it is the expectation of the RIR communities that both are associated with the IANA function and not with a particular IANA

functions operator. Identifying an organisation, not associated with an IANA operator, that holds these assets permanently will facilitate a smooth transition should another operator (or operators) be selected at some point in the future. It is the preference of the RIR communities that the IANA trademark and the IANA.ORG domain name be transferred to an entity independent of the IANA functions operator that will ensure these assets are used purposefully in a non-discriminatory manner for the benefit of all operational communities. From the RIR communities' perspective, the IETF Trust would be an acceptable candidate for this role.

The transfer of the IANA trademark and iana.org domain to the IETF Trust will require additional coordination with the other affected communities of the IANA functions, namely protocol parameters and names.

# III.A.3. Service level agreement with the IANA functions operator on number resources

This proposal assumes that specific IANA customers (i.e. the numbers community, the protocol parameters community and the names community) will have independent arrangements with the IANA operator relating to maintenance of the specific registries for which they are responsible. At the same time, the Internet numbers community wishes to emphasize the importance of communication and coordination between these communities to ensure the stability of IANA functions operation. Such communication and coordination would be especially vital should the three communities reach different decisions regarding the identity of the IANA functions operator going forward. Efforts to facilitate this communication and coordination should be undertaken by the affected communities via processes separate to this stewardship transition process.

The following is a proposal to replace the current NTIA IANA agreement with a new contract that more directly reflects and enforces the IANA functions operator's accountability to the open, bottom-up numbers community. The proposal attempts to ensure the continuity of processes and mechanisms that have proved successful and with which the community is satisfied.

• The services provided by the IANA functions operator in relation to the Internet numberrelated functions remain unchanged

The oversight and accountability mechanisms detailed in Section II.B remain unchanged

- The policy sources identified in Section II.A are unaffected
- The entities that provide oversight or perform accountability functions (the RIRs) remain the same
- The consequence for failure to meet performance standards remains termination or decision not to renew the IANA functions agreement with the then-current contractor

The Internet numbering community proposes that a new contract be established between the IANA functions operator and the five RIRs. The contract, essentially an **IANA Service Level Agreement**, would obligate the IANA functions operator to carry out those IANA functions

relating to the global Internet number pools according to policies developed by the regional communities via the gPDP as well as management of the delegations within IN-ADDR.ARPA and IP6.ARPA domains. The agreement would include specific requirements for performance and reporting commensurate with current mechanisms, and would specify consequences should the contractor fail to meet those requirements, the means for the resolution of disputes between the parties, and the terms for renewal or termination of the contract. IANA operations should be reliable and consistent, with any registry changes made in an open and transparent manner to the global community. The agreement should also require the IANA operator to appropriately coordinate with any other operator of IANA-related registry services.

It is expected that RIR staff will draft the specific language of this agreement, and that the drafting process will be guided by the principles listed below. References to relevant sections of the current NTIA agreement are also noted, as it is expected the new agreement will share many of the same contractual goals and mechanisms.

#### IANA Agreement Principles

## i. Applicability of ASO MoU - Separation of Policy Development and Operational Roles

## Principle:

The IANA Operator will merely execute the global policies adopted according to the global Policy Development Process defined in the ASO MoU.

Relevant section(s) in the NTIA contract: C.2.4, C.2.5

## ii. Description of Serviced Provided by the IANA Operator to RIRs

#### Principle:

The IANA Operator will maintain the global Internet number resource registries. The IANA Operator will distribute Internet number Resources to the RIRs in accordance with the specific processes and timelines described in this section of the agreement. The IANA Operator will delegate subdomains below the IN-ADDR.ARPA and IP6.ARPA domains in accordance with the allocation of IPv4 and IPv6 addresses.

Relevant section(s) in the NTIA contract: C.2.9.3

## iii. Obligation to Issue Reports on Transparency and Accountability

## Principle:

The IANA Operator will commit to certain obligations so as to perform the function as expected by the community and will be obliged to periodically issue reports illustrating its compliance with the community's expectations.

Relevant section(s) in the NTIA contract:

C.2.6, C.2.7, C.2.8

## iv. Security Requirements - Performance Metric Requirements - Audit Requirements

## Principle:

The IANA Operator will commit to specific security standards, metric requirements and audit requirements and will be obliged to periodically issue reports illustrating its compliance with them.

Relevant section(s) in the NTIA contract:

C.3, C.4, C.5

## v. Review of the IANA Operations

#### Principle:

The RIRs will perform reviews to assess whether the IANA Operator complies with all requirements described in the agreement whenever they deem appropriate. The IANA Operator will be obliged to facilitate this review.

Relevant section(s) in the NTIA contract:

N/A

#### vi. Failure to Perform

## Principle:

If the IANA Operator fails to perform as agreed in this agreement, there will be specific consequences. One of these consequences may be termination of the contract.

Relevant section(s) in the NTIA contract:

E.2, I.67

## vii. Term and Termination

## Principle:

RIRs will be able to periodically review the agreement and evaluate whether they want to renew the agreement.

Either party may terminate the agreement with reasonable prior notice.

Relevant section(s) in the NTIA contract: Page 2 of Award/Contract, I.51, I.52, I.53

## viii. Continuity of Operations

## Principle:

If, at the end of the contract term, the RIRs decide to sign an agreement for operation of the number-related IANA functions with a different party, the previous IANA Operator will be obliged to ensure an orderly transition of the function while maintaining continuity and security of operations.

Relevant section(s) in the NTIA contract: C.7.3 and I.61

## ix. Intellectual Property Rights and Rights Over Data

#### Principle:

Both parties acknowledge that the data of the public number resource registries remain in the public domain. The RIRs will have unlimited rights in all other data delivered under this agreement and in all other data first produced in the performance of this agreement.

If the IANA operator becomes the owner of intellectual property rights through the performance of this agreement, these rights will be transferred to the public domain or to the RIRs. In case the legislation does not allow such transfer, the IANA operator must grant appropriate licenses for ongoing use of the relevant intellectual property.

Relevant section(s) in the NTIA contract: H.4, H.5

## x. Resolution of Disputes

#### Principle:

Disputes between the parties related to the SLA will be resolved through arbitration.

Relevant section(s) in the NTIA contract:

N/A

#### III.A.4. Establishment of a Review Committee

To ensure the service level defined in the proposed contract is maintained and provided by the IANA functions operator, the NRO EC will conduct periodic reviews of the service level of the IANA number resource functions that serves each RIR and their respective communities.

The NRO EC shall establish a Review Committee that will advise and assist the NRO EC in its periodic review. The Review Committee will, as needed, undertake a review of the level of service received from the IANA functions operator and report to the NRO EC any concerns regarding the performance of the IANA functions operator, including especially any observed failure or near-failure by the IANA functions operator to meet its contractual obligations under the proposed contract. Any such Review Committee will advise the NRO EC in its capacity solely to oversee the performance of the IANA number resource functions and the Review Committee's advice and comment will be limited to the processes followed in the IANA functions operator's performance under the proposed contract. Activities of the Review Committee shall be conducted in an open and transparent manner. Reports from the Review Committee shall be published.

The Review Committee should be a team composed of suitably qualified representatives from each RIR region.

III.B. If your community's proposal carries any implications for the interface between the IANA functions and existing policy arrangements described in Section II.A, those implications should be described here.

This proposal carries no implication for the interface between IANA functions and existing policy arrangements described in Section II.A. The text in "Attachment A" of the ICANN ASO MoU meets the current and anticipated requirements for a community-driven global policy development process.

As an additional measure of security and stability, the RIRs have documented their individual accountability and governance mechanisms, and asked the community-based Number Resource Organization Number Council (NRO NC) to undertake a review of these mechanisms and make recommendations for improvements that may be warranted given the nature of the stewardship transition for Internet number resources.

## IV. Transition Implications

This section should describe what your community views as the implications of the changes it proposed in Section III. These implications may include some or all of the following, or other implications specific to your community:

- Description of operational requirements to achieve continuity of service and possible new service integration throughout the transition.
- · Risks to operational continuity and how they will be addressed.
- Description of any legal framework requirements in the absence of the NTIA contract.

- Description of how you have tested or evaluated the workability of any new technical or operational methods proposed in this document and how they compare to established arrangements.
- **IV.A.** Description of operational requirements to achieve continuity of service and possible new service integration throughout the transition.
- · Risks to operational continuity and how they will be addressed.

The intent of the proposal described above is to:

- 1. Minimize risks to operational continuity of the management of the Internet number-related IANA functions, and:
- 2. Retain the existing framework for making those policies that describe the management of the global Internet number resource pools, as this framework is already structured to ensure open, bottom-up development of such policies.

Under current arrangements, the NTIA is responsible for extending or renewing the IANA functions agreement, and setting the terms of that contract. A new contract with the five RIRs and the IANA functions operator as signatories would shift the responsibility for renewing, setting terms or terminating the contract to the RIRs, who would coordinate their decisions via the NRO EC (made up of the RIR Directors and Chief Executives). Decisions made regarding the contract would be based on operational circumstances, past performance and input from open, regional communities.

The shift from the existing contractual arrangement to another contractual arrangement (perhaps relying on a set of distinct contracts) covering the IANA functions operator's ongoing management of all the IANA functions should result in no operational change for management of the global Internet number resource pools. This will help minimize any operational or continuity risks associated with stewardship transition.

By building on the existing Internet registry system (which is open to participation from all interested parties) and its structures, the proposal reduces the risk associated with creating new organizations whose accountability is unproven.

The necessary agreement proposed for IANA operation services for the Internet number registries can be established well before the NTIA target date for transition (September 2015), as there are no changes to existing service levels or reporting that are being proposed, only a change in contracting party to align with the delegated policy authority.

IV.B. Description of any legal framework requirements in the absence of the NTIA contract.

The necessary legal framework in the absence of the NTIA contract will be fulfilled by the proposed agreement between the IANA functions operator and the five RIRs. As stated in Section III above, the contract, essentially an **IANA Service Level Agreement**, would obligate the IANA functions operator to carry out those IANA functions relating to the global Internet

number pools according to policies developed by the regional communities via the gPDP as well as management of the delegations within IN-ADDR.ARPA and IP6.ARPA domains. The agreement would include specific requirements for performance and reporting commensurate with current mechanisms, and would specify consequences should the contractor fail to meet those requirements, the means for the resolution of disputes between the parties, and the terms for renewal or termination of the contract. IANA operations should be reliable and consistent, with any registry changes made in an open and transparent manner to the global community. The agreement should also require the IANA operator to appropriately coordinate with any other operator of IANA-related registry services. The contract would also provide for jurisdiction and governing law regarding the new arrangement.

- **IV.C.** Description of how you have tested or evaluated the workability of any new technical or operational methods proposed in this document and how they compare to established arrangements.
- Risks to operational continuity and how they will be addressed.

This proposal does not propose any new technical or operational methods. There is inclusion of a proposed Review Committee to be established by the five RIRs acting cooperatively and coordinating through the NRO EC; however, this does not carry any new operational method as the IANA functions operator would remain accountable to the party with whom it is contracting, in this case, the five RIRs in place of the NTIA. The proposed Review Committee is a tool for the five RIRs to, together with their respective communities collectively, evaluate and review performance of the IANA functions provided.

## V. NTIA Requirements

Additionally, NTIA has established that the transition proposal must meet the following five requirements:

- Support and enhance the multistakeholder model;
- Maintain the security, stability, and resiliency of the Internet DNS;
- Meet the needs and expectation of the global customers and partners of the IANA services:
- Maintain the openness of the Internet.
- The proposal must not replace the NTIA role with a government-led or an intergovernmental organization solution.

This section should explain how your community's proposal meets these requirements and how it responds to the global interest in the IANA functions.

This proposal addresses each of the NTIA's requirements:

**V.A.** Support and enhance the multi-stakeholder model;

The RIRs are not-for-profit membership organisations accountable to their membership and communities. The processes developed by these communities over time are open, bottom-up

and inclusive of all stakeholders, ensuring the opportunity for anyone with an interest in management of Internet number resources to participate in policy-making.

Shifting stewardship of the IANA functions to the RIRs and their communities is an important step in acknowledging the maturity and stability of the multi-stakeholder governance model, and in recognizing the success and de facto authority of that model under the current arrangement.

## V.B. Maintain the security, stability, and resiliency of the Internet DNS;

No changes are proposed in this document that affect the security, stability, and resiliency of the DNS.

This proposal is chiefly concerned with Internet number resources, which also need security, stability, and resiliency. The existing operational and policy-making structures relating to management of the global Internet number resource pools have served the Internet community well over time, and the RIR communities have strongly expressed a desire for stability and operational continuity of this critical element of the Internet infrastructure. Accordingly, this proposal suggests minimal changes to existing processes.

# **V.C.** Meet the needs and expectation of the global customers and partners of the IANA services:

The RIRs and their communities are the primary global customers for the Internet number resource-related IANA functions. As such, they have on numerous occasions expressed their satisfaction with the current management of the IANA functions, which has ensured the effective implementation of policies developed by the community and the efficient distribution of number resources to the RIRs. This proposal has been developed by the RIR communities, as customers of the IANA number-related functions, and meets their need for continuity and stability in the operation of the number-related IANA functions. It does this by solidifying the IANA functions operator's accountability to the RIRs and their communities in relation to the number-related IANA functions.

## **V.D.** Maintain the openness of the Internet.

An "open" Internet relies on the effective implementation of policies developed via open, inclusive, bottom-up processes, ensuring the transparent and coordinated distribution and registration of Internet number resources. The Internet numbers community has a longstanding history of bottom-up, inclusive, open and transparent policy-making and operational processes (including the transparent publication of all registration information). By building on the structures developed by the Internet numbers community, this proposal ensures that in this regard, the openness of the Internet is maintained.

In addition, the proposed community Review Committee will ensure bottom-up community involvement in the open and transparent evaluation of the IANA functions operation.

**V.E.** The proposal must not replace the NTIA role with a government-led or an intergovernmental organization solution.

This proposal does not replace the NTIA role with a government-led or an inter-governmental organization solution. This proposal will place the RIRs in the role currently occupied by the NTIA. The RIRs are not-for-profit organisations, accountable to their memberships and their communities. Those communities are open to anyone that wishes to contribute and they include participants from all Internet stakeholder groups, including operators, civil society, business, the technical community and governments. Open, community-driven and consensus-based policy development processes mean that no single stakeholder group has a dominant role in policy-making.

## VI. Community Process

This section should describe the process your community used for developing this proposal, including:

- The steps that were taken to develop the proposal and to determine consensus.
- Links to announcements, agendas, mailing lists, consultations and meeting proceedings.
- An assessment of the level of consensus behind your community's proposal, including a description of areas of contention or disagreement.

The Internet numbers community process is "bottom-up", transparent and inclusive, with the initial discussions and proposal elements agreed on a regional basis in each RIR region community. The consensus output of these five community discussions has been consolidated in a single global proposal by representatives from each RIR region, however the ensuring feedback to and from regional discussion forums has been a priority for all of those representatives.

This process was deliberately modeled on the longstanding community processes that the RIR communities have successfully employed for policy-making at the regional and global levels. It reflects the strong commitment emerging from all community discussions to employing proven structures and mechanisms in this process.

The proposal development can therefore be seen as two distinct phases, first at the RIR community level and then at the global level. It is important to emphasize that neither of these phases occurred in isolation – throughout the first phase, there was communication between the five communities, and during the second phase, regional communities were kept informed of progress and provided feedback on successive iterations of the global proposal.

#### VI.A. Regional Processes

The number resources communities based their process for developing an IANA stewardship proposal primarily on the regional RIR community structures, which are the existing forums for number resources stakeholders to discuss policies and other issues relevant to the numbers resources. The RIR communities have for many years fostered the active, bottom-up participation of a broad range of stakeholders. Existing mechanisms and communication channels could therefore be used for the IANA stewardship transition discussions, eliminating

the need for the creation of distinct new processes, communication channels or bodies. All RIRs have worked actively over the years to engage the full range of stakeholders via outreach activities within their regions as part of their commitment to openness, inclusiveness and transparency. Building on these outreach activities, the RIRs and the CRISP team have ensured that this proposal has been the product of input and feedback from the full range of stakeholders with an interest in Internet number resources.

Each of the RIR communities operates according to open, bottom-up, transparent and consensus based processes, allowing anyone with an interest to contribute to the discussions. Grounding the IANA stewardship discussion in these communities has ensured broad participation across the global communities and facilitated examination of the issues raised in the context of local and regional circumstances. The very active engagement by the community, particularly in their regional discussions, shows not only the positive commitment of the numbering community to this process, but is evidence of the RIR community's mature and well-functioning decision-making processes.

Each of the five RIR communities discussed the IANA stewardship issues via mailing lists, at their RIR public meetings and in other community forums(many of which included facilities for remote participation). While the discussions have been uniformly open and transparent, with all discussions archived on mailing lists and meeting records, each community has adopted a specific process suitable to their particular local needs and culture to reach an agreed community output.

Links to specific output documents and archives of all the RIR community discussions are available at:

 $\underline{https://www.nro.net/nro-and-internet-governance/iana-oversight/timeline-for-rirs-engagement-iniana-stewardship-transition-process$ 

## VI. B. AFRINIC regional process:

The AFRINIC community held a consultative meeting on 25 May to 6 June 2014 during the Africa Internet Summit (AIS'2014) in Djibouti in the "IANA oversight transition" workshop. As a follow up to the meeting, AFRINIC set up a mailing list to provide a platform for the African Internet community to discuss the IANA Oversight Transition process. The mailing list was announced on July 4, 2014 to develop a community position. The list and its archives can be found at: https://lists.afrinic.net/mailman/listinfo.cgi/ianaoversight

A dedicated web portal was setup for sharing information on the IANA stewardship transition with the AFRINIC community and is also available at <a href="http://afrinic.net/en/community/iana-oversight-transition">http://afrinic.net/en/community/iana-oversight-transition</a>

AFRINIC also conducted a survey seeking community input on the IANA Stewardship Transition. The results of the survey are published at:

http://afrinic.net/images/stories/Initiatives/%20survey%20on%20the%20iana%20stewardship%20transition.pdf

The last face-to-face meeting at which IANA oversight transition consultations were held with the community was during the AFRINIC-21 meeting in Mauritius, 22-28 November 2014. The recordings of the session are available at http://meeting.afrinic.net/afrinic-21/en/vod

Discussions continued on the <u>ianaoversight@afrinic.net</u> mailing list, until the closure of the comments from the number resources communities set by the Consolidated RIR IANA Stewardship Proposal (CRISP) Team on 12th Jan 2015.

The AFRINIC region CRISP team was selected/appointed by the AFRINIC Board of Directors. Key highlights/milestones of the selection/appointment process follow below:

27 Oct 2014: Public Call for nominations - The call was sent by the AFRINIC CEO to major community mailing lists, indicating intent of the Board to make appointments by 12 Nov 2014.

URL: https://lists.afrinic.net/pipermail/announce/2014/001326.html

8 Nov 2014: The AFRINIC CEO announced the 5 nominated candidates: https://lists.afrinic.net/pipermail/ianaoversight/2014-November/000099.html

13 Nov 2014: The AFRINIC Board Chair announced the three CRISP team members selected to the community.

URL: https://lists.afrinic.net/pipermail/rpd/2014/004381.html

The AFRINIC IANA oversight transition info page can be found at: http://www.afrinic.net/en/community/iana-oversight-transition

**VI.C.** APNIC regional process:

APNIC, as the secretariat for the APNIC community, set up a public mailing list (announced on 1 Apr 2014) to develop a community position, and have discussions about the proposal from the region on IANA stewardship transition: http://mailman.apnic.net/mailman/listinfo/IANAxfer

A website, dedicated to sharing up-to-date information on the IANA stewardship transition was set up for the APNIC community members and wider community members interested in this issue: http://www.apnic.net/community/iana-transition

A draft proposal was discussed at the dedicated session at the APNIC 38 Meeting in September 2014, which saw the general community consensus. The meeting provided remote participation tools to enable wider participation from communities across Asia Pacific and beyond, with live webcasts as well as Adobe Connect virtual conference room.

https://conference.apnic.net/38/program#iana

The discussions continued on the "ianaxfer@apnic.net." mailing list, until the closure of the comments from the number resources communities set by the CRISP Team as 12th Jan 2015.

On 23 October 2014, through a post to the APNIC IANAxfer mailing list, APNIC sought volunteers from the Asia Pacific community to nominate to join the CRISP team. The nominees

were asked to provide information about their qualifications and interest to the APNIC Executive Council for its consideration. The nomination period was open for two weeks. On 12 November 2014, the APNIC Executive Council appointed Izumi Okutani and Dr Govind as its CRISP community members, and Craig Ng as its non-voting staff member to the CRISP team.

The information was also posted on APNIC's IANA oversight transition website:

APNIC EC announces CRISP Team appointees APNIC EC seeks nominations for CRISP Team http://www.apnic.net/community/iana-transition

## **VI.D.** ARIN regional process:

ARIN held a community consultation during the period 10/1 - 10/10/14. On 10/9/14 the ARIN community held a consultative meeting at ARIN 34 in Baltimore, MD.

On 10/13/14 ARIN established a mailing list, <u>iana-transition@arin.net</u> to facilitate the open community discussion in the region regarding the IANA Stewardship Transition planning process. This mailing list will remain open for comments and updates throughout the transition planning process. The <u>archives</u> are open and available for all Internet community members to view.

A community survey was conducted following ARIN 34 from October 13, 2014 –October 20, 2014. There were a total of 64 participants and the Community Survey Summary Report can be viewed at https://www.arin.net/participate/governance/iana\_survey.pdf

On October 25, 2014, ARIN put a call out for volunteers to serve on the CRISP team as community representatives of the ARIN region. The call for volunteers ended on October 31, 2014. The ARIN Board of Trustees considered all the names that were submitted in response to the call for volunteers. On November 8, 2014, the ARIN Board of Trustees announced the appointment of its three ARIN region CRISP team members.

On November 21, 2014 the first ARIN <u>draft proposal</u> was shared on <u>iana-transition@arin.net</u> and discussion followed.

http://teamarin.net/wp-content/uploads/2014/03/ARIN draft proposal.pdf

ARIN has a dedicated <u>web portal</u> set up for sharing information and keeping the ARIN region updated on the IANA Stewardship Transition planning process. http://teamarin.net/education/internet-governance/iana-transition/

## **VI.E.** LACNIC regional process:

The LACNIC community developed a consultative process launched on August 15<sup>th</sup> 2014, with a public teleconference. In that opportunity LACNIC's CEO explained the methodology, the expected timeline and the consultation scope. The public consultation process had as a primary goal to obtain the regional community's input with a view to shaping the multi-stakeholder

debate on the transition of stewardship of the IANA functions in Latin America and the Caribbean, taking into account regional points of view, concerns, suggestions and/or recommendations regarding this transition, specifically as it concerns IP address assignment.

From that starting point, three representatives from the community guided the regional debate: http://www.lacnic.net/en/web/transicion/representantes

Contributions were received on the internet-gov@lacnic.net mailing list.

## Timeline for discussion:

During the thirty (30) day period (August 15 to September 15), open discussion was held. Seven (7) days later, moderators prepared a first draft, a preliminary Transition Document summarizing all contributions and discussions.

The first Transition Document was presented on September 23. Another thirty (30) day period started for the community to comment, ending on October 24th.

Within the framework of the LACNIC22 meeting held on 27-31 October in the city of Santiago, Chile, two (2) sessions were scheduled for discussing the first preliminary version of the Transition Document. After these two (2) sessions, a second version of the Transition Document was drafted.

The consultative process included two panel sessions during the LACNIC 22 meeting in Santiago the Chile (October 28<sup>th</sup> 2014). The first panel session was to share information about the global IANA's oversight transition process and the work done by communities involved (names, numbers, and protocols) and the second was to discuss the main proposals on the mailing list, in order to draft a LACNIC community proposal. During the panels, with strong participation of the community, the LACNIC community proposal was shaped.

After these panels, there was a seven (7) day period that lasted until November 15<sup>th</sup> 2014 for the community to present additional comments. Once this step was accomplished the proposal was filed to LACNIC's Board of Directors and after its approval, it was submitted to the CRISP Team.

Announcement of the appointment of the LACNIC region members of the CRISP team can be found at <a href="http://www.lacnic.net/en/web/anuncios/2014-crisp-team">http://www.lacnic.net/en/web/anuncios/2014-crisp-team</a>

After the board appointed the CRISP Team members, there was continued dialogue between the Community Leaders and the LACNIC CRISP team representatives through email and teleconferences.

The final result of the Consultation at LACNIC Community: <a href="http://www.lacnic.net/en/web/transicion/resultado-consulta-publica">http://www.lacnic.net/en/web/transicion/resultado-consulta-publica</a>

The list <u>internet-gov@lacnic.net</u> is still open for regional discussions until the closure of the comments set by the CRISP Team on 12th Jan 2015.

**VI.F.** RIPE regional process:

The RIPE community agreed at the RIPE 68 Meeting in May 2014 that the development of a community position on IANA stewardship should take place in the existing RIPE Cooperation Working Group, and via that working group's public mailing list:

https://www.ripe.net/ripe/mail/wg-lists/cooperation

The RIPE NCC, as secretariat for the RIPE community, also facilitated discussions on the IANA stewardship in national and regional forums across the RIPE NCC service region from the period of May to November 2014. Some of these forums also included remote participation facilities. Summaries of all discussions were posted to the RIPE Cooperation Working Group mailing list and on the RIPE website:

https://www.ripe.net/iana-discussions

While there were very active, and at times passionate, discussions in the community throughout the consultation period, there was clearly strong agreement on the needs of the numbering community and the general principles that should underpin the transition of the IANA stewardship. Between September and November 2014, RIPE community discussion converged around developing a set of principles reflecting the community's primary concerns and needs in the development of an IANA stewardship transition proposal.

These discussions are reflected in the discussions on the mailing list from that time: <a href="http://www.ripe.net/ripe/mail/archives/cooperation-wg/">http://www.ripe.net/ripe/mail/archives/cooperation-wg/</a>

Discussions at the RIPE 69 Meeting in November 2014 saw the RIPE community discuss a range of issues in relation to the IANA stewardship transition and reach consensus on the principles discussed on the mailing list. During the RIPE 69 Meeting, a general invitation for community volunteers to the CRISP team was distributed via various RIPE NCC membership and RIPE community mailing lists: <a href="http://www.ripe.net/ripe/mail/archives/ripe-list/2014-November/000877.html">http://www.ripe.net/ripe/mail/archives/ripe-list/2014-November/000877.html</a>

This announcement also noted the procedure whereby the RIPE Chair, in consultation with the RIPE NCC Executive Board, would select two community representatives (with the staff representative agreed by the Executive Board). At the conclusion of RIPE 69, the community expressed its support for the three RIPE representatives selected to join the CRISP)team.

RIPE Cooperation Working Group Session: <a href="https://ripe69.ripe.net/programme/meeting-plan/coop-wg/#session1">https://ripe69.ripe.net/programme/meeting-plan/coop-wg/#session1</a>

RIPE 69 Closing Plenary Session: https://ripe69.ripe.net/archives/video/10112/

**VI.G.** Global Internet Numbers Community Process (CRISP Team)

Following the broad consultations and active discussion in the respective five RIR communities, a mechanism was established to develop a single proposal from the Internet numbers community, based on the positions and issues noted in the five communities.

On 16 October 2014, the NRO EC proposed the formation of the CRISP team to develop a single Internet numbering community proposal to the IANA Stewardship Coordination Group (ICG). Established around a model similar to the community-based NRO Number Council, the CRISP team comprises three community members from each of the RIR regions (two community members and one RIR staff). The selection of the CRISP team members from each region was facilitated via transparent but distinct processes in each RIR community. Details of these selection processes are included in the RIR community process descriptions above.

The CRISP team members are: AFRINIC Region

Alan P. Barrett – Independent Consultant Mwendwa Kivuva – Network Infrastructure Services, University of Nairobi Ernest Byaruhanga (Appointed RIR staff)

## ARIN Region

Bill Woodcock – President and Research Director of Packet Clearing House John Sweeting – Sr. Director, Network Architecture & Engineering at Time Warner Cable Michael Abejuela (Appointed RIR staff)

#### **APNIC Region**

Dr Govind – CEO NIXI Izumi Okutani – Policy Liaison JPNIC Craig Ng (Appointed RIR staff)

## LACNIC Region

Nico Scheper - Curacao IX Esteban Lescano - Cabase Argentina Andrés Piazza (Appointed RIR staff)

## RIPE NCC Region

Nurani Nimpuno – Head of Outreach & Communications at Netnod Andrei Robachevsky – Technology Programme Manager at the Internet Society Paul Rendek (Appointed RIR staff)

## VI.H. CRISP Team Working Methods

The charter of the CRISP team describes its working methods, which are established to ensure maximum transparency and openness of the process for anyone with an interest. The charter is available on the NRO website:

https://www.nro.net/crisp-team

#### From that charter:

- The CRISP team shall meet entirely via teleconference for its activities; these
  teleconferences will be open to the public who wish to listen to the CRISP Team
  discussions, and will be facilitated by the Regional Internet Registries.
- The CRISP team shall also work through a public mailing list and the archive of such
  mailing list will be publicly available. The name of the mailing list will be
  <ianaxfer@nro.net>.
- The results of each CRISP team meeting shall be published on the <ianaxfer@nro.net>
  mailing list and additionally by each RIR to its respective community. The CRISP team
  members from the region shall monitor and participate in the community discussion in
  their region regarding CRISP Team outputs.

The CRISP team held its first teleconference on 9 December 2014. At that meeting, Izumi Okutani (APNIC region) and Alan Barrett (AFRINIC region) were selected as the Chair and Vice-Chair respectively. A timeline for the process was defined, published and announced. All CRISP teleconferences have been announced on the relevant regional mailing lists as well as the global <a href="mailto:ianaxfer@nro.net">ianaxfer@nro.net</a> list. As stipulated in the charter, all CRISP teleconferences have been open to observers. Archives of the audio, video and minutes of all CRISP teleconferences, as well as several iterations of the proposal draft and a spreadsheet of issues raised by community members and their current status, have been made available online at: <a href="https://www.nro.net/crisp-team">https://www.nro.net/crisp-team</a>

Additionally, the CRISP team decided that in the interests of efficiency, an "internal" CRISP mailing list would be established – only members of the CRISP team would be able to send mails to this list or receive mail sent to the list, but the list content would be archived publicly on the NRO website. This archive is available at:

https://www.nro.net/pipermail/crisp/

Throughout the CRISP team process, CRISP team members have engaged with their regional communities, ensuring that the communities are informed and sharing information with other CRISP team members on key events and discussions in their regional forums. They have also consulted the discussion archives of their regional communities as necessary throughout the process to ensure the fair and accurate representation of their community's views. CRISP team members have been active in encouraging feedback from their regions, whether on the global ianaxfer@nro.net mailing list or in the regional discussion forums.

**VI.I.** An assessment of the level of consensus behind your community's proposal, including a description of areas of contention or disagreement.

Throughout CRISP team deliberations, consensus was determined when, following discussions within the team, no further comments, concerns or objections were observed. A 24-hour window was set for decisions made during CRISP team teleconferences and shared on the CRISP team mailing list to allow those who were not at the call to provide input.

A similar approach was taken for the <<u>ianaxfer@nro.net</u>> list. Consensus was determined following discussions on the list around an issue raised or a new suggestion when no further comments, concerns, objections were observed.

Prior to submitting this proposal to the ICG, two drafts were published, along with calls for feedback from the global community. These two comment periods were important in ensuring that the community had a chance to actively contribute to resolving issues identified during the process.

In addition, the CRISP team has called for community feedback on this current draft of the proposal. ICG members and other interested parties can observe the level of support for the proposal in the archives of <ianaxfer@nro.net> mailing list.

In comparing output coming from each RIR region, many commonalities were identified early in the process, and there was a clear consensus across the five RIR communities on the basic principles for this proposal. The RIR community tradition of openness, transparency and bottom-up processes defined the discussions in all regions, and a solid trust in the RIR system was consistently expressed throughout the process. While all five regional inputs differed, there were no major conflicts or irreconcilable points of contention identified.

Notable points of difference included the views on the format of the agreement to be established between IANA operator and the RIRs, and on the need for an oversight body to periodically review the agreement. The current proposal reflects the consensus agreement reached on these issues through discussion within the CRISP team and in public forums, especially the <ianaxfer@nro.net> mailing list.

In the global discussions at <<u>ianaxfer@nro.net</u>>, several issues received close attention and provoked significant discussion. These issues included:

- Composition of Review Committee
- Details of the agreement, including its term and termination conditions
- Intellectual property rights of the data and trademarks associated with the IANA function

Comments mainly focused on clarification of details of these issues. Support was expressed by several people on the <a href="mailing-list">ianaxfer@nro.net</a> mailing list on the final, agreed elements of the proposal listed in Section III.

There was clear agreement from the global community on positions regarding each of these issues, as reflected in the content of the current proposal. The CRISP team believes therefore that the current proposal fully reflects the consensus of the global numbering community.