RIR Comparative Policy Overview

March 2008

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The goal of this document is to provide a comparative overview of policies across the Regional Internet Registry (RIR) system. It is not a policy statement by the RIRs, but serves as a reference for the Internet community. While this document was accurate on the date of publication (05 March 2008), it may be outdated by subsequent policy implementations. The official policy documents can be found at the respective websites of the RIRs. This is a public document that will be reviewed and revised quarterly through the coordinated efforts of the RIRs.

For more information, refer to the AfriNIC, APNIC, ARIN, LACNIC, and RIPE NCC websites.

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1. General

1.1 Goals of the RIR System

RIR	Policy
AfriNIC APNIC ARIN LACNIC RIPE NCC	All allocations and assignments of Internet resources must be consistent with the goals of the Internet Registry system: aggregation, conservation and registration.

1.2 Membership

RIR	Category	Policy
AfriNIC	Qualification	Membership is open to organizations legally present in the AfriNIC region of service.
	Access to registration services	Registration service is accessible by members only. Registered resources are publicly available.
	Fee model	Not-for profit. Fee established to enable cost recovery of operations.
APNIC	Qualification	Only organizations that are located in the APNIC region or have networks located in the APNIC region may apply for resources.
	Access to registration services	Members have full access to all services. Non-member account holders may access resource assignment and allocation services.
	Fee model	Not-for-profit organisation. Fee schedule established to enable cost recovery of operations.

ARIN	Qualification	Open globally without conditions. Organisations that receive allocations automatically become members.
	Access to registration services	Do not need to be a member to receive registration services.
	Fee model	Not-for-profit organisation. Fee schedule established to enable cost recovery of operations.
LACNIC	Qualification	Membership is open to LACNIC region only, without conditions.
	Access to registration services	Organisations approved for IP addresses automatically become members. It is not necessary to become a member to obtain some services like ASN assignments. Only organisations based in LACNIC region may apply for resources.
	Fee model	Not-for-profit organisation. Fee schedule established to enable cost recovery of operations.
RIPE NCC	Qualification	Membership is open globally without conditions.
	Access to registration services	Members only.
	Fee model	Not-for-profit organisation. Fee schedule established to enable cost recovery of operations.

1.3 Allocation Terms and Conditions

1.3.1 Type of Custodianship

RIR	Policy
AfriNIC	Valid as long as original criteria remain satisfied.
APNIC	Allocates and assigns on a 'license' basis, to be of specific limited duration (normally 1 year). Licenses are renewable if: a) the original basis of the allocation or assignment remains valid and b) requirements have been met at time of renewal.
ARIN LACNIC	Valid as long as original criteria remain satisfied and registration fees are kept up to date.
RIPE NCC	Valid as long as original criteria remain satisfied.

1.3.2 Transfer of Custodianship

RIR	Policy
AfriNIC ARIN LACNIC RIPE NCC	Do not allow sale of addresses, but recognise name changes and transfers of tangible assets associated with addresses. Requires submission of legal documents. Utilisation is verified. May require new agreement.
APNIC	As above, with the exception of “historical resource transfers”. “Historical” resources can be transferred to APNIC members without the need for the technical justification

	procedures.

1.3.3 Recovering Unused Resources

RIR	Policy	Comment
AfriNIC ARIN LACNIC RIPE NCC	Valid as long as original criteria remain satisfied.	Do not actively recover unused resources, but if an organisation closes, unused resources are returned to the public pool.
APNIC	Valid as long as original criteria remain satisfied.	Has policy to actively recover 'unused' networks. If an organisation ceases operation, unused resources are returned to the public pool.

2. IPv4

2.1 Initial Allocation

RIR	**Category**	**Policy**
AfriNIC	Size	Slow start: /22 (can be exceeded when justified by requester).
	Eligibility	The requesting organisation must show an existing efficient utilization of IP addresses from their upstream provider or an immediate need of IP addresses. Justification may be based on a combination of immediate need and existing usage.
	Period	1 year.
APNIC	Size	Slow start: /21 (can be exceeded when documented immediate infrastructure need exceeds /21).
	Eligibility	a) Membership or pay non-member fee; b) have previously used or can demonstrate immediate need for /23; c) complied with policies in managing all previous address space; d) detailed plan for use of a /22 within a year; e) commit to renumber from previously deployed space.
	Period	1 year.

ARIN	Size	Slow start: /22 minimum for multihomed, otherwise /20 (can be exceeded when documented immediate need exceeds /20).
	Eligibility	For a /22: efficient utilisation of a /23 from upstream; intent to multihome; agree to renumber, **or** For a /21: efficient utilisation of /22 from upstream; intent to multihome; agree to renumber, **or** For a /20: efficient utilisation of /21 from upstream; intent to multihome; agree to renumber, **or** Efficient utilisation of /20 from upstream (no renumbering required).
	Period	3 months.
LACNIC	Size	Slow start: /21, otherwise /20 (can be exceeded when documented immediate need exceeds /20).
	Eligibility	For a /21: documented need of a /23; **or** For a /20: Must have /22 from upstream; multihomed; agree to renumber within 12 months. **or** If not multihomed must demonstrate use of /21 from upstream and agree to renumber within 12 months. **or** Demonstrate immediate need.
	Period	3 months.
RIPE NCC	Size	Slow start: /21 (can be exceeded when justified).
	Eligibility	a) Membership; b) Demonstration of need.
	Period	Up to 12 months.

2.2 Subsequent Allocations

RIR	**Category**	**Policy**	**Comment**
AfriNIC	Size	Minimum /22, no maximum.	
	Eligibility	Demonstrate 80% efficient utilisation of all prior allocated space or an immediate need that requires more IP addresses than are available in the most recent allocation.	
	Period	Up to 1 year.	

APNIC	Size	Minimum /21, no maximum.	
	Eligibility	Demonstrate 80% efficient utilisation of all prior allocated space.	
	Period	Up to 1 year.	
ARIN	Size	Minimum /22 for multihomed, otherwise /20, no maximum.	
	Eligibility	Demonstrate efficient utilisation of all previous allocations and at least 80% of the most recent allocation.	
	Period	3 months. A subscriber member may request up to a 12 month supply after they have been an ARIN member for one year.	
LACNIC	Size	Minimum /20, no maximum.	
	Eligibility	Demonstrate 80% efficient utilisation of all prior allocated space.	
	Period	12 months.	
RIPE NCC	Size	Minimum /21, no maximum.	
	Eligibility	Demonstrate approximately 80% efficient utilisation of all prior allocated space.	
	Period	Up to 12 months.	

2.3 Sub-Allocations

RIR	Policy	Comment
AfriNIC	LIRs may sub-allocate addresses to other organisations, which further assign addresses to End Users. LIRs also assign addresses. Sub-allocations are subject to the ‘Sub-Allocation Window’ procedure.	
APNIC	LIRs may sub-allocate addresses to other organisations, which further assign addresses to end-users. LIRs also assign addresses. Sub-allocations are subject to the ‘Assignment Window’ procedure.	See section 2.5.1 'Assignment Window' below.
ARIN	ISPs may sub-allocate addresses to other organisations, which further assign addresses to End Users.	
LACNIC	RIR allocates and assigns IP blocks to organisations that can be ISPs, End Users or National Internet Registries, (NIRs - see section 7). NIRs allocate and assign IP blocks to organisations in their countries. ISPs may sub-allocate IP blocks to other ISPs or assign them to End Users.	
RIPE NCC	An LIR may sub-allocate up to a /20 (4096 addresses) to a downstream network operator every twelve months, who can then assign addresses to End Users. The minimum size of a	

	sub-allocation is a /24.	

2.4 Assignments by RIRs (Independent/Portable)

2.4.1 General

RIR	Category	Policy	Comment
AfriNIC	Size	/24 minimum, no maximum.	
	Eligibility	- Must be an AfriNIC member - Must EITHER show an existing utilization of /25 from their upstream/ISP, OR - Justify that at least 50% of the total 1 year requirement is needed immediately.	
APNIC	Size	No minimum, no maximum.	Known as 'small multihoming assignment policy'. Can be applied for under membership or as a 'non-member account holder'.
	Eligibility	Requesting organisation needs to be multihomed and agree to renumber out of previously assigned address space. Assignments will be made according to the following criteria: 25% immediate utilisation rate and 50% utilisation rate within one year.	
ARIN	Size	/22 minimum for multihomed, otherwise /20, no maximum.	Known as 'end-user' assignments.
	Eligibility	Assignments will be made according to the following criteria: 25% immediate utilisation rate and 50% utilisation rate within one year.	
LACNIC	Size	/24 minimum, no maximum.	
	Eligibility	Multi-homed organizations (End User) may receive a minimum of /24 based on previous assignments of /25 from upstream providers. Single-home organization may apply, for at least a /20, based on demonstrated need of /21.	
RIPE NCC	Size	No minimum, no maximum.	Submit an application via an existing LIR. Cannot request directly.
	Eligibility	Based on demonstrated need.	

2.4.2 Critical Infrastructure

RIR	Category	Policy	Comment

AfriNIC	Definition	Public IXPs and root DNS service providers.	Portable space can be obtained by submitting a request directly to AfriNIC.
	Size	/24 minimum, more if justified.	
	Eligibility	No specific criteria defined.	
APNIC	Definition	Root DNS, ccTLD, gTLD, IANA, RIRs, NIRs.	
	Size	/24 minimum.	
	Eligibility	Assignments to critical infrastructure are available only to the actual operators of the network infrastructure performing such functions.	
ARIN	Definition	Root DNS, ccTLD, gTLD, IANA, RIRs.	Requested via the 'micro-allocations' policy.
	Size	/24 minimum.	
	Eligibility	Assignments to critical infrastructure are available only to the actual operators of the network infrastructure performing such functions.	
LACNIC	Definition	Root DNS, ccTLD, gTLD, IANA, RIRs.	Requested via the 'micro-allocations' policy.
	Size	/24 minimum.	
	Eligibility	Assignments to critical infrastructure are available only to the actual operators of the network infrastructure performing such functions.	
RIPE NCC	Definition	Anycasting ccTLD, gTLD.	Address space can be obtained by submitting a request through an existing LIR.
	Size	/24.	
	Eligibility	If the name server set of a ccTLD or a gTLD without anycasting technology applied would not pass the "IANA Administrative Procedure for Root Zone Name Server Delegation and Glue Data' the TLD administrator may receive a single dedicated /24 network prefix for the sole purpose of anycasting name servers, as described in RFC 3258.	

2.4.3 Internet Exchange Points (IXPs)

RIR	Category	Policy	Comment
AfriNIC	Size	/24.	Portable space can be obtained by submitting a request directly to AfriNIC.
	Eligibility	- Minimum number of three peers connected - Open policy for anyone to connect/peer.	

APNIC	Size	/24 minimum assignment.	There is no restriction on routing prefixes assigned under this policy.
	Eligibility	Must be an IXP. The number of ISPs connected should be at least three and there must be a clear and open policy for others to join.	
ARIN	Size	/24 minimum assignment.	Requested via the 'micro-allocations' policy.
	Eligibility	Exchange point operators must provide justification for the allocation, including: connection policy, location, other participants (minimum of two total), ASN, and contact information.	
LACNIC	Size	/24.	Requested via the 'micro-allocations' policy.
	Eligibility	Exchange point operators must provide documentation showing that it is an IXP, list of participants, structure diagram and numbering plan.	
RIPE NCC	Size	No special policy.	Portable address space for this purpose can be requested via an existing LIR.
	Eligibility	No special policy.	

2.5 Assignments by LIRs (Aggregatable/Non-Portable)

2.5.1 Assignment Window

RIR	Policy	Comment
AfriNIC ARIN	Not applicable.	Assignment practices are audited by RIR staff at time of request for additional resources.
APNIC LACNIC RIPE NCC	LIRs/ISPs need approval from the RIR when making assignments larger than their Assignment Window. This is the number of addresses an LIR/ISP can assign without prior approval. The RIR sets the assignment window according to the LIR's/ISP's level of experience with the policies.	APNIC does not have assignment windows on infrastructure. In RIPE region a new LIR's Assignment Window (AW) is automatically set to a /21 (2048 addresses) six months after receiving their first allocation.

2.5.2 Dynamic Addressing

RIR	Policy
AfriNIC APNIC ARIN	In general, dynamic assignment of IP addresses is expected on transient connections such as analogue dialup.

LACNIC RIPE NCC	

2.5.3 Mobile Terminals

RIR	**Policy**
AfriNIC APNIC ARIN LACNIC RIPE NCC	There is no special assignment policy with respect to mobile terminals.

2.5.4 Web Hosting

RIR	Policy
AfriNIC APNIC ARIN LACNIC RIPE NCC	Name based web hosting is strongly encouraged where feasible.

2.5.5 Network Address Translation (NAT)

RIR	Policy
AfriNIC APNIC ARIN LACNIC RIPE NCC	The use of NAT is neither encouraged nor discussed during the request process.

2.5.6 RFC1918 Private Address Space

RIR	Policy
AfriNIC APNIC ARIN LACNIC RIPE NCC	For private networks that will never be connected to the Internet, the requestor is made aware of the IPv4 address space reserved for use in RFC1918.

3. IPv6

3.1 Initial Allocation

RIR	Category	Policy	Comment

AfriNIC	Size	/32.	
	Eligibility	a) be an LIR; b) not be an end site; c) show a detailed plan to provide IPv6 connectivity to organizations in the AfriNIC region. d) show a reasonable plan for making /48 IPv6 assignments to end sites in the AfriNIC region within twelve months. The LIR should also plan to announce the allocation as a single aggregated block in the inter-domain routing system within twelve months.	
	Period	Up to one year.	
APNIC	Size	/32.	Allocations consistent with the globally co-ordinated 'IPv6 Address Allocation and Assignment Policy' document. Organisations may qualify for an initial allocation greater than /32 by submitting documentation that reasonably justifies the request. Considers IPv4 deployment as one of the means of justifying a larger initial allocation.
	Eligibility	a) Be an LIR; b) not be an end site; c) plan to provide IPv6 connectivity to organisations to which it will make assignments, by advertising that connectivity through its single aggregated address allocation; d) have a plan for making at least 200 assignments to other organisations within two years. In addition, APNIC will make allocations to 'closed' networks if they meet all other criteria. APNIC can make allocation based on existing IPv4 network infrastructure	
	Period	For up to two years.	
ARIN	Size	/32.	Organisations may qualify for an initial allocation greater than /32 by submitting documentation that reasonably justifies the request.
	Eligibility	a) Be an LIR; b) not be an end site; c) Plan to provide IPv6 connectivity to organizations to which it will assign IPv6 address space, by advertising that connectivity through its single aggregated address allocation; and d) Be an existing, known ISP in the ARIN region or have a plan for making at least 200 end-site assignments to other organizations within five years.	
	Period	For up to five years.	

RIPE NCC	Size	/32.	Organisations may qualify for an initial allocation greater than /32 by submitting documentation that reasonably justifies the request. Considers IPv4 deployment as one of the means of justifying a larger initial allocation.
	Eligibility	a) Be an LIR; b) advertise the allocation that they will receive as a single prefix if the prefix is to be used on the Internet; c) have a plan for making sub-allocations to other organisations and/or End Site assignments within two years.	
	Period	For up to two years.	
LACNIC	Size	/32.	
	Eligibility	a) Be a LIR or an ISP; b) Document a detailed plan for the services and IPv6 connectivity to be offered to other organizations c) Announce a single block in the Internet inter-domain routing system, aggregating the total IPv6 address allocation received, within a period not longer than 12 months; d) Offer IPv6 services to clients or entities owned/related (including departments and/or sites) physically located within the region covered by LACNIC within a period not longer than 24 months than 24 months. ***Note: As a special case, LACNIC has a policy for the "Second Allocation" where An Organization that holds only one IPv6 allocation can return it (within the first 6 months of getting it) in order to receive another shorter prefix allocation from LACNIC.***	
	Period	For up to 1 year.	

3.2 Subsequent Allocations

RIR	Category	Policy	Comment

AfriNIC	Size	Minimum size of next allocation will equal the first allocation size. More can be allocated but justification must be supplied.	Contiguous allocation provided if possible. RFC 3194 defines the HD-Ratio.
	Eligibility	ISP/LIR must satisfy the evaluation threshold of past address utilisation in terms of the number of sites in units of /48 assignments. The HD-Ratio of 0.94 is used to determine the utilisation thresholds that justify the allocation of additional addresses.	
	Period	Up to one year.	
APNIC ARIN	Size	Minimum size of next allocation will equal the first allocation size. More can be allocated but justification must be supplied.	Contiguous allocation provided if possible. RFC 3194 defines the HD-Ratio.
	Eligibility	ISP/LIR must satisfy the evaluation threshold of past address utilisation in terms of the number of sites in units of /56 assignments. The HD-Ratio of 0.94 is used to determine the utilisation thresholds that justify the allocation of additional addresses.	
	Period	Up to two years.	
LACNIC	Size	Minimum size of next allocation will equal the first allocation size. More can be allocated but justification must be supplied.	Contiguous allocation provided if possible. RFC 3194 defines the HD-Ratio.
	Eligibility	ISP/LIR must satisfy the evaluation threshold of past address utilization in terms of the number of sites in units of /48 assignments. The HD-Ratio of 0.94 is used to determine the utilization thresholds that justify the allocation of additional addresses.	
	Period	Up to two years.	
RIPE NCC	Size	Minimum size of next allocation will equal the first allocation size. More can be allocated but justification must be supplied.	Contiguous allocation provided if possible. RFC 3194 defines the HD-Ratio.
	Eligibility	ISP/LIR must satisfy the evaluation threshold of past address utilization in terms of the number of sites in units of /56 assignments. The HD- Ratio of 0.94 is used to determine the utilization thresholds that justify the allocation of additional addresses.	
	Period	Up to two years.	

3.3 Other Allocations

3.3.1 Micro-allocations for Internal Infrastructure

RIR	Category	Policy	Comment
AfriNIC APNIC LACNIC RIPE NCC	Size	No policy.	
	Eligibility	Not applicable.	
ARIN	Size	/48 minimum.	These allocations come from specific blocks reserved only for this purpose.
	Eligibility	Organizations that currently hold IPv6 allocations may apply for a micro-allocation for internal infrastructure. Applicant must provide technical justification indicating why a separate non-routed block is required. Justification must include why a sub-allocation of currently held IP space cannot be utilized.	

3.4 Assignments by RIRs (Independent/Portable)

3.4.1 Critical Infrastructure

RIR	Category	Policy	Comment
AfriNIC	Definition	DNS servers, root DNS servers	Part of the 'Provider Independent (PI) Assignment for End-Sites' policy
	Size	/48 minimum.	
	Eligibility	Requestor to prove they operate a critical infrastructure network.	
APNIC	Definition	Root DNS, ccTLD, gTLD, IANA, RIRs, NIRs.	
	Size	/32 maximum.	
	Eligibility	Assignments to critical infrastructure are available only to the actual operators of the network infrastructure performing such functions.	
ARIN	Definition	Root DNS, ccTLD, gTLD, IANA, RIRs.	Known as 'micro-allocation' policy.
	Size	/48 minimum.	
	Eligibility	Assignments to critical infrastructure are available only to the actual operators of the network infrastructure performing such functions.	

LACNIC	Definition	NAPs, Root DNS, ccTLD, gTLD, IANA, RIRs, NIRs.	
	Size	/48 minimum, /32 maximum.	
	Eligibility	Micro allocation to critical Internet infrastructure operators only.	
RIPE NCC	Definition	Root DNS, Anycasting ccTLD, gTLD.	Address space for this purpose can be obtained by members or if not a member by submitting a request through an existing LIR.
	Size	For Root DNS minimum allocation size at time of request. For Anycasting ccTLD/ gTLD a /48.	
	Eligibility	Assignments to critical infrastructure are available only to the actual network infrastructure performing such functions. If the name server set of a ccTLD or a gTLD without anycasting technology applied would not pass the "IANA Administrative Procedure for Root Zone Name Server Delegation and Glue Data' the TLD administrator may receive a single dedicated /48 network prefix for the sole purpose of anycasting name servers, as described in RFC 3258.	

3.4.2 Internet Exchange Points (IXPs)

RIR	**Category**	**Policy**	**Comment**
AfriNIC	Size	/48 minimum.	Part of the 'Provider Independent (PI) Assignment for End-Sites' policy
	Eligibility	- Minimum number of three peers connected - Open policy for anyone to connect/peer.	
APNIC LACNIC	Size	/48 minimum.	
	Eligibility	The IXP must have a clear and open policy for others to join and must have at least three members.	
ARIN	Size	/48 minimum.	
	Eligibility	Exchange point operators must provide justification for the allocation, including: connection policy, location, other participants (minimum of two total), ASN, and contact information.	

RIPE NCC	Size	/64 or /48.	Address space for this purpose can be obtained by submitting a request through an existing LIR.
	Eligibility	The IXP must have a clear and open policy for others to join and must have at least three members.	

3.4.3 End Users

RIR	Category	Policy	Comment
LACNIC RIPE NCC	Size	No policy.	
	Eligibility	Not applicable.	
AfriNIC	Size	/48 minimum	
	Eligibility	a) Not be a LIR; b) Qualify for an IPv4 PI assignment from AfriNIC under the IPv4 policy currently In effect; c) Be or plan to be an AfriNIC Member of the category "EU-PI"; and d) Show a plan to use and announce the IPv6 PI address space within twelve (12) months after approval.	
APNIC	Size	/48 minimum.	These assignments come from a distinctly identified prefix.
	Eligibility	a) An organization is currently multihomed or plans to be multihomed within three months.	
ARIN	Size	/48 minimum.	These assignments come from a distinctly identified prefix and are made with a reservation for growth of at least a /44.
	Eligibility	a) Not be an IPv6 LIR; and b) Qualify for an IPv4 assignment or allocation from ARIN under the IPv4 policy currently in effect. An HD-Ratio of .94 must be met for all assignments larger than a /48.	

3.5 Assignments by LIRs (Aggregatable/Non-Portable)

3.5.1 Dynamic Addressing

RIR	Policy	Comment
AfriNIC APNIC ARIN LACNIC RIPE NCC	There is currently no specific policy related to dynamic addressing.	See RFC3177.

3.5.2 Mobile Terminals

RIR	Policy
AfriNIC APNIC ARIN LACNIC RIPE NCC	There is no special assignment policy with respect to mobile terminals.

3.5.3 Web Hosting

RIR	Policy
AfriNIC APNIC ARIN LACNIC RIPE NCC	There is no recommendation for IPv6 assignments in support of web hosting at this time.

3.5.4 Network Address Translation (NAT)

RIR	Policy
AfriNIC APNIC ARIN LACNIC RIPE NCC	The use of NAT is neither encouraged nor discussed during the request process.

4. Autonomous System Numbers (ASNs)

4.1 Allocations

RIR	Policy
APNIC	Blocks of ASNs are allocated to NIRs for further distribution to their members.
AfriNIC ARIN LACNIC RIPE NCC	Not applicable.

4.2 Assignments

RIR	Category	Policy	Comment
AfriNIC ARIN LACNIC RIPE NCC	Eligibility	Policies for ASN assignments are aligned with the guidelines contained in RFC1930. Verify that a network will have a unique routing policy or that it will be a multihomed site before assigning an ASN.	In RIPE region ASNs cannot be requested directly. An application must be submitted to the RIPE NCC through an existing LIR.
APNIC	Eligibility	ASNs may be obtained directly from APNIC as a member or non-member account holder. The ASN obtained directly is portable. ASNs may also be obtained indirectly, through a LIR who 'sponsors' the request. In this event, the ASN is non-portable. Criteria need to be met in both cases, that is: An organisation is eligible if it a) is multihomed; and b) has a single, defined routing policy that is different from its providers' routing policies. An organisation will also be eligible if it can demonstrate that it will meet the above criteria upon receiving an ASN (or within a reasonably short time thereafter).	

4.2.1 32-bit ASNs

RIR	Policy	Comment

AfriNIC APNIC ARIN LACNIC RIPE NCC	Commencing 1 January 2007, the RIR will process applications that specifically request 32-bit only AS Numbers and assign such AS numbers as requested by the applicant. In the absence of any specific request for a 32-bit only AS Number, a 16-bit only AS Number will be assigned. • From 1 January 2009 the RIR will process applications that specifically request 16-bit only AS Numbers and assign such AS Numbers as requested by the applicant. In the absence of any specific request for a 16-bit only AS Number, a 32-bit only AS Number will be assigned by the RIR. • From 1 January 2010 the RIR will cease to make any distinction between 16-bit only AS Numbers and 32-bit only AS Numbers, and will operate AS Number assignments from an undifferentiated 32-bit AS Number allocation pool.	"16-bit only AS Numbers" refers to AS numbers in the range 0 - 65535 "32-bit only AS Numbers" refers to AS Numbers in the range 65,536 - 4,294,967,295

5. Database - Registration

RIR	Category	Policy	Comment
AfriNIC	Modification	LIRs are required to register all assignments and sub-allocations.	
	Entry	Can update all assignment and sub-allocation registrations (protection mechanism available). Org object cannot be created by a LIR.	
APNIC	Modification	LIRs required to register all assignments and sub-allocations except infrastructure assignments. Registrations will be stored privately by APNIC unless the custodian wishes them to be made publicly available in the APNIC database.	
	Entry	Can update all assignment and sub-allocation registrations (protection mechanism available).	

ARIN	Modification	Downstream reassignments and reallocations are reported, showing hierarchy and End User assignments. Reassignment information for residential customers need not contain the customer's name nor street address.	Not required to register infrastructure assignments.
	Entry	Can modify all parent data except “org name” and address range. Can modify all child data.	
LACNIC	Modification	Downstream reassignments and reallocations are reported, showing hierarchy and End User assignments.	Not required to register infrastructure assignments.
	Entry	Can modify all parent data except “org name” and address range. Can modify all child data. Users have to authenticate themselves in LACNIC web system.	
RIPE NCC	Modification	LIRs are required to register all assignments and sub-allocations.	
	Entry	Can update all assignment and sub-allocation registrations (protection mechanism available).	

6. Reverse DNS

RIR	**Policy**	**Comment**
AfriNIC	Only make delegations on 8-bit boundaries (/16 or /24). Multiple delegations may be requested to cover CIDR prefixes for blocks bigger than a /24.	
APNIC	Provides reverse DNS based on domain objects in the APNIC database. If the delegation is /16 or larger then the authority for the reverse zone, it is delegated to the custodian of the address space.	Policy for “lame delegations” checking established and enforced.
ARIN	Provides reverse DNS for all allocations and assignments in the database with the following exception: For all /16 or shorter prefixes ARIN delegates reverse DNS authority to the registrant.	Policy for “lame delegations” checking established and enforced.
LACNIC	Provides reverse DNS for all parent blocks. Does not provide reverse DNS for reassignments on child blocks if the parent is /16 or greater.	Policy for “lame delegations” checking established and enforced
RIPE NCC	Provides reverse DNS delegation on request. Deploys DNSSEC on all the reverse zones.	RIPE NCC verifies RFC1912 compliance.

7. National Internet Registries (NIRs)

RIR	Policy
AfriNIC ARIN RIPE NCC	Not applicable.
APNIC	NIRs operate in Korea, China, Japan, Taiwan, Indonesia and Vietnam. They are not ISPs. They allocate to their members within their economy following APNIC policies. Organisations within those NIR economies may go to either the relevant NIR or APNIC.
LACNIC	NIRs operate in Brazil and Mexico. They are not ISPs. They allocate to their members following LACNIC policies. NIRs are responsible for providing services within their country.

8. Policy Development

RIR	Policy
AfriNIC APNIC ARIN LACNIC RIPE NCC	The policy development process is consensus based, open to anyone to participate and is transparent in archiving all decisions and policies so that they are publicly accessible.

9. Internet Experiments

RIR	Policy
AfriNIC APNIC RIPE NCC	Allocations and assignments of Internet resources for Internet experiments are available. Such allocations or assignments are made for one year after which they must be returned. They are intended to support experimental Internet activities. Results of experiments must be made freely available to the public.
ARIN	ARIN will allocate Numbering Resources to entities requiring temporary Numbering Resources for a fixed period of time under the terms of recognised experimental activity.
LACNIC	LACNIC shall make experimental allocations with the aim of encouraging research and development within the region of Latin America and the Caribbean. The experimental allocation shall be for a period of one year, renewable for a period of the same duration, with no specified maximum. The results of the experiment must be published on a public website.

10.Documentation Prefix

RIR	Policy
APNIC	A documentation prefix is available to organisations wishing to use examples of

	Internet resources in educational materials, case studies and other documentation.
AfriNIC ARIN LACNIC RIPE NCC	No policy.