

## Draft Policy 2018-1

#### Allow Inter-Regional ASN Transfers

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#### **ARIN 2018-1 Problem Statement**



•There is a need to allow RIR transfers of ASNs with RIRs with an equivalent transfer policy.

## 2018-1 Changes to current text



Change the first sentence in section 8.4 from:

"Inter-regional transfers may take place only via RIRs who agree to the transfer and share reciprocal, compatible, needs-based policies."

To:

"Inter-regional transfers of IPv4 number resources and ASNs may take place only via RIRs who agree to the transfer and share reciprocal, compatible needs-based policies."

#### Points of Discussion



- Mergers and Acquisitions
- 2 Byte vs 4 Byte ASN's
- RPKI and ARIN Implications
- APNIC and RIPE NCC
- IANA ASN Registry Issue

#### Mergers and Acquisitions



#### Real World Possibilities...

A company relocates their HQ to Europe, transferring all of their IP addresses space to the RIPE NCC region. Today this company is required to maintain an ARIN account to house their one remaining ASN. They do not want a different ASN, and they do not want to remain ARIN customers but today they do not have the option to transfer the ASN to the RIPE NCC.

## 2 Byte vs 4 Byte



RFC8092-compliant code is not prevalent in the DFZ. This is important because it means a network operator who wants to shape their traffic properly with BGP communities still needs a 2-byte ASN or it won't work.

This proposal addresses the problem by allowing registrants of an unused or unwanted 2-byte ASN to transfer the registration to a network operator who needs one, all within the existing and community agreed-upon framework of Inter-RIR transfers.

## 2-Byte ASNs



Would the community prefer to limit this policy to incorporate only 2-byte ASNs?

2-byte ASN's were assigned to RIR's in non-contiguous blocks.

## **ARIN Implications**



- During the previous assessment transfers were not fully automated within ARIN's registry system.
- ARIN's systems now conduct transfers via ARIN Online, a facility giving ARIN proper audit trails and the generation of publicly available transfer log (used by third parties to monitor ARIN's transfer activity).
- These automated processes will need to be modified to accommodate Inter-RIR transfers, with an estimated effort of between 1 and 2 months

#### RPKI Implications



In the previous assessment of Draft Policy ARIN-2014-15 Allow Inter-RIR ASN Transfers, it was noted that minimal work was necessary with the exception of the RPKI. Today, the RPKI TA contains all AS numbers (a change to the RPKI commonly referred to as 0/0), making RPKI a non-issue with regard to inter-RIR transfers.

#### APNIC and the RIPE NCC



Both APNIC and the RIPE NCC have approved Inter-RIR ASN transfers, however zero transfers have actually taken place.

APNIC Policy - APNIC will recognize inter-RIR IPv4 address and ASN transfers only when the counterpart RIR has an inter-RIR transfer policy that permits the transfer of those resources between APNIC and its own region.

RIPE NCC Policy - Organizations in the RIPE NCC service region can transfer Internet number resources with organizations in other RIR service regions. These so-called "inter-RIR" transfers are possible between RIRs with compatible policies. Currently, ARIN and APNIC are the only RIRs that can perform inter-RIR transfers with the RIPE NCC:

- IPv4 addresses can be transferred to/from the ARIN service region
- IPv4 addresses and AS Numbers can be transferred to/from the APNIC service region

#### IANA



• The RIRs and IANA are discussing how the top-level ASN registry should be updated and cleaned up so that future RIR ASN transfers are referred to the appropriate RIR, and that additional redirects are done as needed.

• The NRO EC is working with IANA/PTI to ensure that a single ASN that has moved from one RIR's administration to another should not have to be reflected at the IANA/PTI.



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## Thank you.

Any Questions?





# Discussion



