

Are NIRs limiting the nation's say in APNIC governance policies?

(NIR: Boon or Bane – Is APNIC policy of Members Voting Rights doing the Justice with NIRs and Corresponding Countries)

APNIC (the Asia Pacific Network Information Centre) is the regional Internet address registry (RIR) for the Asia-Pacific region, service 56 economies, including India, Bangladesh, China, Australia, Japan and others. APNIC is one of the world's five RIRs and is part of the Number Resource Organization (NRO).

As of date, the following 7 NIRs (National Internet Registries) are registered with APNIC for serving the local internet community^{i ii iii--}

NIR	Serving Economy	Members under each NIR ^{iv}
APJII (ID)	Indonesia	2916 ^v
CNNIC (CN)	China	1399
IRINN (IN)	India	3368
JPNIC (JP)	Japan	474
KISA (KR)	Korea	N.A.
TWNIC (TW)	Taiwan	299
VNNIC (VN)	Vietnam	624

APNIC Membership is classified into 7 tiers depending on the IP holding by each member. Each membership tier has voting rights. These voting rights play a crucial role in governance and policies matters of APNIC.

For IPv4 address space, the membership tier is assessed as follows:

Membership tier	IPv4 Holding
Associate	None
Very Small	Up to and including /22
Small	Greater than /22, up to and including /19
Medium	Greater than /19, up to and including /16
Large	Greater than /16, up to and including /13
Very Large	Greater than /13, up to and including /10
Extra Large	Greater than /10

For IPv6 address space, the membership tier is assessed as follows:

Membership tier	IPv6 Holding
Associate	None
Very Small	Up to and including /35
Small	Greater than /35, up to and including /32
Medium	Greater than /32, up to and including /29
Large	Greater than /29, up to and including /26
Very Large	Greater than /26, up to and including /23
Extra Large	Greater than /23

Membership tier	Number of votes
Associate	1
Very Small	2
Small	4
Medium	8
Large	16
Very Large	32
Extra Large	64

As per the Membership tier voting chart, every member can have a max of 64 votes (including NIRs) but APNIC charges an additional 190% premium on the annual membership fees from NIR, which leads to effective membership fees for NIRs equals to 290% of the ordinary membership fee^{vi}, but with no added advantage of voting rights. Members of NIR didn't get the voting rights in APNIC, even though they pay the fees to NIR and indirectly pay to APNIC, as NIR pays to APNIC as per resources holdings of all its members plus an additional 190% premium over and above of ordinary fee.

Top economies (and NIRs) based on the voting rights under APNIC region (as of 11th Nov 2021) ^{vii}—

Country	No. of APNIC Members	Voting Rights	Average vote per member	Rank (as per voting rights)
AU	2015	7032	3.49	1
HK	949	3733	3.93	2
BD	1067	3442	3.23	3
IN*	608	2434	4.00	4
SG	391	1728	4.42	5
CN*	310	1666	5.37	6
NZ	447	1657	3.71	7
AP	419	1633	3.90	8
JP*	316	1258	3.98	9
MY	313	1228	3.92	10
PH	284	1078	3.80	11
TH	223	1046	4.69	12
PK	262	932	3.56	13
ID*	89	484	5.44	14
TW*	55	305	5.55	18
VN*	2	65	32.50	27

**Average vote per member
across top 13 economies**

4.20

(Vietnam is not included while calculating the average vote per member because VN has only 2 members, VNNIC and VN Post and Telecommunications, and including VN while calculating average votes, leads to changing of figures from 4.20 to 5.97 as VNNIC has 64 votes, which will not be on the average side).

* Economies which have NIRs are star marked

If every resource holder (doesn't matter whether membership is with RIR and NIR) has voting rights in APNIC, then the voting rights table will change to (average votes per member are 4.20, as calculated above. Here, I am taking 2 votes per NIR member for conservative calculation and 3 votes per NIR member for realistic calculation) –

NIR	Serving Economy	Members under each NIR	Votes (2 per Member)	Votes (3 per Member)
APJII (ID)	Indonesia	2916	5832	8748
CNNIC (CN)	China	1399	2798	4197
IRINN (IN)	India	3368	6736	10104
JPNIC (JP)	Japan	474	948	1422
KISA (KR)	Korea	N.A.	N.A.	N.A.
TWNIC (TW)	Taiwan	299	598	897
VNNIC (VN)	Vietnam	624	1248	1872

Adding this vote count with the existing voting rights which every economy has, the results would be like this –

Country	Total Member (APNIC+NIR)	Voting Rights (Average 2 votes per NIR per member)	Voting Rights (Average 3 votes per NIR per member)
AU	2015	7032	7032
HK	949	3733	3733
BD	1067	3442	3442
IN*	3976	9170	12538
SG	391	1728	1728
CN*	1709	4464	5863
NZ	447	1657	1657
AP	419	1633	1633
JP*	790	2206	2680
MY	313	1228	1228
PH	284	1078	1078
TH	223	1046	1046
PK	262	932	932
ID*	3005	6316	9232
TW*	354	903	1202
VN*	626	1313	1937

The new Ranking of the economies will change like this (based on 2 votes per NIR member)

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Country	Rank
IN*	1
AU	2
ID*	3
CN*	4
HK	5
BD	6
JP*	7
SG	8
NZ	9
AP	10
VN*	11
MY	12
PH	13
TH	14
PK	15
TW*	16

In this scenario, I have considered every NIR member on average have 2 voting rights (which is more towards the conservative side), and the results are as - AU is no more in top position and Indonesia rises from 14th position to 3rd position, similarly, China rises from 6 to 4th and Vietnam rises from 27th to 11th position. So, If APNIC gives fair chances to the countries where NIR is doing great work in the expansion of the Internet, then ID and VN will get the maximum benefits concerning the voting rights.

Now, let's see what will be the ranking status, if I consider an average of 3 votes per NIR member (which is more on the realistic side) –

Country	Rank
IN*	1
ID*	2
AU	3
CN*	4
HK	5

BD	6
JP*	7
VN*	8
SG	9
NZ	10
AP	11
MY	12
TW*	13
PH	14
TH	15
PK	16

In this case, India rises from 4th to 1st position, Indonesia rises from 14th position to 2nd position, China rises from 6 to 4th, Vietnam rises from 27th to 8th position and Taiwan rises from 18th to 13th position.

So, If APNIC gives the fair chances to the countries where NIR is doing a great work in expansion of Internet , then IN, ID and VN will get the maximum benefits (as per voting rights) and will have much more say in the APNIC policies and governance, which will be beneficial for the whole Internet community as this will correctly capture the members interests and can guide the governance and policies for the benefit of whole community.

ⁱ <https://www.apnic.net/about-apnic/organization/apnic-region/national-internet-registries/>

ⁱⁱ <https://conference.apnic.net/52/program/schedule/#/day/2/nir-sig-forum>

ⁱⁱⁱ Please note: In the EC meeting of 27 February 2012, the EC resolved to impose a moratorium on accepting any new NIR applications while the EC evaluates the future of the NIR program, without prejudice to existing NIRs.

Ref - <https://www.apnic.net/about-apnic/organization/apnic-region/national-internet-registries/>

^{iv} Member info is picked from the respective slides of NIR of APNIC 52 conference

^v IDNIC member count is updated till 14.12.2021 while rest other NIRs member count is as per info from APNIC52 conference

^{vi} <https://www.apnic.net/about-apnic/corporate-documents/documents/membership/member-fee-schedule/#1.4>

^{vii} <https://www.apnic.net/about-apnic/organization/structure/members/>