

TWNIC Update

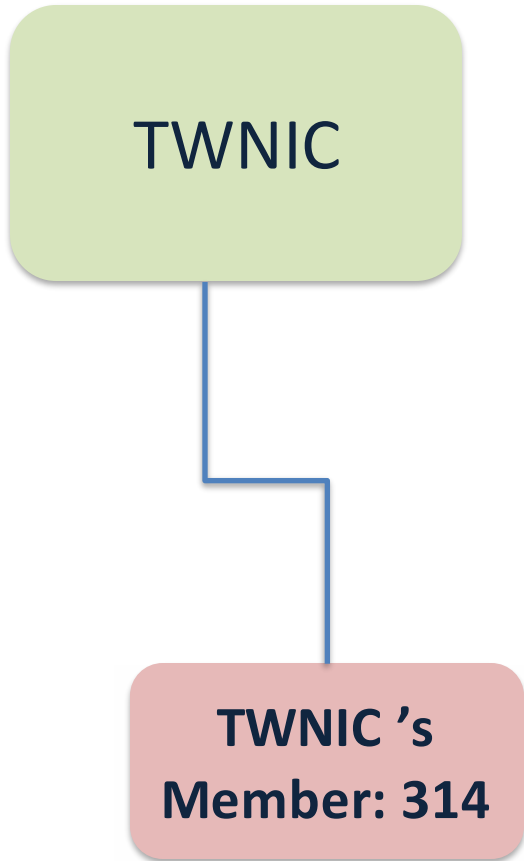
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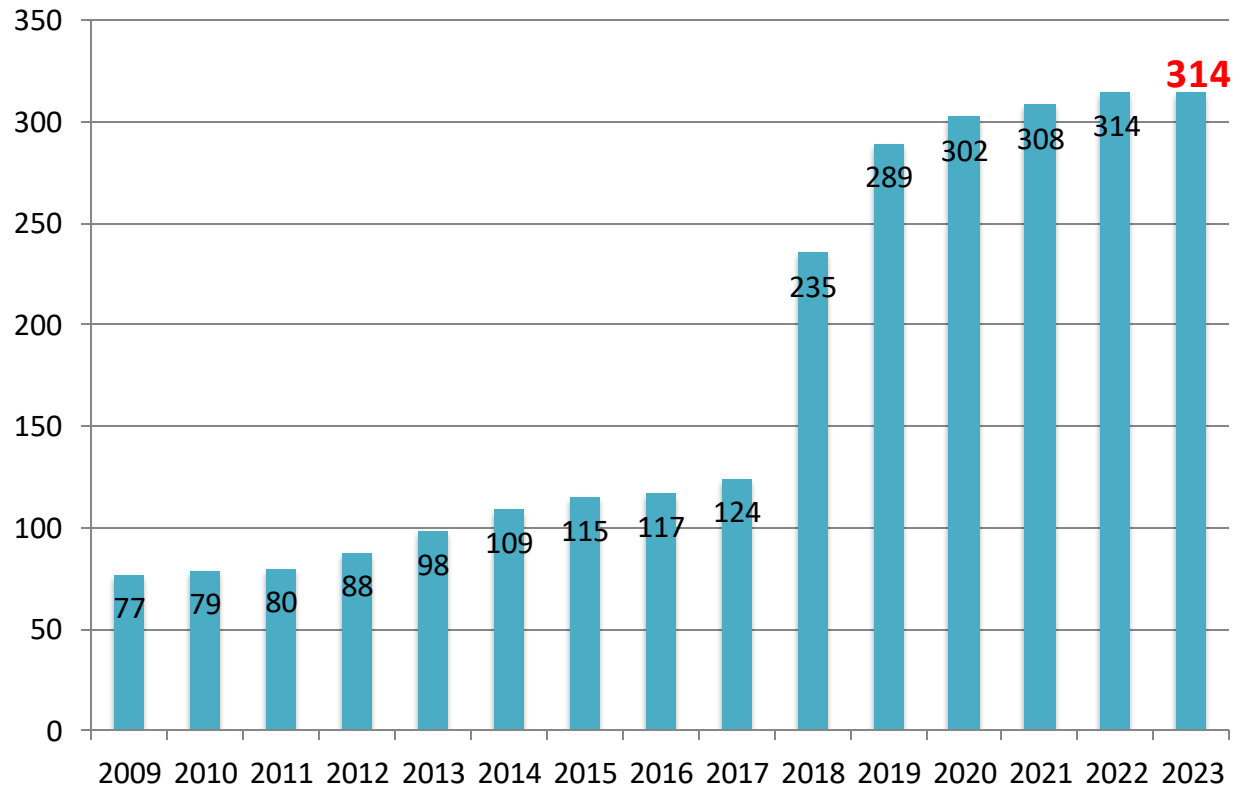
Outline

- Statistics of TWNIC
- TWNIC's activities and training programs
- TWNIC RPKI Update
- Conclusions & Future Works

Statistics of TWNIC's IP members



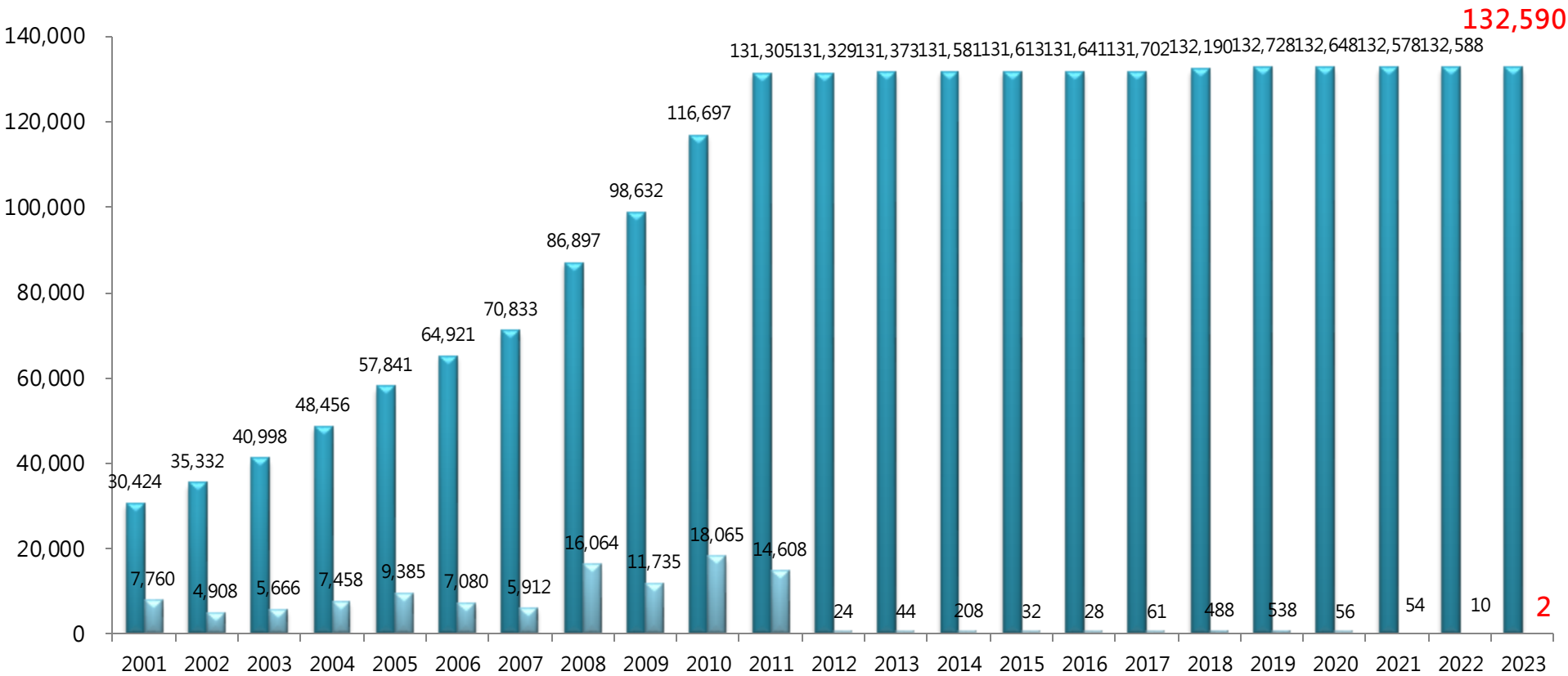
Membership growth



IPv4 Address Allocation

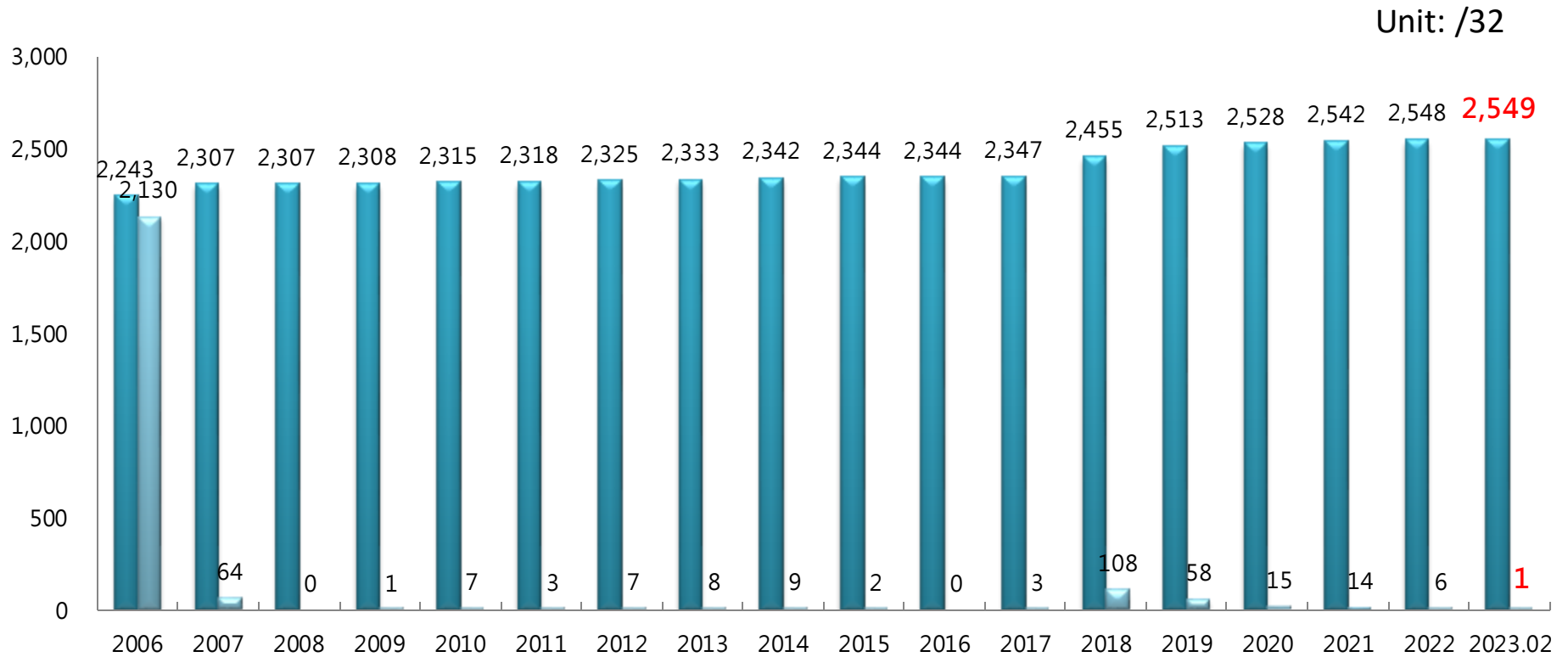
- TWNIC has allocated 132,590 /24s IPv4 addresses.

Unit: /24



IPv6 Address Allocation

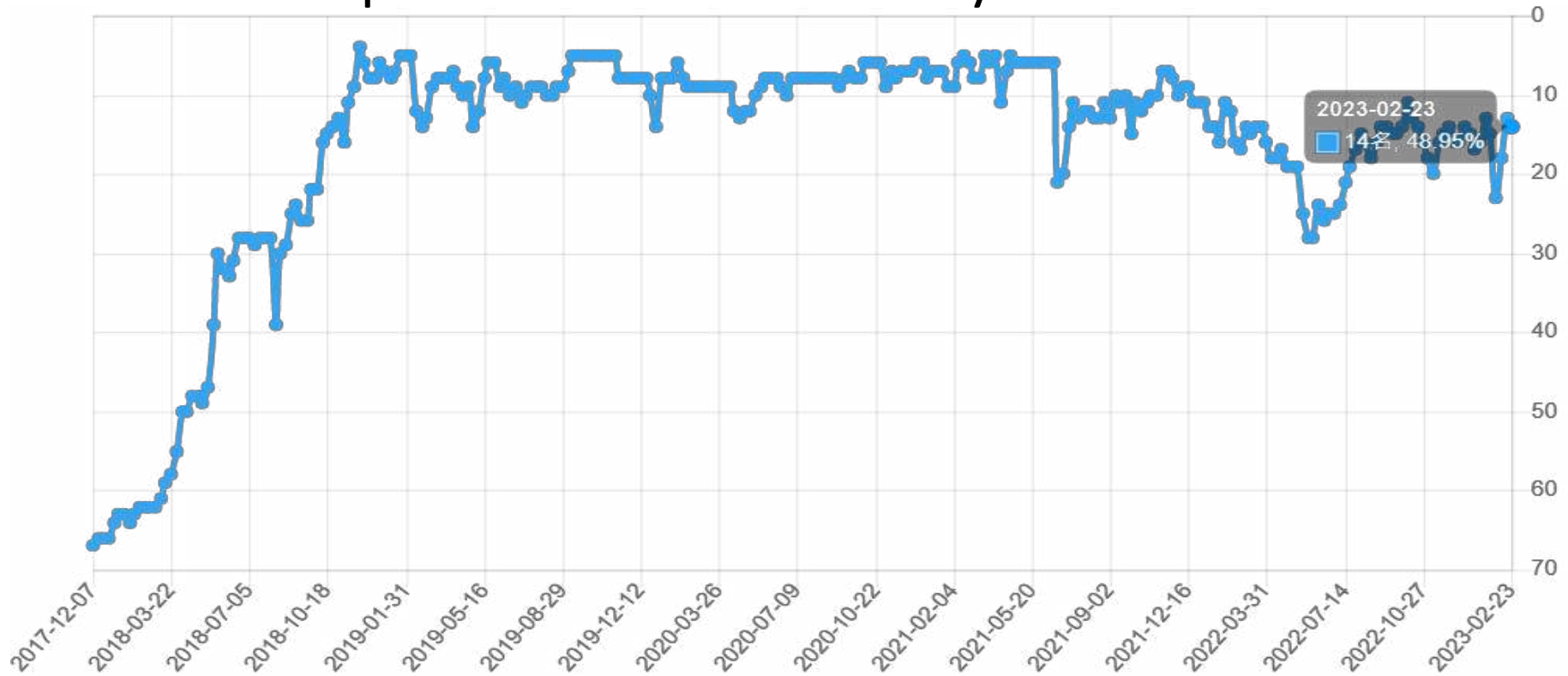
- TWNIC has allocated 2,549 /32s IPv6 addresses.
- Most of TWNIC IP members have obtained IPv6 addresses.



Taiwan IPv6 User Availability



- Taiwan IPv6 user availability is 0.46% in the end of 2017 and 48.95% in February 2023.
- Taiwan IPv6 Global Ranking: 14
- Data derived from APNIC by measuring mean value of IPv6 Capable over the last 7 days.



38th TWNIC IP Open Policy Meeting

- Time: Dec 1, 2022
- Keynote speech:
 - **Future Network Need**
Geoff Huston, Chief Scientist, APNIC
 - **The UN norms of responsible state behavior in cyberspace**
Bart Hogeveen, Head of Cyber Capacity Building, International Cyber Policy Centre (ICPC), Australia strategic Policy Institute, ASPI
- Session topics include Cyber Security SIG, Operational Technology SIG, Cooperation SIG, Policy SIG and IPv6 Deployment SIG.
- To see the detail agenda, visit <https://opm.twnic.tw/38th/agenda.html>



2022 IP Network Communication Training

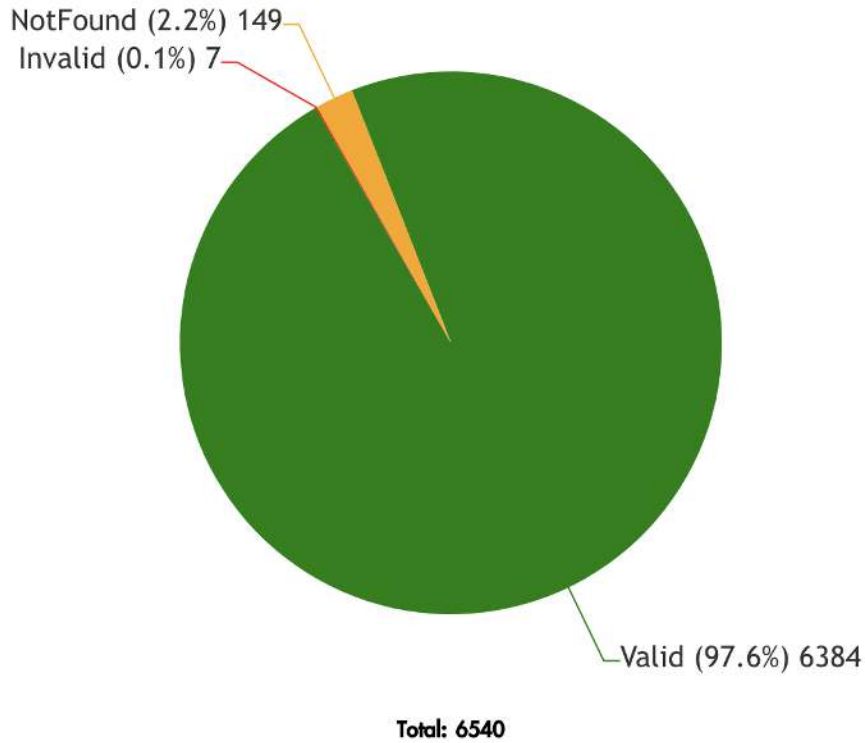
SN	Location	Date	Course Topic	Onsite Participants	Online Participants	Onsite & Online Participants
1	Kaohsiung City	9/07	IPv6 Upgrade of Website & Cloud	14	54	68
2	Yunlin County	10/07	IPv6 Security	20	70	90
3	Taipei City	11/18	IPv6 Network Upgrade	15	90	105
4	Tainan City	12/15	IPv6 Upgrade of Website & Cloud	16	30	46
Total Participants				65	244	309

2022 TWNIC-APNIC Joint Training

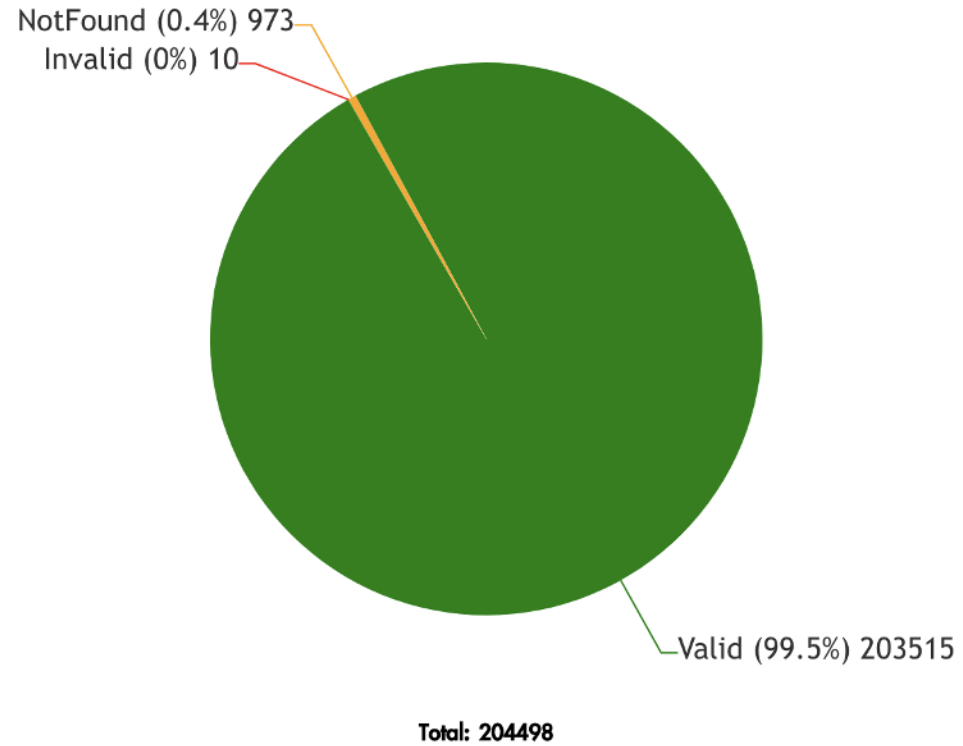
SN	Course Topic/Location	Date	Onsite Participants	Online Participants	Onsite & Online Participants
1	Network Security (Only Online)	6/7-6/08	0	36	36
2	Network Management and Monitoring(Taipei) (Onsite & Online)	12/2	20	58	78
Total Participants			20	94	114

TWNIC RPKI Service

Number of Routing: IPv4 Valid Prefix 97.6%



Number of Class C: IPv4 Valid Space 99.5%



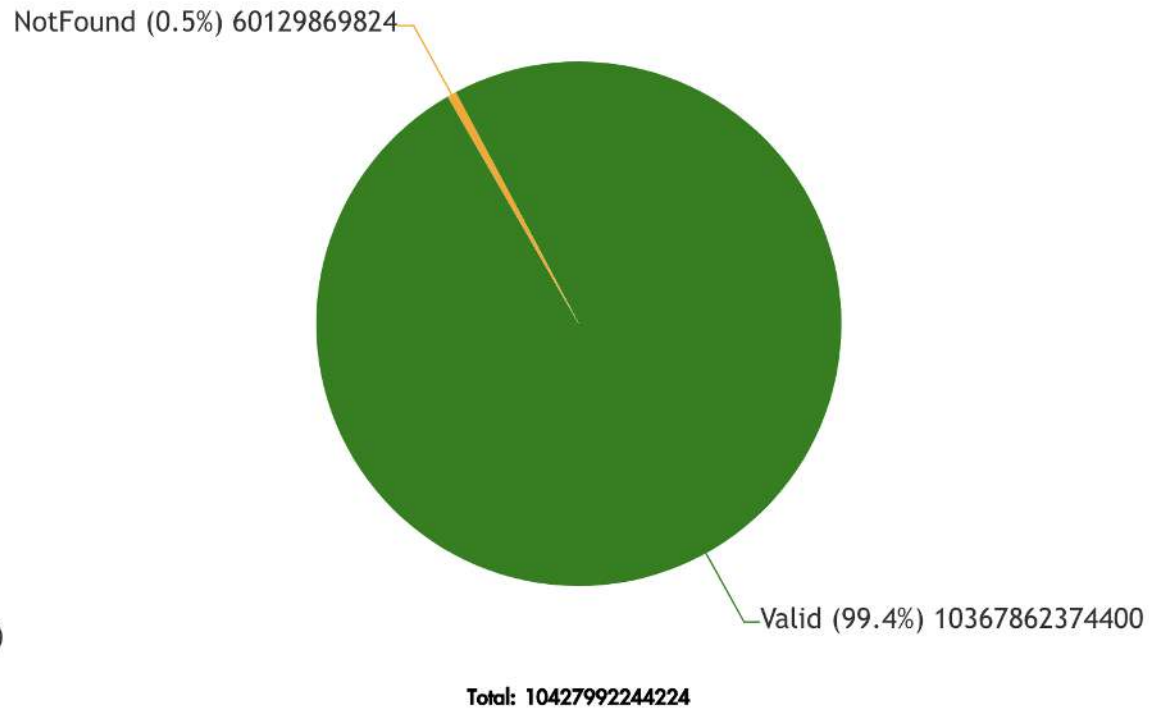
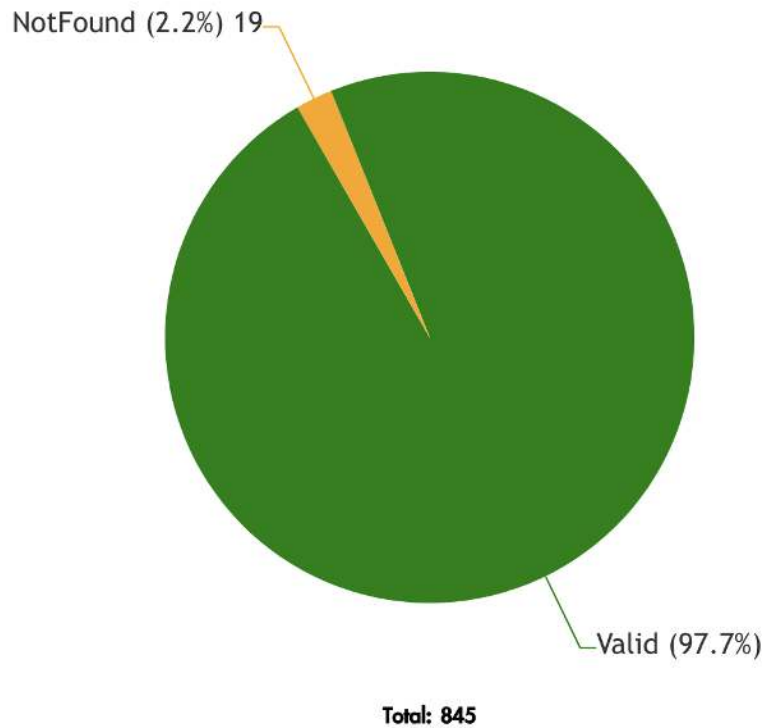
date: 2023/2/24

TWNIC RPKI Service



Number of Routing: IPv6 Valid Prefix 97.7%

Number of /64: IPv6 Valid Space 99.4%

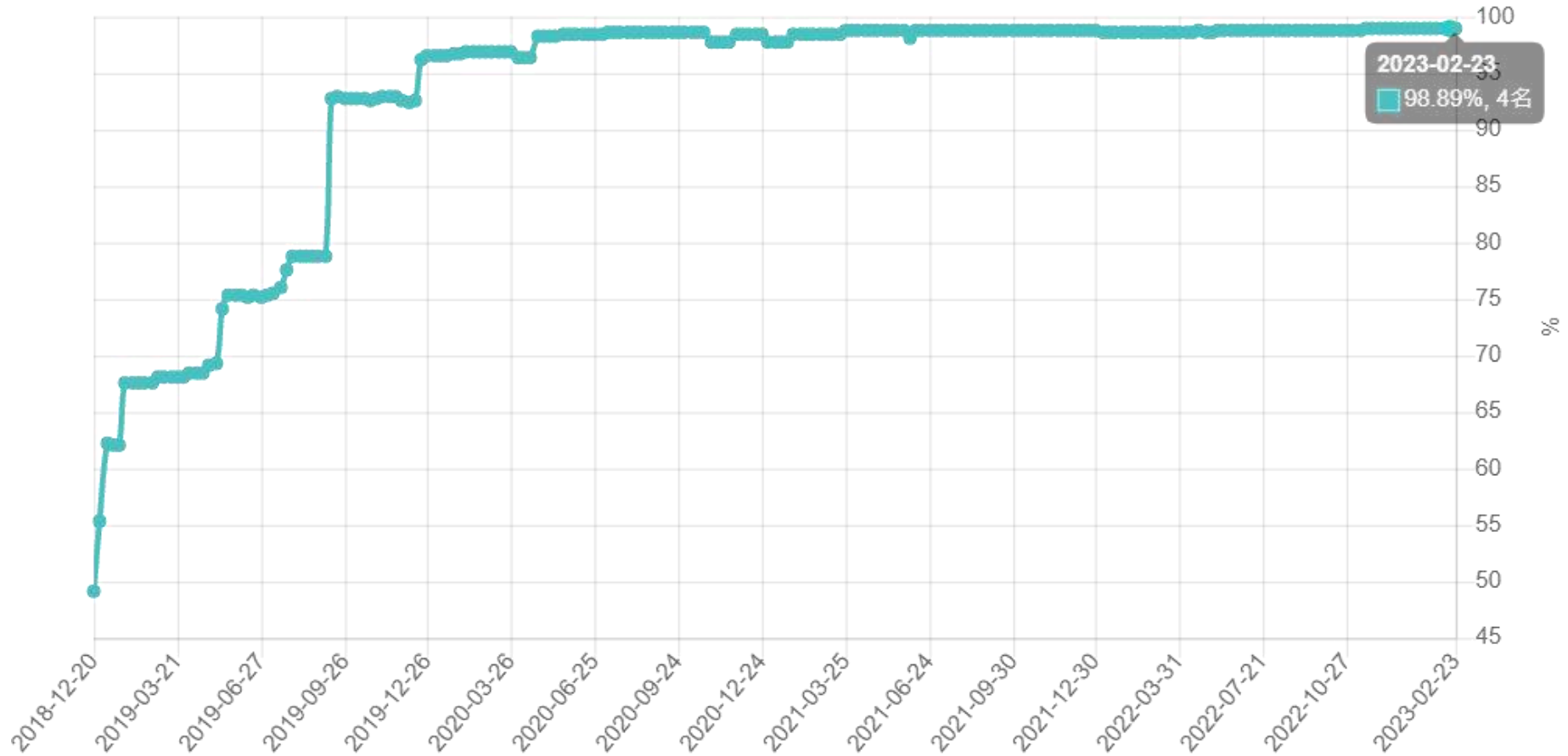


date: 2023/2/24

Taiwan RPKI ROA Asia Ranking: 4



- RPKI ROA space covered ratio: 98.89%



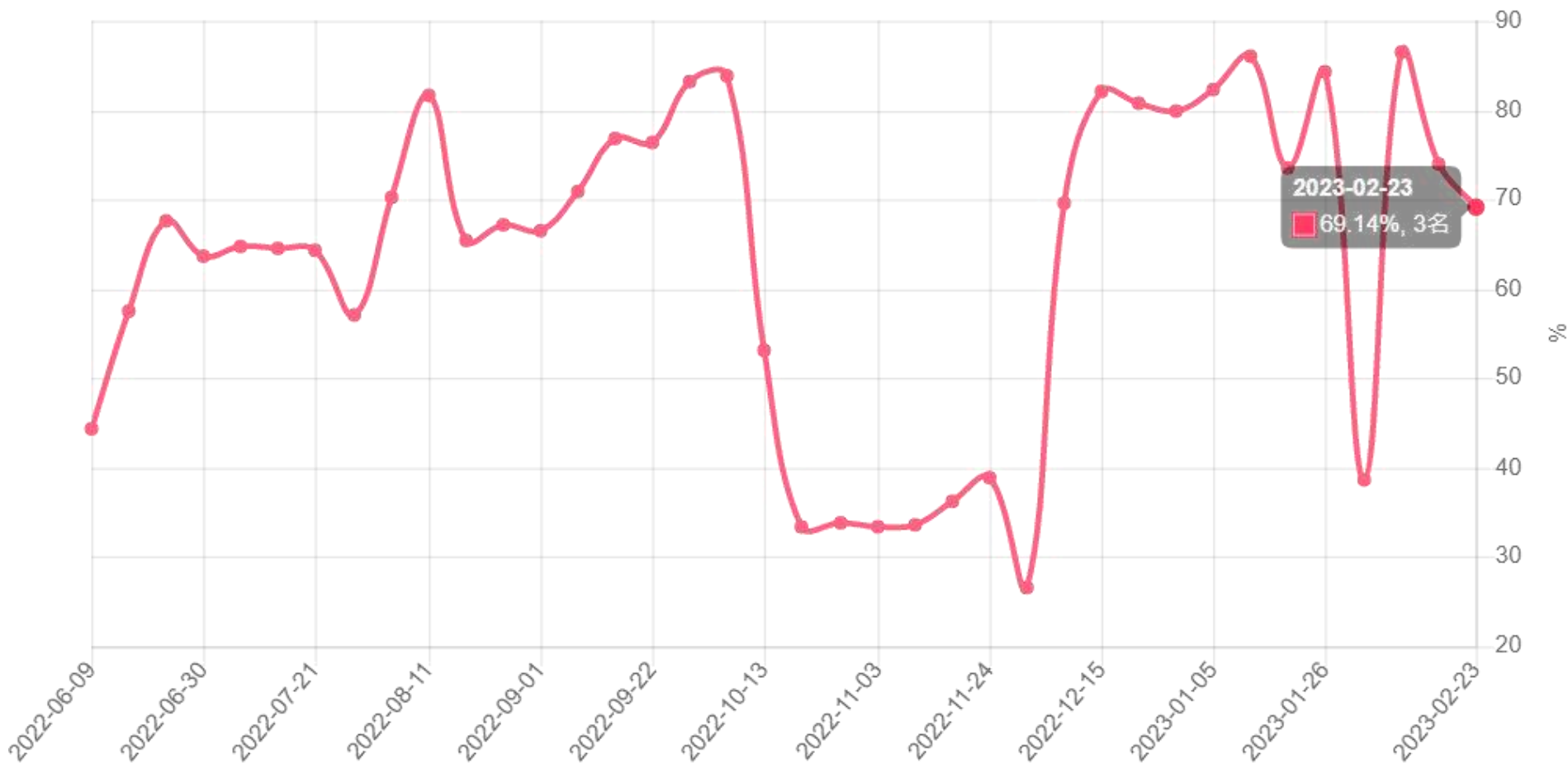
Data source: RIPE NCC

<https://lirportal.ripe.net/certification/content/static/statistics/world-roas.html>

Taiwan ROV Asia Ranking: 3



- RPKI ROV ratio: 69.14%



Data source: RIPE NCC

<https://lirportal.ripe.net/certification/content/static/statistics/world-roas.html>

Conclusions & Future Works



- TWNIC have 29 new members in 2022.
- Execute abuse contact validation every half this year.
- Plan to hold 2 Open Policy Meeting in 2023.
- We will continually hold the IPv6 training and activities.
- We encourage and help Taiwan ISPs and service providers to manage ROAs to increase the ROA coverage.

4th ICANN APAC-TWNIC Engagement Forum with 39th TWNIC IP Open Policy Meeting



- Time: May 22-24, 2023
- To see the detail agenda, visit <https://forum.twnic.tw/2023/agenda01.htm>



Thank you