

## APNIC 31 Member Meeting Minutes

### Chair:

Akinori Maemura, Chair, Executive Council of APNIC

### Agenda:

1. Welcome – Akinori Maemura
2. BGP Movie: End of IPv4
3. APNIC Member and Stakeholder Survey 2011 report
4. APNIC EC election procedures
5. Speeches from candidates; EC election opens
6. DG – Paul Wilson
7. APNIC Services Area report – Sanjaya
8. APNIC Technical Area report – Siamak Hadinia
9. APNIC Communications Area report – German Valdez
10. APNIC Business Area report – Richard Brown
11. APNIC Public Affairs report – Pablo Hinojosa
12. APNIC EC report and strategic plan – Akinori Maemura
13. Treasurer’s report: James Spenceley
14. APNIC EC voting closes; AEC election results
15. Policy SIG report – Gaurab Raj Upadhaya
16. NIR SIG report – Izumi Okutani
17. Membership Voting Rights WG report – Desi Valli
18. Government Advisory Council WG report – Naveen Tandon
19. RQA BoF report – Frank Salanitri
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21. NRO Statistics report – Arturo Servin
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24. NRO NC election result
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### 1. Welcome

**Presenter: Akinori Maemura**

Akinori Maemura, Chair of the APNIC EC, welcomed the Members to the AMM. He continues to be the Chair for the AMM as per the APNIC By-laws.

### 2. BGP – The end of IPv4

**Geoff Huston, Chief Scientist, APNIC**

Geoff discussed what was happening in the BGP by reviewing some data and the trends it highlighted regarding IPv4 exhaustion. After trying to project when IANA would run out, the actual event occurred on 3 February 2011. IANA’s allocation trends from 2004 to 2009

indicated no heightened demand for addresses, with around 4 /8s allocated per year. However, by 2010, this changed, and there were around 22 /8s allocated. In terms of RIR depletion, the latest modelling suggests that APNIC will start allocating from the last /8 block in July 2011. RIPE and ARIN look likely to run out in the middle of 2012, with LACNIC and AfriNIC in the middle of 2013.

A movie illustrating these trends – the BGP Movie by George Michaelson, Senior R&D Scientist, was then shown.

### 3. 2011 Member and Stakeholder Survey report

**Presenter: Prof. Ang Peng Hwa**

There were 794 valid responses from 47 economies, an increase of 32% from previous surveys, although there was decreased participation from Members of 7%.

Overall, the membership is generally satisfied with APNIC services. On an economy breakdown, Least Developed Economies are the most satisfied with APNIC, with Developed economies, the least satisfied. Respondents did indicate that APNIC should provide consultancy services at 6.83. In terms of APNIC priorities, supporting IPv6 deployment was strongly highlighted both by the survey and in the initial consultations. However, on further analysis, despite 40% of respondents indicating that they have a plan for IPv6 plan, only 20% said they have a budget. This may signal a potential issue. The membership is generally satisfied with the PDP, however, in terms of IPv4 transfers, strongly felt that APNIC should develop policies and guidelines for transfers.

Cost was the major concern regarding Training, with many respondents preferring local training. eLearning access was pointed out as an issue, with access and relevancy highlighted.

There was high agreement that APNIC should do more to support specific regional Internet governance activities, but it should be noted that there was a qualitative difference in the responses based on whether the respondents were from governments or not. There were also strong indications that APNIC should engage with governments, but not allow governments to be involved in decision making. There was also a sense that governments might benefit from training and that APNIC should play a more active role in the IGF.

With regard to NIRs, there appeared to be confusion from Members as to what an NIR was, even from those economies requesting an NIR.

### 4. APNIC EC election procedures

**Presenter: Paul Wilson, APNIC DG**

These procedures have been changed in accordance with the recommendations of the Election Review Panel. Adopted recommendations include the appointment of:

- An Election Chair to oversee the process
- Election Officers selected from Secretariat staff
- Election Tellers to count the ballots

- Scrutineers as observers

These roles all have specific responsibilities.

Documentation of these procedures has also been improved and there are specific procedures set out for dispute resolution.

The EC Chair invited Mr Francis Lee, an APAN Steering Committee Member to be the Election Chair. Mr Lee explained who the Tellers and Scrutineers were and asked each candidate to give a short speech. Mr Lee then showed the ballot box, explaining that it was empty, then proceeded to lock it. He then declared the election open.

As part of the new procedures, the Election Chair announced the start and end of the on-site voting and the results of the election.

## 5. DG report

**Presenter: Paul Wilson, Director General**

Even though the DG report usually summarizes the key events of the past year, Mr Wilson started by highlighting the events of early 2011 as they resulted from many 2010 activities. The beginning of January saw the start of the new year in the new offices and the global production launch of RPKI. On 13 January, Brisbane was affected by a devastating flood event. On 3 February, IANA distributed the last /8s to all the RIRs. The next day, there was a NRO EC retreat, involving the heads of ICANN, IANA, IAB and the IETF to discuss global issues. On 15 February, APNIC announced a new set of procedures for handling IPv4 requests. On 16 February, APNIC launched the in-add.arpa zone along with DNSSEC. On 20 February, an EC strategic retreat was held.

The four operational areas of Delivering Value, Supporting Internet Development, Collaborating and Communicating, and Corporate Support were the key performance plans for 2010.

In terms of IPv4 and IPv6 procedures, IPv4 procedural changes were anticipated and planned. IPv6 procedures have been streamlined with Kickstart, boosting the number of IPv6 allocations and assignments.

APNIC has adopted Agile methodology for project and software development management, and recruited a specialist public affairs advisor to increase our engagement in terms of Internet governance. APNIC has actively participated in many governance related events, including the ITU Plenipotentiary, an event held every four years.

APNIC also spent much of 2010 involved in the purchase, refitting, and relocation of our new office. The move was the test bed for our new redundancy triangle architecture.

Mr Wilson then mentioned that the APNIC logo will change and played a short video of things to come.

## 6. Services Area report

**Presenter: Sanjaya, Services Area Director**

This report focuses on the two operational areas of Delivering Value, and Supporting Internet Development.

In terms of Delivering Value, with RQA, APNIC is focused on raising awareness of responsible filtering. APNIC has also successfully implemented mandatory Incident Response Team (IRT) objects in the APNIC Whois Database. We now have close to 1300 IRT objects linked from 57,800 whois objects.

MyAPNIC improvements will make it easier for Members to manage their public information, and in June 2011, Members will be able to update their DS record for their reverse DNS delegations. APNIC is now waiting for IANA to sign the in-addr.arpa root zone.

IPv6 delegations have more than tripled from around 170 in 2009, to over 650 in 2010, due mainly to Kickstart IPv6.

Supporting Internet Development has focused on IPv4 exhaustion preparations and the creation of specific IPv4 website information. APNIC is currently in Stage 2 of exhaustion planning.

APNIC membership growth continues to increase and has grown to 3269 Members. With the implementation of extended working hours, email and phone communication has increased. IPv4 delegations experienced huge growth in 2010, but there has also been significant growth in IPv6 with 212 million /48 networks deployed.

## 7. Technical Area report

**Presenter: Siamak Hadinia, Infrastructure Services Manager on behalf of Byron Ellacott, Technical Director**

Under Delivering Value, IPv4, IPv6, and redundancy are provided on all critical services. APNIC had the RPKI system production for resource certification ready in 2010 and is continuing to work with the standards developed by the IETF process as well. With DNSSEC, we are in the third phase of a three-phase plan and will publish Member DS records later in 2011. APNIC has also recently provided the devices and architecture for the e.in-addr-servers.arpa reverse delegations in collaboration with the RIRs and IANA. We have also provided improved meeting support with new equipment, and going forward, improved webcasting.

Under Communicating and Collaborating, APNIC will be working with the NRO to provide DNSSEC support for the ERX blocks and provided software and expertise support for AfriNIC's RPKI development. APNIC is also continuing its ongoing collaboration with Merit, NTT Communications, and AARNet on RQA traffic measurements and is communicating on DNS-OARC measurement activities.

Under Corporate Support, network, phone services, Internet connections, and security systems were implemented for the office relocation. The adoption of Agile methodology included comprehensive training as well as daily stand-up meetings. There is also a new co-location facility using “triangle” architecture for redundancy, and software and system support for project work include MyAPNIC improvements, ARMS staff portal improvements, events registration and support systems, and the IPv6 Kickstart program.

## 8. Communications Area report

**Presenter: German Valdez, Communications Area Director**

Under Delivering Value, Training content has been comprehensively reviewed, and there have been improvements to the IPv6 and IRM courses. These improvements have been integrated with the new, recently upgraded, Training Lab. The Training Lab also allows APNIC to run parallel sessions. eLearning has also been extended with new courses, two sessions offered per month, and more flexibility.

Meeting improvements include improved web casting, video, and steno captioning.

With regard to communications, there is now an additional communications tool called Apster Bulletin, a monthly html emailed collection of newsworthy information. In keeping with EcoAPNIC initiatives, this and other publications will be available online as pdfs.

Under Supporting Internet Development, APNIC is the Secretariat of the AP IPv6 Taskforce, and also provided support for the first Pacific IGF. We also helped support the Fifth IGF in Vilnius by helping to organize four remote hubs. APNIC continues its outreach regarding IPv6, and has been focused on media and public relations on both the global and regional levels. The Communications area has also supported Public Affairs activities, ensuring there is consistent messaging and better understanding of the issues involved.

## 9. Business Area report

**Presenter: Richard Brown, Business Area Director**

Under Delivering Value, all Members have now been converted to the new fee schedule, which was implemented on 1 January 2010. The Non-Member fee schedule was also revised and was implemented on 1 January 2011. APNIC’s taxation status has been confirmed as not-for-profit.

Under Corporate Support, the Business Continuity Plan had its first real test with the Brisbane floods of 11-14 January 2010. The various teams were quickly brought to action, the first priority being the safety of APNIC staff. The event was not considered a disaster, so the relevant teams were in “monitoring” mode. Daily meetings and communication were key features of this response. Post-event behaviour will focus on evaluation of the response and continued scenario testing.

The office relocation was also a big commitment, and saved APNIC a lot of exposure to future rental and lease increases.

The Operational Plan is an iterative process and during 2012, APNIC will be going through the complete planning process again. The findings of the 2011 Member and Stakeholder

Survey will therefore be significant. The plan will establish APNIC's activities for 2011-2012 and we will focus on improved alignment of our activities.

For the ISIF report, 19 projects have so far been awarded grants totaling AUD 675,000. There was a workshop in November 2010 to assist recipients with administrative and reporting procedures. Funding is very important for this program to continue. A range of funding available to interested parties.

## 10. Public Affairs report

**Presenter: Pablo Hinojosa, Senior Public Affairs Advisor**

Mr Hinojosa's role is to manage relations with strategic partners such as governments and other entities, both globally and regionally. Mr Hinojosa reported on his activities to date, including the IGF, ITU related matters, and APEC Tel. A few Members of the AMM objected to certain aspects of his report, and Mr Hinojosa subsequently apologized for any offence that was caused.

## 11. EC report

**Presenter: Akinori Maemura, EC Chair**

The Executive Council (EC) is made up of seven members, six of whom are elected. The EC represents the interest of the Members in the governance of APNIC; have oversight of APNIC activities; consider broad Internet policy issues for APNIC's strategic direction; set membership dues; and endorse the policy consensus towards implementation. The EC meet regularly and undertake specific project activity where required such as the review of the EC election process. The membership fees will remain at the same levels as 2010.

The EC also participated in a strategic planning process in December 2010 to discuss APNIC's future strategic direction especially with the changing nature of the Internet. These meetings will be held regularly and will be facilitated. The major issues identified include: IPv4 exhaustion; IPv6 transition; environmental changes; registry function; sustainability; and future processes.

## 12. Treasury report

**Presenter: James Spenceley**

Mr Spenceley confirmed the ATO's ruling that APNIC is a not-for-profit, mutual organization, therefore any membership fees that we receive are not taxed.

Operating revenue was up by 4% to 13.4m. Although expenses were higher than budgeted, tight control of costs resulted in an operating profit.

Going forward, the focus of the EC is on financial stability, in particular, maintenance of a strong or reasonable operating profit. For the 2011 budget, revenue is budgeted to increase to AUD 14.4m, with budgeted expenses forecast at AUD 14.2m, leaving an operating profit of AUD 200,000.

### 13. Policy SIG report

**Presenter: Gaurab Raj Upadhaya**

Consensus was reached on props-083; 088; 093; 094; 097; 095. Consensus was not reached on props-090; 092; 086. The author withdrew prop-091 and for prop-089, the author was absent and the proposal was sent back to the mailing list. Prop-096 failed to reach consensus and was sent back to the mailing list.

The Chair pointed out that there is a “race” condition attached to prop-096 because according to APNIC forecasts, by the time this proposal is discussed in the next policy session, a window may have opened whereby transfers would have taken place under the current policy. There was some discussion on whether endorsement of the consensus could be reached collectively, and it was decided to endorse the consensus reached individually.

### 14. NIR SIG report

**Presenter: Izumi Okutani, NIR SIG Chair**

CNNIC, TWNIC, and KRNIC KISA all provided presentations dealing with IPv4. CNNIC outlined a research project on the use of IP addresses, in particular, on how they can efficiently allocate address space within a network. TWNIC discussed IPv6 information sharing and provided a list of products in Taiwan that are IPv6 ready. KISA has developed a national plan in support of commercial service for IPv6.

It was strongly emphasized in the NIR SIG discussion that registries such as APNIC or NIRs shouldn't be responsible for trying to predict when IPv4 will run out, because that's just not possible. They should instead, keep the community informed about the latest situation.

### 15. EC Election result

**Presenter: Francis Lee**

In accordance with the new election procedures adopted by the APNIC EC, Francis Lee reported the results of the 2011 EC Election. Nate Davis, a Scrutineer, confirmed that there were no anomalies or irregularities with the ballot count.

Gaurab Raj Upadhaya, James Spenceley, Kenny Huang, and Wendy Zhao were all elected to the EC.

### 16. Voting Rights Working Group report

**Presenter: Desi Valli, Chair of the Voting Rights WG**

The objective of this working group is to discuss possible changes to APNIC membership voting rights, specifically the proposition of a “one Member, one vote” system of voting. Discussions have so far centered on understanding the problem, and defining a problem statement.

## 17. Government Advisory Working Group

**Presenter: Naveen Tandon, Chair of the Government Advisory WG**

The objective of this working group is to discuss the formation of a specialized group that includes government to support APNIC and suggest policies. Discussions so far include: how the committee will function and institutionalizing government and industry framework.

## 18. RQA BoF report

**Presenter: Frank Salanitri, Projects and Systems Services Manager**

Discussions were wide ranging and included measuring and reporting on unauthorized use of IPv4 address space (ICANN); testing address blocks for dark traffic (APNIC); an RQA trial in Japan that collaboratively test blocks with APNIC; and security aspects related to bogoning and not bogoning.

## 19. ASO AC report

**Presenter: Tomohiro Fukisaki**

The ASO's responsibility is to advise the ICANN Board and select two ICANN Board Members and one NC Member. It comprises 15 Members (3 from each region); with terms of appointment of 2 years for elected Members and 1 year for appointed Members. The Chair is Louis Lee from the ARIN region and the Vice Chair is Naresh Ajwani from the APNIC region. The ASO AC discuss global policies and are currently discussing prop- 086: Global policy for IPv4 allocations by the IANA post-exhaustion, and prop-97: Global policy for post exhaustion: IPv4 mechanisms by the IANA.

Wilfred Woeber is the ICANN Nomcom for 2011 and the next 2011 face-to-face meeting will be held at ICANN 40 in San Francisco.

## 20. IANA report

**Presenter: Leo Vegoda**

IANA recently had its fourth DNSSEC key signing ceremony, and have been collaborating with the RIRs on an easier system to manage DNSSEC information. IANA are mid-way through re delegating the in-addr.arpa domain to new nameservers. In 2010, IANA completed its highest number of root requests and introduced DNSSEC. In early 2011, IANA completed a successful tabletop exercise for the L-root, and also did their second business excellence self-assessment. Over the past year, they have progressed with standardizing process documentation to ensure consistent formatting; and will focus this year on introducing better measurements for success. IANA have also started their annual review of multi-cast assignments and have started testing 25 assignments.

## 21. NRO Statistics report

**Presenter: Arturo Servin, LACNIC**

Apart from IPv4 depletion, there are minimal changes to the stats. IANA reserved space is now 0. Regarding ASN assignments, there is evidence of fluctuations from 1999 to 2010. RIPE and ARIN have the majority of ASNs, but in terms of assignments, RIPE and LACNIC



are taking the lead. There was a big jump in IPv6 delegations in 2010, lead by APNIC, but it must be noted that LACNIC and AfriNIC normally delegate /32s, not the larger spaces illustrated by the other registries.

## 22. NRO report

**Presenter: John Curran, President and CEO of ARIN; NRO Secretary**

The NRO is the vehicle for RIR cooperation and representation. Particular operational groups have also been formed to work together on similar operational issues – Engineering Coordination Group; Communications Coordination Group; and the Registration Services Managers Group. The RIRs contribute to ICANN on an equal formulaic basis and work closely with ICANN on various issues. It also works with the IGF, ITU, and the OECD on related matters. The NRO meet for workshops and will continue to work on RPKI, and develop communications materials about the RIR and NRO system.

## 23. RIR reports

**(a) Presenter: John Curran, ARIN**

A major project for ARIN is ARIN Online, and it will be released at the next ARIN meeting. They have been focused on IPv6 outreach, DNSSEC, and RPKI. Although they were delayed in rolling it out, they are considering a hosted RPKI that would generate certificates on the ARIN Online interface. They are also considering an “up down” feature where a major organization might want to run their own certification authority and link to ARIN’s RPKI. ARIN do a significant amount of IPv6 outreach, and have a number of policy proposals being discussed on the PPML mailing list.

**(b) Presenter: Hisham Ibrahim**

There were 8.3m addresses allocated in 2010, including 54 new IPv6 allocations. Membership grew by 100% and is now 131. AfriNIC has participated in over 30 events and conducted 11 training sessions. IPv6 allocations are expected to grow sharply over the next two years.

**(c) Presenter: Arturo Servin, LACNIC**

Membership is growing and has reached 1616. On current projections, IPv4 is likely to run out sometime in 2014, and although IPv6 delegations are fluctuating, there was a steady increase in the last few months of 2010. There is also a lot of activity on DNSSEC and RPKI. At LACNIC 14, five policies were discussed and four reached consensus.

**(d) Presenter: Axel Pawlik, RIPE NCC**

With the run out of IPv4, Mr Pawlik focused on more strategic matters. RIPE have formulated three strategic pillars on: (1) Being a trusted source of data; (2) Resource Cycle Management; and (3) Developing the role of the RIPE NCC. The expectations are that the emphasis on allocation will change towards maintaining registrations. RIPE aim to ensure their utility to their membership and continue to improve their registration data, root servers, and certification. The major challenge for the next two years will be to maintain stability over the expected periods of change.

## 24. APIX report

**Presenter: Rapheal Ho**

The APIX Forum is an association of Internet exchange (IX) providers in the AP region, which shares information about the technical, operation, and business issues regarding Internet exchange. There were 33 attendees, and discussions centered on route servers and the experiences of other IXs that operate outside of the AP region.

## 25. APNIC 32 launch

**Presenter: Yoonjeong Kim, KRNIC KISA**

APNIC 32 will be held in Busan, South Korea from 29 August to 2 September 2011.

## 26. Thanks and closing

Paul Wilson ended the meeting at 17:00 with a vote of thanks to all the sponsors and to all those who participated in making APNIC 31 such a successful event.