



APNIC

A N N U A L R E P O R T 1 9 9 9

ASIA PACIFIC NETWORK INFORMATION CENTRE

“Addressing the challenge of responsible Internet resource distribution in the Asia Pacific region.”



APNIC¹

Highlights

59% Membership growth

Financial security strengthened

IPv6 services launched

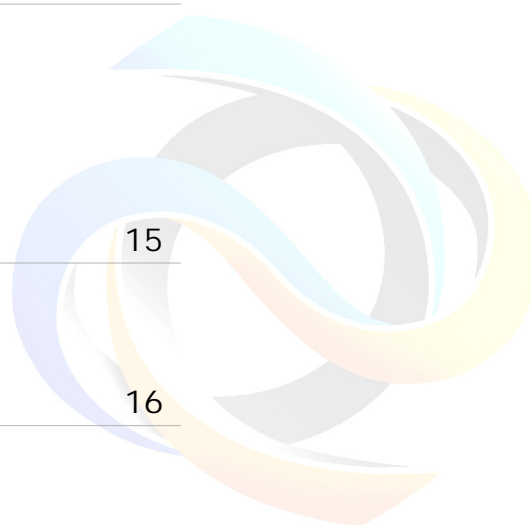
Training courses held in five countries

ICANN Address Supporting Organisation formed

Over 13,500 requests processed

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Introduction

A message from the Director General

It is a pleasure and an honour to present to the APNIC community this Annual Report for 1999. It is my second such report as Director General and I can proudly say that it marks the end of a very productive and positive year in APNIC's development.



Paul Wilson
APNIC Director General

Since our relocation in mid-1998, the APNIC Secretariat has been rebuilding its capacity and services in a new location, with an almost entirely new staff, and with renewed aspirations for service to APNIC members and the Internet community.

At the time of the last Annual Report, we were very much in the middle of that process. Since then, however, changes have continued at APNIC as part of the same rebuilding process and the further development of our services. I hope that the positive results of this ongoing transition will be clear to all.

This report presents many of those results in detail. However, I would like to take a moment to highlight a few major developments that illustrate our overall achievement during 1999:

- APNIC's membership grew from 249 to 396, representing a 59% increase in membership numbers
- Secretariat staffing grew from eight to 13, increasing our capacity to run operations and new services on a professional and sustainable basis
- IPv6 address allocation services were launched – a major milestone in the growth of APNIC's services and responsibilities
- APNIC played a crucial role in guiding the formation of the Address Supporting Organisation of ICANN
- APNIC held its first round of member training courses and is now set for an active training programme in 2000
- The first ever formal survey of APNIC members was conducted, providing valuable feedback on member concerns and priorities
- A Strategic Planning process within the Secretariat produced APNIC's first Mission Statement
- APNIC's financial position strengthened greatly, to the extent that we have over 12 months' operating expenses in reserve.

Our new Mission Statement – presented on the first page of this report – represents the goal of the Secretariat to provide meaningful and valuable service to the Asia Pacific community. Also, with this report, APNIC is launching its new logo, developed by the Secretariat as an expression of our aspirations for the region. I do hope that you will also find meaning in these symbols, and will join together in strengthening APNIC, developing and improving its services, and increasing its value to the entire Asia-Pacific region.

Best regards

A handwritten signature in blue ink, appearing to be 'P. Wilson', written over a horizontal line.

Paul Wilson
Director General

Brief overview of APNIC

APNIC is one of three Regional Internet Registries currently providing allocation and registration services to support the operation of the Internet globally. It is a not-for-profit, membership-based organisation whose members include Internet Service Providers, National Internet Registries, and similar organisations.

Region

APNIC represents the Asia Pacific region, comprising sixty-two economies.

Economies in AP region		
Afghanistan (AF)	Kiribati (KI)	Palau (PW)
American Samoa (AS)	Korea, Dem. People's Republic (KP)	Papua New Guinea (PG)
Australia (AU)	Korea, Republic of (KR)	Philippines (PH)
Bangladesh (BD)	<i>Laos People's Dem. Republic (LA)</i>	Pitcairn (PN)
<i>Bhutan (BT)</i>	Macau (MO)	Reunion (RE)
British Indian Ocean Territory (IO)	Madagascar (MG)	Samoa (WS)
<i>Brunei Darussalam (BN)</i>	Malaysia (MY)	Seychelles (SC)
Cambodia (KH)	Maldives (MV)	Singapore (SG)
China (CN)	Marshall Islands (MH)	Solomon Islands (SB)
Christmas Island (CX)	Mauritius (MU)	Sri Lanka (LK)
Cocos (Keeling) Islands (CC)	Mayotte (YT)	Taiwan (TW)
Comoros (KM)	Micronesia, Federated States of (FM)	Thailand (TH)
Cook Islands (CK)	Mongolia (MN)	Tokelau (TK)
East Timor (TP)	Myanmar (MM)	Tonga (TO)
Fiji (FJ)	Nauru (NR)	<i>Tuvalu (TV)</i>
French Polynesia (PF)	Nepal (NP)	Vanuatu (VU)
French Southern Territories (TF)	<i>New Caledonia (NC)</i>	Viet Nam (VN)
Guam (GU)	New Zealand (NZ)	Wallis and Futuna Islands (WF)
Hong Kong (HK)	Niue (NU)	
India (IN)	Norfolk Island (NF)	
Indonesia (ID)	Northern Mariana Islands (MP)	Total Countries/Territories: 62
Japan (JP)	Pakistan (PK)	Total with APNIC Members: 34

Highlighted entities are currently represented in the APNIC membership. Those in italics joined APNIC for the first time in 1999.

Organisational Structure

APNIC's organisational structure comprises:

- Members, who vote on issues during General Meetings and provide input through various channels throughout the year
- An Executive Council, appointed by the Members to represent them in a policy- and decision-making capacity between General Meetings
- A General Secretariat, APNIC's staff.

The Executive Council

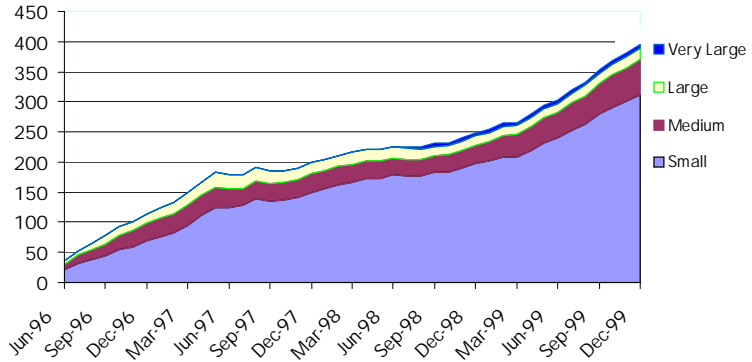
The EC traditionally includes persons of high standing and expertise in the Asia Pacific Internet community, who represent the membership and the region as a whole in providing guidance and support to the Secretariat. The current EC members are: Tommi Chen (Chair), Che-Hoo Cheng (Secretary), Toru Takahashi (Treasurer), Geoff Huston, Xing Li, Oh Kwang Sok, and Kuo-Wei Wu.

In 1999, the EC met at APRICOT in March and at INET in June.

Growth & development

Following a year of significant changes, 1999 was very much a year of growth. The increase in importance of the Internet throughout the Asia Pacific region was reflected clearly in record increases in membership and a corresponding increase in demand for services. This trend continued throughout the year.

Membership growth since June 1996 (cumulative)



By the end of 1999, APNIC had 396 members, representing a doubling of the membership over two years.

The fastest growth in terms of membership occurred in Australia, India, and Hong Kong. Meanwhile, five economies that had not been represented in APNIC membership ranks before – Laos, Brunei Darussalam, Tuvalu, New Caledonia, and Bhutan – all opened their first memberships in 1999.

Financial position

In financial terms, APNIC performed strongly in 1999, with higher than budgeted income and lower than budgeted expenses. Whereas the EC had previously directed the Secretariat to maintain six months' operating expenses in reserve, the organisation actually exceeded a 12 month reserve by year's end. The EC have now directed that APNIC maintain this 12 month reserve.

Comparisons: Revenue and expenses - actual to budgeted

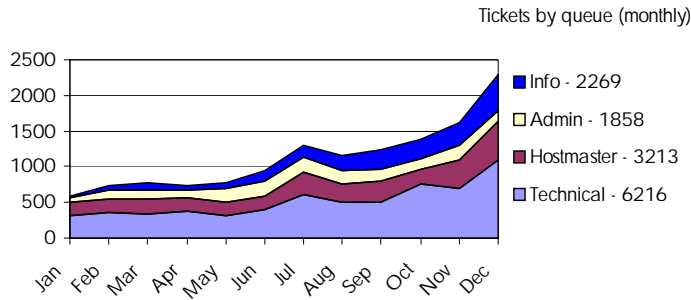
<i>January to December 1999</i>	<i>Consolidated Actual</i>	<i>1999 Budget Estimates</i>	<i>Comparison</i>
Revenue	\$1,569,441	\$1,294,666	21% more
Expenses	\$882,933	\$1,182,652	25% less
Operating surplus	\$686,508	\$112,014	513% more

This reserve provides a secure base for APNIC to consolidate its position and embark safely on longer term projects for the benefit of the membership and the regional Internet community.

Capacity building

Growth & Development

To meet the growth in demand for services, APNIC continued the staff expansion it commenced in the previous year, finishing 1999 with 13 full-time staff positions (and three positions to be filled in early 2000). APNIC met the corresponding demand for floor space by expanding into a neighbouring office in December. This expansion gives a 50 percent increase in space, providing for a maximum of 28 staff – sufficient for APNIC’s foreseeable future needs.



The new RT request tracking software installed in 1999 has improved the handling of requests and compiling of service statistics.

Member Survey

Such rapid expansion requires careful, managed planning. APNIC commenced a major stage in the planning process by commissioning independent consultants KPMG to conduct a detailed, open-ended survey of members and others from the wider Internet community before and during the 1999 Member Meeting.

The Member Survey comprised a thorough questionnaire and face-to-face interviews at APRICOT99 in Singapore. It provided valuable inputs for APNIC to consider in its ongoing operations and planning.

The Secretariat subsequently published a response to the survey highlighting relevant matters and indicating future directions. Both the consultant’s report and the Secretariat’s response are available at <http://www.apnic.net/survey/kpmg1999/>.

Membership fees and legal structure

The rapid growth in the number of members has brought with it a need to reconsider the current method of determining membership category. With this in mind, APNIC has developed a proposal for a new fee structure, designed to allow for greater fairness and predictability within the organisation.

At the same time, a new draft membership agreement has been developed and proposed to provide a clearer expression of APNIC’s legal framework and relationship with members.

Membership by category at 12/31/1999

Category	Number	% of Total
Very Large	6	1.5%
Large Member	20	5.1%
Medium	58	14.6%
Small	312	78.8%
TOTAL	396	100.0%

A proposal for a new fee structure would see minimum membership categories determined by address space holdings

Growth & Development

Strategic Planning

Following on from the guidance provided by the Member Survey, the Secretariat commenced development of a Strategic Plan. The planning process was independently facilitated and drew on the input of the entire staff. Its first outcome was the expression of APNIC's first ever mission statement – "Addressing the challenge of responsible Internet resource distribution in the Asia Pacific region" – as well as the following organisational values and objectives:

In pursuit of its mission, APNIC values:

- *Fairness and equity of access to public Internet resources*
- *Ensuring member confidentiality, while maintaining organisational openness*
- *Exercise of foresight and initiative in planning for the future*
- *Provision of secure, stable, cost-effective, and high quality services*
- *Technical expertise and professionalism of our staff*
- *Courtesy and professionalism in service delivery*
- *Language and cultural diversity of our members and staff.*

APNIC objectives are:

- 1 *To provide high-quality Internet resource management services to APNIC members, namely:*
 - a *To provide high-quality resource allocation services*
 - b *To provide high-quality registration and database services*
 - c *To provide high-quality membership administration and support services.*
- 2 *To support our membership in fulfilling their responsibilities as managers of Internet resources, and to promote the need for responsible management throughout our region.*
- 3 *To promote and advance technical policy development in relation to APNIC services, and to Internet resource management in general.*
- 4 *To maintain the relevance of APNIC to its membership and the Internet community of the region through responsive, open communications and support for participatory, consensus-driven processes.*
- 5 *To assist Internet development activities in our region, relating to the above objectives.*

The Strategic Plan is an ongoing process and the Secretariat will continue to seek the comments and suggestions of the membership in developing and refining the plan, as well as the projects and tasks that arise from it.

Security and insurance

As the membership increases, so too does the need to provide a secure professional environment for the protection of the members' interests. In 1999, APNIC responded to this need by implementing a variety of measures including:

- Professional Indemnity and Directors/Officers/Staff Liability insurance
- Staff and contractor non-disclosure agreements
- Integrated physical security system
- Third-party offsite backups.

APNIC in the Internet community

APNIC is charged with fostering the sense of an Internet community within this region and providing high-level representation of that community on the global stage. It pursues this goal primarily by building strong collaborative relationships with key organisations, regionally and globally.

AP* and other Internet organisations

APNIC was a platinum sponsor of APRICOT99 in Singapore and presented a full-day tutorial during the conference. This participation will be increased at APRICOT2000 in Seoul. At the time of writing, APNIC was developing a Special Interest Group (SIG) program track, covering a comprehensive range of subject matter and including a training session and an open policy meeting.

APNIC continued its close relationships with other AP* organisations. APNIC joined APIA and in October delivered the first of a now regular two-page contribution to the APIA Newsletter, providing exposure of APNIC's activities to a broader audience. And, on the direction of the EC, APNIC also made a US\$10,000 donation to APNG.

In 1999, APNIC became a Sustaining Gold Sponsor of ISOC, with a view to fostering closer ties between the organisations and increasing the representation of the Asia Pacific region in ISOC activities.

ICANN and the ASO

In 1999, APNIC was heavily involved with the ongoing developments surrounding ICANN (the Internet Corporation for Assigned Names and Numbers). This involvement included attendance at three major international meetings specifically for ICANN and many other ICANN-related meetings in association with other events.

With the other RIRs, APNIC helped coordinate at least five open forum meetings at major conferences (including APRICOT and the IETF) on the formation of the Address Supporting Organisation of ICANN (the ASO).

APNIC in the Internet community

A long consultation process succeeded in forming the ICANN ASO, with approval of the ICANN Board granted during the Santiago meeting in August. A Memorandum of Understanding (ASO MoU) was jointly developed by the RIRs and signed officially at the ICANN Los Angeles meeting in November.

APNIC is providing Secretariat services to the ASO for its first year of operation, including hosting the ASO website at <http://www.aso.icann.org>. APNIC has also coordinated the appointment of Asia Pacific regional representatives to the ASO Address Council and the corresponding appointments of ASO representatives to the ICANN Board.

APNIC representation in 1999

<i>Month</i>	<i>Place</i>	<i>Details</i>
January	Hong Kong	Seminars & member consultation
	Taipei	Seminars & member consultation
March	Singapore	APRICOT & Member Meeting
	Minneapolis	44th IETF
April	Sydney	Conference presentation & member consultation
May	Vienna	RIPE-33 meeting
	Colombo	Member consultation
June	Mumbai & Dehli	Member training & consultation
	San Jose	INET99 & APNIC EC meeting
July	Hong Kong	Member training & consultation
	Oslo	45th IETF
August	Santiago	ICANN meetings
September	Amsterdam	RIPE-34 meeting & RIR coordination
	Canberra	APAN meeting
October	Denver	ARIN Public Policy & Member Meeting
November	Manila	Member training & consultation
	Los Angeles	ICANN meetings
	Washington	46th IETF

Policy development

During 1999, for the first time, APNIC's primary allocation and assignment policies were brought together in a single document. The drafting process involved seeking membership input at every stage, by publishing drafts and calling for comments. In October, satisfied that membership consensus had been achieved, the EC approved the document *Policies for Address Space Management in the Asia Pacific Region* for implementation on 1 January 2000.

The process was used to help form the proposed *Document Review Policy*, which is intended to regulate the development of all future official APNIC documents. It was also followed on a global scale when APNIC collaborated with ARIN and the RIPE NCC – with additional input from the IETF, IAB, and 6BONE communities – to develop the *Provisional IPv6 Assignment and Allocation Policy*.

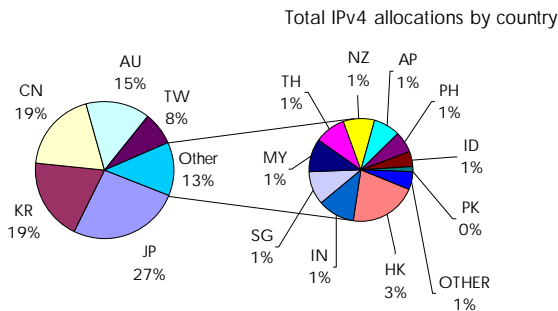
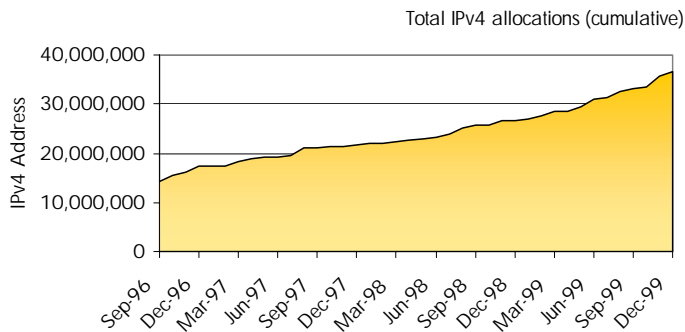
Details of ongoing document reviews are available at <http://www.apnic.net/drafts/>.

Service delivery

The Member Services department was one of the main areas of expansion within APNIC during 1999. The previous under-resourcing of this department was alleviated with the appointment of two additional hostmasters, allowing APNIC to work more proactively than ever before. Also, the appointment of a training manager will see an increase in the scope and quality of APNIC's training services in the coming year.

IPv4

The growth in the demand for IPv4 address space continued, with India and China returning the highest growth figures.



The consumption of the old “class C” address ranges is significant; however, APNIC has for some time been investigating the use of “class A” address space from its 61/8 address range. Several members have already commenced use of this “Network 61” space. On the basis of their experience, and that of class A users from ARIN and RIPE NCC, APNIC will be proposing the introduction of Network 61 allocations within regular service.

IPv4 address space allocated and free				
Network	Allocated	Total	% Allocated	% Free
061	1089536	16777216	6.5%	93.5%
169	0	1048576	0.0%	100.0%
202	10659072	16777216	63.5%	36.5%
203	9958912	16777216	59.4%	40.6%
210	13174272	16777216	78.5%	21.5%
211	3932416	16777216	23.4%	76.6%
Total	38814208	84934656	45.7%	54.3%

Service delivery

IPv6

APNIC launched IPv6 allocation services to its members in mid-1999, following the release of a joint Registries' policy document. IPv6 is a significant milestone in the development of the Internet and its initial deployment will be closely watched by the global community. Since the launch, eight members have received IPv6 allocations from APNIC (compared to two from ARIN and 11 from RIPE NCC).

IPv6 (sub-TLA) allocations to date

<i>Date</i>	<i>Organisation</i>	<i>Economy</i>
13/08/1999	WIDE Project	JP
27/08/1999	National University of Singapore	SG
16/09/1999	Connect.com.au	AU
22/09/1999	NTT	JP
06/10/1999	Korea Research and Education Network	KR
27/10/1999	JENS	JP
24/11/1999	Electronics and Telecommunications Research Institute	KR
08/02/2000	Chunghwa Telecom	TW

APNIC Training courses

<i>Date</i>	<i>Location</i>
March 1999	Singapore
June 1999	Mumbai
July 1999	Hong Kong
November 1999	Manila
February 2000	Sydney
February 2000	Seoul

More details of training opportunities, including past presentations, are available at <http://www.apnic.net/training/>.

Training

Training was a new APNIC member service launched during the APRICOT99 conference. By the time of writing, APNIC had presented the course in five countries – Singapore, Hong Kong, India, Philippines, and Australia – at subsidised cost to members. It will also be presented in Seoul during APRICOT2000.

The course, *Effective IP Address Management: Asia Pacific Policies and Procedures*, is targeted towards technical personnel with responsibility for allocating or assigning IP addresses. It is intended to help members stay informed of developments in current best practice and to lead to increased compliance with APNIC policies.

In late 1999, a training manager joined the APNIC staff. In the coming year he will be responsible for delivering the course to other countries within the region and developing a range of other training resources and strategies.

Other service developments

- AS number and reverse DNS request processes have been automated via web interfaces for member use, with real-time syntactical and logical checking.
- Filtering has been introduced on "hostmaster" mailbox to ensure priority service for members.
- Request tracking system has been improved with added database and Perl support for more efficient handling of requests.

AS numbers allocated & free

<i>AS Block</i>	<i>ASNs</i>	<i>%Allocated</i>	<i>%Free</i>
4608-4863	256	98.4%	1.6%
7467-7722	256	100.0%	0.0%
9261-10239	979	61.4%	38.6%
Total	1491	74.4%	25.6%

Operations and infrastructure

As was the case with Member Services, the addition of staff within the Technical Services department in 1999 also allowed for larger projects to be tackled and more specialised solutions developed for workflow automation within the organisation.

Consistency Project

To create the preconditions for a fully integrated automation of APNIC's processes, it is necessary to address a number of inconsistencies in historical APNIC internal data. To this end, the Consistency Project was launched in 1999 and will continue through 2000. Core data will now be moved to and stored in a consistent internal database, maintained by staff via web interfaces, allowing for more accurate and efficient management reporting.

Automated systems development

A major project of the Technical Services department in 1999 was to commence development of an extensive software "toolkit" to support the automation of internal and external processes. Following from the work carried out in the Consistency Project, this ongoing work will allow for an organisation-wide integration of APNIC's processes. The first examples of this have been deployed in the new automated processes for AS and reverse DNS requests (noted above).

Work is also well advanced on the development of prototype internal tools for managing the allocation of IP and AS numbers. The development of Java-based interfaces for the automation of other internal workflows is scheduled to commence in 2000.

PKI Pilot Project

APNIC worked intensively with an external consultant in late 1999 on a pilot project to investigate establishing a certification authority for improved security in member services.

The main applications of this project will be the encryption and digital signing of email, and access authentication for the website and database. It is intended to eventually apply to certification of resource allocations.

This work coincides with increasing Internet community interest in security measures such as certification, X.509, and Open PGP through IETF PKIX and related activities. APNIC will keep the membership informed of the progress of this work during 2000.

Y2K compliance

APNIC's Y2K work began early in 1999 and involved a staged program of analysis, testing, and monitoring throughout the year. By the end of the year, APNIC was confident of its Y2K readiness, but nevertheless maintained onsite technical staffing over the transition period.

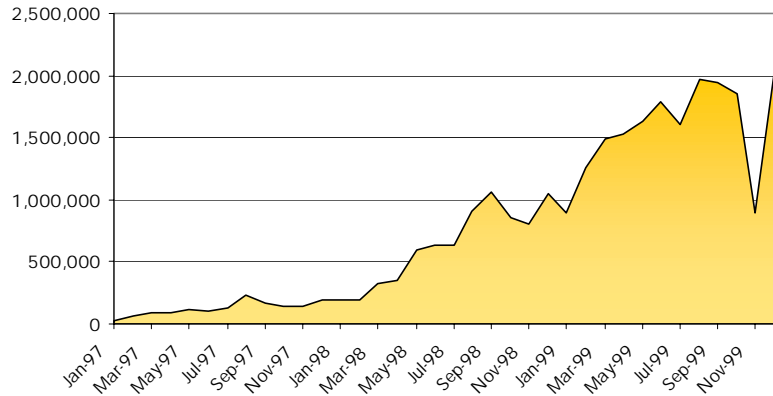
By January 2000, APNIC was able to report that it had experienced no Y2K-related service interruptions or problems of any kind.

Operations and infrastructure

Other upgrades and improvements

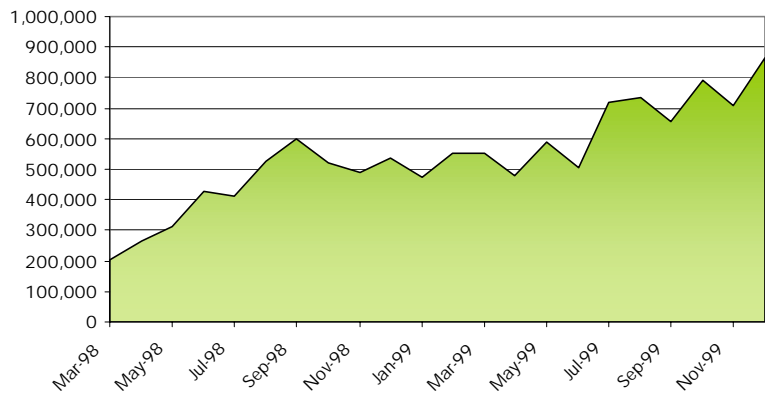
- Sponsorship relationships with Compaq and SCO were finalised resulting in a two node “Non-Stop Cluster” deployed as the primary server for whois and reverse DNS queries.
- Network bandwidth to head office was increased from 256Kbps to E1 (1.9Mbps).
- Advanced preparations were made for redundant connection to be established in early 2000.
- Request ticketing system was upgraded to database-backed “Request Tracker” system. Database and Perl support was provided for integration with existing workflow automation processes.
- Updates were made to APNIC’s whois server, DNS server, and internal management systems to meet demands of new IPv6 services.
- Internal monitoring system was installed.

Whois queries per month



In December 1999, the number of hits to the whois server exceeded 2,000,000 for the first time

HTTP queries per month



Financial reports

Consolidated statement of financial position ^(a)

	<i>Consolidated year-end 1998</i>	<i>Consolidated year-end 1999</i>	<i>% change from 31/12/98</i>
	<i>in US\$</i>	<i>in US\$</i>	
		0.6422	
CURRENT ASSETS			
Cash	774,412	^(b) 1,609,398	107.8%
Receivables	128,565	164,501	28.0%
Advance payment	0	2,820	100.0%
Other	47	740	1474.3%
Total current assets	903,024	1,777,459	96.8%
NON-CURRENT ASSETS			
Property, plant and equipment	129,242	164,366	27.2%
Intangibles	2,040	0	-100.0%
Total non-current assets	131,282	164,366	25.2%
TOTAL ASSETS	1,034,306	1,941,825	87.7%
CURRENT LIABILITIES			
Accrued expenses	45,074	33,351	-26.0%
Provisions	19,263	24,793	28.7%
Unearned income	494,193	735,415	48.8%
TOTAL LIABILITIES	558,530	793,559	42.1%
EQUITY			
Share capital	2	2	0.0%
Retained earnings	475,775	1,148,265	141.3%
TOTAL EQUITY	475,777	1,148,266	141.3%
TOTAL LIABILITIES & EQUITY	1,034,306	1,941,825	87.7%

Notes

- (a) APNIC has been audited by internationally recognised accounting firms since incorporation in June 1996. The audited financial statements will be published at <http://www.apnic.net/corpdocs>.
- (b) This figure includes the cash reserve, as directed by the EC to ensure APNIC's financial stability. This reserve was originally set at the equivalent of six months of operating expenses. In December 1999, the EC directed that the reserve be maintained at 12 months of operating expenses.

Financial Reports

Consolidated statement of activities

	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>1999</i>
	<i>in US\$</i>	<i>in US\$</i>	<i>in US\$</i>	<i>% of total</i>
			^(a) 0.6422	
REVENUE				
Membership fees	721,561	536,393	1,323,668	84.3%
Non-member fees	16,192	12,062	20,698	1.3%
Start-up fees	105,000	144,844	168,870	10.8%
Sundry income	698	15,955	-3,102	-0.2%
Interest received	7,433	16,286	44,485	2.8%
Exchange rate gain/(loss)	0	-23,842	14,822	0.9%
TOTAL REVENUE	850,884	701,698	1,569,440	100.0%
EXPENDITURE				
APRICOT	86,296	0	22,360	2.5%
Membership fees and donations	50,000	0	45,650	5.2%
Operating expenses	577,014	702,490	742,042	84.0%
Depreciation	8,268	39,684	55,217	6.3%
Loss on disposal of assets	0	7,548	11,000	1.2%
Income tax expense	0	0	6,664	0.8%
TOTAL EXPENDITURE	721,578	749,722	882,933	100.0%
Operating surplus/(loss)	129,306	^(b)-48,024	686,507	

Notes

- (a) To convert AUS amounts to US\$, APNIC used the exchange rate of 0.6422 AUS / 1 US\$, based on the monthly average exchange rates published by the Australian Taxation Office.
- (b) During 1998, to comply with Australian Accounting Standards, APNIC changed to accrual accounting in recognising membership fee revenue. The financial effect of changing the accounting policy was an increase of the 31 December 1998 liability "Unearned Income" of \$494,193, and a decrease in the corresponding operating profit of \$494,193, resulting in an accounting net operating loss for 1998.

New APNIC logo - Artist's statement

APNIC is pleased to take this opportunity to publicly launch its new logo. Graphic Artist Chiaki Kanno explains her vision of the design:

I see the balanced, interweaving bands as representing the harmony, fairness, and sense of community that APNIC stands for. By styling the bands around the simplified forms of the letters "a" and "p", I also hope to connect these values strongly to the Asia Pacific region. Within this environment of cooperation and community, the typeface reflects the modern, professional approach that APNIC has expressed in its value statements.

