



# Registration Services Update

October 2000



#### Registration Services Staffing

- RSG currently staffed with 8 people
  - 1 manager
    - Leslie Nobile
  - 1 team leader
    - Cathy Clements
  - 6 analysts
- 1 additional analyst begins on October 9



# Registration Services Daily Activities

- Review requests for:
  - IPv4 address space
  - IPv6 address space
  - AS numbers
  - Registration transfers
- Maintain registration DB by processing:
  - SWIP templates
  - Modification templates
- Maintain ARIN Routing Registry
- Maintain ARIN Help Desk



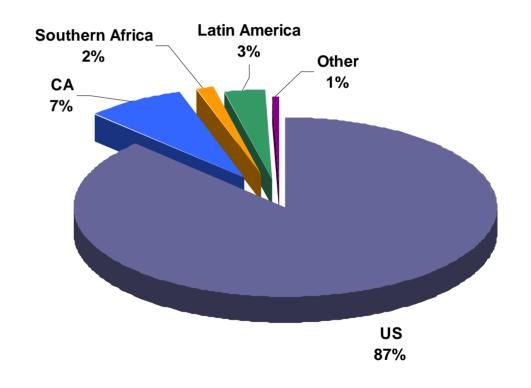
# Registration Services Points of Interest

- Number of requests for IPv4 address space increasing steadily
- Number of requests for AS numbers issued per month increasing rapidly
- Number of SWIP templates processed has increased dramatically



## Members

Area	Members
US	1045
CA	87
Southern Africa	19
Latin America	35
Other	7
Total	1193



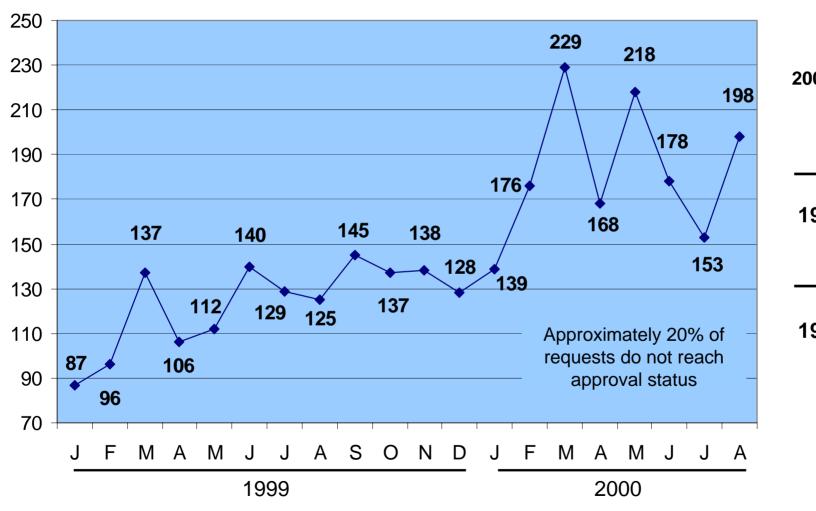


# Subscription Holders by Registration Category

Registration Category	Subscribers
Small	725
Medium	386
Large	53
X-Large	18
v6 Small	8



# Requests for IPv4 from ISPs



2000 through August

1,459

1999 Total 1,693

1998 Total 900



## **IPv4 Space Issued**

#### /24s Issued by Month

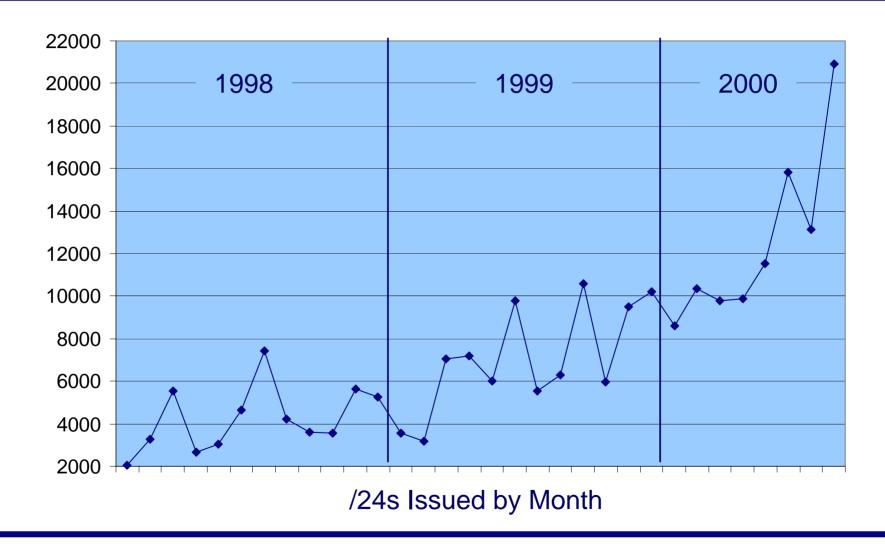
	1998	1999	2000
January	2,048	3,576	8,624
February	3,265	3,176	10,368
March	5,548	7,040	9,760
April	2,664	7,204	9,872
May	3,040	6,000	11,506
June	4,634	9,760	15,809
July	7,436	5,545	13,120
August	4,216	6,274	20,912
September	3,624	10,608	
October	3,548	5,984	
November	5,624	9,480	
December	5,256	10,192	
Total	50,903	84,839	99,971

#### **Notable Facts**

- 65,536/24s = /8
- 1999 was 66% increase over 1998
- 2000 could possibly double 1999

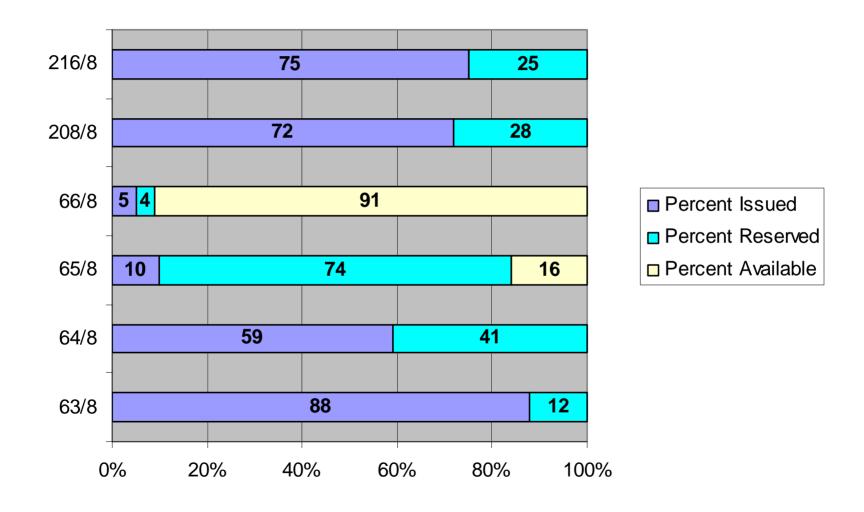


# **IPv4 Space Issued**





#### **ARIN Block Utilization**



**ARIN VI** 



#### **SWIP Templates Processed**

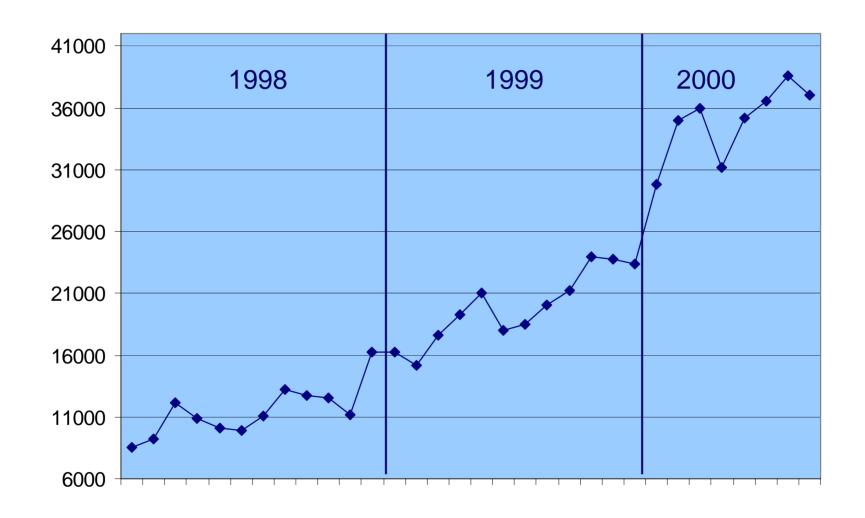
	4000	4000	2000
	1998	1999	2000
January	8,525	16,208	29,767
February	9,185	15,197	35,005
March	12,117	17,571	35,963
April	10,831	19,224	31,140
May	10,090	21,012	35,153
June	9,950	18,017	36,495
July	11,100	18,526	38,553
August	13,249	20,026	37,009
Septembei	12,704	21,215	
October	12,540	23,969	
November	11,202	23,729	
December	16,260	23,393	
Total	137,753	238,087	279,085

#### **Notable Facts**

- 1999 was 73% increase over 1998
- 1999 averaged 652
   SWIP templates per day
- 2000 is averaging 1,158
   SWIP templates per day

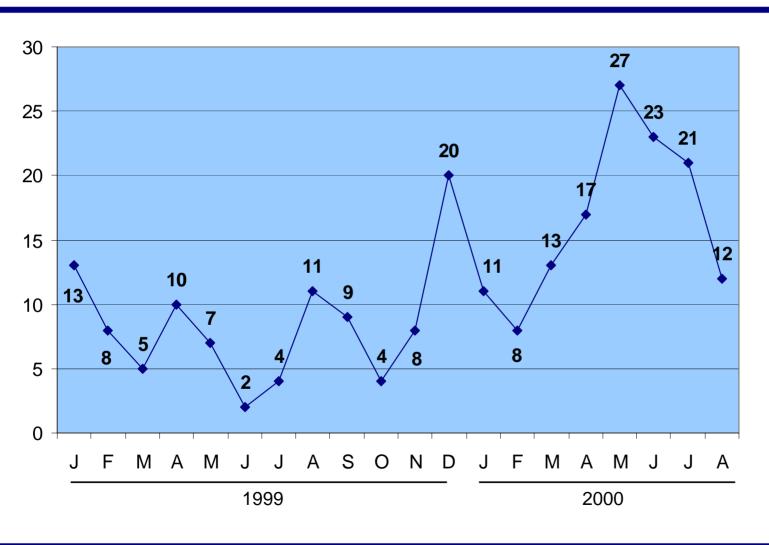


#### **SWIP Templates Processed**





#### Registration Transfers Completed



2000 through August

132

1999 Total 121

1998 Total 70



#### **AS Number Registrations**

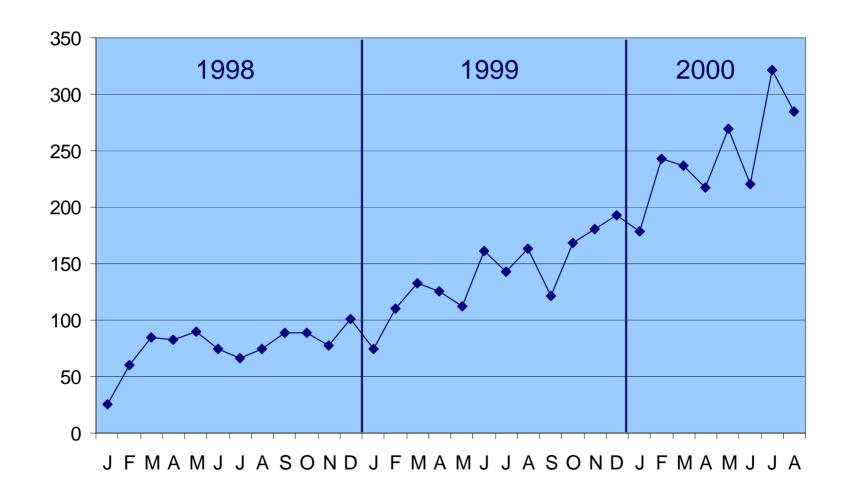
	1998	1999	2000
January	26	74	179
February	60	110	243
March	85	133	237
April	83	126	217
May	90	112	269
June	74	161	220
July	66	143	321
August	74	163	285
September	89	121	
October	89	168	
November	78	181	
December	101	193	
Total	915	1,685	1,971

#### **Notable Facts**

- 1999 was 84% increase over 1998
- 2000 could possibly double 1999
- Policy discussion to be held today regarding AS number registrations



## **AS Number Registrations**





#### **IPv6** Information

- ARIN has made eight IPv6 allocations
- See http://www.arin.net/regserv/ipv6/ipv6-regserv.html
   for IPv6 registration information
- Discussion about IPv6 registration fees to be held at Member Meeting on Wednesday



## Routing Registry

- ARIN RR currently mirrors:
  - ARCSTAR BCONNEX BELL KOREN
     LEVEL3 RADB RIPE VERIO FGC
- 746 objects currently in ARIN RR
  - 216 are maintainer objects
- See <a href="http://www.arin.net/rr.htm">http://www.arin.net/rr.htm</a> for more information.



October 2000



#### **Completed Projects**

- Additional billing department automation
- Website performance enhancement
- Routing Registry mirroring enhancement
- RSG Tools
  - Bulk updates of POC
  - Bulk deletes of reassignments
  - Bulk deletes of in-addr hosts
  - Bulk update for DSL private addresses
  - Identifies ticketing system issues



#### **Ongoing Projects**

- Increasing bandwidth to full-T1 from 256K/burstable-T1
- Internal infrastructure issues
  - Sandbox to replicate production environment
  - Expand development and production platforms
  - Migrate intranet from Netscape to Apache web server
    - External site to follow
  - New NT server



#### **Upcoming Projects**

- New intranet server
- Work request / bug tracking management system
- Additional tools to support RSG
- Legacy network transfer
- IN-ADDR DNS Services Contract



#### **IN-ADDR DNS Services Contract**

- Background
  - ARIN currently maintains the authoritative records for reverse delegation of legacy networks and networks in its region
  - ARIN produces the in-addr.arpa zone file based on this information
  - The zone file is provided to the root servers via NSI
  - The root servers answer in-addr queries



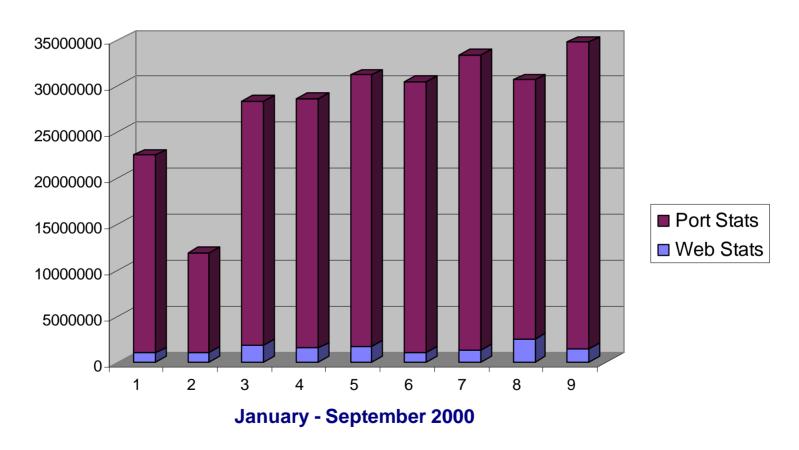
# IN-ADDR DNS Services Contract (cont'd)

- ARIN seeks contract support
  - Issued RFP for vendor to host DNS services
  - ARIN will continue to provide in-addr.arpa to root servers for each top-level /8 block
  - Vendor will provide in-addr reverse lookup for legacy networks and networks in ARIN's region



#### **WHOIS Statistics**

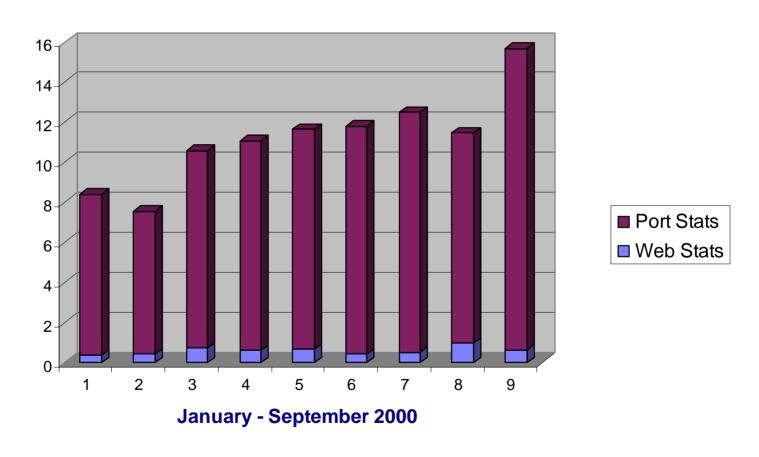
#### **2000 WHOIS Number of Queries**





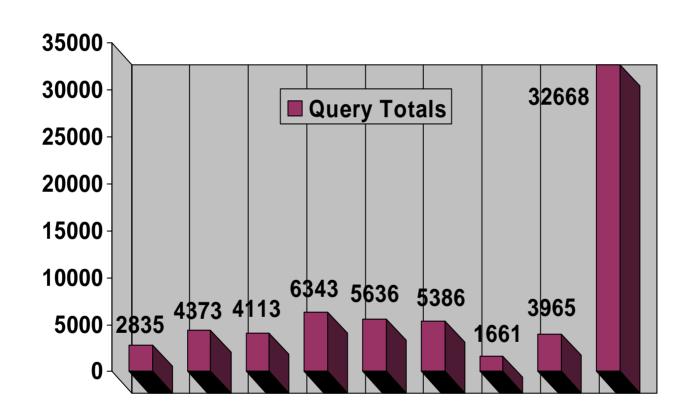
#### **WHOIS Statistics**

#### **WHOIS Queries Per Second**





#### Routing Registry Query Statistics





#### Routing Registry Statistics

#### Number and Types of Objects

route objects: 421

mntner objects: 216

aut-num objects: 58

inetnum objects: 28

as-set objects: 15

route-set objects: 6

inet-rtr objects: 2

**ARIN VI** 

# ICANN Update

# ARIN Public Policy Meeting

Herndon, Virginia
October 2, 2000
Ken Fockler



# The ICANN Concept

#### ICANN =

Internationalization of Policy Functions for DNS and IP Addressing systems

+

Private Sector (Non-governmental)

Management

#### What does ICANN do?

Coordinates policies relating to the unique assignment of:

- Internet domain names
- Numerical IP Address
- Protocol Port and Parameter Numbers

#### Coordinates the DNS Root Server System

- through Root Server System Advisory Committee

# Does ICANN regulate/govern?

- No: ICANN coordinates.
- But: technical coordination tasks sometimes require touching non-technical policy areas:
  - Data privacy protection
  - Intellectual property/trademark law
  - Competition law

# Background Summary

- Status Quo Before
- Jon Postel
- Need for change
- White Paper Principles
- White Paper Implementation
- Transition Plan

## Status of Transition from USG

- ✓ 25 November, 1998 ICANN recognized in MoU
  - Sometimes known as the "Joint Project Agreement"
- ✓ June, 1999 Cooperative agreement among ICANN, US Government, root server operators
- ✓ 10 November, 1999
  - ICANN and NSI sign gTLD registry and registrar agreements
- ✓ 9 February, 2000
  - Contract with US Gov. to complete transfer of IANA functions
- ✓ 1 March, 2000
  - Agreement with IETF to continue IANA protocol numbering function
- ✓ Sept. 2000
  - Extension of transition agreements Sept. 2001 or sooner

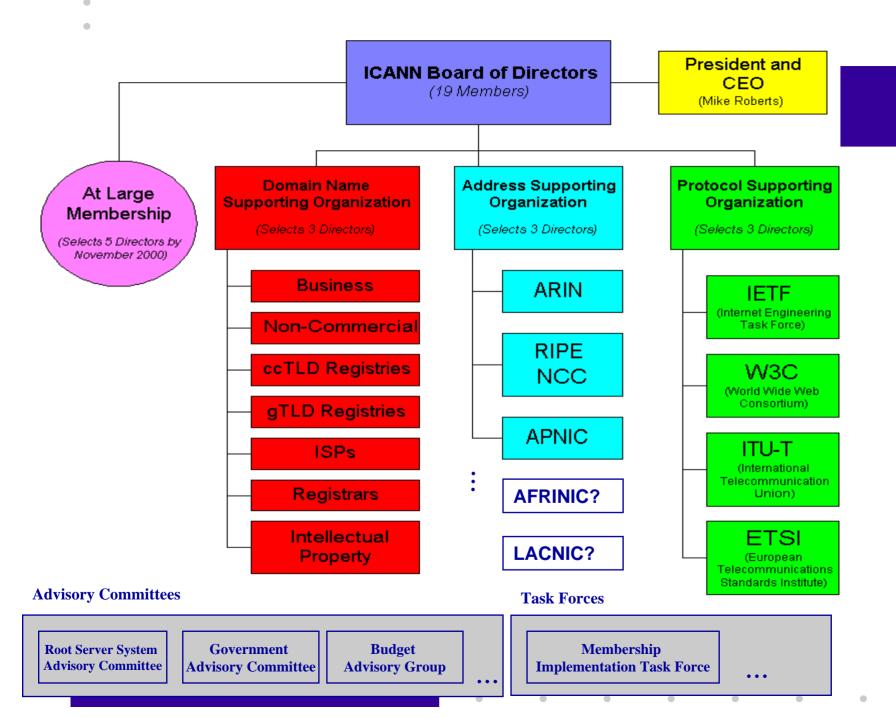
# Remaining Transition Items

- Year 2000/01:
  - ccTLD registry agreements
  - IP Address registry agreements
  - Root server operator agreements
- September 30, 2001 Target date for ICANN to settle all registry/registrar/root server relationships

# Other Accomplishments

- Shared registry system
- Uniform Domain Name Dispute Resolution Policy
- Creation of Supporting Organizations & MOUs
- Membership definitions and Membership Implementation Task Force established
- Membership established
- Nomination and Election processes
- CEO Search Committee underway

## Structure of ICANN



#### **ICANN Staff**

#### **Current Staff:**

- President and CEO (Mike Roberts)
- Vice President/General Counsel (Louis Touton)
- CFO/Policy Director (Andrew McLaughlin)
- ◆ Total Staff 12 (some part time)

## Geographic and Cultural Diversity

- Geographically diverse Board of Directors
  - Directors elected by Supporting Organizations
    - 4-Europe
    - 3-North America
    - 1- Latin America
    - 1-Asia/Pacific
  - At Large Directors current
    - 4-North America
    - 3 Europe
    - 2-Asia Pacific
  - At Large Directors future
    - 1 from each of 5 regions + 4 (to be determined)

## Geographic and Cultural

## Diversity

- Geographically diverse Supporting Organization councils
- Geographically diverse ICANN meetings
  - Singapore
  - Berlin
  - Santiago
  - Los Angeles
  - Cairo
  - Yokohama
- Future efforts: Multiple languages; staff diversity

## At Large Membership

- Over 158,000 applications by July 31, 2000
- Final Total of Activated At Large Members
  - Date: Friday Sept. 8 24:00:00 2000 UTC/GMT
- Africa 321
- Asia and Pacific 38397
- Europe 23519
- Latin America and Caribbean 3571
- North America 10694

## At Large Director Elections

- 5 At Large Directors to be elected. 1 from each region.
- Africa 3 candidates
- Asia/Pacific 5 candidates
- Europe 7 candidates
- Latin America Caribbean 5 candidates
- North America 7 candidates

## North America At Large

- Candidates
- Karl Auerbach
- Lyman Chapin
- Donald N. Langenberg
- Lawrence Lessig
- Harris Miller
- Barbara Simons
- Emerson Tiller

#### Latin America and Caribbean

- Candidates
- Ivan Moura Campos
- Raul Echeberria
- Claudio Silva Menezes
- Aluisio S. Nunes
- Patricio Poblete

### Results of Cairo Meetings

- New top-level domain registries
  - Board set schedule in order to take action in July (Yokohama meeting)
- ccTLD delegation and administration policies
  - Board directed staff to work with ccTLDs to complete contracts
- At Large Membership & elections
  - 5 Directors to be elected by direct vote of the At Large members before November
- ICANN Budget for 2000-2001
- Independent Review Policy

## Results of Yokohama Meetings

- New Top-Level Domains
- Bylaws on Membership and Minutes
- Sublease for Additional Office Space
- Appointment of Auditors
- Root Server Enhancement
- Definition of ICANN's Geographic Regions
- Authorization to Contract with Voting System Vendor
- At Large Director Selection Plan
- Contributions of Becky Burr
- Thanks to Local Hosts and Sponsors

## Key Upcoming Issues/Activities

- RIR Relationship Agreement
- ccTLD Agreements
- Funding/Budget Process
- New TLDs
- Root Server Operator Agreements
- Root Server Enhancements
- IPV6
- Establish Independent Review Panel
- Reviews

#### Reviews

- Supporting Organizations
  - DNSO, ASO, PSO
- UDRP, Universal Domain Name Dispute Resolution Policy
- At Large Election Process
- At Large Membership and Directors
- Ad Hoc Group Numbering and Addressing

#### For Further Information:

From ICANN Board
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905-584-1317

From ICANN Staff
Andrew McLaughlin
<ajm@icann.org>
<http://www.icann.org>

# ASO AC UPDATE Report to ARIN VI

Author: Raimundo Beca (rbeca@ctc.cl)

Thanks to Cathy Wittbrodt, Sabine Jaume, Takashi Arano, Hans Peter Holen and Louis Tuton



## Table of Contents

- Starting Point of this Report
- AC Timetable since ARIN V (Calgary)
- The AC Institutional Status
- The AC Administrative Procedures
- The ASO AC Open Activities
- The Brisbane Workshop Agenda

## **Starting Point**







#### ICANN ASO AC Report to ARIN Public Policy Mtg

Http://www.aso.icann.Org/

Cathy Wittbrodt

Thanks to Hans Petter Holen and Sabine Jaume



ICANN ASO AC Report to ARIN Public Policy Mtq

Address Council members

AC appointments to the board

**Call for Nominations** 

**ASO functions** 

**Mailing Lists** 

<u>Timetable</u>

Open AC meeting 1999-11-02

AC phone conf 2000-01-23

AC phone conf 2000-02-15

Electronic vote # 1

**Background** 

<u>Result</u>

**Conclusion:** 

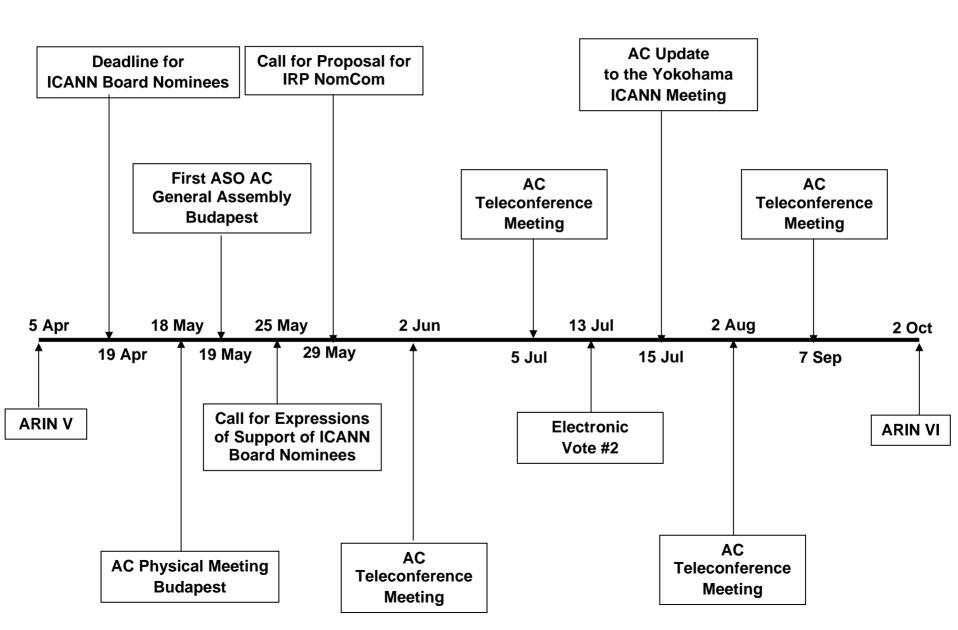
AC meeting 2000-03-02

Primary goals for the AC

Conference call about At Large Membership

Agenda for Conference Call

## AC Timetable since ARIN V (Calgary)



## **ICANN** Board Nominees

#### The Address Supporting Organization

**ICANN Board Nominees** 

ASO Home Documents & Archive ASO news The Address Council Registry links Mailing lists

#### **ICANN Board Nominees**

The following individuals had been nominated to fill ASO seats on the ICANN Board, by the deadline for nominations on 19 April 2000. The geographic region\* of residence of each candidate is indicated in parentheses. All candidates listed have now formally accepted their nominations.

- 1. Zomara Wilson (North America)
- 2. Sang Hyun KYONG (Asia/Pacific)
- 3. Leslie Heeter Lundquist (North America)
- 4. Geoff Huston (Asia/Pacific)
- 5. Kent Crispin (North America)
- 6. Srisakdi Charmonman (Asia/Pacific)
- 7. Lisa Ruth Lifshitz (North America)

<sup>\*</sup> It should be noted that in accordance with the geographic diversity requirements of the <u>ASO MoU</u>, it is not possible for the Address Council to appoint a candidate from the North America or Europe regions to the ICANN Director position which will be vacated by Pindar Wong on 30 September 2000.

## Address Council Meeting

(18 May, Budapest - Hungary)

#### The Address Supporting Organization

ASO Home Documents & Archive The Address Council ICANN Board reps Registry links Mailing lists

[meeting minutes]

#### **ICANN Address Supporting Organisation**

**Open Address Council Meeting** 

Thursday 18 May 2000, 8am

**Budapest, Hungary** 

#### **Main Decisions**

- Call for Expressions of Support of ICANN Board Nominees.
- Call for Proposal for IRP NomCom.
- Terms of the response to Mike Robert's letter.
- Appointment of Cathy Wittbrodt and Takashi Arano as deputy chairs of the AC.
- To held the next AC physical meeting at Brisbane, Australia, on October 28.

## First General Assembly Meeting

(19 May, Budapest - Hungary)

#### The Address Supporting Organization

Address Council General Assembly

ASO Home Documents & Archive The Address Council ICANN Board reps Registry links Mailing lists

#### FIRST ADDRESS COUNCIL GENERAL ASSEMBLY

Friday 19 May 2000, 2pm to 6pm

Danubius Thermal Hotel Helia, Budapest, Hungary.



Axel Pawlik, General Manager of RIPE NCC, opens the first General Assemply meeting, 19 May 2000

#### [Minutes]

AGENDA	
2.00pm	Meeting Opening and Welcome - Axel Pawlik, General Manager, RIPE NCC
2.15pm	Address Council Status Report - Hans Petter Holen, Chair, Address Council
2.45pm	Emerging Registries Reports  AfriNIC Status Report - Ant Brookes, ISPA ZA  LACNIC Status Report - German Valdez, NIC-Mexico
3.15pm	Global Address Policy Proposals  ISP Assignment Guidelines - Yoshiko Okazaki Chong, JPNIC

# Expressions of support for ICANN Board Nominees

#### The Address Supporting Organization

Expressions of support

ASO Home Documents & Archive ASO news The Address Council Registry links Mailing lists

#### **Expressions of support for ICANN Board Nominees**

- · Zomara Wilson (North America)
- Sang Hyun KYONG (Asia/Pacific)
- Leslie Heeter Lundquist (North America)
- Geoff Huston (Asia/Pacific)
- · Kent Crispin (North America)
- Srisakdi Charmonman (Asia/Pacific)
- . Lisa Ruth Lifshitz (North America)

#### Nominee details

\* It should be noted that in accordance with the geographic diversity requirements of the <u>ASO MoU</u>, it is not possible for the Address Council to appoint a candidate from the North America or Europe regions to the ICANN Director position which will be vacated by Pindar Wong on 30 September 2000.



#### The Address Supporting Organization

Address Council

ASO Home Documents & Archive ASO news The Address Council Registry links Mailing lists

#### Independent Review Panel Nominations Committee

On 23 March 2000, ICANN called on the Address Council to select 2 individuals to fill ASO seats on the Independent Review Panel (IRP) Nominating Committee. In their <u>letter</u> to the AC, ICANN described the function of the committee, and provided general guidelines as to the type of individuals who would be suitable for nomination.

At its 18 May 2000 meeting, the AC resolved to make an open call for proposals for individuals to fill these positions, and to make a selection from those proposals at a future meeting.

Please note that the deadline for proposals has now been extended.

The Address Council now calls for proposals of individuals to sit on the IRP Nominating Committee, to be submitted to the ASO Secretariat by no later than 5pm UTC on 31 July 2000. Proposals should provide at least the following.

- 1. Details of individual proposed to sit on the IRP Nominations Committee
  - a. Full name
  - b. Email address
  - c. Detailed reasons for suitability for this position
- 2. Details of person submitting proposal
  - a. Full name
  - b. Email address

Further relevant details may be provided as appropriate.

## AC Teleconference Meeting

(7 June)

#### The Address Supporting Organization

ASO Home Documents & Archive The Address Council ICANN Board reps Registry links Mailing lists

[meeting minutes]

#### **ICANN Address Supporting Organisation**

#### **Address Council Teleconference**

#### Agenda

- 1) Welcome
- 2) Agenda
- 3) Minutes from last meeting
- 4) AC procedures flowchart
- 5) IRP NomCom
- 6) Response to Michael Roberts letter

#### **Main Decisions**

General support to the AC procedure flowchart prepared by Takashi Arano,
 Sabine Jaume and Cathy Wittbrodt

## **AC Teleconference Meeting**

(5 July)

#### The Address Supporting Organization

ASO Home Documents & Archive The Address Council ICANN Board reps Registry links Mailing lists

[meeting minutes]

#### **ICANN Address Supporting Organisation**

Agenda

- 1. Welcome
- 2. Agenda bashing
- 3. Minutes from last meetings
- 4. ICANN directors election
- 5. IRP NomCom
- 6. Response to Michael Roberts letter
- 7. Emerging RIR document
- 8. IANA policies
- 9. Status of .arpa

#### **Main Decisions**

- Election Process of the ICANN Board Director appointed by ASO.
- General agreement that alignment of terms of new AC members.
- Extend to july 31 deadline for IRP NomCom proposals.

## Electronic Vote #2

Question: To invite Emerging RIR's listeners to AC meetings (teleconference and physical).

Result:

- 7 votes in favor
- none against
- several comments

# AC Update to the Yokohama ICANN Meeting

#### ASO Updates

Address Council members

Observers from emerging RIRs

AC appointments to the board

**New BoD Election** 

First ASO General Assembly

First GA agenda

**Emerging RIR Criteria** 

**Documentation Status** 

Criteria

Address block delegation from IANA

ASO Internal Issues

Slide 13

...goals for the AC

**Next AC Meeting** 

More Information





http://www.aso.icann.org/

15 July, 2000 Takashi Arano *Vice Chair, Address Council* 

## AC Teleconference Meeting

(2 August)

# The Address Supporting Organization ASO Home Documents & Archive The Address Council ICANN Board reps Registry links Mailing lists [meeting minutes] ICANN Address Supporting Organisation Address Council Teleconference 2200 Wednesday 2 August 2000 UTC Minutes - FINAL Agenda: 1. Welcome 2. Agenda bashing 3. Minutes from last meeting 4. Status of open actions 5. ICANN directors election 6. IRP NomCom 7. Response to Michael Roberts letter

#### **Main Decisions**

 Election of Doctor Sang Hyun Kyong director of ICANN Board appointed by ASO.

8. Emerging RIR document
9. Schedule of further meetings

10. AOB

• Extende deadline of IRP NomCom proposals two week before the Brisbane meeting.

## AC Teleconference Meeting

#### (7 September)

#### Agenda

- 1. Welcome
- 2. Agenda bashing
- 3. Minutes from last meeting
- 4. Status of open actions
- 5. Status of listeners from the emerging RIRs.
- 6. MoU amendment
- 7. IAB/IESG recommendation on IPv6 address delegation
- 8. Brisbane agenda
- 9. Next meeting
- 10. AOB

#### **Main Decisions**

- According to the results of the electronic vote the emerging RIR's listeners are invited to participate to next meetings.
- Support MoU amendment on alignment of all AC terms to end on first day of the year

## **AC Institutional Status**

Address Council Members

Address Council Election Process

- Emerging RIR's Observer and Listeners
- AC Appointments to the Board

## Address Council Members

Name	Term (years)	<b>Appointed by</b>
Takashi Arano,	3	APNIC region
Jianping Wu	2	APNIC region
Hyun Je Park	1	APNIC region
Cathy Wittbrot,	3	ARIN region
Dave Meyer	2	ARIN region
Raimundo Beca	1	ARIN region
Wilfried Woeber	3	RIPE region
Hans Petter Holen	2	RIPE region
Sabine Jaume	1	RIPE region

# Address Council Election Process

Call for	or
----------	----

	Nominees	Voting Procedure		Election
	Deadline	Electronic	On-Site	Date
ARIN	11 Aug	✓	<b>✓</b>	3 Oct. 2000
APNIC	25 Sep		$\checkmark$	27 Oct. 2000
RIPE	30 Sep	?	<b>✓</b>	Jan. 2001

## Emerging RIR's Observer and Listeners

**AfriNIC** 

**Observer:** Ant Brookes

Listeners: Mouhamet Diop, Nii Quaynor

**LACNIC** 

**Observer:** German Valdez

Listeners: Hartmut Richard Glaser, Jorge Plano

## AC Appointments to the Board

<b>Board member</b>	Term (years)	Region
Rob Blokzijl	2	Europe
Ken Fockler	1	Americas
Sang Hyun Kyong	3	Asia Pacific

## **AC Administrative Procedures**

- Monthly teleconference
- E-voting
- Procedure Flowchart

Requests: Board ICANN

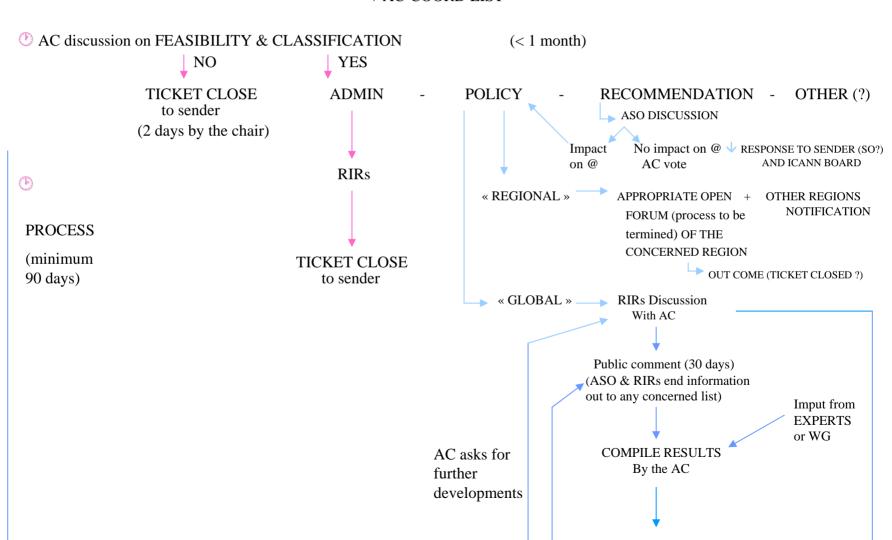
Public

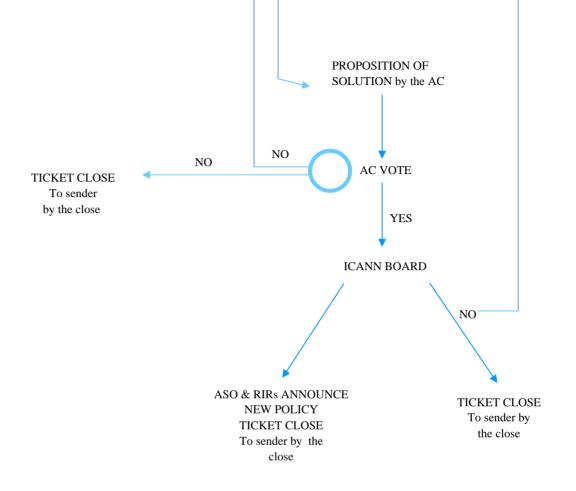
RIRs

Individual AC members

AC Procedures

★ TICKET OPEN & ACKNOWLEDGMENT SENT TO SENDER (2 days by the chair)
+ AC-COORD LIST





## The ASO AC Open Activities

- Examination of 24/8 initial draft.
- Emerging RIR's document.
- RIR's second draft of Resource Request Procedures.
- RIR's document on Global Policy.
- Reply to Mike Robert's letter.
- IAB/IESG Recommendation on IPv6 Address Delegation.
- Request for a public listening facility for AC meetings.
- Nomination of 2 individuals to sit at IRP NomCom.

# The Brisbane Workshop Agenda

- What is Global Policy?
- Revising the MoU.
- Addressing the essence of the Ad-Hoc Comitee.
- How to promote IPv6.
- Tutorial on Regional Policies.



## ICANN ASO AC Election Process

- Address Supporting Organization (ASO)
  - Advisory body to ICANN
  - Actions performed by <u>Address Council</u> (AC)
    - Advises ICANN Board on IP matters
    - Appoints 3 Directors to ICANN Board
    - Hosts annual General Assembly
  - Each RIR selects 3 AC members
  - Restrictions while serving on AC
    - Cannot be on ARIN staff
    - Cannot serve on other SO Councils or ICANN Board
    - If nominated for the Board, cannot participate in ICANN or AC elections



## ICANN ASO AC Election Process

- Qualifications of AC candidate
  - Past involvement with ARIN activities
  - IP experience
  - Available to travel to AC and ARIN meetings
  - Can devote time to ASO
- Term of Office
  - 3 years
  - How many consecutive terms?
  - Terms are staggered -- one member elected each year



## ICANN ASO AC Election Process

#### Election Procedures

- On-line member voting opened 1 week before PPM
  - Open until 6:00 PM EDT today.
     Confirmations until 8:00 p.m. EDT today.
- Meeting attendee voting on 1st day of PPM
  - All attendees of PPM are eligible to vote today.
     Voting ends at 6:00 p.m. EDT today.
- If an individual votes on-line and at the PPM, only the on-line vote will count.
- Results tallied and announced at PPM tomorrow morning.