



ICANN

56

HELSINKI

27 – 30 June 2016

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POLICY FORUM

# ICANN56 Technical Report

27 – 30 June 2016

ICANN | PUBLIC MEETINGS

## What is an ICANN Public Meeting and what happens?

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ICANN meetings provide the opportunity for an internationally diverse group of individuals and organizations to come together to discuss and develop policies for the Internet's naming systems.

ICANN's international meetings have been a staple of ICANN's multistakeholder bottom-up consensus-building model since its formation in 1998.

## Why are we publishing technical data from ICANN Public Meetings?

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Just like any other event, ICANN meetings need to innovate, adapt and evolve to meet their purpose: to support ICANN's multistakeholder model. One of the challenges that conference organizers face is to improve the conference, meeting after meeting, and maximize attendees' engagement and satisfaction.

This is where meeting data comes into play. This data provides reliable information on what attendees want, what ICANN is doing well and where ICANN has opportunities to improve. By leveraging this data, we can be a stable and transparent organization that is responsive to our community's needs.

For ICANN56, beyond the graphs and charts, we have published the raw data for each area. One of our biggest challenges is to standardize the information that we collect to ensure that data is consistent. Over the past few meetings, we have automated the collection of data through improvements in the registration system and meeting management software. Ultimately, our goal is to continue to improve on our metrics and to provide our community with more valuable data.

If you would like to learn more about ICANN Meetings Technical Services or have questions about this technical report, please contact: [mts@icann.org](mailto:mts@icann.org).

## Where can I find more information about ICANN Public Meetings?

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Each meeting has a dedicated website that acts as a broad guide to the conference with details on the venue, information about the local area, a program of social events during the week, and answers to frequently asked questions about ICANN meetings.

To find out how to participate, go to <https://meetings.icann.org/en/about>.

To learn more about the Fellowship Program, go to <http://www.icann.org/en/fellowships>.

For a schedule of past and upcoming meetings, go to <http://meetings.icann.org/calendar>.

For the press page, go to <http://www.icann.org/en/press>.

If you belong to an organization that is interested in having an exhibit at a meeting or in sponsoring a meeting, please contact: [meeting-sponsorship@icann.org](mailto:meeting-sponsorship@icann.org).

# ICANN56 Statistical Summary

1. Attendee Profiles

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2. Session Statistics

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3. Mobile App Statistics

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4. Schedule Website Statistics

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5. Remote Participation Statistics

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6. General Information

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7. Network Operations Center

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8. Network Statistics and Client Profiles

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# ICANN56 Technical Report

## Attendee Profile

# ICANN56 Attendee Profile

## Attendee Profile for Helsinki, Finland

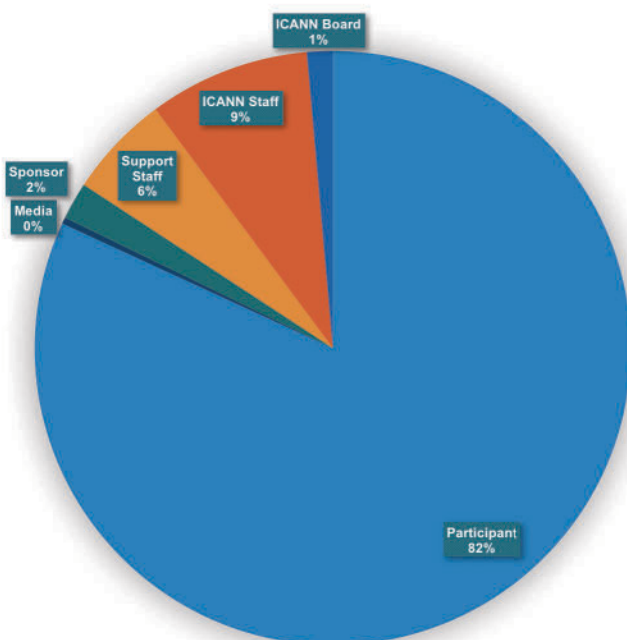
ICANN56 had **1,436** attendees for the first Policy Forum in Helsinki, Finland. This is a meeting of firsts for ICANN and the community. It is the first ICANN Public Meeting for the new President and CEO, Göran Marby. And it is the first Meeting B in the Future Meetings Strategy.

In the new strategy developed by the Meeting Strategy Working Group, Meeting B is a policy forum. Sessions are limited to policy work and outreach, with the Supporting Organizations and Advisory Committees taking the lead in organizing the program. Sessions focus on current policy development work and cross-community dialogue with other constituencies. At a Meeting B, you will not find a welcome ceremony, high-interest topics, public forum or public Board meeting.

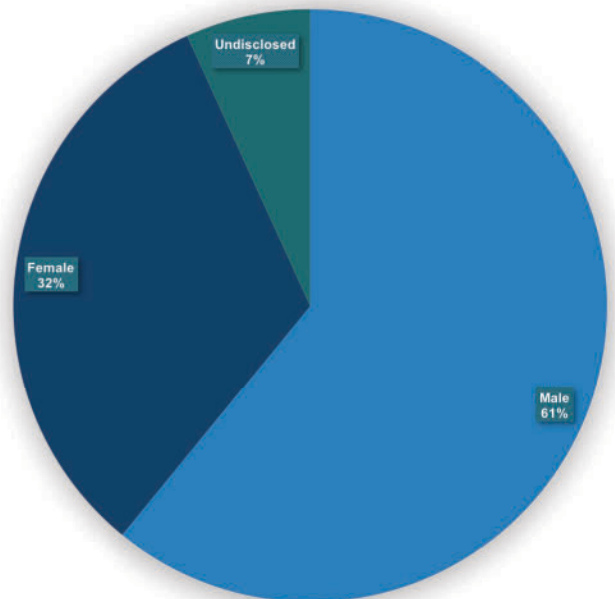
For this section, the attendee profile metrics are derived from data that users provided during the meeting registration process. Attendees were not required to answer all questions.

## ICANN|56 | POLICY HELSINKI | FORUM 27–30 June 2016

ICANN56 Attendee Profile by Badge Type

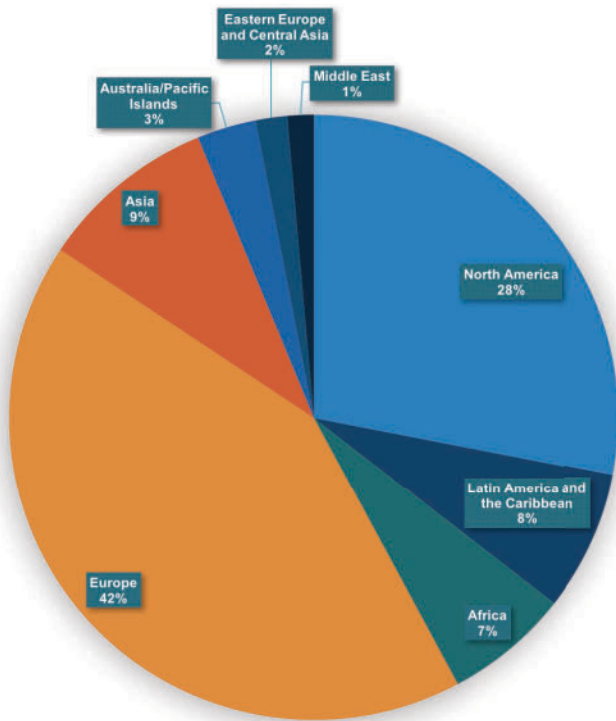


ICANN56 Attendee Profile by Gender

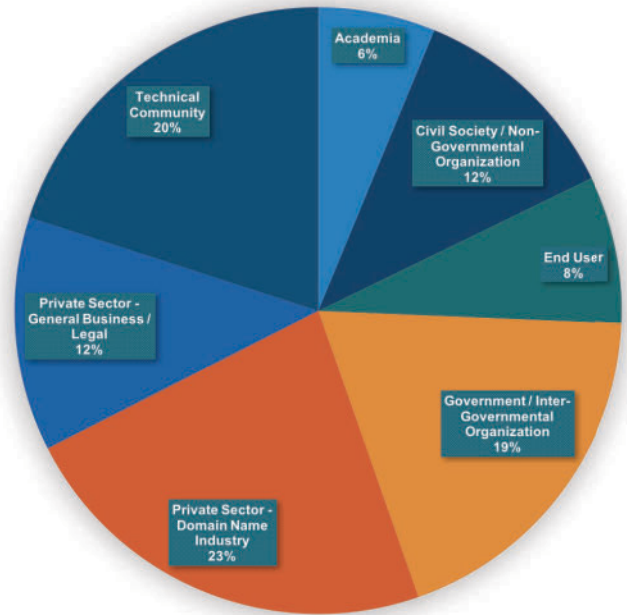


# ICANN56 Attendee Profile

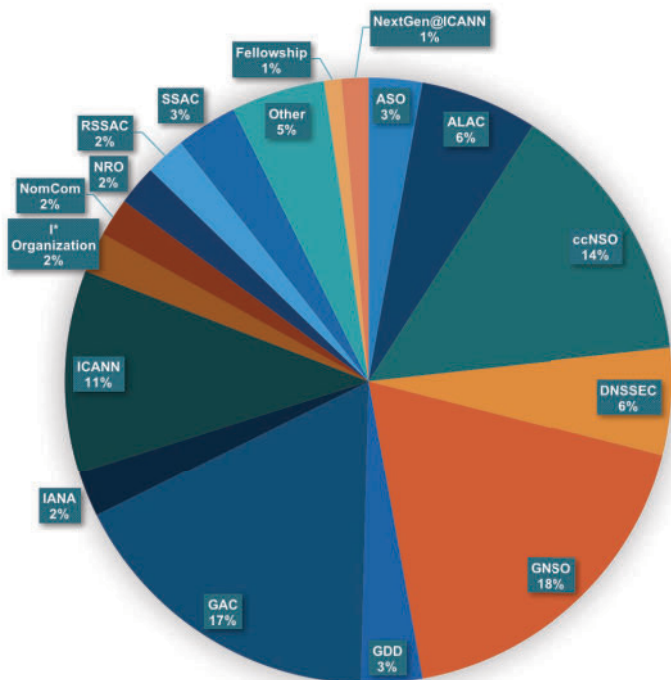
ICANN56 Attendee Profile by ICANN Regions



ICANN56 Attendee Profile by Stakeholder Classification



ICANN56 Attendee Profile Groups of Interest



- ASO - Address Supporting Organization
- ALAC - At-Large Advisory Committee
- ccNSO - Country Code Names Supporting Organization
- DNSSEC - Domain Name System Security Extensions
- GNSO - Generic Names Supporting Organization
- GDD - Global Domains Division
- GAC - Governmental Advisory Committee
- IANA - Internet Assigned Numbers Authority
- ICANN - Internet Corporation for Assigned Names and Numbers
- I\* Organization
- NomCom - Nominating Committee
- NRO - Number Resource Organization
- RSSAC - Root Server System Advisory Committee
- SSAC - Security and Stability Advisory Committee
- Other / Special Interest Group
- Fellowship Program
- NextGen@ICANN

# ICANN56 Attendee Profile by Region

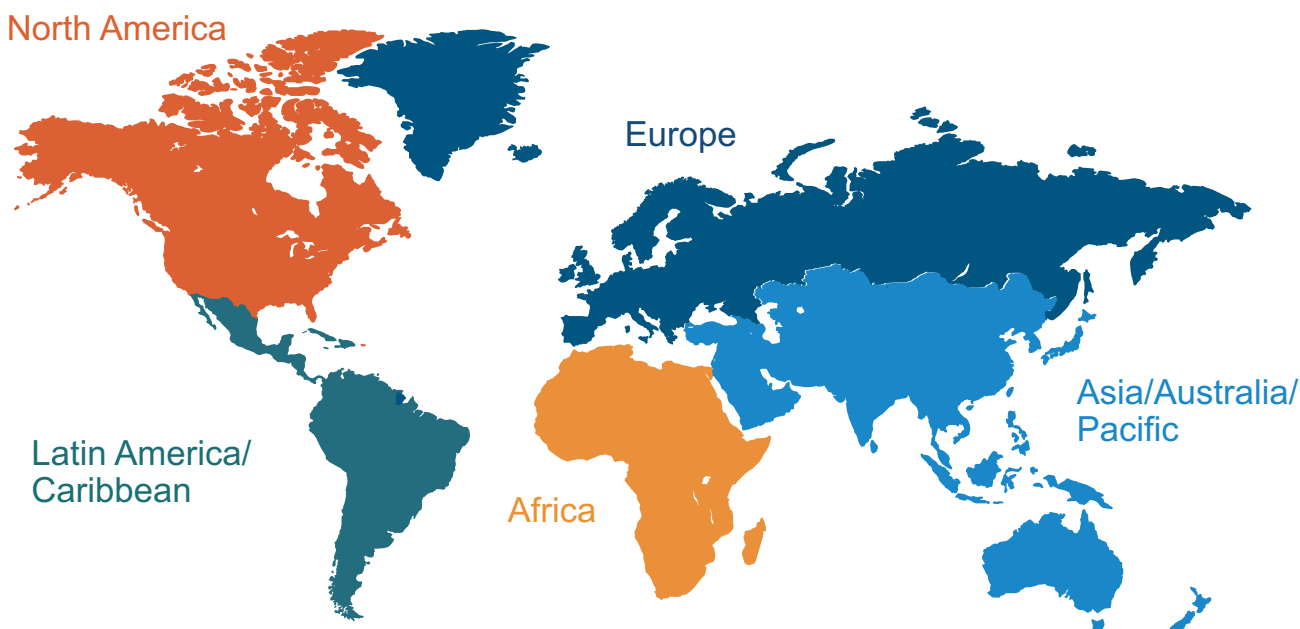
## Attendee Profile by ICANN Regions

Geographic diversity is fundamental to the ICANN organization. The ICANN Bylaws (Article VI, Section 5) currently define five geographic regions: Africa, North America, Latin America/Caribbean, Asia/Australia/Pacific and Europe.

The ICANN geographic regions were originally defined to ensure regional diversity in the composition of the ICANN Board. Subsequently expanded to apply to the Generic Names Supporting Organization (GNSO), At-Large Advisory Committee (ALAC) and the Country Code Names Supporting Organization (ccNSO).

The attendee profile metrics for ICANN56 are derived from data that users provided during the meeting registration process.

Selections are based on the five ICANN geographic regions shown on the map below.



# Africa: Attendee Profile

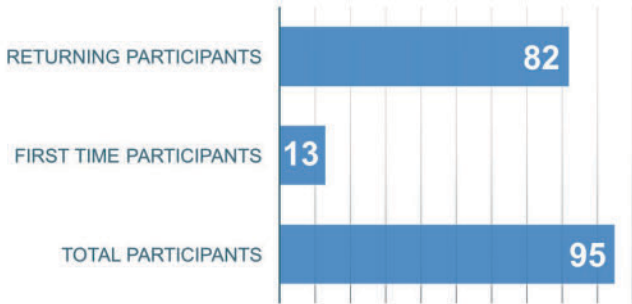
## Attendee Profile for Africa



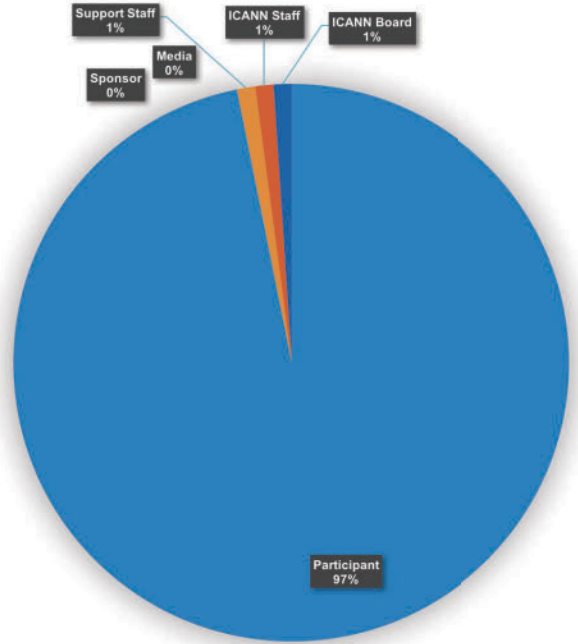
The attendee profile metrics for ICANN56 are derived from data that users provided during the meeting registration process.

Selections are based on the five ICANN geographic regions.

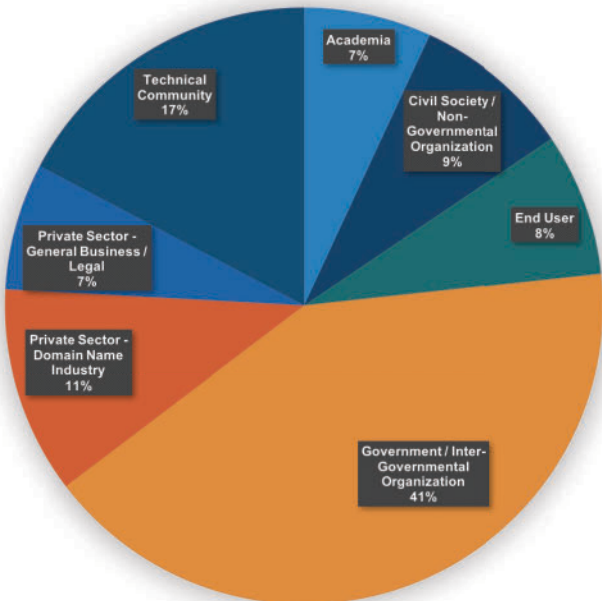
### ICANN56 African Region Attendee Profile by Attendance



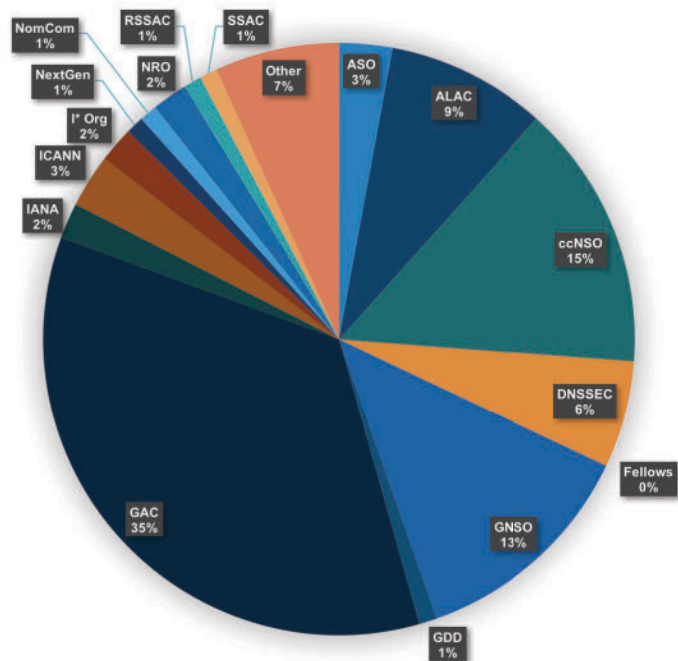
### ICANN56 African Region Attendee Profile by Badge Type



### ICANN56 African Region Attendee Profile by Stakeholder Classification



### ICANN56 African Region Attendee Profile by Groups of Interest





# Asia/Australia: Attendee Profile

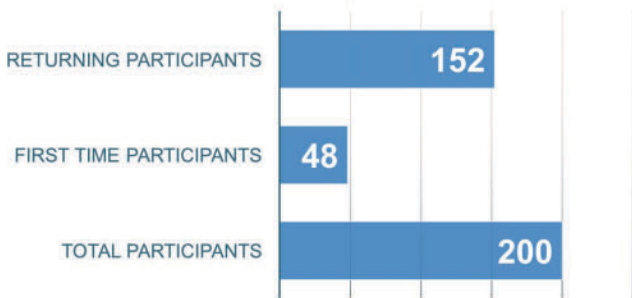


## Attendee Profile for Asia, Australia and the Pacific

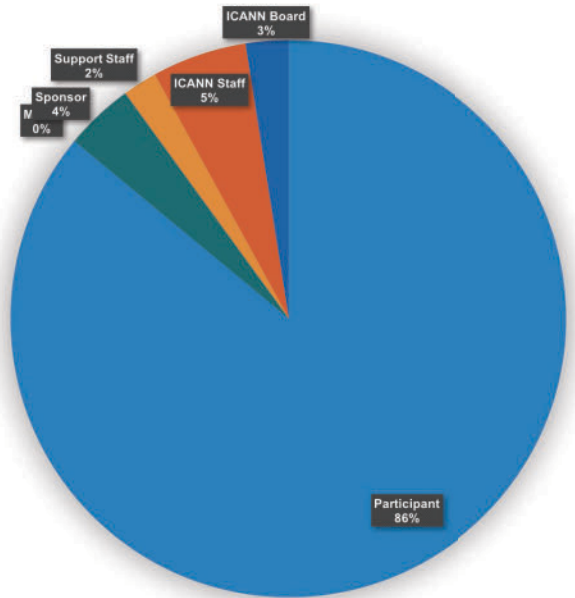
The attendee profile metrics for ICANN56 are derived from data that users provided during the meeting registration process.

Selections are based on the five ICANN geographic regions.

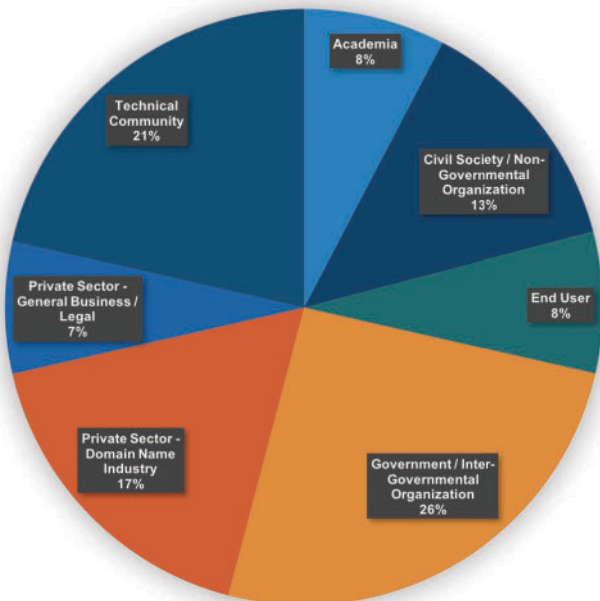
### ICANN56 Asian/Australian Region Attendee Profile by Attendance



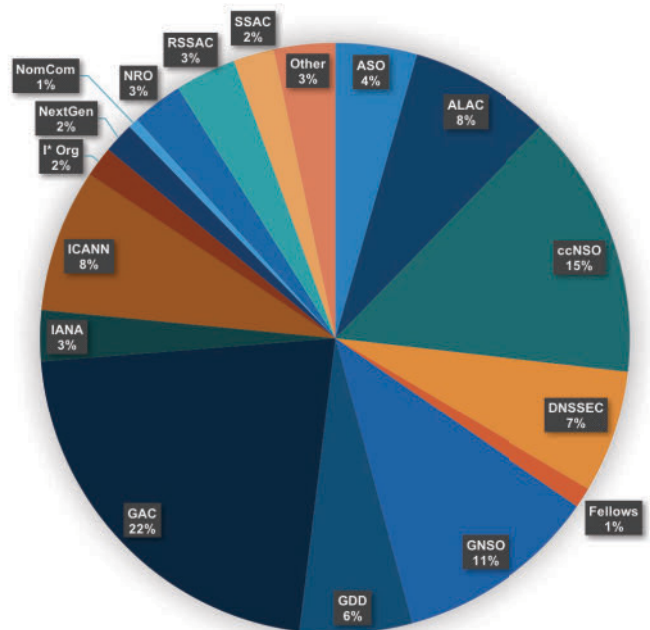
### ICANN56 Asian/Australian Region Attendee Profile by Badge Type



### ICANN56 Asian/Australian Region Attendee Profile by Stakeholder Classification



### ICANN56 Asian/Australian Region Attendee Profile by Groups of Interest



# Europe: Attendee Profile

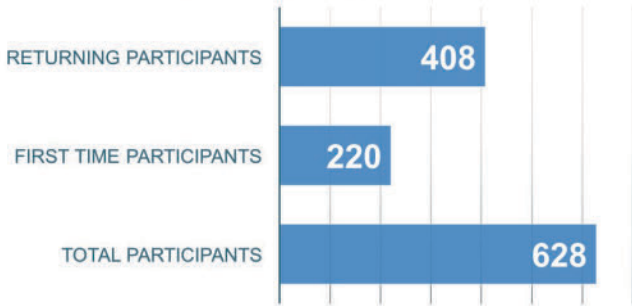


## Attendee Profile for Europe

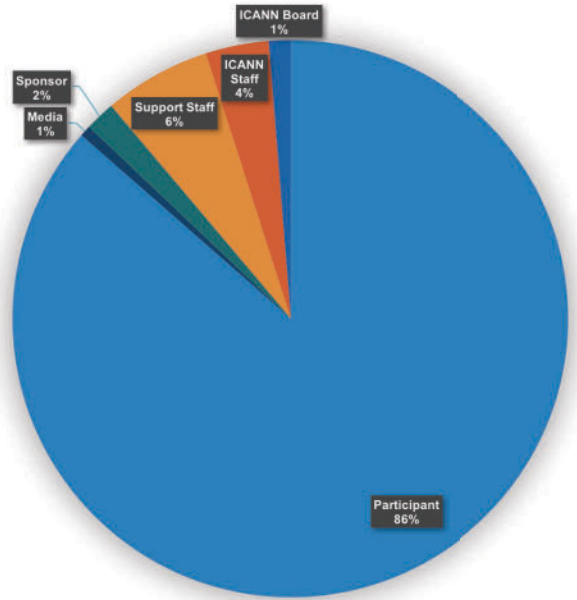
The attendee profile metrics for ICANN56 are derived from data that users provided during the meeting registration process.

Selections are based on the five ICANN geographic regions.

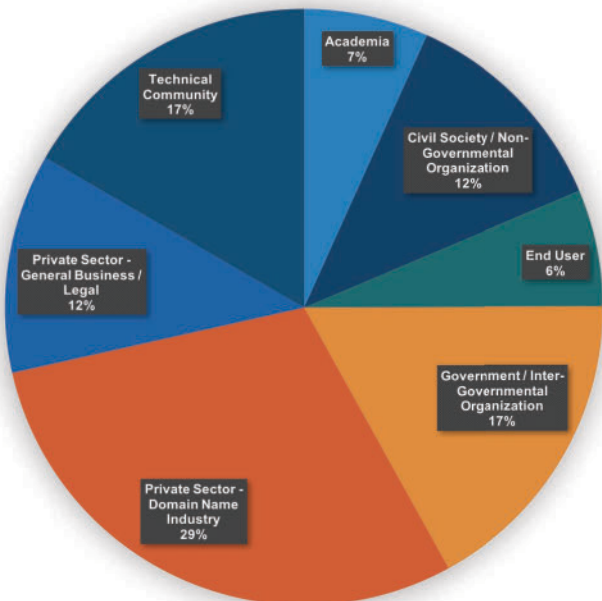
### ICANN56 European Region Attendee Profile by Attendance



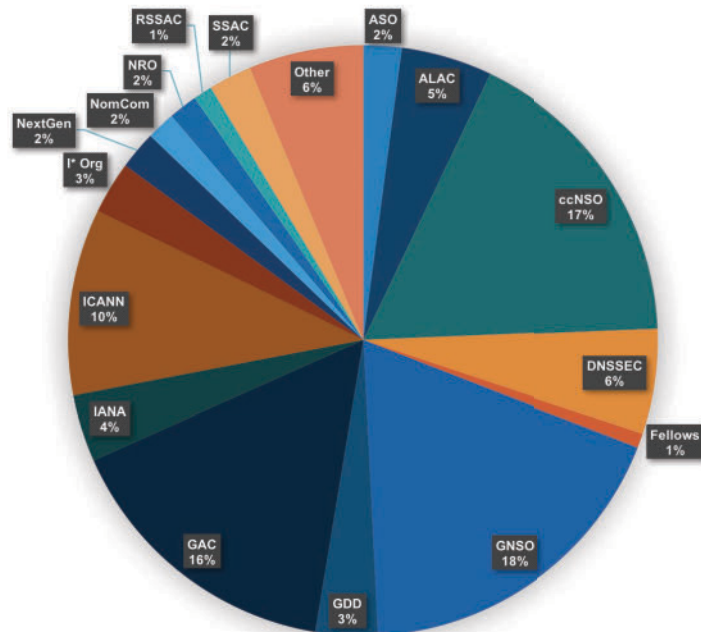
### ICANN56 European Region Attendee Profile by Badge Type



### ICANN56 European Region Attendee Profile by Stakeholder Classification



### ICANN56 European Region Attendee Profile by Groups of Interest



# Latin America/Caribbean: Attendee Profile

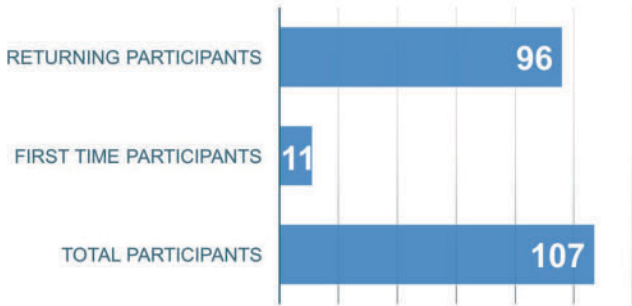
## Attendee Profile for Latin America and Caribbean Islands



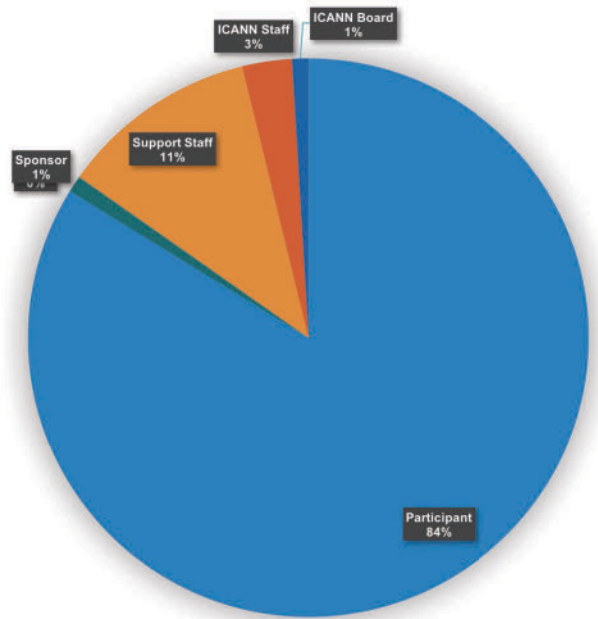
The attendee profile metrics for ICANN56 are derived from data that users provided during the meeting registration process.

Selections are based on the five ICANN geographic regions.

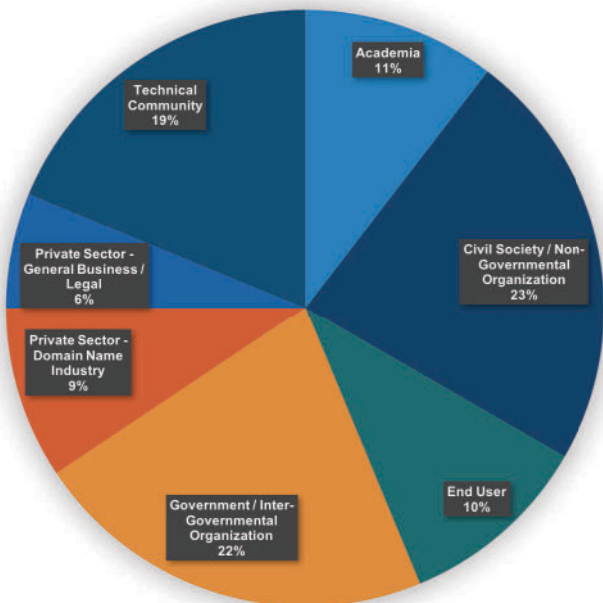
### ICANN56 Latin America Region Attendee Profile by Attendance



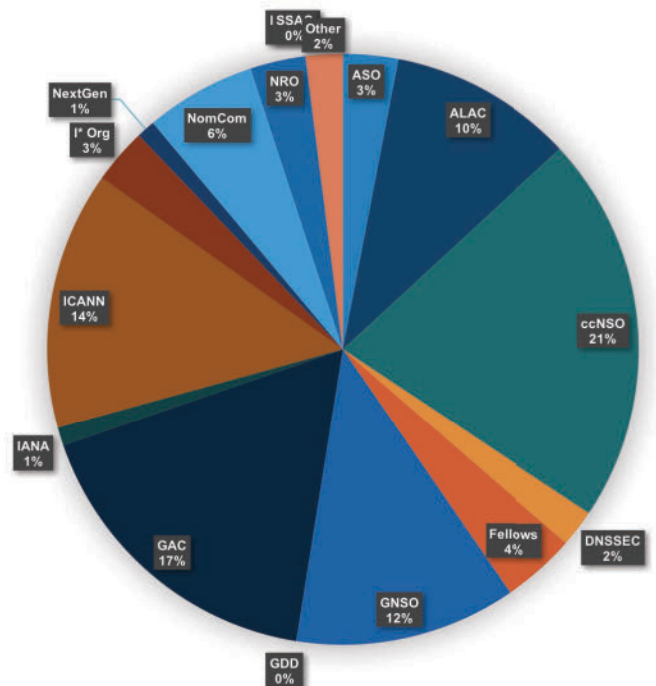
### ICANN56 Latin America Region Attendee Profile by Badge Type



### ICANN56 Latin America Region Attendee Profile by Stakeholder Classification



### ICANN56 Latin America Region Attendee Profile by Groups of Interest



# North America: Attendee Profile

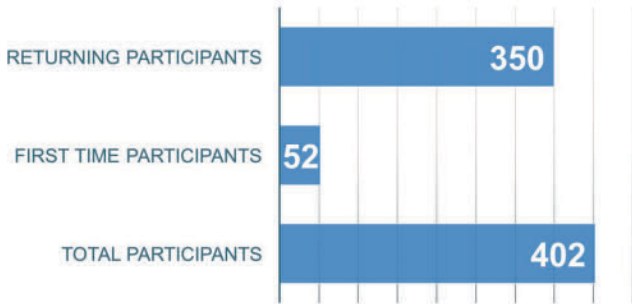
## Attendee Profile for North America

The attendee profile metrics for ICANN56 are derived from data that users provided during the meeting registration process.

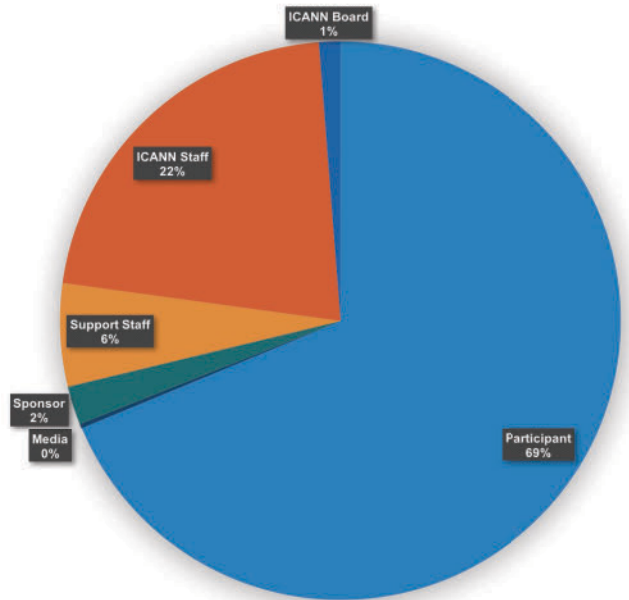
Selections are based on the five ICANN geographic regions.



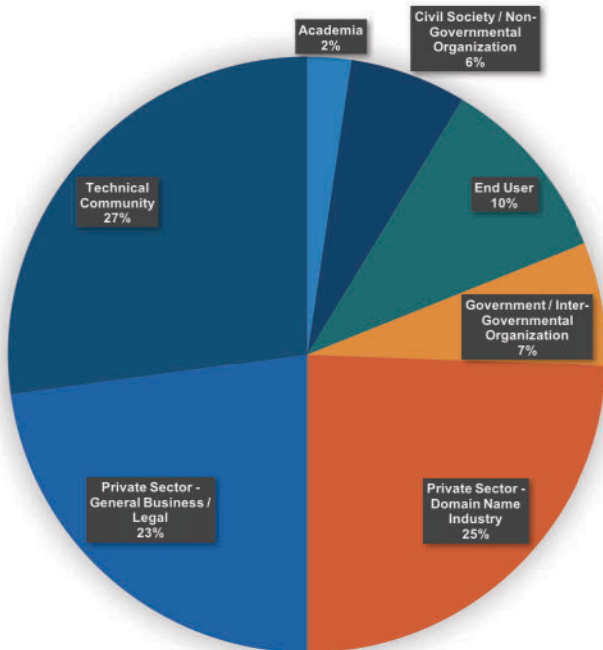
## ICANN56 North American Region Attendee Profile by Attendance



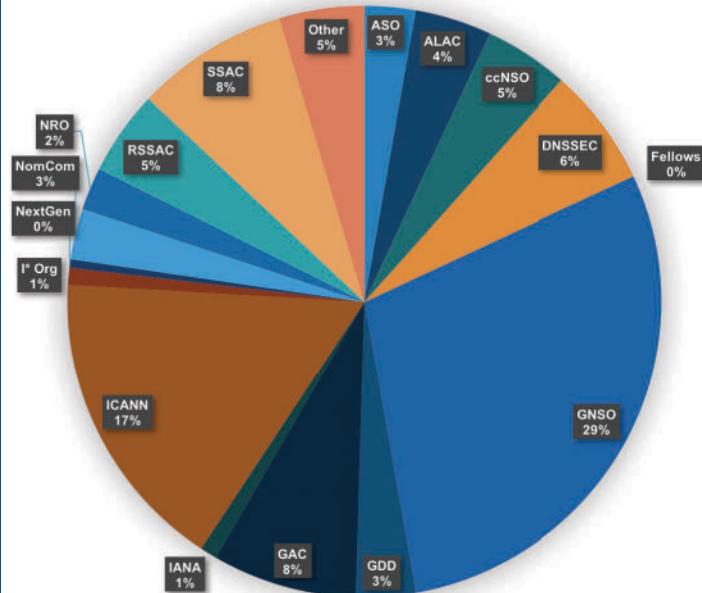
## ICANN56 North American Region Attendee Profile by Badge Type



## ICANN56 North American Region Attendee Profile by Stakeholder Classification



## ICANN56 North American Region Attendee Profile by Groups of Interest



# ICANN56 Attendee Profile Data

## Gender

Male	653
Female	346
Undisclosed	73

## Badge Type

Participant	1,171
Media	5
Sponsor	29
Support Staff	80
ICANN Staff	125
ICANN Board	20

## Stakeholder Classification

Academia	73
Civil Society / Non-Governmental Organization	135
End User	92
Government / Inter-Governmental Organization	222
Private Sector - Domain Name Industry	267
Private Sector - General Business / Legal	146
Technical Community	234

## Groups of Interest

ASO - Address Supporting Organization	28
ALAC - At-Large Advisory Committee	61
ccNSO - Country Code Names Supporting Organization	139
DNSSEC - Domain Name System Security Extensions	56
Fellowship Program	9
GAC - Governmental Advisory Committee	169
GDD - Global Domains Division	32
GNSO - Generic Names Supporting Organization	178
I* Organization	21
IANA - Internet Assigned Numbers Authority	24
ICANN - Internet Corporation for Assigned Names and Numbers	106
NextGen@ICANN	14
NomCom - Nominating Committee	20
NRO - Number Resource Organization	21
RSSAC - Root Server System Advisory Committee	21
SSAC - Security and Stability Advisory Committee	32
Other / Special Interest Group	49

## ICANN Five Regions

Africa	95
Asia/Australia/Pacific Islands	200
Europe	628
Latin America and the Caribbean	107
North America	402

## ICANN Meeting Seven Regions

Africa	95
Asia	135
Australia and Pacific Islands	45
Eastern Europe and Central Asia	24
Europe	604
Latin America and the Caribbean	107
Middle East	20
North America	402

# ICANN56 Attendee Profile Data

	Africa	Asia / Australia / Pacific	Europe	Latin America / Caribbean	North America
Total Participants	95	200	628	107	402
First-Time Participants	13	48	220	11	52
Returning Participants	82	152	408	96	350
<b>By Badge Type</b>					
Participant	92	172	542	88	277
Media	0	0	4	0	1
Sponsor	0	8	11	1	9
Support Staff	1	4	39	12	24
ICANN Staff	1	11	23	3	87
ICANN Board	1	5	8	1	5
<b>By Stakeholder Group</b>					
Academia	8	15	34	10	6
Civil Society / Non-Governmental Organization	10	26	60	22	16
End User	9	15	32	10	26
Government / Inter-Governmental Organization	48	50	86	21	17
Private Sector - Domain Name Industry	13	34	149	9	62
Private Sector - General Business / Legal	8	14	60	6	58
Technical Community	20	42	84	18	69
<b>By Interest Group</b>					
ASO - Address Supporting Organization	3	8	8	3	6
ALAC - At-Large Advisory Committee	9	14	19	10	9
ccNSO - Country Code Names Supporting Organization	15	26	66	21	10
DNSSEC - Domain Name System Security Extensions	6	12	22	2	14
Fellowship Program	0	2	3	4	0
GNSO - Generic Names Supporting Organization	13	20	70	12	63
GDD - Global Domains Division	1	11	13	0	7
GAC - Governmental Advisory Committee	36	39	60	17	17
IANA - Internet Assigned Numbers Authority	2	5	14	1	2
ICANN - Internet Corporation for Assigned Names and Numbers	3	14	39	14	36
I* Organization	2	3	11	3	2
NextGen@ICANN	1	3	8	1	1
NomCom - Nominating Committee	1	1	6	6	6
NRO - Number Resource Organization	2	5	6	3	5
RSSAC - Root Server System Advisory Committee	1	6	4	0	10
SSAC - Security and Stability Advisory Committee	1	4	9	0	18
Other / Special Interest Group	7	6	24	2	10

# ICANN56 Technical Report

## Session Statistics

**ICANN|56** | **POLICY**  
**HELSINKI** | **FORUM**  
27-30 June 2016

# ICANN56 Session Statistics

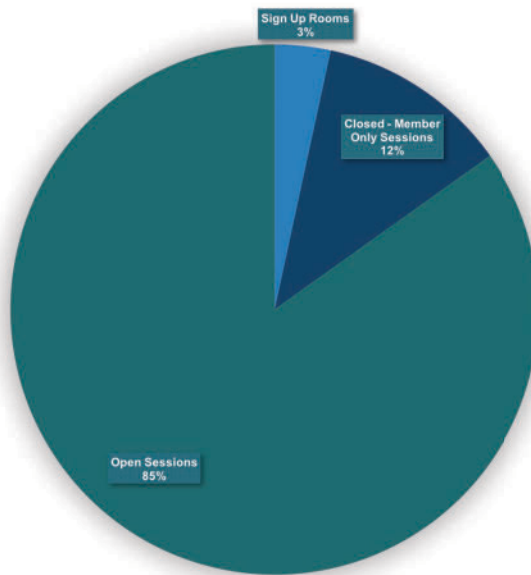
## Session Statistics for Helsinki, Finland

Each "type" of session has a different structure and purpose:

- Open sessions are open to everyone, and are supported with remote participation tools for additional outside participation.
- Closed sessions are typically open only to members of a specific group, and may have limited remote participation.
- Sign Up Rooms are on-site impromptu meetings, held in session rooms that have open time slots.

This chart breaks down meetings conducted by session type.

Counts by Session Type

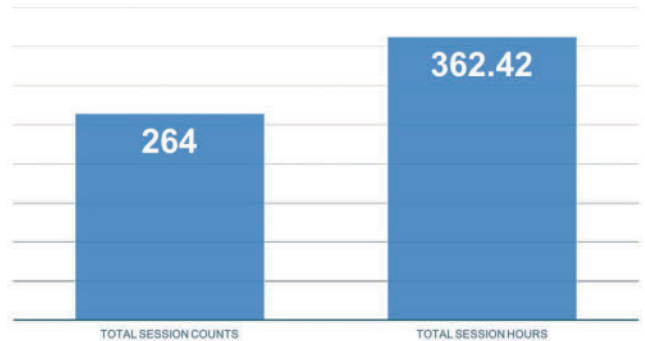


Actual Attendance for All Sessions



Based on Hourly Counts of Session Rooms

Session Count and Session Hours





# ICANN56 Session Statistics

## Session Attendance – Top 50 Sessions

This list ranks the top 50 sessions based on attendance. The attendance number comes from midsession manual headcounts done every hour. The count includes only people who were physically present in the session room at the time of the count.

	Session Title	Attendance
1	Welcome & Multistakeholder Ethos Award Presentation	285
2	GAC meeting with the GNSO	225
3	GAC Opening Plenary	216
4	GAC Capacity Building Session	215
5	Cross-Community Session: Next Generation Registration Directory Services	215
6	Country Codes and Names as Second Level Domains (SLDs)	211
7	GAC meeting with ccNSO	208
8	Cross-Community Session: New gTLD Subsequent Procedures	208
9	GAC Human Rights and International Law Working Group Presentation to the	203
10	Cross-Community Session: Review of All Rights Protection Mechanisms in All gTLDs	190
11	Cross-Community Session: Country and Other Geographic Names Forum	182
12	Three Character Codes as Top Level Domains	179
13	GAC Communique Finalisation	173
14	Future New gTLDs Rounds Policy Development	169
15	Funding for the Independent GAC Secretariat	167
16	GAC PSWG presentation to the GAC	160
17	IANA Stewardship Transition and CCWG Accountability Work-stream 1	160
18	Board-GAC Recommendations Implementation Working Group (BGRI)	159
19	GAC Meeting with the SSAC	149
20	ICANN56 Wrap Up & Planning Ahead for ICANN57	149
21	GAC Protection of Geographic Names Presentation to the GAC	143
22	CCWG Stewardship CCWG Accountability and GAC Next Steps (2nd Session)	137
23	At-Large Outreach and Engagement Session	136
24	Review point for Communique Input	129
25	Privacy and Proxy Services Accreditation	129
26	GAC Communique Drafting Session	125
27	Competition, Consumer Trust and Consumer Choice (CCT) Review Team	117
28	IGO/INGO Names and Acronyms Protections	115
29	Cross-Community Session: Workload Scheduling and Management	109
30	GNSO-New gTLD Subsequent Procedures PDP Working Group (Part 1)	108
31	At-Large Outreach and Engagement Session	101
32	Cross-Community Session: Charter for the CCWG on Auction Proceeds	101
33	GAC participation in NomCom Working Group Presentation to the GAC	98
34	GAC website demonstratin	97
35	Review points for Communique Input	93
36	GAC Operating Principles Review Working Group Presentation to GAC	92
37	GNSO Review of All Rights Protection Mechanisms (RPMs) in All gTLDs PDP	92
38	GNSO Council Public Meeting	90
39	ccNSO Members meeting day 1 (Part 2)	84
40	GNSO Meetings (Part 3)	83
41	DNSSEC Sponsored Lunch [C]	82
42	GNSO Next-Generation Registration Directory Services	82
43	GNSO Meetings (Part 1)	80
44	GNSO Cross-Constituency meeting between the IPC RySG	80
45	ccNSO Members meeting Day 2 (Part 2)	80
46	Tech Day (Part 2)	79
47	DNSSEC Workshop (Part 1)	78
48	Discussion of the Proposed Amendments to the Base New gTLD Registry	78
49	CCWG Accountability WS2 Session	75
50	ccNSO Members meeting day 1 (Part 3)	72

# ICANN56 Session Statistics Data

## Overall Meeting Statistics

Total Session Counts	264
Total Session Hours	362.42
Actual Attendance for All Sessions	9,503
Checked-In Attendees	1,436

## Counts by Session Type

Sign Up Rooms	9
Closed - Member Only Sessions	31
Open Sessions	224

# ICANN56 Technical Report

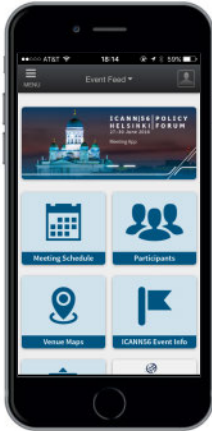
## Mobile App Statistics

# ICANN56 Mobile App Statistics

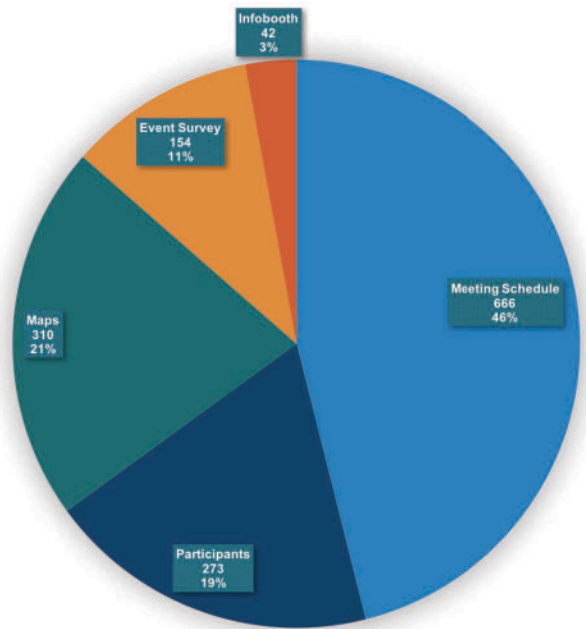
Mobile App | [meetingapp.icann.org](http://meetingapp.icann.org)

The charts on this page show the ICANN meeting mobile app usage. We provided the first mobile app in a beta state for ICANN54 in Dublin, Ireland. The ICANN56 mobile app was the third iteration, and was available in the various app stores.

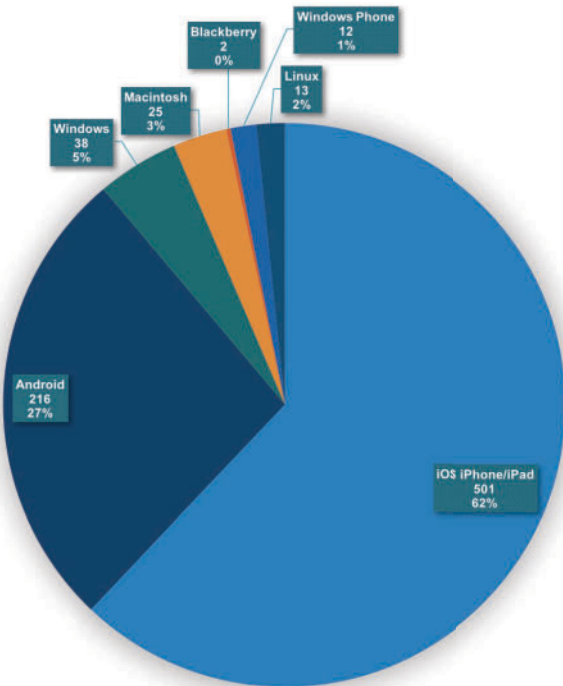
ICANN will continue to enhance the participants' mobile app experience.



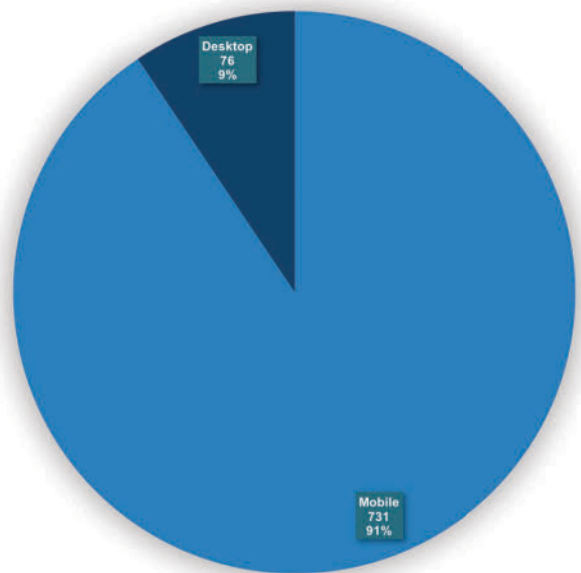
### Top Viewed Modules



### Mobile App Usage by Device

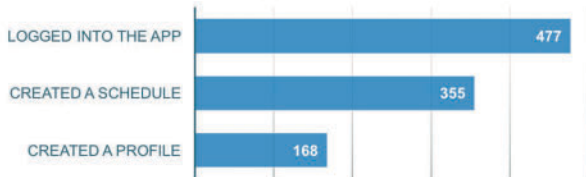


### Mobile vs. Desktop Usage

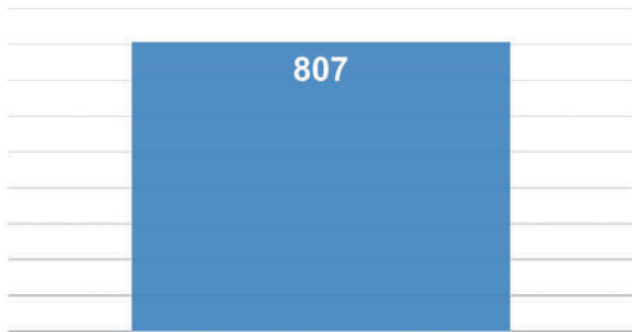


# ICANN56 Mobile App Statistics

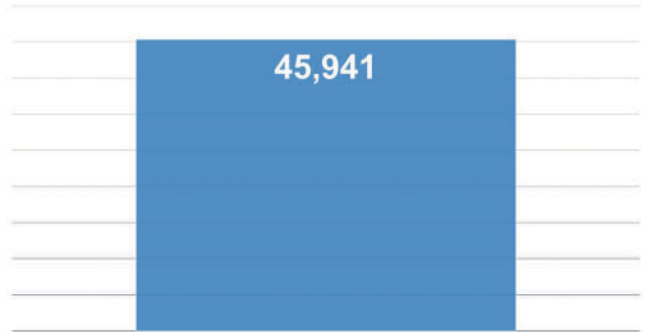
## Mobile App Attendee Interaction



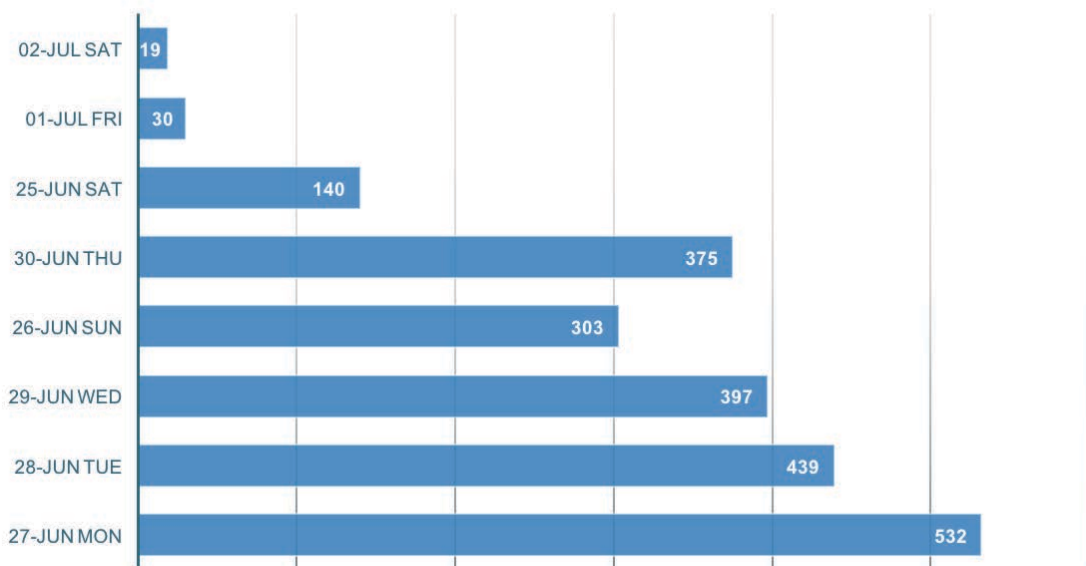
## Total Unique Visitors



## Total Pageviews



## Unique Visitors by Day



# ICANN56 Mobile App Statistics Data

Top Viewed Sections	Unique Visitors	Pageviews
Meeting Schedule	666	17,467
Participants	273	1,048
Maps	310	1,041
Event Survey	154	394
Infobooth	42	136

Top Views - By Date	Unique Visitors	Pageviews
27-Jun Mon	532	14,662
28-Jun Tue	439	10,652
29-Jun Wed	397	7,708
26-Jun Sun	303	5,626
30-Jun Thu	375	4,863
25-Jun Sat	140	2,174
01-Jul Fri	30	161
02-Jul Sat	19	95
Total Pageviews	45,941	
Total Unique Visitors	807	

Mobile App Device Breakdown	
iOS iPhone/iPad	501
Android	216
Windows	38
Macintosh	25
Blackberry	2
Windows Phone	12
Linux	13
Mobile	731
Desktop	76

Mobile App Attendee Behavior	
Created a Profile	168
Created a Schedule	355
Logged Into the App	477
Total Sessions Favorited	5,232
Total Notes	18

# ICANN56 Technical Report

## Schedule Website Statistics

**ICANN|56** | **POLICY**  
**HELSINKI** | **FORUM**  
27-30 June 2016

# ICANN56 Schedule Website Statistics

## Schedule Website | [schedule.icann.org](http://schedule.icann.org)

For ICANN56, we introduced the SCHED platform, for the first time automating the posting of the ICANN meeting schedule. The effort involved integration with ICANN's internal Event Management Software system database, eliminating hundreds of hours of manual data transfer.

ICANN will continue to enhance the user experience with the schedule website.



## Schedule Website Quick Stats

Attendees Logged In

400

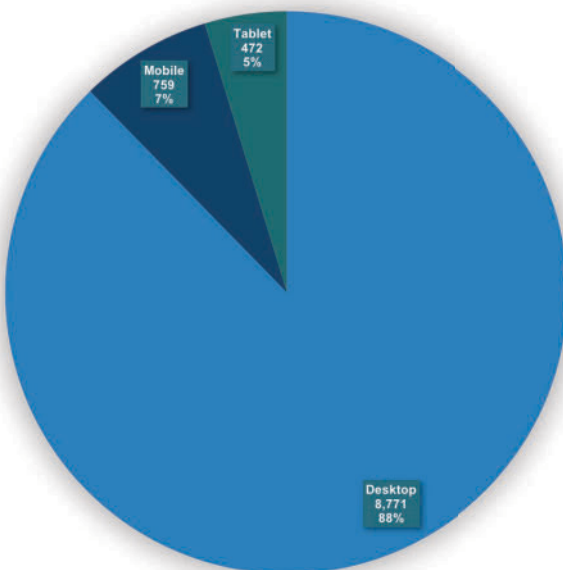
Schedules Created

340

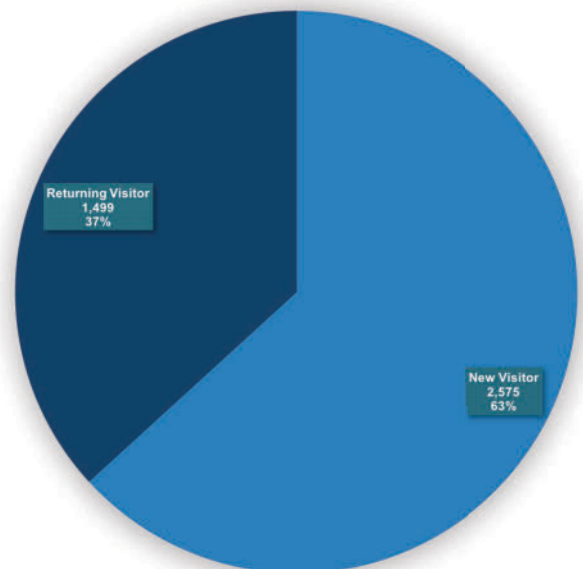
Average Sessions per Schedule

17.33

## Schedule Website Usage by Device Category



## Schedule Website Traffic Type





# ICANN56 Schedule Website Statistics

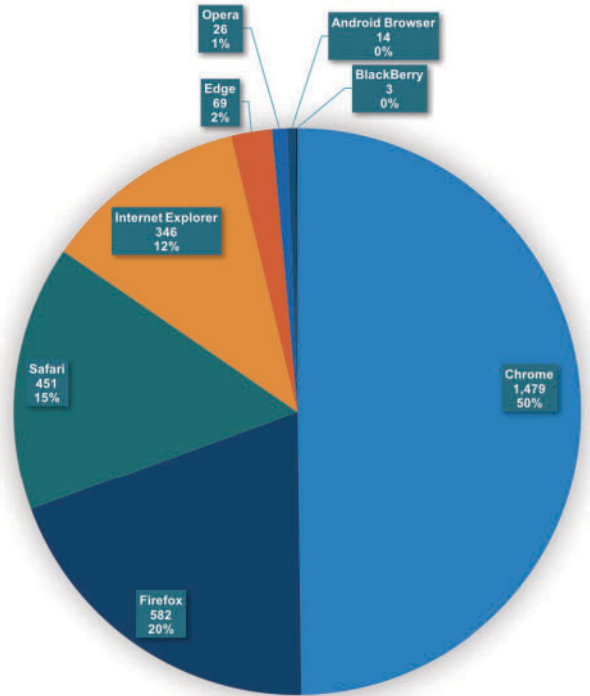
Schedule Website | [schedule.icann.org](http://schedule.icann.org)

Before a meeting, the website includes language streaming links, remote participation links and presentations. Shortly after a session concludes, the audio recording links are automatically posted.

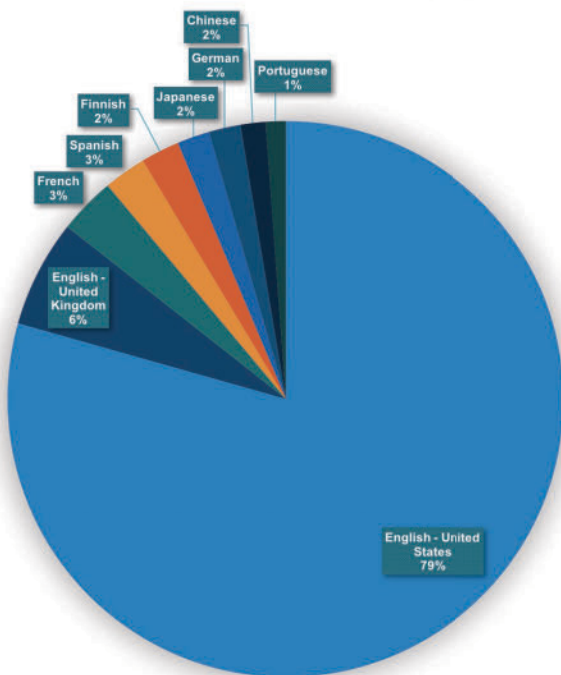
The Meetings Technical Services (MTS) team tests all audio recordings before they are posted. Periods of dead air are removed so listeners don't have to fast-forward through gaps in a recording. When MTS completed this process, Language Services Department processes and posts the associated transcripts.

## ICANN56 | POLICY HELSINKI | FORUM 27-30 June 2016

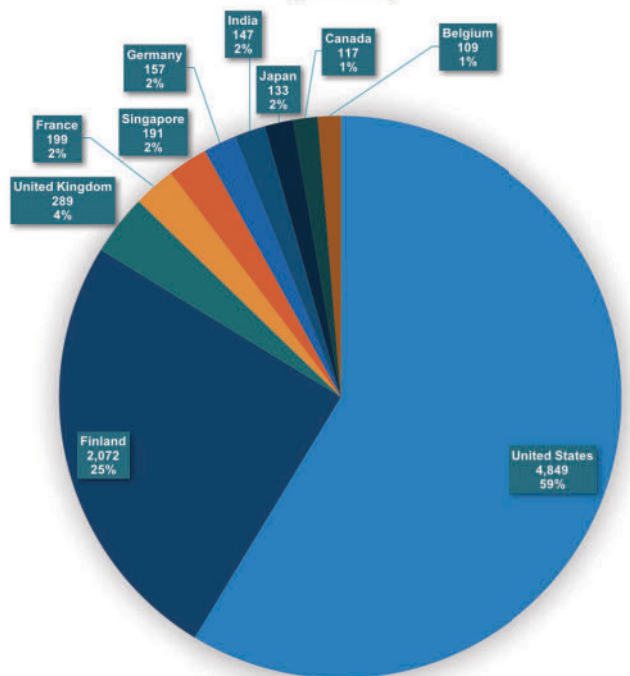
Schedule Website Usage by Browser



Schedule Website Users by Language



Schedule Website Top Usage by Country

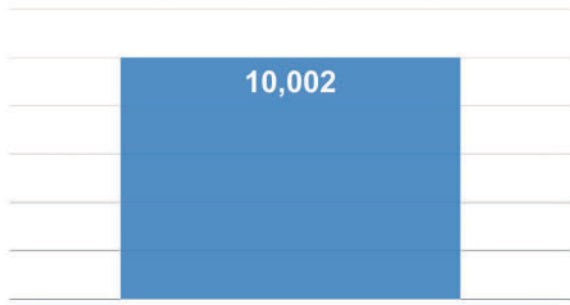


# ICANN56 Schedule Website Statistics

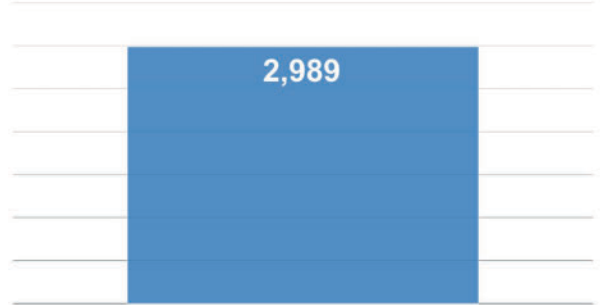
ICANN|56 | POLICY  
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27-30 June 2016



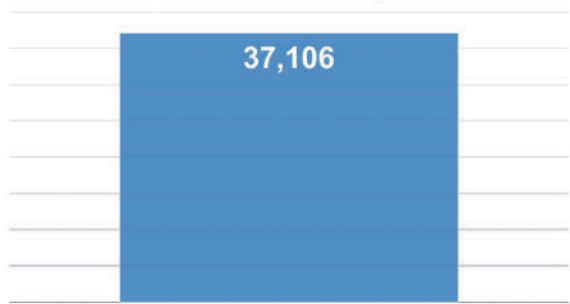
Schedule Website Total Sessions



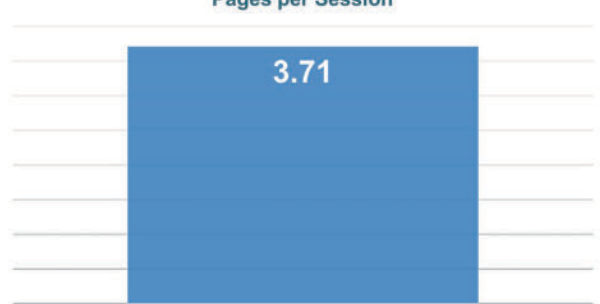
Schedule Website Total Users



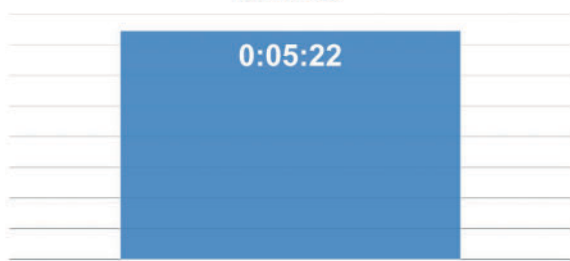
Schedule Website Total Pageviews



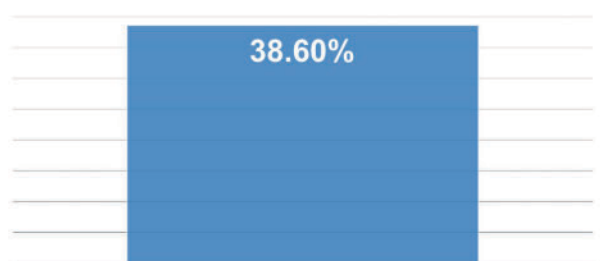
Schedule Website Average Pages per Session



Schedule Website Average Session Duration  
[H:MM:SS]



Schedule Website Average Bounce Rate



# ICANN56 Schedule Website Statistics

Country	Sessions
United States	4,849
Finland	2,072
United Kingdom	289
France	199
Singapore	191
Germany	157
India	147
Japan	133
Canada	117
Belgium	109

Device Category	Sessions
Desktop	8,771
Mobile	759
Tablet	472

Browser	Users
Chrome	1,479
Firefox	582
Safari	451
Internet Explorer	346
Edge	69
Opera	26
Android Browser	14
BlackBerry	3

User Type	Users
New Visitor	2,575
Returning Visitor	1,499

General Stats	
Sessions	10,002
Users	2,989
Pageviews	37,106
Pages / Session	3.71
Avg. Session Duration	0:05:22
Bounce Rate	38.60%
% New Sessions	25.74%

Language	Sessions
English - United States	6,866
English - United Kingdom	539
French	287
Spanish	213
Finnish	194
Japanese	164
German	159
Chinese	125
Portuguese	101

Website Quick Stats	
Attendees Logged In	400
Schedules Created	340
Avg Sessions per Schedule	17.33

# ICANN56 Technical Report

## Remote Participation Statistics

**ICANN|56 | POLICY**  
**HELSINKI | FORUM**  
27-30 June 2016

# ICANN56 Remote Participation

## Remote Participation

A very important facet of ICANN meetings is remote participation. This section presents metrics related to the services provided on-site during meetings.

### Services Provided:

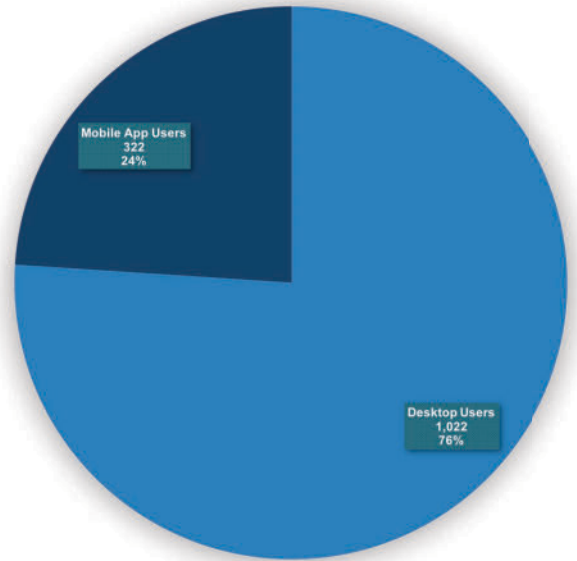
**Adobe Connect** – Visual platform with presentations, participant chat, video of session room and other tools. Recordings of meetings are posted after the session concludes. A mobile app version is also available on app stores.

**Video Streaming** – Video and audio streamed live to Livestream.com, primarily for High Interest Topic sessions.

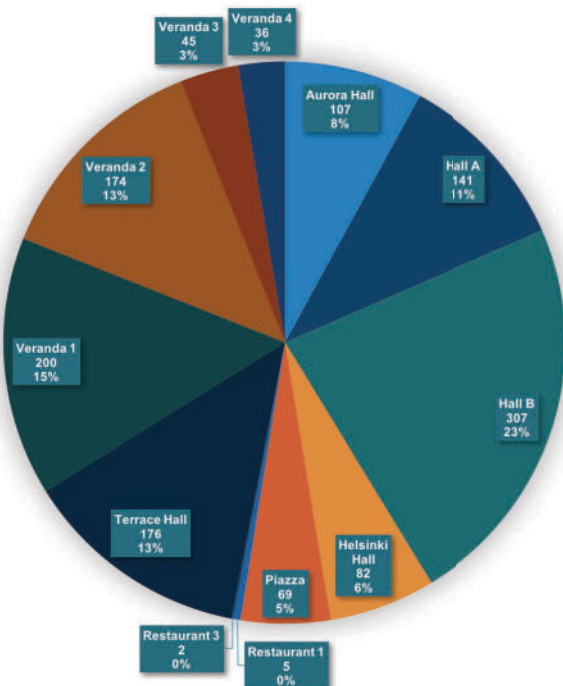
**Audio Streaming** – MP3 audio links for all languages available for a session, giving participants a choice of language. There are high quality streams for participants with broadband connections, and a low bandwidth stream for those with limited connectivity.

**Scribing** – Closed captioning is a live stream of text transcribed from the session's audio, and is available in English for several sessions.

Adobe Connect  
Mobile App vs. Desktop Users



Adobe Connect  
Unique Users by Session Room



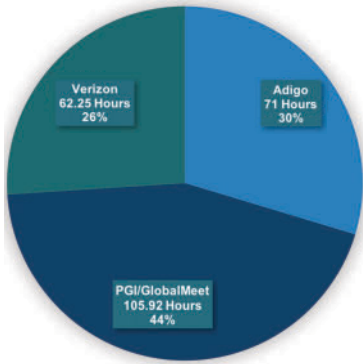
Adobe Connect  
Total Unique Participants



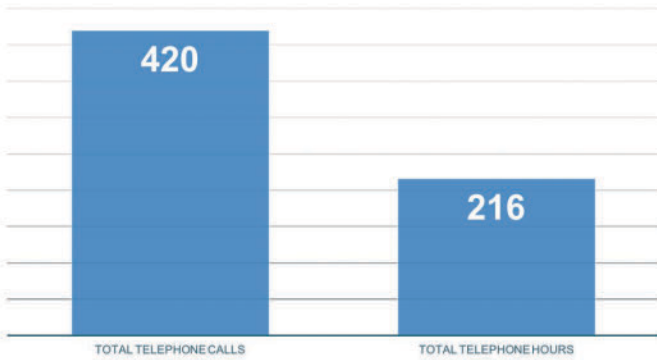
This count includes participants connected on-site to Adobe Connect. In the near future, we hope to improve the breakdown of this data to include on-site participants vs. remote participants.

# ICANN56 Remote Participation

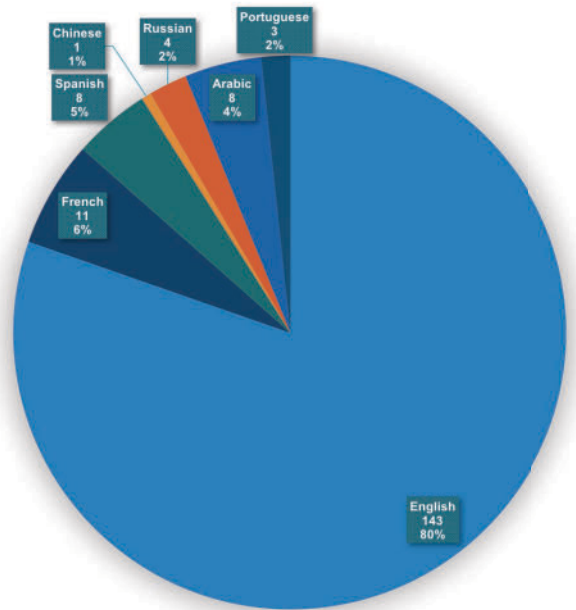
Scheduled Telephony Calls by Provider



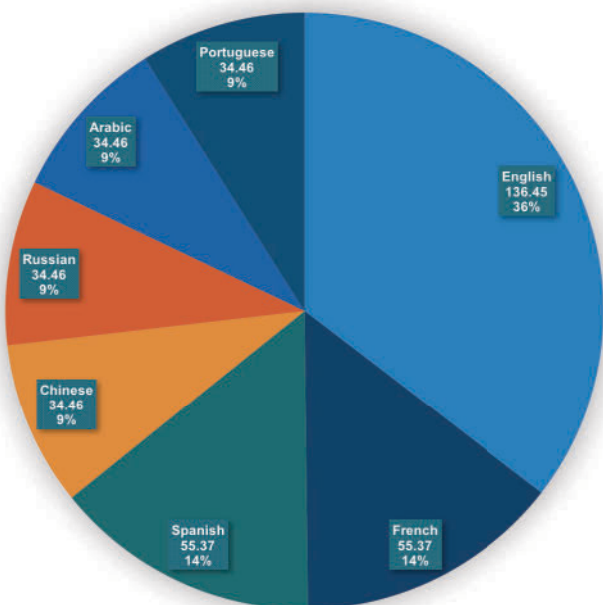
Telephone Calls and Hours



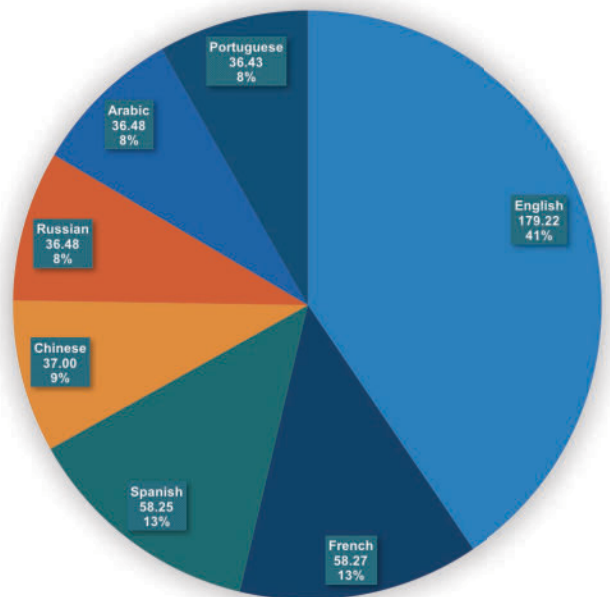
Total Streaming Audio Listeners



Total Streaming Hours [HH.MM]



Total Recorded Hours [HH.MM]



# ICANN56 Remote Participation

## Remote Participation – Top 50 Sessions

This list ranks the top 50 sessions based on the peak count of listeners to the web audio stream. All open sessions provide web audio streams. “N/A” denotes that a specific language was not available for a session. “–” denotes that a specific language had no listeners during the noted session. These numbers reflect the combined number of listeners for both the high-bandwidth and low-bandwidth audio stream.

Session Title	Web Audio Stream Listeners						
	English	French	Spanish	Chinese	Russian	Portuguese	Arabic
1 Competition, Consumer Trust and Consumer Choice (CCT) Review Team	19	–	–	–	–	1	2
2 ICANN56 Wrap Up & Planning Ahead for ICANN57	14	–	–	–	–	–	–
3 CCWG Accountability WS2 Session	10	N/A	N/A	N/A	N/A	N/A	N/A
4 Cross-Community Session: New gTLD Subsequent Procedures	6	1	1	–	–	1	–
5 GNSO Parts 1-3 and CBUC, June 27, 2016	5	N/A	N/A	N/A	N/A	N/A	N/A
6 Cross-Community Session: Next Generation Registration Directory Services	2	5	1	–	2	1	1
7 Cross-Community Session: Review of All Rights Protection Mechanisms in All gTLDs	4	1	–	–	1	1	–
8 GNSO Next-Generation Registration Directory Services	4	N/A	N/A	N/A	N/A	N/A	N/A
9 GNSO – New gTLD Subsequent Procedures PDP Working Group (Part 2)	4	N/A	N/A	N/A	N/A	N/A	N/A
10 Cross-Community Session: Draft Framework of Principles for Future CCWGs	4	–	–	–	–	–	–
11 GNSO Council Public Meeting	4	N/A	N/A	N/A	N/A	N/A	N/A
12 Cross-Community Session: Workload Scheduling and Management	4	–	–	–	–	–	–
13 DNSSEC Workshop	3	N/A	N/A	N/A	N/A	N/A	N/A
14 GNSO - COMMERCIAL STAKEHOLDERS GROUP (CSG)	3	N/A	N/A	N/A	N/A	N/A	N/A
15 GNSO – New gTLD Subsequent Procedures PDP Working Group (Part	3	N/A	N/A	N/A	N/A	N/A	N/A
16 ccNSO Members Meeting Day 2 (Part 3)	3	N/A	N/A	N/A	N/A	N/A	N/A
17 GNSO Review of All Rights Protection Mechanisms (RPMs) in All gTLDs PDP Working Group	3	N/A	N/A	N/A	N/A	N/A	N/A
18 At-Large Leadership Wrap Up Session Part 1	3	–	1	N/A	N/A	N/A	N/A
19 At-Large Leadership Wrap Up Session Part 2	–	–	3	N/A	N/A	N/A	N/A
20 GAC Protection of Geographic Names Working Group Meeting	2	–	–	–	–	–	–
21 GAC Protection of Geographic Names Presentation to the GAC	2	–	–	1	1	–	–
22 GAC Public Safety Working Group Meeting	2	–	–	–	–	–	–
23 At-Large Leadership Work Session	2	–	–	N/A	N/A	N/A	N/A
24 GNSO - NCSG Policy Committee Meeting	2	N/A	N/A	N/A	N/A	N/A	N/A
25 GAC meeting with ccNSO	2	–	1	–	–	–	–
26 CWG Stewardship, CCWG Accountability and GAC Next Steps (2nd Session)	2	1	–	–	–	–	–
27 Cross-Community Session: Country and Other Geographic Names Forum	1	–	–	–	–	2	–
28 IGO/INGO Names and Acronyms Protections	2	–	–	–	–	–	–
29 GAC Communique Drafting Session	2	–	–	–	–	1	–
30 GNSO Wrap-Up Session	2	N/A	N/A	N/A	N/A	N/A	N/A
31 TLD-OPS Standing Committee	1	N/A	N/A	N/A	N/A	N/A	N/A
32 Country Codes and Names as Second Level Domains (SLDs)	1	–	–	–	–	–	–
33 ccNSO Council Prep Meeting	1	N/A	N/A	N/A	N/A	N/A	N/A
34 At-Large Outreach and Engagement Session	1	N/A	N/A	N/A	N/A	N/A	N/A
35 Universal Acceptance Steering Group	1	N/A	N/A	N/A	N/A	N/A	N/A
36 At-Large Outreach and Engagement Session	1	1	–	N/A	N/A	N/A	N/A
37 Tech Day	1	N/A	N/A	N/A	N/A	N/A	N/A
38 ccNSO Members Meeting Day 1 (Part 1)	1	N/A	N/A	N/A	N/A	N/A	N/A
39 IANA Stewardship Transition and CCWG Accountability Work-stream 1	1	–	–	–	–	–	–
40 Review point for Communique Input	1	–	–	–	–	–	–
41 Three Character Codes as Top Level Domains (TLDs)	1	–	–	–	–	–	–
42 Cross-Constituency meeting between the IPC RrSG	1	N/A	N/A	N/A	N/A	N/A	N/A
43 Future New gTLDs Rounds: Policy Development	–	1	–	–	–	–	–
44 ccNSO Members Meeting Day 1 Part 4	1	N/A	N/A	N/A	N/A	N/A	N/A
45 ALAC and IPC Meeting	1	N/A	N/A	N/A	N/A	N/A	N/A
46 GNSO IGO-INGO Access to Curative Rights Mechanisms Policy Development Process WG	1	N/A	N/A	N/A	N/A	N/A	N/A
47 Cross-Community Session: Charter for the CCWG on Auction Proceeds	1	N/A	N/A	N/A	N/A	N/A	N/A
48 GAC Human Rights and International WG Meeting	1	–	–	–	–	–	–
49 ccNSO Members Meeting Day 2 (Part 1)	1	N/A	N/A	N/A	N/A	N/A	N/A
50 GNSO Non Commercial Users Constituency	1	N/A	N/A	N/A	N/A	N/A	N/A

# ICANN56 Remote Participation Data

## Overall Resource Usage

Adigo Phone Conference Bridge Calls	64
Adigo Phone Conference Total Hours	71
PGI/GlobalMeet Conference Bridge Calls	33
PGI/GlobalMeet Conference Total Hours	105.92
Verizon Conference Bridge Calls (by Session)	46
Verizon Conference Total Hours	62.25
Remote Participation Manager Requests	101
Remote Participation Manager Total Hours	128.75
Telephone Calls Conducted	420
Telephone Calls Conducted Hours	216

## Adobe Connect Remote Participation Stats

Adobe Connect Total Unique Participants	1,344
Desktop Users	1,022
Mobile App Users	322

Room	Unique Users
Aurora Hall	107
Hall A	141
Hall B	307
Helsinki Hall	82
Piazza	69
Restaurant 1	5
Restaurant 3	2
Terrace Hall	176
Veranda 1	200
Veranda 2	174
Veranda 3	45
Veranda 4	36



# ICANN56 Remote Participation Data

Web Streaming Listeners	
English	143
French	11
Spanish	8
Chinese	1
Russian	4
Arabic	8
Portuguese	3
<b>Total</b>	<b>178</b>

Web Streaming Hours [hh.mm]	
English	136.45
French	55.37
Spanish	55.37
Chinese	34.46
Russian	34.46
Arabic	34.46
Portuguese	34.46
<b>Total</b>	<b>387.03</b>

Recorded Hours [hh.mm]	
English	179.22
French	58.27
Spanish	58.25
Chinese	37.00
Russian	36.48
Arabic	36.48
Portuguese	36.43
<b>Total</b>	<b>442.13</b>

Room	Desktop Users	Mobile Users
Aurora Hall	102	5
Hall A	141	N/A
Hall B	165	142
Helsinki Hall	71	11
Piazza	61	8
Restaurant 1	5	0
Restaurant 3	2	0
Terrace Hall	86	90
Veranda 1	177	23
Veranda 2	142	32
Veranda 3	40	5
Veranda 4	33	3

Room	Total Connections	Unique Users	Mobile Users	Total Mobile Mins
Aurora Hall	204	107	5	89
Hall A	1,978	141	N/A	N/A
Hall B	921	307	142	3,281
Helsinki Hall	156	82	11	205
Piazza	121	69	8	95
Restaurant 1	6	5	0	0
Restaurant 3	8	2	0	0
Terrace Hall	571	176	90	4,146
Veranda 1	438	200	26	1,130
Veranda 2	420	174	32	878
Veranda 3	86	45	5	471
Veranda 4	64	36	3	64
<b>TOTALS</b>	<b>4,973</b>	<b>1,344</b>	<b>322</b>	<b>10,359</b>

# ICANN56 Technical Report

## General Information

**ICANN|56** | **POLICY**  
**HELSINKI** | **FORUM**  
27–30 June 2016

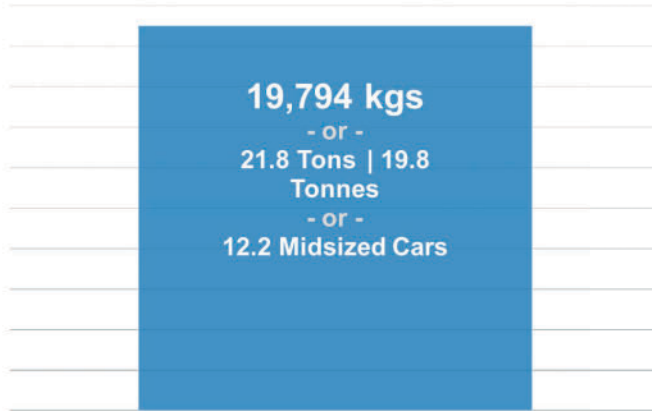
# ICANN56 General Information

## ICANN Equipment Shipped to ICANN56

Much like a touring band, ICANN learned over time that the most cost-effective method of ensuring that meeting participants have a positive experience is to sea freight our own equipment to ICANN meetings. We ship critical equipment, then rent the remaining equipment locally to help promote the economy.

The following depicts the equipment shipped to ICANN56.

### ICANN Owned Equipment Shipment Weight



### ICANN Owned Equipment Cases Shipped



# ICANN56 General Information

## Equipment Deployed for ICANN56

**ICANN|56 | POLICY  
HELSINKI | FORUM**  
27-30 June 2016

### Conference Microphones



412

### Wireless Access Points



104

### Laptops



73

### Mac Minis



53

### Telephones



56

### Switches



48

### Printers



28

### Registration iPads



14

### Audio/Video Streamers



10

### Routers



3

### Video Camera Kits



10

# ICANN56 Technical Report

## Network Operations Center

**ICANN|56 | POLICY**  
**HELSINKI | FORUM**  
27-30 June 2016

# ICANN56 Network Operations Center

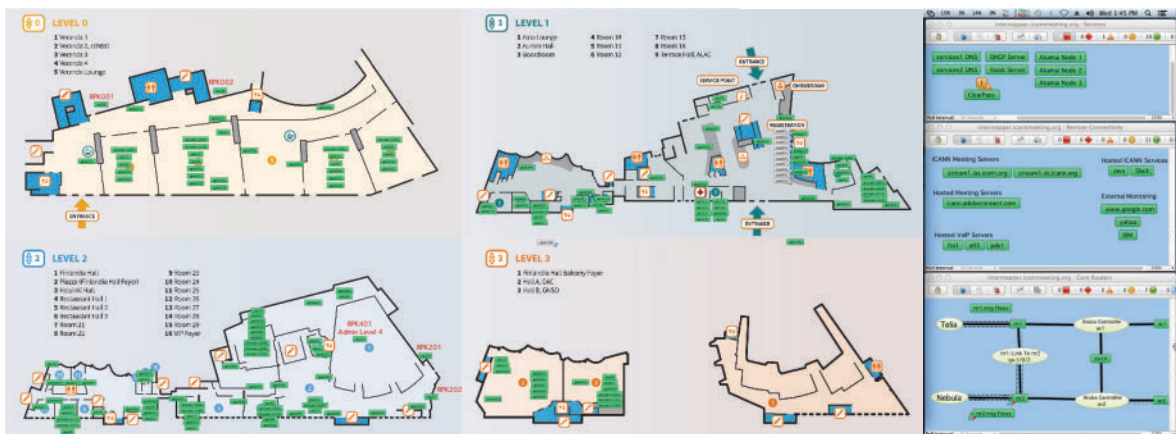
## Session Monitoring

The Network Operations Center (NOC) monitors all session rooms, including audio streams, recordings, Wi-Fi associations, connectivity stability, room temperatures and technician status. At any time, NOC staff can look at the monitoring screen and get a real-time status check of any session room.

Below is a screenshot taken during ICANN56 of the monitoring software.



The NOC uses InterMapper to monitor all active equipment deployed into various areas of the venue. The tool enables the NOC to respond quickly to power outages, network problems and equipment failures.



# ICANN56 Network Operations Center

## Meetings Technical Services Team

People are key to the success of ICANN meetings. Several teams of people help manage every aspect of a meeting. Our Meetings Technical Services (MTS) team includes: meeting managers, audio visual technicians, interpreters, scribes (closed captionists), remote participation managers, IT technicians and video technicians. Many other teams outside the technical scope help make the meetings a success.

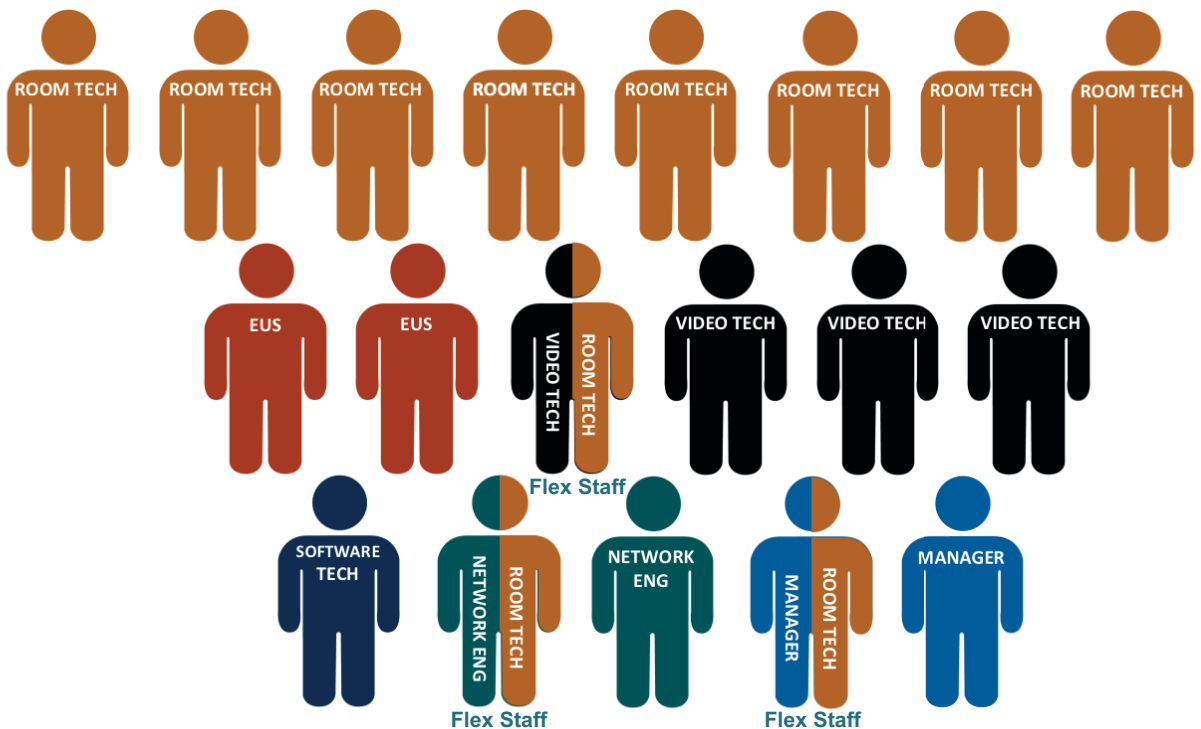
MTS Team  
Messages Exchanged



## Meetings Technical Services Team | ICANN56



## Breakdown of MTS Team by Role



**19**  
MTS CREW

### Role Breakdown:

**11** ROOM TECH  
**4** VIDEO TECH

**2** MTS MANGER  
**1** SOFTWARE TECH

**2** END USER SUPPORT  
**2** NETWORK ENGINEER

# ICANN56 Network Operations Center



## Shipment of Equipment

Over 80 cases ship around the world from meeting location to meeting location. This equipment returns back to Los Angeles, CA, USA, only once a year for restocking and repairs.

## Typical Session Room Setup

A typical meeting room is set up with a VoIP phone, several Wi-Fi access points, two to four Mac Minis, and one or two switches.

MTS installs international power strips in all session rooms. ICANN carries over 600 six-plug power strips with over 6 km of power cable. This provides over 3,600 power outlets for participants during meetings.



## Video Setup

Three operator-controlled PTZ camera systems are available for large session rooms. This system streams video via Adobe Connect, and in some rooms, via Livestream HD video.

We introduced seven new automated camera kits for each session room. The kits operate in conjunction with the microphone system. All session rooms will now have live video for open sessions.

Live video has been a major investment - ICANN is striving to improve the experience and interaction of remote participants.



# ICANN56 Technical Report

## Network Statistics and Client Profiles

**ICANN|56 | POLICY**  
**HELSINKI | FORUM**  
27–30 June 2016

# ICANN56 Network Statistics

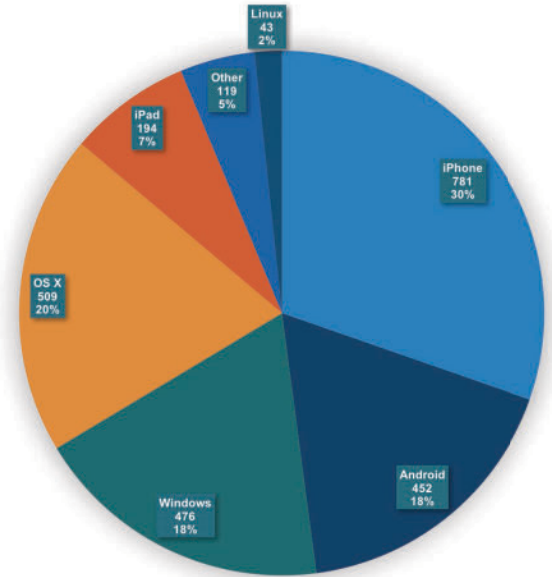
## Overall Network Usage and Statistics

The ICANN Meetings Technical Services team operates primarily with Juniper routers and switches, with a small number of legacy Cisco switches. For the wireless infrastructure, we use Aruba access points, including Aruba wireless controllers.

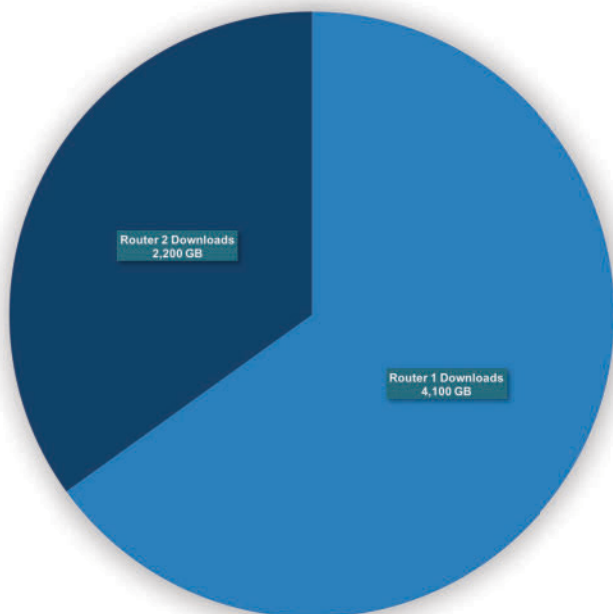
In the "General Information" section, we provide the inventory of IT equipment that ICANN brings to each meeting to meet the unique challenges of each venue.

**ICANN|56 | POLICY  
HELSINKI | FORUM**  
27-30 June 2016

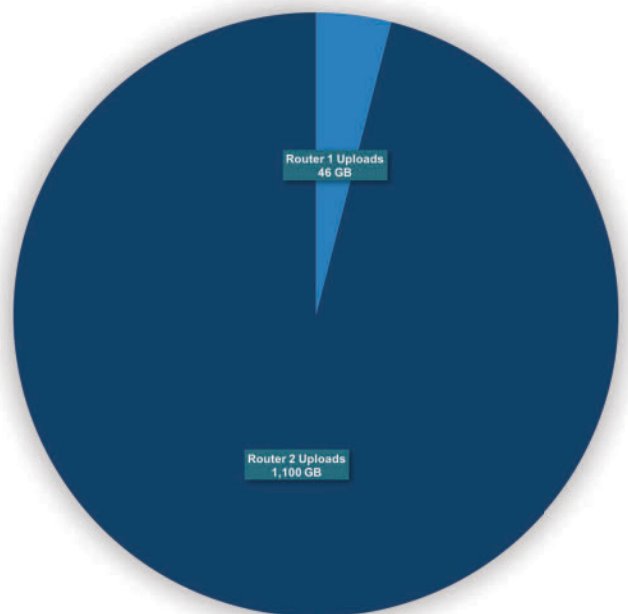
### Clients by Device Type



### Download Traffic



### Upload Traffic



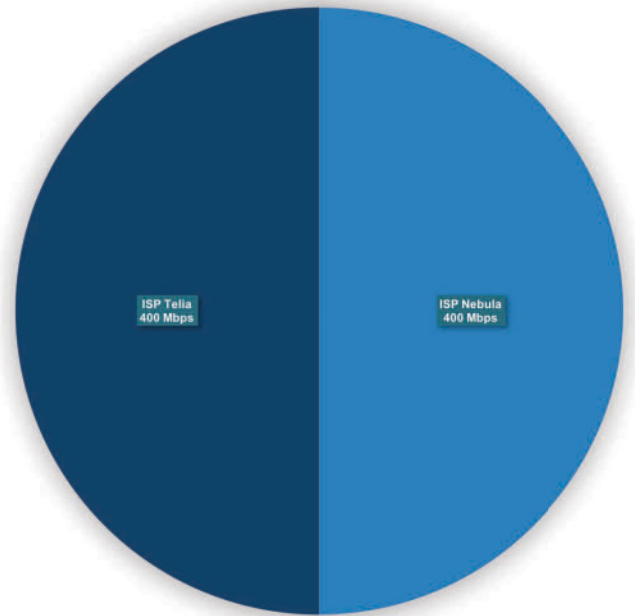
# ICANN56 Network Statistics

## Bandwidth Consumption and Allocation

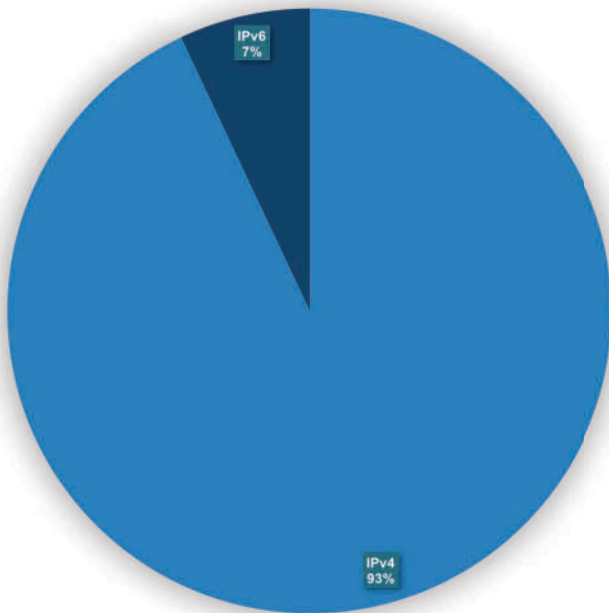
These charts show the bandwidth that was provided and consumed, and the traffic allocation between IPv4 and IPv6.

**ICANN|56 | POLICY  
HELSINKI | FORUM**  
27-30 June 2016

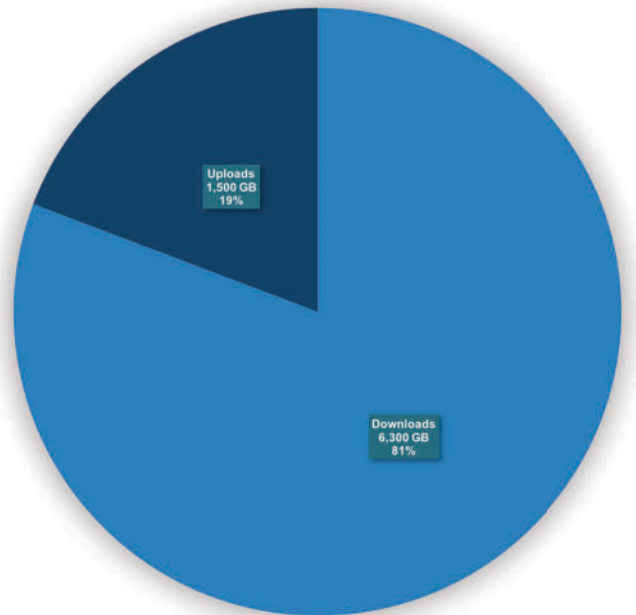
## Internet Service Providers 800 Mbps Service



## Traffic Allocation



## Data Consumption



# ICANN56 Network Statistics

## Wi-Fi Client Associations and Bandwidth

During an ICANN meeting, the Meetings Technical Services team closely monitors the network load and Wi-Fi associations to each wireless access point. Alerts notify the NOC team when a maximum number of users are associated to a single access point. The team responds promptly by mitigating issues with access points or deploying more access points.

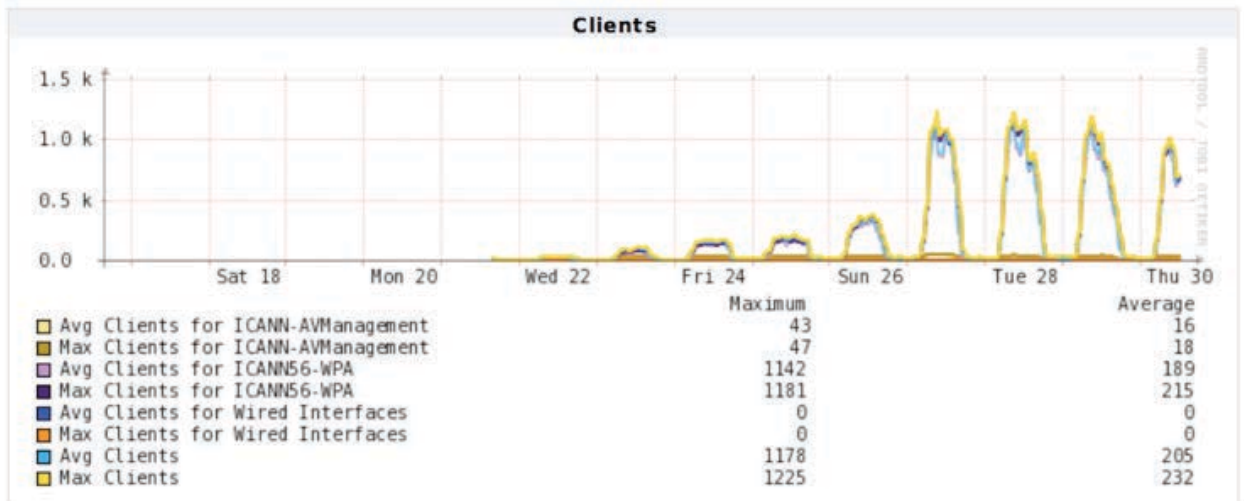
Great care and time go into the deployment plan for wireless access points. The team works with our wireless vendor Aruba to ensure the best possible configuration of device profiles.

Our goal is to ensure the highest quality experience for all attendees on the ICANN network.

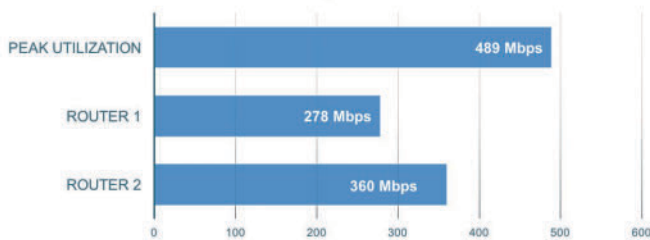
**Peak Wi-Fi Client Associations**  
Wednesday 29-Jun-16



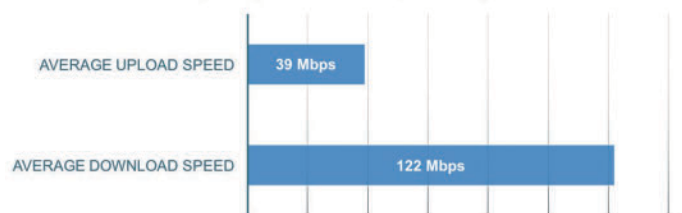
## Wi-Fi Client Associations | by Day



**Peak Bandwidth Utilization**  
Wednesday 29-Jun-16



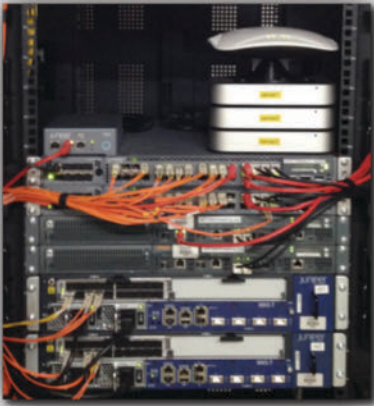
**Bandwidth Speed**  
[During Business Hours per 30min]



# ICANN56 Network Statistics

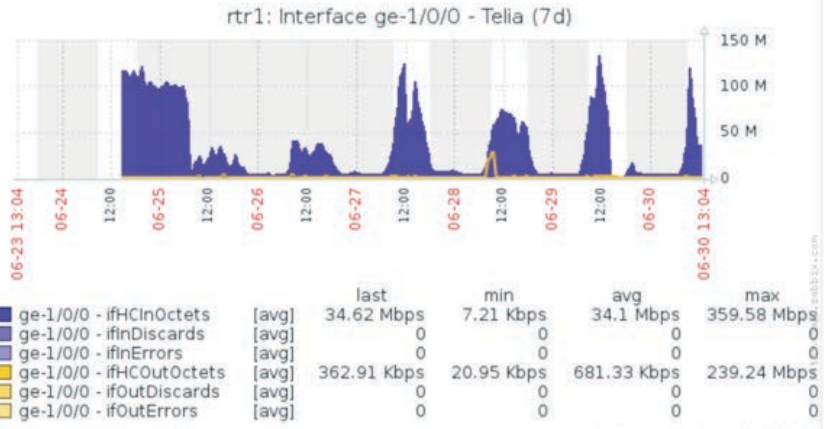
## Average Bandwidth Utilization

ICANN runs our core network from two redundant routers. These graphs show the weekly 30-minute average bandwidth consumption.

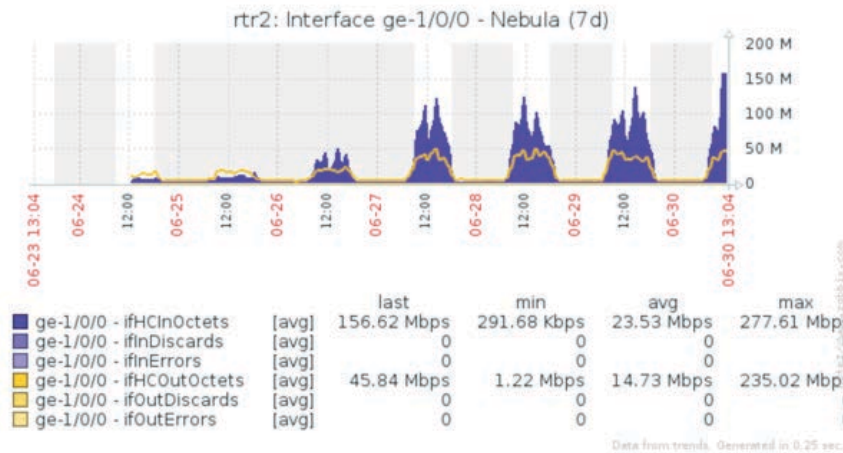


ICANN MTS Core Network

### Router 1



### Router 2

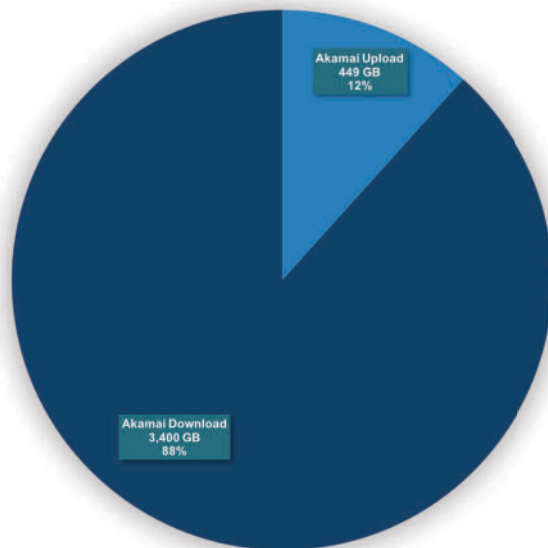


## Akamai On-Site CDN

ICANN is proud to be supported on location by Akamai, provider of Content Delivery Network (CDN) services. Akamai helps ensure that the ICANN meeting network is fast, reliable and secure.



## Akamai CDN Server Traffic



# ICANN56 Network Statistics Data

## Wireless Associations – Top 50 Sessions

This list shows the top 50 sessions based on peak wireless client associations. We typically find that Wi-Fi associations represent about a 1:1 ratio of actual attendees in the session room. This ratio varies slightly from 1:1 to 1:1.25 for wireless clients vs. actual attendee count, depending on session content, time of day, and other variables.

	Session Title	Wireless Clients
1	GAC meeting with the GNSO	497
2	IANA Stewardship Transition and CCWG Accountability Work-stream 1	471
3	Cross-Community Session: Next Generation Registration Directory Services	468
4	Review point for Communique Input	454
5	Privacy and Proxy Services Accreditation Issues	451
6	Country Codes and Names as Second Level Domains (SLDs)	441
7	Future New gTLDs Rounds: Policy Development	440
8	Three Character Codes as Top Level Domains (TLDs)	437
9	GAC Capacity Building Session	430
10	GAC Protection of Geographic Names Presentation to the GAC	409
11	Cross-Community Session: New gTLD Subsequent Procedures	403
12	Cross-Community Session: Review of All Rights Protection Mechanisms in All gTLDs	390
13	GAC meeting with ccNSO	390
14	CCWG Stewardship, CCWG Accountability and GAC Next Steps (2nd Session)	369
15	Cross-Community Session: Country and Other Geographic Names Forum	363
16	GAC Public Safety Working Group Meeting	334
17	Competition, Consumer Trust and Consumer Choice (CCT) Review Team	326
18	GAC meeting with the SSAC	323
19	GAC Communique Drafting Session	311
20	ICANN56 Wrap Up & Planning Ahead for ICANN57	305
21	Welcome and Multistakeholder Ethos Award	300
22	Review points for Communique input	271
23	IGO/INGO Names and Acronyms Protections	268
24	GAC Protection of Geographic Names Working Group Meeting	262
25	GNSO Parts 1-3 and CBUC	257
26	Cross-Community Session: Workload Scheduling and Management	255
27	GAC Operating Principles Review Working Group Presentation to GAC Plenary	253
28	GAC Human Rights and International WG Meeting	242
29	GNSO – New gTLD Subsequent Procedures PDP Working Group (Part	226
30	CCWG Accountability WS2 Session	198
31	ccNSO Members Meeting Day 1 (Part 1)	188
32	GAC participation in NomCom Working Group Meeting	184
33	GNSO Council Public Meeting	183
34	Cross-Community Session: Draft Framework of Principles for Future CCWGs	180
35	Cross-Community Session: Charter for the CCWG on Auction Proceeds	179
36	ccNSO Members Meeting Day 2 (Part 2)	173
37	Review Point for Communique Drafting	170
38	GNSO – New gTLD Subsequent Procedures PDP Working Group (Part 2)	165
39	GNSO Next-Generation Registration Directory Services	162
40	ccNSO Members Meeting Day 1 Part 4	162
41	GNSO Review of All Rights Protection Mechanisms (RPMs) in All gTLDs PDP Working Group	161
42	Tech Day	158
43	GNSO Cross-Constituency meeting between the IPC RySG	154
44	DNSSEC Workshop	143
45	ccNSO Members Meeting Day 2 (Part 3)	142
46	GNSO Wrap-Up Session	134
47	ccNSO Members Meeting Day 2 (Part 1)	134
48	Cross-Constituency meeting between the IPC RrSG	130
49	At-Large Leadership Wrap Up Session Part 1	127
50	Cross Community Operational Planning Session	121

# ICANN56 Network Statistics Data

Bandwidth	Mbps
ISP Nebula	400
ISP Telia	400
Total Bandwidth Available	800

Total Data Transferred In/Out	GB
Router 1 - Downloads	4,100
Router 1 - Uploads	46
Router 2 - Downloads	2,200
Router 2 - Uploads	1,100
Total Downloads	6,300
Total Uploads	1,500

Total Traffic Allocation	%
IPv4	93%
IPv6	7%

Total Traffic	GB
IPv4 Downloads	6,000
IPv4 Uploads	1,000
IPv6 Downloads	406
IPv6 Uploads	58

Total Akamai Traffic	GB
IPv4 Downloads	449
IPv4 Uploads	3,400

Average Traffic Speed (30 min.)	Mbps
Average Download Speed	122
Average Upload Speed	39

Peak Bandwidth Utilization	Mbps
Peak Date	29-Jun-16
Router 2	360
Router 1	278
Peak Utilization	489

Peak Wi-Fi Clients	
Peak Date	29-Jun-16
Peak Devices	1,243

Clients by Device Type	%
iPhone	30.20%
OS X	19.70%
Windows	18.00%
Android	17.50%
iPad	7.50%
Other	5.10%
Linux	2.00%

# ICANN56 Network Statistics Data

Wireless Access Point(s)	Unique Clients	Max Clients	Total Data [GB] <sup>200</sup>	Avg Usage <sup>66</sup>
ap6001	756	62	420.44 GB	4.41 Mbps
ap6003	534	16	14.22 GB	191.68 Kbps
ap6004	188	18	8.13 GB	127.19 Kbps
ap6005	273	13	12.12 GB	163.30 Kbps
ap6006	714	85	145.44 GB	1.91 Mbps
ap6007	1076	27	19.95 GB	264.45 Kbps
ap6008	1022	59	66.24 GB	920.89 Kbps
ap6009	428	72	28.31 GB	433.67 Kbps
ap6010	932	13	3.59 GB	42.33 Kbps
ap6011	1295	31	18.24 GB	212.32 Kbps
ap6012	683	26	28.99 GB	336.22 Kbps
ap6013	902	48	51.57 GB	811.34 Kbps
ap6015	849	63	63.30 GB	996.44 Kbps
ap6016	639	53	63.59 GB	1.14 Mbps
ap6017	853	15	6.60 GB	77.96 Kbps
ap6019	692	49	69.06 GB	810.19 Kbps
ap6020	375	55	99.48 GB	1.53 Mbps
ap6021	628	74	167.79 GB	2.57 Mbps
ap6022	821	114	143.51 GB	2.15 Mbps
ap6023	1063	150	161.43 GB	2.40 Mbps
ap6024	1340	163	263.92 GB	3.56 Mbps
ap6025	1034	80	118.40 GB	1.77 Mbps
ap6026	1465	135	179.25 GB	2.67 Mbps
ap6027	849	66	136.11 GB	2.03 Mbps
ap6028	1545	107	142.88 GB	2.13 Mbps
ap6029	1324	71	123.12 GB	1.84 Mbps
ap6031	1053	42	92.66 GB	1.08 Mbps
ap6034	992	60	47.12 GB	745.25 Kbps
ap6036	852	95	59.95 GB	948.23 Kbps
ap6037	309	16	10.87 GB	170.18 Kbps
ap6038	1504	61	48.70 GB	636.91 Kbps
ap6039	263	39	32.27 GB	505.32 Kbps
ap6040	1387	29	38.24 GB	437.70 Kbps
ap6047	1023	100	15.44 GB	182.09 Kbps
ap6048	1013	91	4.42 GB	52.18 Kbps
ap6049	602	37	9.02 GB	106.39 Kbps
ap6050	235	47	7.01 GB	82.64 Kbps
ap6051	1303	17	11.28 GB	133.69 Kbps
ap6052	1546	93	15.71 GB	186.87 Kbps
ap6053	1543	37	59.45 GB	764.08 Kbps
ap6057	1502	32	16.07 GB	191.09 Kbps
ap6059	1142	58	22.15 GB	286.65 Kbps
ap6060	896	32	9.96 GB	129.38 Kbps
ap6073	1279	60	16.55 GB	248.83 Kbps
ap6074	347	24	35.47 GB	636.94 Kbps
ap6100	582	4	1.04 GB	10.94 Kbps
Oap6192	1580	80	21.61 GB	285.71 Kbps
Oap6194	1269	70	5.85 GB	87.85 Kbps

ap#### = Aruba wireless access point model AP220

oap#### = Aruba outdoor wireless access point model AP270



# ICANN56 Technical Report

For additional information or for comments  
on this report, please contact: [mts@icann.org](mailto:mts@icann.org)

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**HELSINKI | FORUM**  
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