MARRAKECH – Fellowship Morning Meeting
Wednesday, March 09, 2016 – 07:00 to 09:00 WET
ICANN55 | Marrakech, Morocco

UNIDENTIFIED FEMALE: …as quickly as possible. I know that a few of you wandered in a couple of minutes late, but thank you for not wandering in too, too late. We have Patrik Fältström here. He's the Chair of the SSAC, for those of you who have not had the wonderful pleasure of meeting him. He is going to give us an update on SSAC activities, give us a quick overview. I'm going to turn it over to him so we can get to his presentation and get some questions going. Patrik?

PATRICK FÄLTSTRÖM: Thank you very much. Good morning, everyone.

UNIDENTIFIED FEMALE: Good morning.

UNIDENTIFIED FEMALE: [inaudible]

PATRIK FÄLTSTRÖM: There we go. Thank you. Haven't had enough coffee yet.

I recognize some of you. There are some people, of course, that I haven't seen before. Welcome to your first ICANN meeting, I guess. For how many people is this the first ICANN meeting? Raise your hands, please. Excellent.

UNIDENTIFIED MALE: [inaudible] newcomers.

PATRIK FÄLTSTRÖM: What I will do is talk a little bit about SSAC, the Security and Stability Advisory Committee. How do you go to the next? Thank you.

We are one of the advisory committees here in ICANN. We have 30 members, as of today. They are appointed by the ICANN Board. What we are doing is that we are advising ICANN committee and the Board on matters related to the security and integrity of the Internet's naming and address allocation systems. That's a very long sentence in English, even for people that sort of know the language. My mother tongue is Swedish, so for me, English is a secondary language, and this sentence is not something I would have been able to write. I can hardly speak these long sentences.

Anyway, what does it mean? It means that in ICANN – can you go to the next slide, please? In ICANN's mission, which are the rules

by which ICANN is operating, there's a long list of things that ICANN must live up to, which are the rules of the foundation of the organization. Two of them you see up to the left. The first one says, "ICANN exists to ensure the stable and secure operation of the Internet's unique identifier systems." That means that ICANN is supposed to do the best that it can to ensure that the identifier systems, IP address and domain names, are operated in a stable and secure manner. It does not say that ICANN is responsible for the security on the Internet. I will come back to that later, but only this specific thing, for the identifiers.

The next thing that is in ICANN's mission says that ICANN is there to preserve and enhance the operational stability, reliability, security and global interoperability of the Internet. So it doesn't say that ICANN is responsible for this, but ICANN must make decisions in this direction. ICANN is not allowed to make decisions that create instability or make any decisions that might lead to global non-interoperability. ICANN must make decisions in this direction. If you go back one slide.

That is why we exist in SSAC. We are reading many of the papers that ICANN produces. Not all, of course, because there are so many. We also get questions from the ICANN Board and from the organizations that actually do write policy, which are the supporting organizations. We try to answer questions. We are

reviewing documents to make sure that these goals on security and stability are still contained, that ICANN is not making a decision that breaches security regarding these identifiers. That's why we exist.

The expertise we have is down there to the left. Really hard to read on this small screen. I hope you can send mail out the slides to people afterwards. Thank you. The expertise we have include addressing and routing, Domain Name System, DNSSEC, domain registry and registrar operation, abuse and cybercrime, internationalization for both domain names and data, which includes languages, scripts, alphabets, etc., Internet service and access providers, ICANN policy and operation, legal matters, and other things. That's basically the skillset that these 30 members of SSAC have together. We are ensuring that all the members together do have all of this expertise and more than that. We have published 80 documents since 2002 when we were created. Next slide, please.

How do we produce these documents? You see that to the red square down left there. We get a question or there is an issue that we find out ourselves. We create a work party. We do some research and write the document. We review and approve the document in SSAC as a whole, and then we publish it. Publication of a document takes between three months and two years, so it's something that takes quite a long time. It's quite a

lot of work, and of course, all SSAC members are volunteers, so we do it on our spare time. People donate the time, not only when writing documents but also when traveling to ICANN meetings, so no one in SSAC is paid. We do get a little bit of travel support if people really need it, but most SSAC members also pay their travel and accommodation at the ICANN meetings. There are, of course, travel support simply for people that cannot afford traveling, but they still have to donate their time. It's a lot of work.

If it is the case that the advice that we give is directed to the ICANN Board, in that case, we are submitting the finished report to the ICANN Board. We submit the advice to the ICANN Board. The Board acknowledges and studies the advice. It takes formal action on the advice, and that can be one of four things. Either it requests the supporting organizations to launch a policy development process, and that policy development process is supposed to take the advice into account and implement the advice, or it requests that staff should implement the advice. That includes the normal public consultation and the rules for how staff implements things. Or there is a dissemination of advice to the affected parties. For example, it could be that ICANN should communicate with another standards organization or do communication outreach to the community or whatever. Or it might be the case that the ICANN Board is

choosing a completely different solution. This is really, really important because the ICANN Board does not have to implement all advice. Advice is still advice. There might be other reasons why the ICANN Board wants to do something different, but that is still to take advice into account as long as the ICANN Board is explaining why they are choosing a different solution. Next slide, please.

The current work parties that we are working with has to do with namespace-related issues, which is broader than the Domain Name System. The Domain Name Systems are using words and textual strings that are also used elsewhere; for example, in the TOR network and as country codes by ISO, etc. We're looking a little bit into that. We're looking into the overarching question regarding internationalized domain names, Unicode character set, etc. to see whether there is anything that can be done there to make internationalized domain names and such things work more easily. There is currently more gaps between, for example, the rules in the gTLDs and the ccTLDs regarding internationalized domain names, and also some ccTLDs that have policies which are a little bit weird for internationalized domain names. We need to have a look at that and see whether we can come up with some recommendations.

We also started a work group to keep track of the work inside ICANN on auction proceeds, which is more an organizational

issue regarding ICANN financing and organization. How can we control and get better prediction on the ICANN budget? We need to do that as well because, of course, stable long-term operation of ICANN is something that is important for the stability of the Internet.

We also have DNSSEC workshops at the ICANN meeting. We had one DNSSEC workshop for Newcomer Sunday. We have an advanced DNSSEC workshop today, actually in this room after this meeting, but that is a technical workshop. If it is the case that people come in here and [throw yard], those are the ones that will work on DNSSEC. If you're interested and you actually deal with DNNSEC, please stay. It's fairly technical, though, so it's not for newcomers, but if you're running DNSSEC, it's actually a really good thing.

We also, of course, have to track the advice that we give to the Board, and the Board works with us on tracking our advice, and also that internal administrative issue. We also deal with membership applications because SSAC, compared to many other groups in ICANN, we have our own appointment process. The recent publications that we have is that we looked at the creation of KPIs in SAC 77; KPIs regarding marketplace health index. We think that ICANN has suggested a somewhat naïve way of drawing conclusion from data that it collects, so we suggest a more modern methodology of evaluating whether the

gTLD marketplace is more healthy. We wrote advice number 78. It's an advisory on use of the shared global domain name space. We wrote SAC 79, which is about IPv4 addresses. We remind people, once again, that we have run out of IPv4 addresses, that we must deploy IPv6. We also, SAC 80 last week, we, just like many other advisory committees and support organizations, we did our homework and approved the SSWG accountability proposal, which is part of the IANA transition issue. We were the first charting organization to prove that. GAC just approved it last night in the middle of the night. Maybe you saw that. So now we only wait for ccNSO and GNSO, and then we're done, but SSAC was first, and who remembers number two?

UNIDENTIFIED MALE: Good for you [inaudible].

PATRIK FÄLTSTRÖM: If we look at the little bit longer list, you see that, of course, a lot of things have to do with the transition issues. One document that I would like to point out, just because there are many people which I'm really happy of – there are many people in this room that are not from the United States. We wrote SAC 75. We got a liaison document from ITUD, the development sector in ITU, which we're working on a proposal from, I think it was the country of Togo, on supporting deployment of certificate

authorities in developing countries. We responded to that liaison statement, of course, because we think it's important to respond to these. It might be good to read that report. What we basically say is that an increased number of certificate authorities in the world does not help. There are other things that should be made to help developing countries regarding cryptography and certificates to create a more secure and stable Internet. I encourage people that are in the security business, specifically in developing countries, to read SAC 75. If you have any questions, reach out to me, and I will try to help that so that the document is not misunderstood because the document is explaining what should be done to increase the security and why creation of more certificate authorities is not solving the problem.

I think that's all slides. Thank you very much. I would like to open up for a few questions.

ANAND RAJE: Anand Raje from India, first time Fellow. My first question: how to get involved?

PATRIK FÄLTSTRÖM: There are two answers to that question. The first thing that I think is important is how to get involved in working with security

and stability issues on the Internet. That's the first question. The answer to that is, for example, by being here and listening to me: that's a good start. By going and listening and talking to other security people in other fora so you start to understand what security and stability issues are.

There was a person yesterday talking to me from the music industry that thought security and stability issues included trademark infringement, for example, or copyright infringements. It is not. If you have registered a domain name and you have put up a website, security and stability implies the ability for me to access your website, be able to fetch that information from there, and that I don't end up at someone else's website, regardless of whether you have copyright-infringed material on your website or not. Okay? That was a little bit confusing for him, but after talking about 20 minutes, then he started to understand what it was. He understood that security and stability was important for him to be able to do his business, whatever it is.

Okay. The next thing you can do is, because of that, to participate in many of the ad hoc security organizations that probably exist in your home country, or you can create one. Internet Society does have some work regarding Internet security. Not so much locally, and I really, really would like that to be a little bit more of that. RSSAC, another advisory

committee, they have a caucus which you can become a member of and participate. The second part of the question is, how can you become a member of SSAC? That's the next step, the final step, of course, because that's the best thing. I'm just joking. How do you become a member of SSAC? Well, you contact us. You will get a questionnaire where you fill out your biography. You explain what your skillset is. If it is the case that your skillset matches needs that we have in SSAC, then you will be called to an interview. You do the interview. It's online. All of this is online. It will be about 30 or 40 minutes of interview by the membership committee. After that, they evaluate whether they should propose you to SSAC as a whole. Then SSAC comes to a conclusion and ICANN Board will make a decision to add you as a member. That's how it works.

ANAND RAJE: Okay, thank you.

PATRIK FÄLTSTRÖM: Thank you. Next question.

[MARK]: Good morning. My name is [Mark]. I'm a researcher from Brazil. I've recently written an article about IDN fishing and the dangers associated with that, like with the Armenian, Cyrillic, Greek

letters. The overall workflow of that project seemed really big. It's a big scope project. What I'm wondering is, how is that workflow like? How do you handle such a large issue?

PATRIK FÄLTSTRÖM: There are multiple things that goes on inside ICANN regarding confusability, which is what it's called. Unfortunately, there are multiple, and that's why we in SSAC have started look at this because we are going to see whether the fact that there are multiple by itself create an instability risks.

The most important work at the moment that is done, in ICANN, is something that is called label generation panels. There exist one per script group. For example, Armenian do have their work. Arabic script have their work. Note that I say script and not language. There are people that participate in each one of those groups that have skillsets for all languages using that script. For example, regarding the Arabic script, there are many participants from India, for example, because they also use the Arabic script. What they do is that they go through the characters that are allowed according to the IETF and try to see which one of those that are allowed should still be prohibited to not create confusion. When those panels are done with their work, all of those are merged in something that is a

consolidation mechanism that then creates the overarching, big table of characters that are allowed in domain names.

This is not easy, and the work is not done yet, but that work is only valid for the root zone and the contracted parties at ICANN. ICANN cannot force, for example, a ccTLD to limit the allowed characters to just that subset. For example, personally, I feel it's unfortunate that some country codes do allow, for example, registration or domain names which are emojis. It might look funny and nice and many users might want that, but unfortunately, smiley face, for example, is not even allowed in a domain name, according to the IETF standard.

Does that create a danger? I don't know. I just think it's unfortunate that there are even ccTLDs that are violating the standards that exist out there. ICANN is coming to come up with a good repertoire of characters which are safe, even though, for example, at the moment we are looking at the virama, which are used in some of the Indic scripts.

Then the second step, of course, is to make sure that everyone implements the standard, don't violate it. We don't have any protocol police.

SHAVKAT SABIROV: Shavkat Sabirov from NGO, Kazakhstan. I'd just like to ask about root certificates. From the first of January of the 2016, Kazakhstan implemented root certificates across the country. Could you suggest to GAC members where is right way and what we can do in this case?

PATRIK FÄLTSTRÖM: Can you explain what you mean by root certificate?

SHAVKAT SABIROV: If any end user will go outside of the country, they will get an invitation to install root certificates.

PATRIK FÄLTSTRÖM: Oh, okay, you mean for TLS.

SHAVKAT SABIROV: Yes. So for example, we've talked to Google, to Facebook. No one is going to accept root certificates from Kazakhstan.

PATRIK FÄLTSTRÖM: Okay. So what you're saying is that Kazakhstan has created a CA. They are hijacking the HTTP TLS connection. They request people to install their certificate, and they basically have a proxy

regarding the TLS so that they can do a man in the middle attack on the HTTP connection, right?

SHAVKAT SABIROV: Right.

PATRIK FÄLTSTRÖM: Okay. Yes, I am happy to bring this. This is a good example. Thank you very much. I think that the best explanation at the moment you get in that advisory I was pointing out that was the liaison to ITUD that talks about specifically this issue, regarding the liaison to ITUD that talks about the issue with an increased number of CAs and why that is not good.

We have another advisory, as well, that talks about these thing. After I answer the other two questions, I'll come over and give you my business card. I would like to send you pointers [with a little bit] more documents. Thank you for the information.

UNIDENTIFIED FEMALE: Bram, before you start, you and [Farizo], you're going to be the last question just so we can move on to our next speakers. As usual, if anybody else has any further questions for Patrik, he will always be happy to answer them. Bram, please go ahead.

[BRAM FUDZULANI]: My name is Bram. I wanted to find out on the documents of [N5] that you've spoken about, that you've written. I will personally have a look at it, but I wanted to find out, would you recommend – I know there are other countries that are still coming with policies to do with electronic bills and everything. An example is my country. We're coming up with an electronic bill that actually talks about the establishment of the certificate authority. Would you recommend that these countries, before implementing these policies, look at this document?

PATRIK FÄLTSTRÖM: Absolutely. What we say in this document, just because [inaudible]. It was good that I pointed it out, actually. What we say in this document is that we point out the weakness that exist in the way certificates are managed, compared to DNSSEC, which is much, much better. The problem is that any certificate authority can create a certificate for any domain name that exists in the world. That means that the higher the number of certificate authorities we have, the higher the risk that one of them will make a mistake. Just because you create a certificate authority in your country, that doesn't mean that they can only create certificates for organizations in your country. It's enough that only one certificate authority make a mistake, and there's no security whatsoever regarding certificates in the world.

There are many big certificate authorities; for example, the certificate authority in the Netherlands that issues certificates for the Netherlands government. There was a break in there, and people started to generate false certificates for all organizations in all countries in the world. In DNSSEC, on the other hand, if your ccTLD is signing your TLD, it can only make mistakes for your ccTLD. I'm coming from Sweden. The .se registry, if they make a mistake, they can only create problems for organizations in Sweden. That's the big difference. I don't want Sweden to have a certificate authority that can destroy things in your country. It's enough if my registry, .se, can destroy DNS, but only for Sweden. That's it. So please, read this document. We recommend launching and using DNSSEC and deploying a standard that is called DANE that is developed in the IETF. Thank you.

UNIDENTIFIED MALE: Hi. This is [inaudible] from Brazil. Do you need to be a technical guy to work with you guys at the security? Just to do an example, because I am not a technical guy, I am not from the technical background, but I work for a security company and I go to lots of events and so on. What I try to do is just to put things together.

PATRIK FÄLTSTRÖM: No, you don't have to be technical. It's actually the other way around. We need people, as I said, with all different kind of skills. One of our most energetic members is a lady from Australia. She's a lawyer, retired from the Air Force. But you must be able to discuss and understand and be able to participate in technical discussions, which means you need to be really good at what you are doing, and you must be able to talk with others that are not like you. So no people inside SSAC have the same skillset. So you're a good person to be in SSAC if it is the case that you are able to work with others. We don't need two people with the same skillset.

UNIDENTIFIED FEMALE: Thank you so much, Patrik, for your presentation and for answering our questions. I know that there are probably a few more in the room, but if you have any more for Patrik, please feel free to pull him aside any time you see him. He is always happy to answer questions. He's answered plenty of mine. With that, let's thank Patrik for his time this morning. Thank you.

Our next speakers are here. Brad, if you want to go ahead and come up and I will put your slides back up.

To my right is Brad Verd, and to my left is Liman. They are going to talk about the RSSAC, and I am going to stop and let them go.

BRAD VERD: Good morning, all. I am Brad Verd. I am the new Co-Chair of RSSAC. To my left over here is Liman, the former Co-Chair, which I think most of you know probably know or have met at one time in this same venue. This is my first time here. Hopefully I can fill the same shoes or live up to Liman's precedent that he's set here. I have a lot of slides, as I obsess about this stuff, so I will try to go as quickly as possible through them and give time for questions at the end.

What is RSSAC? Root Server System Advisory Committee. We have a very narrow scope, but it is a key part of the DNS ecosystem. We advise the ICANN committee and Board on matters relating to the operation, administration, security and integrity of the root server system. As I said, very narrow, but key.

We communicate on matters, as I stated, in relation to the operation of the root server system to the ICANN community. Also, we advise on the administration of the root zone itself.

Some of these slides I completely plagiarized from Liman. He's here to keep me honest.

LARS-JOHAN LIMAN: Everything is my fault.

BRAD VERD: No, no, no. I take full credit, but he's here to keep me honest and keep me on track here. These are more details into what we actually do. We engage in ongoing threat assessment for the root server system and report back to the Board on that. Any specific questions that the Board might have regarding the root server system, obviously we will address that. We make recommendations on that, and then obviously we report to the community on our work.

These are different areas that we've participated in. Obviously, the stewardship, accountability work. General meetings. I think we have a public meeting later today. As I stated earlier, we work with the Board, and then obviously we're engaged on the NomCom.

We have a large procedure stock, much like all the ACs. With this, we track everything, but RSSAC itself, we keep track of the different work items. We appoint different work parties from the caucus. You guys heard Patrik earlier talk about our caucus, which is experts in their field who are helping us advise the Board.

The RSSAC will develop the different work parties based upon the questions or the work that is being asked upon us. Then based upon the output of the caucus, we'll take formal action on

the results of those work parties and make publications. Obviously, we meet at ICANN meetings and we have teleconferences monthly.

We appoint liaisons and we accept liaisons, so we have incoming and outgoing liaisons within RSSAC. Some of those include liaisons to the Board and liaisons to SSAC. Again, touching on Patrik earlier, we also have liaisons from the current root zone partners that include NTIA, IANA, and VeriSign. Then obviously we create processes and procedures, as documented in RSSAC 000, which we just completed a large edit of yesterday.

These are the Co-Chairs. As I stated, I just started and Tripti is in her second year of her tenure. She was unable to come to the meeting and sends her apologies. Here's a touch on our liaisons. I already touched on this just a moment ago. You can see them all listed here. Like I said, I got lots of slides.

The caucus. This is really key. The caucus is made up of a pool of experts. Broad spectrum, varied backgrounds, lots of skillsets, much like Patrik referred to. We need all different views, all different talents, to help us get our work done and make sure that it is complete. We focus on transparency with everything we do. We try to be as open and try to publish everything. Again, we try to be a results-driven group. We have leaders of the work

parties, and we set pretty aggressive deadlines to get to an end of the work.

Caucus members. All the members of the formal RSSAC committee are members of the caucus. As I stated, the caucus is made up of people from the community. At the end here, I think there's a link that can show you how to apply. You're quickly vetted and then added to the caucus. Then you can start working on any number of our different work interests.

To be a member, you have to make a statement of interest: who you are, what you do, what your interest is, why you want to be a member of the caucus and what value you would be bringing to the group. The caucus gets all the credit for the work. The formal committee doesn't, so if you work on any of the documents or publications, you get the credit for it.

We try to scope the work items as clearly as possible. We'll write a problem statement or a scope of work and we'll submit that to the caucus and identify a work party, identify a leader, and as I said, follow our quick process of trying to turn stuff around. It's key to note that we do include dissenting opinions in our documents, so, again, being as transparent as possible.

This is our membership committee as it stands today. This document will probably change in a week because our Chair, Kaveh, just finished his tenure. There is a new person. There is a

name to put in there, but it's not official yet, so that's why this slide isn't changed. The membership committee is made up of three people who review all the applications and vet the people applying. I am on the membership committee, just a, I don't want to say observer, but I don't get to vote. I just get to make sure I see everything and watch everything going through.

We touched on this. The membership committee, they do outreach in the sense that they're sharing how to get in touch with us, how to apply, how to become a member. They do manage the membership as people apply, and they'll be updating RSSAC, the formal committee, as people apply and share those applications with us. Then obviously once somebody is vetted, they'll be notifying them about being a member.

Here you go. This is the e-mail address. If you notify this e-mail address, the membership committee will get back to you with the formal form you have to fill out with the SOI. Then we follow our process that I've already stated. Quickly, sorry.

When do we meet? This is the membership committee that I'm speaking of here. The membership committee meets every other week. Again, they review the applications and go through [approved] candidates. They also review the existing membership, just to ensure that people are engaged, and make

recommendations to the committee if they see anything that needs to be brought to their attention. It says here if somebody's willing to contribute, then we're very happy to have them.

Again, a little bit more of the same. Here's how to join. RSSAC itself, we have regular calls. We have calls with the caucus also, and there's a caucus meeting every other IETF meeting. I would say a majority of our caucus members are technicians that play a large role in the IETF, so that is a quick way for us to engage with them on their grounds. We have RSSAC meetings here at ICANN that the caucus can certainly attend. Then we have caucus meetings at the IETF, and then we have phone calls also.

RSSAC, we review all the composition out of the caucus. There are some links to some documentation here if you want to go read.

Here's some of the work that has recently come out of the caucus. RSSAC 001 is not one that I can take credit for getting done under my watch, as this has been done for some time. It has been held up in our publication process, as we thought the document that this document was superseding or taking over its role was an IAB document. Published in concert with this is a new IAB document that basically defines protocols that the root servers need to serve. We pulled that out of the service expectations of the root servers. For RSSAC in 001, we published

the other half; basically how to serve those protocols as defined by the IAB and what those expectations are around them. By getting the IAB document published, we were able to get this one finally published. That was more of an administration piece that had it held up.

002 has been published for some time. This is a second version of 002. This document is a measurements document. In this document is defined a number of measurements and metrics that each root server operator is supposed to gather and publish to make available to the community. This one was a minor modification based upon operational experience, some things that we had to tweak in the document to make it fit the real world. In addition, we've had two public statements since the last ICANN, one of the CCWG proposal, and one is a workshop report. RSSAC, for the first time, held an off-site workshop where the formal committee was locked in a room for a number of days. We talked through a number of root server system topics; a didn't-let- people-leave type of thing. There's a nice report recap of the topics we covered and some of the outcomes.

Current work that's ongoing right now. There's a work party happening for the root server naming scheme. This one: the DNS ecosystem has evolved over time. The root zone continues to evolve over time. What this work party does is they're questioning the status quo naming of the root servers

themselves. We're trying to see if there's a better way to do it. They are looking at possibilities. They're supposed to be making risk analysis of those changes and then making a recommendation to a formal committee.

002. I've already spoken about it. This will be version three that's currently underway. This document is a living document. As we operate the root server system, we learn more and we continue to identify things to monitor the health of it. Version three is a pretty substantial change with a number of new metrics that each of the root server operators will be needing to collect and publish for the community.

Lastly, the history of the root server system. I'm really excited about this document myself. Through all of our work and all of our workshops and discussions, it occurred to us that the history of the root server system was not memorialized anywhere. It was in a lot of people's heads. It was in hallway conversations, but it wasn't written down anywhere. So we took the opportunity to collaborate with root servers, both past and present, as well as a lot of technologists that you've probably seen here in this meeting who were involved in the root server system in the early days, and essentially documented the entire history of the root up to present day. It's a wonderful read, and I myself learned a number of things that I was not aware of. All

three of these documents are, like I said, underway, and we hope to have them published before ICANN 56.

001. I'll just really quickly touch on this. This is the root server expectation document that I touched on earlier. This is more details about 001. As I said, it's root server expectations. The intended audience of this is obviously the DNS community and the root server operators on how they should perform. A number of topics that are covered in this document include the infrastructure, the accuracy, availability, capacity, and so forth; really key stuff for running critical infrastructure such as the root.

002 I know I said was our metrics document. This was triggered by the new gTLD program. As people wanted to monitor and watch the health of the root as new gTLDs rolled out, RSSAC 002 was created and published. As I stated earlier, we continue to make modifications to it.

Here's current metrics that are in 002 right now, which is the latency of the distribution of the root, overall size of the root as it changes and grows, number of queries, query response size and distribution, our code distribution, and number of sources seen. With version three, we'll see more topics here.

This is an example from the K-Root operator of daily traffic. What you see there is a graph of queries per second, and all the

colors represent the different nodes that K-Root operates around the globe. This is just an example of one of the things you'll find from the 002 metrics.

Where do you go find those? All the root servers collaborate quite often, quite well. Their home, so to speak, is root-servers.org. Not .net. This is root-servers.org. This is a website that can show you where all the locations of all the roots are, all the instances around the world, which is somewhere around 500 instances located around the world. Also on here are the 002 metrics that are supposed to be published on a per letter basis. A great resource if you want to go there.

I guess that I cruised through some of that. I can take questions and comments. I think I bought some time back.

GANGESH VARMA: Hi. My name is Gangesh Varma. I work with the Centre for Communication Governance at the National Law University in Delhi. I'm from a policy and a law background. My question's more general to do with root servers. We hear a lot that there is a strategic advantage to the main root server being located in United States. How much of that is really true, and what is the advantage of moving it out?

That's one. Two is, if you could make me understand, how does having an instance of a root server in each country help in management of Internet traffic? I'm sorry. This is very rudimentary, but yeah.

BRAD VERD: The first one, as I stated – I'll go to the map again. Let's see if I have another map here. Here is root servers today. This is probably maybe a month old. As you can see, the root server system is not centrally located in the United States. It's distributed all over the world, and every instance is identical. Of the 13 letters in the root zone, they all serve the same data. They all provide the exact same answer. So there is no difference between them. The benefit of having them distributed like this is all about latency to the user and minimizing latency.

To your second question, as far as how they control traffic, they don't. Routers control traffic. All the root server does is they provide answers. In most cases, just to emphasize this, we don't see most of the traffic. Caching resolvers is the mechanism between you, the end user, and us, the root. Those will cache our answers and provide those answers over and over again as that cache expires. We only see a fraction of the actual queries at the root level.

GANGESH VARMA: Thank you very much. I just have a quick clarification. All the root servers are mirrors of Root A? Could you explain that?

UNIDENTIFIED MALE: [inaudible]

GANGESH VARMA: Okay.

LARS-JOHAN LIMAN: Yes. I'm Lars Liman. I work for NetNod. We operate I-Root. Can we please stop this notion of mirrors? Can you please just forget that word? There is no such thing. Each and every one of these 500 copies is a server on its own, and it has an IP address. The different servers have different IP addresses, and there is, in total, 13 IP addresses and almost 13 IPv6 addresses, as well. Each server stands on its own feet. It does its own thing. Now, it has to be updated as the root zone is changed, so it gets feed from somewhere.

Depending on which IP address the server has, that's connected to a letter. That letter is just an implication of the IP address and the organization that operates it, but they all receive the same updates. They all receive the same information, and the letters are only there to indicate which one is which IP address. So

there is no value in the letter. A is not better than B. You could argue that all the instances are copies of all the letters. It's all the same. It's just a matter of who is actually forwarding the updates to that server, but it's the same updates.

UNIDENTIFIED MALE: Hello. Good morning. My name is [inaudible]. I have a basic question. You mentioned about the root server naming system. We basically see the A, B, C, likewise, the one English letter [inaudible]. Is that any reason for that, to put English [inaudible] rather than the name or something like that?

LARS-JOHAN LIMAN: Yes. There is actually a very, very detailed technical reason for that. The names of the root servers, the host names of them, used to be totally different. Our server used to be called nic.nordu.net 15 years, 20 years ago. But by changing the names of all the servers into the same domain name, root-servers.net, we can take advantage of the algorithm and how is the data put into the DNS packet in the queries and responses because there is a way to compress the information that works very well if everything has the same domain name. If the domain names are different, you cannot push them into the packets as efficiently.

By naming them in the same domain, we could make room for more servers. There were only nine. By changing the names of them, we could expand that to 13, so we could add more servers back in the 1990s, when that was necessary because in the 1990s, we didn't use Anycast. We had no 500 servers then. We had 13 machines on the network that served the entire Internet. That's gone. That problem is gone. We now have 500, so the need to expand that list has disappeared from a technical standpoint. We don't need more letters. We will need more instances, and we do deploy more instances all the time, but that technical problem disappeared when we started to use Anycast. We could address the problem 20 years ago by renaming them.

We also have this work party that looks at the names of the root servers to see: is this thing with letters and root-servers.net, is that optimal? Is that the best thing we can do? What happens if we change it? What happens to the DNS, the signatures of records, if we change these things? There is an investigation going on to see whether this is the best thing.

UNIDENTIFIED FEMALE: We have two more questions and that's about all we have time for, but I'm sure that if everybody has time, they can take your question in the corridor. Here.

ANAND RAJE: I'm Anand Raje from India, first time Fellow. What are the expectations of a new member who joins caucus with the current works in [inaudible] right now for root server operations. If anybody wants to join you guys, what can be the expectations and technical background the members would have [inaudible]?

UNIDENTIFIED MALE: Great question. We actually spent a lot of time talking about this yesterday in the committee. I think I've stated, we're looking for diverse backgrounds, diverse skillsets. As far as engagement, I think being willing to engage is key. It is a technical group, so sometimes it can be very intimidating for people who aren't, but everybody brings value. It's just identifying what that value is. We are in the process right now of defining a number of different roles for the caucus, or really for members of the work parties, which would include work party leaders, people who actually review the document. Maybe they don't produce the output, but they'll be reviewers of the document.

Also, we've talked about creating a role, just somebody who can audit the work party or be an observer so that, over time, you engage with the work party. You're on the calls. You're listening. You're learning. Then over time, you basically build up some of

that skillset or that knowledge of how things all work together. Then you start adding value. Does that make sense?

ANAND RAJE: Yeah.

HASHIM NOUMAN: Hashim Nouman from Pakistan. My first question is, is the RSSAC involved in any way when the ICANN staff is helping deploy the root server instances in different corporations around the world?

UNIDENTIFIED MALE: I think you're referring to the L-Root operations, which is one of the 12 organizations that operate root servers. ICANN root operations, they have a member on the RSSAC committee, and we are engaged with them on that sense. They're a member of the committee, and they provide input as needed for advice to the Board. But no, RSSAC is not involved in the day-to-day operations of any of the letters on how they operate or deploy servers around the world.

HASHIM NOUMAN: My second question is, we're looking forward to the IANA transition, but most of the root servers are operated by

American organizations, so is that a topic of discussion, for example?

UNIDENTIFIED MALE: I think the thing to focus on here is that 500 instances around the world, they're actually operated in the different countries by your Internet Exchanges, by different people who volunteer to host them and support them. The actual operation of keeping the servers alive is done by the 12 organizations, which are located around the world, also, in both the AP and European Union, also.

HASHIM NOUMAN: Thank you.

UNIDENTIFIED FEMALE: Last question. Is it a quick one?

UNIDENTIFIED MALE: [inaudible] from Morocco. I will ask my question in French.

It is a technical question. It is a technical question about this server or these servers. Since they have the same information, do they have the role as a backup for the servers, and does the end user receives the answer from the closest server or from the fastest server? That was my question. Thank you.

BRAD VERD: I'll try to answer that, and maybe Liman, you can pipe in. Again, as I stated earlier, the root servers don't define where the traffic goes. That is handled by BGP protocols in the routing tables. So to answer the question of does the closest one get the answers, that depends on the network you're on and how they manage traffic. The root servers have no control over that. It's all done via BGP. They are, as I stated earlier, all identical, so if you can't reach one, you reach the other, you'll get the same answer.

The root zone is signed, can't be modified, isn't modified by any of the root server operators, so you can cryptographically validate that you're getting the right answer. I think I answered your question there. Liman?

LARS-JOHAN LIMAN: If we continue into DNS queries and the Anycast model, the model is designed so that you will reach the nearest server, but nearest is not necessarily decided in kilometers on the map. It's the nearest one in the networking terms. That's back to what Brad said. It's the routing protocols on the network. They are the algorithms for choosing the best path to any address on the entire Internet, and here, we are just servers like any web server.

The algorithms for selecting the path to a certain IP address, it's very precise. It doesn't always yield the geographically closest one, but maybe that's not the best one because if you have a very slow network link going to a server that's nearby and a very fast link going to a server that's further away, maybe it's better to use the fast link. So you can't really see that beforehand, but by deploying as many instances as we can, we try to take that problem out of the equation. But don't be surprised if you reach a server that, to you, looks like a strange place, because that's probably the best place from a networking standpoint.

For instance, here, I checked if I tried to reach I-Root, my server. It's in Belgium. Okay, so that's probably the best and fastest way to get to I-Root. That's how the network works.

UNIDENTIFIED FEMALE: Thank you very much to both of our speakers from RSSAC this morning. That was incredibly informative. If possible, could you e-mail me these slides so I can share them? Thank you.

Our next speaker is here, so if there are any other questions – I am sure if you have them – you could stop either of these gentlemen and ask and they would be happy to answer them for you. Thank you very much.

Our next speaker is from the Business Constituency. Chris Wilson? Oh, here he comes. I'm just going to let you take the floor since we're running a little bit late. Yes, please.

UNIDENTIFIED MALE: [inaudible] Jimson.

UNIDENTIFIED FEMALE: Of course, of course. Hi, Jimson.

JIMSON OLUFUYE: Hi.

UNIDENTIFIED FEMALE: How are you? Very good?

CHRIS WILSON: Good morning, everyone. My name is Chris Wilson. I'm the Chair of the Commercial and Business Users Constituency within ICANN, or really specifically within the Commercial Stakeholder Group, which is a subset of the GNSO policymaking council here at ICANN. I'm a new Chair. I joined just in January, and I'm joined down to my left here by Jimson Olufuye, who's our Vice-Chair for Finance and Operations and Outreach for the BC. When I say

"BC," that is the acronym we use for the Constituency, so it's easier to keep track of what we're talking about.

The BC. I just thought maybe it would be helpful to give an overview of the Constituency, tell you a little bit about what we do and what our role is within the ICANN community. Then I'll be happy to take questions, and I'm going to be also turning it to Jimson. He can provide some additional insight for everyone as to how we engage in outreach. We're always trying to grow the membership, so Jimson can provide some insight into that.

I don't have any slides, so I'm just going to be speaking to you informally here. The Business Users Constituency consists of a variety of companies and associations that consist of companies that do business on the Internet. We're not talking about registries and registrars. They have their separate constituencies and stakeholder groups. This is really businesses that utilize the Internet for commercial purposes. Maybe they own websites or they simply do commerce online and care deeply about a safe, secure, reliable Internet and Domain Name System that provides confidence to their consumers and their businesses.

I work for 21st Century Fox, the media company, and we actually approached our engagement with ICANN in two different ways, if you will. One, on the BC, we care deeply about making sure that the Internet is safe for distribution of our content; our TV shows,

our films, etc. Then secondly, we are now sort of a registry operator because we own the new gTLD, .fox. We care also about making sure that's an effective deployment, [inaudible] through the BC, but actually we're also a member of the Registry Stakeholder Group in that regard.

We're just an example of one company. It's not just large companies. We have small companies, medium companies, and companies from not only North America but Europe and Africa. We're hoping to grow more in Latina America and Asia. That's something that Jimson can talk about in just a minute. But we're also made up of trade associations that consist of companies that do business on the Internet.

Our driving force, if you will, is our policy engagement. We have a policy Chair. His name is Steve DelBianco. He's based in Washington, DC, and he coordinates all of the comment writing that the Business Constituency does for feeding into all the policy processes that take place in ICANN. There's many, many opportunities for the public and the ICANN community to provide comment on policy matters that are important to businesses, but also to end users, etc.

The Business Constituency last year, in 2015, filed I think over 40 public comments on policy issues, which made it the most engaged constituency of any other within ICANN. That's, in part,

because we have so many companies as members, and also a lot of various business models. So there's always at least one or two parties that are interested in filing a comment on some type of policy issue that comes across the radar screen, if you will.

We expect that will probably continue in 2016, and probably perhaps even in the future. I know when ICANN, just a few years ago, launched its new gTLDs, that opened up a whole other world of policy interaction and engagement for the Business Constituency because companies like 21st Century Fox and others like Google, Amazon, Facebook, etc., who are all members of the Business Constituency, saw potentially new business models and new opportunities there and wanted to provide comment and engagement within ICANN on how best to roll out the new gTLD space.

Of course, with that, there are policy issues that come down the pike, including how to protect one's brand, one's trademark, etc. In some cases, as you'll hear later on, there's the Intellectual Property Constituency. They deal very specifically with intellectual property matters. We are concerned with those too, but we are a broader constituency in that our members aren't just focused on intellectual property matters. We're focused on a variety of other matters that affect businesses.

Jimson, you can correct me. I think we have about 100 and … How many members do we have? 100 and …

JIMSON OLUFUYE: 62.

CHRIS WILSON: 62. Okay. 62 members, but growing.

UNIDENTIFIED FEMALE: It's going to be 100 soon.

CHRIS WILSON: Indeed. Maybe I just think there's 100 sometimes.

[JIMSON OLUFUYE]: If you factor in the association, so that's [inaudible]

CHRIS WILSON: That's true. Okay, so I'm not totally wrong. We just added three new members, frankly, in roughly last six months. [inaudible] than that, we added Symantec from the United States, MicroBoss Technologies from Nigeria, and we're very soon to be adding Louis Vuitton from Paris, from France. So just to give you

a sense of just the wide range of type of businesses that are members of the Business Constituency.

At this time, it may be helpful to turn it over to Jimson. That's a good opportunity to segue to you, and you can talk a little bit about the outreach and the growth of the BC. Thanks.

JIMSON OLUFUYE: Thank you very much, Chris Wilson, our Chair in the BC. My name is Jimson Olufuye. I represent the Africa ICT Alliance in the Business Constituency. A little about Africa ICT Alliance. It's an alliance of companies, ICT associations, organizations in Africa. We have companies, associations, and organizations from about 25 African countries, started in 2012.

We have business people and we converge in Africa, AfICTA, for our interest in Africa. And through AfICTA, we have come to the BC because we are doing business with the Internet. In fact, my company is Kontemporary, and we build data centers. We also help our clients [with what to write] and also consult for the World Bank and some ICT [inaudible] Nigeria. We are very much interested in the security, stability, and resiliency of the Internet. That's why we're highly committed in the whole ecosystem.

Prior to us joining the BC – that was 2013 –most companies there were North America and a few from Europe. Right now, we

have about five companies from Africa in the BC, and also from Asia. We've been able to do outreach to Asia, so we all must welcome [inaudible] in the business sector. Welcome. Interest, again, is making sure we add our voices to the policy direction of ICANN and the global stability of the Internet. IANA is a major point of our action, commitment and contributions, so we follow it and we support its continuous maturity and [they] still wish it to be fully [transitioned].

I just want to conclude by saying that the next phase requires everybody to be engaged. We all welcome fellows to ask questions, to be engaged, and ensure that your voice is heard. This is a place whereby, as is known, the multi-stakeholder model approach is used in governance. We're all welcome to [air] our voices, and together, we'll make things [inaudible] for business.

We have some means of outreaches. We publish a newsletter at every of our events. This addition is in English and French, and it's also available on the Business Constituency website. That is bizconst.org. With that, I'll stop here.

CHRIS WILSON: Thank you, Jimson. Frankly, I'm very happy to be here to speak with you al. If you take a look at our newsletter, I wrote an initial introduction article, if you will, on the front. The premise of what

I wrote was that ICANN is either at or very near becoming a young adult in its age. It's been around since roughly 1998. It's approaching its 18th birthday, which certainly in the United States and elsewhere is when you really become an adult and you start going out on your own and adding more responsibility. Your parents send you off on your way.

ICANN is at its stage right now in its trajectory, obviously just because it's been around now for almost 18 years, but also because I think as was referenced earlier, the IANA transition's occurring. The legacy oversight of the US government will be most likely coming to an end here in the next six months. Therefore, really the ICANN community as a whole is expected to take on perhaps a little more responsibility.

The importance of that is we need more members. We need more voices, not whether just within the Business Constituency, but within ICANN generally because it's now the community's, ICANN, truly. It's wonderful to see so many people here this morning, relatively early, thinking about these things because from the Business Constituency's point of view, it's very important for us to grow our membership so we can continue to leverage our voice within the community as ICANN continues to grow and mature, not just now, but ten years from now, 20 years from now, however long. I just wanted to make that point because it's important for you all to be here, and hopefully you

continue to remain engaged. Some of you have been already or some of you who are alumni, but others that are new, it's nice to see you continue this engagement for future meetings and future times.

With that, I'm happy to take questions and Jimson's happy to take questions for folks that may have about how the BC operates and what we do.

UNIDENTIFIED FEMALE: Good morning. Hello. Good morning. I'm [inaudible], and I am working in an ISP company. My company is [inaudible] We run a business on the Internet, so we do like telecom and domain and it's the mobile. How do I or my organization fit in as a member? I join as my organization has to be present there or as an individual? If you could more elaborate on this. I am from Asia Pacific, so my country can be part of the Business Constituency team [inaudible] policies. If you could elaborate more on this a bit more. Thank you.

CHRIS WILSON: Sure. Two quick points. One, you may or may not. There is actually a specific constituency called the ISPCP, the Internet Service Providers and Connectivity Providers Constituency. Then there's also, of course, our constituency and then the

Intellectual Property Constituency. In some cases, each company just determines which constituency best represents or best fits their interests and so forth. There's overlap in that case. Now and even in the past, we have ISPs who are members of the Business Constituency. I just wanted to make clear. You may hear from the ISPCP too.

UNIDENTIFIED FEMALE: Tony was [inaudible]

CHRIS WILSON: Okay, great. Generally, the company joins the constituency and then designates a representative to be the person who engages with the rest of the group. In my case, I work for 21st Century Fox. I am the company's person who is on the constituency.

I think the preference is that each company designates one person so it's easier to communicate and know who you're speaking with, rather than three, four, or five other people. That's not to say that I don't engage with my colleagues and tell them what's going on and so forth.

The best way to engage is the company joins. There are some membership fees. I think the highest level is about 1500 euros. Is that right? It's based on company size, associate size. The most expensive is 1500 euros a year. That helps us fund outreach

because we're able to sponsor at least two travelers to ICANN meetings who couldn't otherwise afford to come to an ICANN meeting because we want to be able to have as many people from our constituency attend the meetings themselves.

A long way of answering your question. There's a membership form on the website, so if you're interested, again, go to bizconst.org and you can find information over there. Maybe, Jimson, if you wanted to provide any more?

JIMSON OLUFUYE: Yeah. Just in addition to that, in order to encourage membership from developing countries, we're able to advocate a reduction in fee, and the BC granted 70% discount on the entry fee for members from developing countries. Basically it's is about 383 euros. Apply 70%, so about 100 euros, thereabout.

CHRIS WILSON: Yes. Thank you.

MARK DATYSGELD: Good morning. I'm Mark Datysgeld, a researcher from Brazil. My question regards: how does the Business Constituency deal with the expectations of members regarding content control? I mean that beyond the scope of the IPC because I'm sure businesses do

not have this clear distinction of the functions of ICANN. I'm sure you've probably, in your outreach efforts, tried to explain that as best as they can, but how do you deal with those expectations?

CHRIS WILSON: Very good question. I think the BC is guided by some core mission points. We've mentioned that the biggest is that we all care to make sure that the Domain Name System is safe, secure, reliable, and instills consumer confidence. We don't get too engaged in the notion of content control, other than we support policies that ensure freedom of expression and ensure the seamless, if you will, flow of information on the Internet. That's important to all businesses, whether it's my business or any other, frankly; as uninhibited as possible the flow of information.

Obviously, we have companies that have different business models. So there's always work to be done to find consensus on particular policy issues, but I think we all respect and appreciate ICANN's limited mission within the broader Internet governance landscape, if you will. I think I can safely say that the companies within the Business Constituency respect that. We advocate positions that attempt to keep the Internet as open as possible. Does that answer your question a little bit? I don't know. If not, no – okay.

JIMSON OLUFUYE: Very just quickly add that, as Chris said, there is [inaudible] requirement for responsibility [on] what everybody does because according to the Geneva Convention of Human Rights, the freedom we have offline is the same as online, where this responsibility is attached to the content we present on the web. Even internally in the BC, we have a list. You are responsible for what you put on the list, and it has to be responsible and add value.

FABRICIO PESSOA: Hi. I'm Fabricio Pessoa from Brazil. Two questions, actually. The first one is, just making sure that, if I understand right, you guys are more into working towards writing policies or making sure that the policies that are already written or that they are being developed are in accordance to the business interests. This is the first one.

The second one is that, since the members are companies, do you have only one person that is representing the company within, or can one company can have more than one person representing?

CHRIS WILSON: Thank you. To your first question, we don't write ICANN policies. We are just one constituency of a variety of others and

stakeholder groups that provide input into the policy development process. The GNSO, the Generic Name Supporting Organization, which is one of the broader chartering organizations within ICANN, is responsible for policy development. We are a subset of that broader group. A variety of other stakeholders within ICANN also provide – it's a public comment. These are public comment periods, so people are offering – even people, frankly, from outside the ICANN community can provide comment on policy matters. They don't necessarily have to be a member of a constituency or a stakeholder group.

We are just one entity within the ICANN community and the public generally that provides input. We just provide the business voice on what we think would be a good policy. Sometimes our voice is heard. Sometimes it's not. Sometimes the suggestions we make are not incorporated in the end, but we all have an opportunity to provide input in that regard. We don't draft policy. I'm sure some folks would love to, but we don't have that power. We like to think we have a strong voice to comment on policy.

Just to your second question, each company will designate one person to be the primary point of contact within the Business Constituency. That's not to say that other people within the company can't participate or receive e-mails from us, etc., etc.,

comment on things, because obviously companies have a variety of different experts and knowledge. We wouldn't inhibit that engagement, but if there ever comes a time when we needed to vote on something, for example, then it has to be that one person who's been designated to do that on behalf of the company. It's as much of an administrative efficiency as it is anything else.

Frankly, just speaking from my company, I know we have at least two or three other people. I have one colleague who manages our .fox business, and she's very much engaged on the BC. I serve as the point person on the company, but she provides input and so forth. That's just an example, but that's how we operate. Thank you.

JIMSON OLUFUYE: Also quickly, AflCTA ,too, as the designator representative, we have two other people that are there in AfICTA. It's quite possible that, based on your model, your business activity, you have some members being in the BC and ISPC. You have to resolve that. You can only vote in one of the constituency. I find most of the time some people choose to just be in the BC and vote in the BC. Once they have voter membership somewhere, they cannot vote.

UNIDENTIFIED MALE: Thank you for an [intellecting] thought. My question really is to the IANA transition. As one who sits on the Business Constituency, BC, and interacts most of the time with business community, I want to know how your community, the business one, sees this transition, and how the process, after it is finished and the IANA transition is completed, will impact the businesses on the Internet and off the Internet. Thank you.

CHRIS WILSON: That's a fantastic question. The Business Constituency is very much supportive of the transition. Our particular focus has been on the accountability work reforms that have been undertaken in conjunction with the literal transition of the IANA functions themselves.

The Commercial Stakeholder Group – again, which we're one third of – has a representative on the Cross-Community Working Group on the accountability. His name is Steve DelBianco. He also happens to be our policy Chair. He's provided a voice into that work. We, the Business Constituency, support the accountability reforms that have been proposed and that will most likely be accepted tomorrow by the ICANN Board and then sent to the US government, in addition to the IANA transition proposal itself.

We think that, assuming that the reforms are put into place and implemented properly – and there's still a lot of work left to be done in that regard – that it will be beneficial to the community, to businesses, and to the Internet generally. I think there's been a lot of good, hard work done, frankly in the last almost year and a half now since the real work began – the announcement of the transition occurred almost exactly two years ago – and I think a lot of effort has been put into ensuring that ICANN is ready for the next generation.

So the BC is very supportive of the proposal. We think it meets all the requirements that the US government has laid out for a proper transition. We're optimistic and hopeful that the US government will approve it, and we'll begin a new era.

UNIDENTIFIED FEMALE: Good morning. Since the constituencies have members from all kind of businesses, is there any kind of ongoing activities where businesses are discussing any kinds of issues that arises in different parts of the regions, or is this done in informally matter in terms of one-to-one conversation?

CHRIS WILSON: Thank you. Good question, as well. The Business Constituency actually holds a bi-weekly teleconference with all members who

want to participate. We also set up an Adobe chat room just like this. Usually we do have an agenda of items to discuss, but we also have an opportunity to allow any member to raise an issue that's important to that member and discuss it. If there's enough interest from the membership, if it's a policy issue, we can try to provide comment on it. If it's another issue within ICANN, then we can try to talk to the right people within ICANN to get an answer or resolution, no matter what the issue is.

Also, we love to hear from what people are seeing and hearing in their region of the world. It helps better inform the overall policy discussion for us. Most of the work we do really is the policy comments. We use bi-weekly calls. We also have an e-mail list, so people can always converse via e-mail at all times, whenever they want. We all can engage and have discussion via e-mail, but we also realize that we have a bi-weekly call. That gives people a regular opportunity to comment on our work.

JIMSON OLUFUYE: Also, all our policy outputs, they're on the website. For importance to developing countries, the issue of cybersecurity, a lot of allegations of hacking or blacklisting, it's a serious issue in developing countries. I do have opportunity to raise that at our meeting, and that brings in the security guys to come and brief

us, to let us know what they are doing and support they can provide.

UNIDENTIFIED FEMALE: We have a question in our chat. “Are all regions and/or countries represented in the constituency?”

JIMSON OLUFUYE: Yes. I can say that. We have representation from North America, from Europe, from Latin America, from Africa, from Asia, and from Middle East. It was not so before, but over the last three years. We have representation across, but we need to grow it.

UNIDENTIFIED FEMALE: Thank you for that. We don’t have time for any more questions on this topic. Our next speaker is here. We just went over. We’ve only got actually about 15 minutes left in this session before the next session starts, so I want to thank Chris really quickly for his time. Really quick. If you have any more questions, I have Chris’s contact information, and I will share it, of course. Jimson, I have your contact information, as well. If you see Chris or Jimson, I’m sure they would be happy to answer any questions you have.

Next, to do a quick overview of the Intellectual Property Constituency is Greg Shatan, who’s the Chair. He’s going to talk

quickly. If you're free this evening, you're welcome to come back to our afternoon session, if you'd like.

GREG SHATAN: Good morning, everyone. I'm from New York, so I can talk very fast. I understand that some of you may not be native English speakers, so I will talk a little slower, just give you a little less information. Here's some information on paper in our brand new brochure. Yes, it's not eight pages like the Business Constituency, but who needs eight pages to explain themselves?

In any case, the Business Constituency and the Intellectual Property Constituency are actually very complementary and good colleagues in the multi-stakeholder process. The Intellectual Property Constituency is unique in that we are both representative of a group of stakeholders and also represent an expertise in the ICANN multistakeholder community. The role of the Intellectual Property Constituency is to represent the interests of intellectual property creators, owners, and distributors, and also to represent the interests of consumers who rely on intellectual property to make safe choices; for instance, in the use of trademarks and also copyrights, as well.

The Intellectual Property Constituency was one of the original founding constituencies of the Domain Name Supporting Organization, which has mutated into the GNSO. We're part of

the Commercial Stakeholder Group, along with the Business Constituency and the ISPs. That's, in turn, part of the non-contracted parties house of the GNSO. We are very active across all the working groups, both the GNSO Working Groups and the Cross-Community Working Groups. I personally am a member of the Cross-Community Working Group on the IANA stewardship transition and also the Cross-Community Working Group on enhancing ICANN's accountability.

UNIDENTIFIED FEMALE: [inaudible]

GREG SHATAN: Yes. So I've been busy in that regard. The Intellectual Property Constituency has both organizational members and individual members from many different countries of the world, every continent except Antarctica, and we're working on that. Our members are both organizations such as the International Trademark Association, the Intellectual Property Owners Association, [Marks], ASIPI, which is the Latin American intellectual property organization, and others; also various intellectual property owners, corporations, and individuals, members of law firms and law firms themselves, consultants, and others, trade associations such as the Motion Picture

Association and the Recording Industry Association, and the like.

Issues that we particularly tend to be concerned about are the rights of intellectual property owners, as you might imagine, so things like the UDRP, which is the domain arbitration system that probably you have heard of. If not, it's a kind of self-contained judicial process or arbitration process where intellectual property owners – trademark owners, really – can challenge registrations of domain names in a fairly low-cost and simple arbitration proceeding that's all done electronically in front of a one- or three-person panel.

There's an even simpler and cheaper version, which was created just for the new gTLD program, which is the URS, the Uniform Rapid Suspension program. It only results in a suspension and not a transfer of the domain name, but it's a fraction of the cost and the paperwork is simplified.

We tend to be concerned with issues around WHOIS. In many cases, in order to file a domain name dispute or in order to find out where your intellectual property is being infringed, WHOIS is an extremely useful tool for that purpose. So we find ourselves, generally speaking, quite a bit about WHOIS issues.

Other than that, the Intellectual Property Constituency involves itself in issues across the ICANN spectrum. I think you'll find our

members to be all types. You should look for them. Some of them may even be wearing this "Ask Me About the IPC" button, in which case, you can ask them about the IPC. You can also ask me about the IPC. I'll see if there are any questions. I don't think there's anything that I haven't covered that others have covered.

UNIDENTIFIED FEMALE: We have a few minutes for questions. Okay, Maritza, go ahead.

MARITZA AGUERO: Good morning. My name is Maritza from Peru. I got a question regarding the membership. You say that the membership of the IPC constituency are companies and individual members. Can a member that belongs and works, for example, in government be part of your constituency?

GREG SHATAN: We actually don't have any government members, but we do work closely with intellectual property ministers and agencies. We haven't actually been approached by any government organizations or ministries to be members. I think technically they're not qualified if they're actually in government.

MARITZA AGUERO: If it is not a deputy, it is a technical part that belongs to a government. That was the sense of my question.

GREG SHATAN: The Intellectual Property Constituency's mission and membership is for organizations and individuals who are primarily devoted to the creation and protection of intellectual property. I'd have to go back and look at our charter a little more carefully, but I think generally speaking, governments kind of stay in the GAC.

MARITZA AGUERO: I thought that because I received an e-mail because in the sense that your constituency was creating an observer thing. I don't have the exact things in my mind, but I got an e-mail in the time when I belonged to the government. I received an e-mail of your constituency regarding that issue, that you are implementing an observer panel. That was the sense of my question. Thank you.

GREG SHATAN: The Intellectual Property Constituency represents a stakeholder group, so I think the view is that the government is a separate set of stakeholders. We don't have an observer status for governments. As I said, we were one of the original six

constituencies back from 1999. It's always been a constituency of stakeholders. Thanks.

UNIDENTIFIED FEMALE: Maritza, if you want to follow up, we can do it. We've only got six minutes left, and we have two questions. [Aubrey], go ahead.

[AUBREY]: Morning. [Aubrey] from Bermuda. Can you explain or elaborate on the issue between trademark and pricing?

GREG SHATAN: Trademark and?

[AUBREY]: Pricing.

GREG SHATAN: The pricing issue in terms of domain names? The trademark community has been very concerned about some of the premium pricing issues related to top-level domains, especially during the sunrise period. The sunrise period is a period before the general availability of domain names, where trademark owners who have registered in the trademark clearinghouse can

register domain names that match the trademarks in the clearinghouse.

The pricing is supposed to be on a cost recovery basis, but certain of the top-level domains were charging in excess of, say, $2,500 for a single domain name at the registry during the sunrise period. Some other cases, trademarks, particularly trademarks that are well-known, were designated as premium names and were also charged excessive prices at the registry, in essence singling out trademark owners as a source of extra revenue for their strings. When the sunrise is supposed to be one of the intellectual property protections in the system, instead it became a punishment.

[AUBREY]: Thanks.

UNIDENTIFIED FEMALE: We have about five minutes. We have one question. Greg, we have also I think two more questions. Do you mind taking them after the session?

GREG SHATAN: Sure.

UNIDENTIFIED FEMALE: Is that okay? Okay. [Anika], go ahead.

[ANIKA]: Great. [Anika] [inaudible] from South Africa. My question is with regards to the fact that it seems like there's also some touch of consumer protection issues within the group. Generally, the perception is that consumers and IP holders, for example, there's some kind of healthy tension that needs to exist there. How do you reconcile that perception that there's really not – I just could never imagine the two being together, but I'm actually pleased that they are because we need to move to a new generation of IP laws in general.

GREG SHATAN: First, there are really two kinds of intellectual property that are relevant in the ICANN universe: trademarks and copyrights. Patents really don't come into play. Trademarks really evolve as a form of consumer protection. It's a way of knowing where your product or service comes from. A trademark represents a unique source or origin of the goods and services, so that if your car says Tata on it, you know that Tata Motors made the car, and not some guy in his backyard.

The trademark then signifies a form of consumer protection, and consumers should be able to rely on a trademark. Trademarks

are very valuable in part because they have this so-called secondary meaning. They acquire a distinctiveness. Trademarks, in that sense, function to steer consumers to be able to make the choice and have a sense of reliance and trust. Improving trust in the Internet is one of ICANN's core responsibilities.

On the copyright side, consumers should again know that what they're getting is a genuine copy and not a rip-off. Copyrights don't have the same function of consumer protection. Copyrights exist to give creators, for a limited period of time, the fruits of their creative works. Copyrights don't have the same consumer function, but again, consumers should want the genuine article because even though digital copying can be perfect, bootleg copies and torrents and the like may not be. Plus, if you're doing that, the creators of the IP are not being compensated. Thank you.

UNIDENTIFIED FEMALE: Thank you so much, Greg. I really appreciate you coming by and talking to us. Again, like I said, we have an afternoon session that starts at 6:00. We have a speaker from 6:00 to 6:30, but if you're not doing anything and you want to come back, feel free.

For the questions that we still have, Greg will answer them after the session. Just a quick reminder: alumni, we have a photo at noon at the booth, so please meet there. Like I said, we have a

session at 6:00. Steve Conte from ICANN staff is going to come entertain us about security, and when I say entertain, I promise it will be entertaining.

Thank you very much for coming, Greg.

GREG SHATAN: Thank you. It was my pleasure.

[END OF TRANSCRIPTION]