MARRAKECH – SSAC Public Meeting Thursday, March 10, 2016 – 08:00 to 09:00 WET ICANN55 | Marrakech, Morocco

UNIDENTIFIED MALE: This is the ICANN 55 SSAC public meeting on March 10<sup>th</sup>, 2016 at

08:00 WET hours in the Ametyste room.

PATRIK FÄLTSTRÖM: We are a minute over the hour. Good morning, everyone.

Is that doing okay? Good? No, I just forgot to ask you if everything is okay. As in starting the meeting. That's okay with

you. Good.

Let's start the meeting, SSAC at ICANN 55, open meeting and an activities update. I'm happy to see non-SSAC members. Welcome back. It almost feels like it was just starting to have some sort of honorary SSAC family club or something. I don't

know.

UNIDENTIFIED MALE: We have to give you somebody to listen to you.

UNIDENTIFIED MALE: Groupies.

Note: The following is the output resulting from transcribing an audio file into a word/text document. Although the transcription is largely accurate, in some cases may be incomplete or inaccurate due to inaudible passages and grammatical corrections. It is posted as an aid to the original audio file, but should not be treated as an authoritative record.

PATRIK FÄLTSTRÖM:

Groupies.

**UNIDENTIFIED MALE:** 

[We can] have a new sticker, "SSAC Groupie."

PATRIK FÄLTSTRÖM:

We'll come up with something. There are a couple of things we would like to present here and talk about. The current status of SSAC is that we have had 80 publications since 2002. The publications could be all different kind of things, like reports, advisories, comments, letters. Some things are longer. Some things are shorter. We decided some time ago to start to number everything that we publish as formal. We'll make formal publications and put a number on them.

Greg, sit by the table, please. I get so nervous when someone is behind my back. I've seen too many Western movies. I know what's happening when you have someone behind you.

We have today 30 members. It has shrunk a little bit. They are appointed by the ICANN Board. Regarding expertise, we try to have all different kind of expertise that we need to be able to write the advisories that we are writing.



ICANN do have mission and core values of various kinds, but these two specific ones are the ones where we in SSAC connect to. The first one, to ensure the stable and secure operation of the Internet's unique identifier systems, and the second one, preserving and enhancing the operation, stability, reliability, security and global interoperability of the Internet. When we are investigating something, we are looking at the issues framed by these two mission statements. They also match the charter of SSAC, which was on the slide before this one up to the right, which is, "Advise ICANN community and Board on matters relating to the security and integrity of the Internet's naming and address allocation systems."

If you compare that with a discussion in other advisory committees – welcome. – we see it as being very important that what we are doing, we form a work party, we do some research and writing, we review and approve and decide to actually publish something, and we do the actual publication. If it is the case that the publication include advice to the ICANN Board, then we are submitting the advice to the Board. The Board acknowledges and studies the advice, take formal action on the advice, which can be one of four things. You can either to launch a policy development process. It could be a request to staff to implement it with a normal public consultation. It could be a dissemination of advice to affected parties, other [standard]



organizations and the like. Or the Board can choose a different solution and explain why they did not follow the advice, and that has happened a couple of times.

For us, it's pretty important that now when we're going into a situation where ICANN is going to rewrite its bylaws, that the mission and core values actually are still there for ICANN, that our charter matches that subset of the mission and core values of ICANN, and that our advice when we are producing some advice to the Board, that the Board must take advice into account. That is the dotted line of where we see that we fit in the ecosystem.

We will come back to what work parties, what we are doing at the moment, and also the publications that we have published recently.

What we are working on is the outreach. We are working with the comms team here at ICANN and working on producing videos. We are working with ALAC to come up with a better way of explaining what's in the advisories and including modern things like video and these [intertube] things and social media, whatever that is. A little bit difficult for us old folks. The young generation actually like what we have done so far, but we can do more.



What we are currently looking at, which is kind of interesting, is that the comms team is actually now helping us for every advisory to try to have a discussion at the time of publication, a discussion with us where we try to explain who we would like to explain. They then tell us, "You want to reach these parties? In that case, you should probably use these channels, etc." That is very helpful for us because we don't know this stuff. Duncan and his team are really, really good.

Also, just because you and ISOC are here, I would like to thank you also for the good cooperation regarding the DNSSEC workshop and other things we're doing together. I think with the work that we're doing with the comms team, there might be very well other things we can do together regarding outreach of our material.

DAN YORK:

You should explain for the newcomers here that "you" is Dan York. You were looking at me, but people who are remote or others may not know that.

PATRIK FÄLTSTRÖM:

That's true, but on the other hand, I'm actually looking at everyone in the room. It's the global you. In this specific case,



when I'm thanking ISOC, I'm talking to you, Dan. Greg is also helping. I know that, even though he's trying to sit in the shadow and not be on the table.

I can also mention that I'm also personally happy for all the help that Greg has done in the work of the ICG regarding communication around the CCWG and ICG work. Thank you very much, Greg.

First question. Is there any overarching questions on SSAC? Might be people that have been here for a while that have come up with new things, people that have not met with us. Dan, please.

UNIDENTIFIED MALE:

Dan York, your groupies would just like to compliment you on the upgrade to the graphics in this latest presentation deck. This is a remarkable change, so thank you on that. It does explain things better.

PATRIK FÄLTSTRÖM:

Thank you very much. Julie, for how many meetings have we tried this now? This is the third, right?



JULIE HEDLUND:

Yes, it's the third.

PATRIK FÄLTSTRÖM:

I think we have used these and refined them for about a year. We actually think they work pretty fine. The only thing that has been a little bit negative is, of course, that if you look at it on a projector like this, it's a little bit hard to read, at least for me from this distance. But if you look at the actual slide, I think it actually looks pretty good, so thank you. Feedback is always good.

Current work. When SSAC do work, we create something that we call work party. Members of the work party are SSAC members, and then they can choose to have external invited experts of various kinds. We currently have three work parties on namespace-related issues, which is talking a little bit more in general of the namespace that we're using for, among other things, the Domain Name System. We have one namespace in auction proceeds, and the reason why we have that is because we have appointed two SSAC members to participate in the ICANN work discussion on the auction proceeds. The way SSAC operates, it's important for SSAC to have a support mechanism for these people to be able to come back to SSAC, to check whether SSAC do have a specific view on certain things.



IDN Harmonization is another work party that we are running that is looking at the various IDN-related activities in ICANN and in other related places in the Internet ecosystem, specifically the IETF and Unicode consortium, and also ISO regarding country codes. We're looking at whether there are any potential security and stability implications with the lack of functioning or nonfunctioning harmonization between the various processes.

ICANN staff has also been doing some research in this area that was presented at the Technical Advisory Group –

**UNIDENTIFIED MALE:** 

Experts Group.

PATRIK FÄLTSTRÖM:

Technical Experts Group – thank you – where lots of different organizations have members. ICANN staff presented what they have been doing so far there.

Then we have three ongoing work parties. The first one are the DNSSEC sessions that I just mentioned. Dan York is helping with that. We have one for newcomers and one longer, deeper technical. We have one work party on Board advice tracking. That makes sure that we don't drop any balls between us and ICANN staff when we have passed advice, which is to keep track



of the box to the right here.

Then the last work party that we have is the Membership Committee, where Jim, to my left, Vice Chair of SSAC, is the Chair of that committee. The Membership Committee consists of me as Chair of SSAC, Ram Mohan, liaison to ICANN Board, and Jim Galvin, Vice Chair. The three of us are non-voting members of the Membership Committee. Then we have five SSAC members which are voting members of the Membership Committee, which is taking care of the review process of new potential SSAC members and also review of SSAC when their term is expiring.

SSAC members are appointed on three-year terms. ICANN staff, if it is the case that they want to be on the SSAC mailing list, they are reviewed yearly, but reviewed according to the same criteria as other SSAC members. Although they are ICANN staff and participate, but we have that review process for everyone that is on the SSAC mailing list.

Then we have support staff, as well, and we should not mix those up. We have support staff and then we have ICANN staff that participate, for example, from the security team. And Patrik. Thank you.



The future milestones, we have this quarter, to produce four advisories. Do you see them there on the left? 77, 78, 79, and 80. Just because the new work parties we have now are pretty new, we don't envision being able to produce any result from those more than outreach and explaining where we are. We don't think we will be able to produce much before third quarter 2016, where we're looking forward to have DNSSEC workshop in the new Plan B meeting. It will be a slightly different structure of the workshops, just because of the new meeting plan, but there will be workshops for DNSSEC at ICANN 56 unless things change drastically. We do think that both Namespace and IDN Hominization might have something to say at that point in time, and specifically the IDN thing might be actually be done if we are lucky.

Since ICANN 54, we published quite a large number of publications. I thought that at first the latest ones were the more interesting one, but when meeting with the Fellows, I also mentioned SAC 75 that you see, the second last bullet there. At the Fellows meeting, that was actually the one that they asked the most questions about. Let me bring that to this group's attention, as well.

We got a liaison from ITUD, and I think that is the first time we've got a liaison from ITU directly to SSAC. I cannot remember that



we have got anyone before that. It might be the case that IETF people actually nudged them and said yes, that something should come over to us. I don't know how it happened because they basically should not know that we exist because we have not done much outreach in that direction.

Anyway, we got the liaison. We're very happy of that. The liaison was a suggestion. I think the original filing was from Togo that suggested to ITUD that they would help establishing CAs in developing countries. We looked at that and came to the conclusion that that might not be the best way of increasing security and stability in developing countries. It's probably better to help them to use already existing CAs and to look at DANE and deploy DNSSEC instead.

That created the Fellows meeting interesting discussion because it seems to be the case that at least three different examples were brought to my attention immediately where countries explicitly do create CAs for their country and require everyone to use their CA because they are blocking TLS connections and do man in the middle things.

Specifically, one participant at the Fellows meeting pointed out to me that this is currently happening in Kazakhstan. The government of Kazakhstan is trying to get Google and other



browser manufacturers to include their CA in the trust chain in the browser, and these manufacturers is saying no. There is a pressure going on there, and it was a direct request for SSAC to investigate whether or not we could say anything about how bad idea that is, like an extension to SAC 75. But I encouraged the person to read SAC 75 and come back. There were a couple of other persons coming, as well, asking similar things. SAC 75 seemed to be more interesting to at least some parts of the community than what we expected, which is kind of interesting. Dan?

DAN YORK:

Dan York, Internet Society. Out of curiosity, is ICANN able to provide any statistics around the downloads of these documents or visits to the pages? Just be curious to know, to your point, which of these are the more widely read.

PATRIK FÄLTSTRÖM:

Steve?

STEVE SHENG:

Thank you, Dan, for that question. This is Steve, the SSAC support staff. We've done exercise in the past, but as an overall exercise looking at the consumption and the effectiveness of SSAC publications, a few years back. We could certainly take [in]



an effort again, looking at the download statistics because the website has been revamped. Thanks.

DAN YORK:

I work in the Internet side of communications team, and I'm a Google Analytics geek and some of that kind of stuff. It just occurred to me that, to your point of trying to understand, Patrik, which of these are getting more interest than others, that could be one tool that could be used just to see what are they doing. Anyway, it would be good to know it, [sir].

PATRIK FÄLTSTRÖM:

Yes. Personally I don't have access to Google Analytics for the webpage of ICANN of these publication of ours. I am on the other. Just for your information, I am the one that posts notifications on the SSAC page on Facebook. I've been quite careful of announcing on the SSAC webpage publications the same way, so that then when I look at the analytics inside of Facebook, which is actually kind of interesting, it is possible to then try to draw some conclusions. Now I can see, for example, that when there are high interest from the city of [Falkenberg] in Sweden, it's probably my parents, which means that the number of active people on the SSAC webpage is pretty low. So I can actually derive who it is. It's still interesting to look at these kind of numbers, regardless of what kind of numbers they are. Ram?



RAM MOHAN: Steve, isn't it true a while ago you were also tracking the number

of citations off these reports and using that as a proxy for

usability or usage of these reports?

STEVE SHENG: Yes, Ram. That was another metrics we use. Where we primarily

use Google and the Google Scholar to see how many citations to

SSAC advisories. Where we find that is something not surprising.

Older advisories seem more hit. Advisories, for example, SAC004

and the DDoS ones, those targeting operators, guidance to

registries get more uptake in terms of download. But that

doesn't usually translate. We wouldn't be able to tell who really

download those. That's just a limited, one piece of the

measurement.

UNIDENTIFIED MALE: Do you know, Steve, what kind of analytics system is run on the

webpage itself, like Google Analytics? Do you know that?

STEVE SHENG: For the old site, it's not Google Analytics. For the new site, I will

check out.

**UNIDENTIFIED MALE:** 

Thank you.

PATRIK FÄLTSTRÖM:

Let's move on because we will at some of the other later reports one by one. If we go backwards, SAC 80, Approval of the CCWG-Accountability Supplemental Final Proposal on Work Stream 1 Recommendations. As I pointed out the other day, it's a very long title, and it's very, very long even though it includes two acronyms. It would be interesting to actually write the whole thing out. That would be kind of silly.

This is, I guess, not the overview but the whole report. Almost.

UNIDENTIFIED MALE:

[inaudible]

PATRIK FÄLTSTRÖM:

Yeah, there's some header and footer, but otherwise I think this is the whole report. Of course, the story behind something that is so short is of course you have to work. The shorter you write, the harder the work is.

First of all, I would like to once again thank Lyman and Julie for all the hard work in CCWG to ensure that we reach this point in time. Thank you very much.



The method that we used was that very, very early when this project started, we thought there would be confusion in the community on what means by IANA function. Of course, after a while, we discovered that we were absolutely right there. Thanks to Russ Mundy, another SSAC member, we wrote first of all two very important documents. One that describes from our perspective what IANA is doing. The second document was what the IANA contract with NTIA covers. The reason why we wrote both of those was to give the ability for the community to compare those two documents and see that they did not list the same things. I pointed this out to people yesterday, and people were still surprised.

Then we wrote a third document where we pointed out what, from an SSAC perspective, the pitfalls were and what would be very important for the community to look at. Based on those three documents, SSAC had then reviewed the various documents from the CCWG. We also participated – thanks to Robert and Jaap, thank you very much – participated in the CWG work in parallel. We could, based on those documents and the early work, create a list of issues or one could call it red lines where we in SSAC decided on what lines should never be passed by the CCWG proposal. After we had done all of that work, that's the hard work. Then Julie and Lyman, over time, has checked



that the CCWG, whatever they're doing, have not passed those red lines. When they come close, they get back to SSAC and validate it with SSAC. "Is it correct, this interpretation of ours?" At the end of the day, this is the final result from our perspective.

The complete view of SSAC, of course, is not only this but also four or five other documents. Any questions?

Next document. SSAC Advisory on the Changing Nature of IPv4 Address Semantics. Jeff is not here, no? Anyone that would like to speak to this? Otherwise, I'll do that as well, but if someone would like to.

Okay. I'll do this as well. Ram, do you want to?

RAM MOHAN: This is what you get me to [inaudible]

PATRIK FÄLTSTRÖM: I know. That's why I was alone on the 6:30 bus from [inaudible] on three days in a row. I could sleep in today.

In this advisory, SSAC considers the changing role of IPv4 addresses caused by the increased scarcity, which, of course, is nothing new. That we run out of IPv4 addresses is nothing new



to us, but in this advisory, we specifically looked a little bit more carefully on the fact that an IPv4 address does not necessarily identify an endpoint anymore, and the implications of that. We tried to be a little bit more pointy because it seems to be the case that some people don't really understand what this implies. For example, if you have Carrier-Grade NAT and other kind of things, in that case, of course, just the IPv4 address is not just the endpoint to the communication.

We also say explicitly that just because of that, an IPv4 address alone may not be sufficient to correlate Internet activity observations with an endpoint. You need to have the full flow identifier.

The specific recommendations we give, similar to what many others have been saying, including ISOC through the work that Dan York and others are doing where they Deploy360 Programme, the network operator should accelerate plans to deploy IPv6 and consider the consequences of deploying IPv4 continuation technologies, such as NAT or other things prior to deployment. And that device manufacturers should accelerate plans to support IPv6, as well as or better than they currently support IPv4.

That's it. Anyone that would like to say anything, ask? Dan?



DAN YORK:

Dan York, Internet Society. I thought this was an interesting document. I would just comment, though, that it talked a lot about NAT and the fact that you can't correlate an endpoint. What I think is interesting to think about, too – and this is a point Jeff Houston's been making in a couple of the other commentaries and things he's been doing – is that there is also a challenge in, not only are the user endpoints disappearing behind NAT, but the server endpoints are disappearing behind CDNs and overlay networks like [Dot]. The correlation is happening on both sides.

This is talking about endpoints, so endpoint could be taken generically, but the main text of it was talking about NATs. In my mind, it was looking at it from the client endpoint, but I would also think that we should be aware that for the law enforcement and others who are looking at that kind of thing, the server endpoints are disappearing, as well, because of the global load balancing CDNs and the other pieces as well that are no longer allowing you to directly have a DNS record that connects to a specific point, a server. That's gone. Just another little point on that.



PATRIK FÄLTSTRÖM: Wendy. Thank you very much. Wendy?

WENDY SELTZER: Looking at the document and its reference to forensic evidence,

I wondered if you thought about adding a footnote of other

reasons that the IPv4 address may not be a unique identifier for

forensic purposes. Things like TOR, for example.

PATRIK FÄLTSTRÖM: I'm looking at you, Benedict. Do you want to comment on that?

You don't have to. I'm just checking.

BENEDICT ADDIS: I think sensible law enforcement agencies acknowledged long

ago that that was a mere breadcrumb in the clue trail, but

perhaps the message hasn't percolated through. We'd be

delighted for your help in spreading that message.

PATRIK FÄLTSTRÖM: That was amazingly politically correct to be a quarter past 8:00

in the morning. Okay, you win. Ram?

RAM MOHAN: Patrik, it seems to be that perhaps a path forward, given that

SSAC has already published this report and formally there is no

next thing for SSAC to do here, but we're getting feedback and other things. We should look at how we can collaborate with folks from the W3C, folks from ISOC, etc. to take the contents of this report and evolve it to get the new feedback. We don't have a formal mechanism to do that, but in this case, it seems very useful and an important thing for us to do.

The second point I wanted to make was perhaps this should be one of the candidate items. If there is an IGF coming up, this perhaps is a candidate item for a topic at the IGF.

PATRIK FÄLTSTRÖM:

I also think that, given the good connection and work we have been doing with law enforcement that now is active in GAC, we should maybe reach out to that specific subgroup and ask them whether there is anything we could help with there. For example, maybe trying to see whether there should be some kind of specific communication in that direction, as well, to help them in their work. Benedict?

**BENEDICT ADDIS:** 

I attended the public Safety Working Group yesterday and made exactly that offer and explained, as I've now learned from you, that they can ask us questions and we can see if we can answer those.



PATRIK FÄLTSTRÖM: Mark?

[MARK SEIDEN]: The same question came up yesterday in the Privacy Working

Group in the morning, where the question was asked by the

Hungarian [inaudible] privacy representative, "What are the

privacy rights of an IP address?" They're still thinking that IP

addresses identify individuals, rather than endpoints in the

more general sense.

BENEDICT ADDIS: It may suit privacy advocates to treat an IP address as personally

identifiable information.

PATRIK FÄLTSTRÖM: The follow up question was, "What does that mean?" Mark?

[MARK SEIDEN]: It may be that we would suggest they rephrase that as, "What

are privacy rights of an IP address and port number?" For

example, rather than just an IP address because port numbers

may end up being personally identifiable information, as well.



PATRIK FÄLTSTRÖM: Dan? By the way, let me just say that if I don't see you down

there when you're waving, it's because it's a very, very bright

light before you. I was like, "Bright light." Exactly. I

will try to not pour water on you, but otherwise, Dan.

WENDY SELTZER: It's a part of the deliberate anonymity set down here that we all

look like the same person.

PATRIK FÄLTSTRÖM: With three heads. You're like the knights that say, "Ni."

UNIDENTIFIED MALE: That's your role with the robe, I think.

UNIDENTIFIED MALE: [inaudible]

PATRIK FÄLTSTRÖM: So, Wendy, please.

WENDY SELTZER: Sorry, yes. Just to note in the privacy conversation, we're often

talking about what can be inferred from information gathered.

Although the IP address is not always uniquely identifying of an

individual, when it can be, its correlation with other information in the stream can be identifying.

[END OF TRANSCRIPTION]

