Transcription ICANN Buenos Aires Meeting Meeting with SSAC Sunday 17 November 2013

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Coordinator: This conference is being recorded. If you have any objections please

disconnect at this time. Thank you.

Jonathan Robinson: Hi, everyone. It's 5 past 9:00 so if I could ask you to either join in the meeting or leave the room to continue conversations outside the room.

((Crosstalk))

Jonathan Robinson: Yeah, I mean. All right so if we could become prepared to start the recording please? We okay? Great. Thanks, Nathalie. All right.

Good morning, everyone. Welcome to the second day, Sunday 17th of November of our GNSO Council working sessions on the weekend here in Buenos Aires.

We start the day with a meeting as is somewhat customary with the SSAC and very pleased that we've been joined by both the chair and the vice chair, Patrick Fältström and Jim Galvin.

Now talking with Patrick I understand that he has got a number of items he could talk with us about and really it seems to make sense to home in on one or two of those. So I'm going to let Patrick start proceedings. He'll highlight to you what's available. And then I think we'll need to set some direction for the meeting after that. Thanks. Over to you, Patrick.

Patrick Fältström: Thank you very much, Jonathan. And thank you for inviting us. I think it's always interesting and challenging to meet you guys 9:00 am Sunday morning. I hope everyone has had enough coffee.

So let's go to - so as Jonathan said we have a couple of different kind of options here. Given that we have 30 minutes I still think that the best thing to do is to concentrate on one of the various options we have on discussions.

SSAC has the last couple of months or during the - from the - after the last ICANN meeting we have released four advisories and they are on DNSSEC key rollover in the root zone; an advisory on name space collisions; comments on ICANN's initial report from the Expert Working Group on gTLD directory services; and comments on examining the user experience implications of active variant TLDs report.

So we have key rollover, name space collisions, Expert Working Group on gTLD directory services, and variants. And we can absolutely not talk about all of those - all of those during 30 minutes. I think we should focus on specifically one and then we'll see whether we have time for the others.

So, Jonathan, the question to you like what do you think people want to hear about?

Jonathan Robinson: Yeah, I mean, my sense is that collisions is the topic of the moment and that that's what many would like to hear about. Can I - I guess I will - I'll propose that we let - can we go back to that first slide please? That's agenda

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- potential Agenda Item Number 2. Can I get a sense if anyone is not happy with us homing in on that and then picking up perhaps a second item if more

time is available? Any opponents to that course of direction?

Great, let's pick up then with that, Patrick. It'll be great to talk through your

Topic Number 2 and if we have more time afterwards we'll pick up on

something else.

Patrick Fältström: Thank you very much. So let's go directly to - you of course have the whole slide deck available so you can get an overview of what we've done. We have so far produced seven advisories this year which is a new record. We hope to produce at least one more this year that is very close to be ready.

> So next slide please. We have been looking at the issue with name collision. And this is not the first report that we are writing on the topic. We started to talk about the various issues regarding lookups and name collision issues already in the fall of 2010.

> What we - in the context of top level domains we imply with name collision to situation where a name that is properly defined in the global DNS is also defined and used in the private name space somewhere. And it doesn't have to be DNS. It's something - it's something that is used somewhere.

> So in reality you have a collision which we mean that software, the computer or whatever it's going to use, this string, doesn't really know what to do with it. You have multiple alternatives, that is when you have the collision.

So when looking at the current situation we are specifically providing advice in four different areas: high risk strings, trial delegation, root zone monitoring capability and emergence and rollback capability. So these four different areas in the context of name collision is what we have been looking at. Next slide please.

If you start to look at high risk strings apart from all the discussion of the high risk strings that have been done at multiple - in multiple groups here within ICANN we are specifically identifying that we do believe that there is an obvious need for private name spaces regarding domain names, very similar to private IP address allocation, according to RFC 1918.

The IETF already have RFC 6761 and 6762 which are documenting both the process for allocating these kind of private strings but they - and they also have allocated a few of them. We do point out some - we do have some recommendations on how to improve that and also we think that it's - we do think that it's needed to allocate a few of those - a few strings to local use. Next slide please.

Regarding trial delegation we - in this area we're also trying to go a little bit deeper than what was done elsewhere where trial delegation has been described. We are saying that if it is the case that someone would like to do a trial delegation we identify specifically three different categories of trial delegation where a specifically have two main categories.

One which has to do with the pure DNS infrastructure testing, which can be divided into just looking at the queries which are coming from four domain names which are not allocated. And then when you have queries coming for domain names which actually are allocated under a TLD.

And then the second category has to do with actually putting up services that accept connections for, for example, email and http and other kind of protocols and see what's actually happening when - to see whether applications actually are trying to connect to those names. We'll also try to lay out the benefits and the risks associated with each one of these three options. Next please.

Regarding root zone monitoring we - in SSAC has for - a couple of times already in advisories said that we do believe that we need better monitoring

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capability for specifically the root zone. And we support the decision for ICANN to work with the community to develop a long-term plan to retain and measure root server data. Next please - next slide.

The next thing that we are pointing at - which we are talking about which also we have a little bit of wording about that when we're talking about trial delegation but it has to do with the (unintelligible) rollback capability.

We believe that the (unintelligible) lead to regardless of whether we do believe this is going to be used or not. Of course we all hope that it doesn't have to be used.

But it's very important to think about the situation when a TLD is added to the DNS - global DNS name space and it creates so much problems so that if we - one look at the mitigation methods against what the problems it might be the case that the only mitigation method that is left is to actually undelegate the domain from the DNS. And we don't really see that process being known or well defined. Next please.

So we have three - let's see, three or four recommendation - specific recommendations so let's go through them more precisely. Recommendation 1. ICANN should work with the wider Internet community including at least the Internet Architecture Board and the Internet Engineering Task Force to identify what strings are appropriate to reserve for private name space use and what type of private name space use is appropriate at the TLD level only or at any additional lower levels in the name space. Next slide please.

Recommendation 2. ICANN should explicitly consider the following questions regarding trial delegation and clearly articulate what choices have been made and why as part of its decision as to whether or not to delegate any TLD on a trial basis.

The purpose of the trial, the operations of the trial, emergency rollback and termination of the trial including, of course, the evaluation of the - evaluation criteria of the data collected. Next please.

Three. ICANN should explicitly consider under what circumstances undelegation of a TLD is the appropriate mitigation for a security or stability issue.

And, four, finally, ICANN should work in consultation with the community, in particular the root zone management partners, to create additional processes or update existing processes that accommodate the potential need for (active) reverse of the delegation of the TLD.

And I think that's it. No more slides. Thank you. So that's our advisory.

Jonathan Robinson: Thanks, Patrick, for that whistle stop tour through the name collision work and the advisory on that. Can I open it up to questions, comments, input? So I've got Maria, Jeff, Tony and then Mikey.

Maria Farrell:

It's Maria here. Thank you, Patrick, for that presentation. Has there ever been an un-delegation of a TLD? And if not, how do you envisage the processes that would be needed to make that happen?

Patrick Fältström: There have been a couple of un-delegation of TLDs specifically for the IDN trial TLDs that have existed. So we do have technical experience on how to do that. So IANA do have - within its process and the root server - the root server system we know how to remove a top level domain.

What we have found - and the reason why we point this out is that the problem is not on the actual - not what is going to happen after the decision is made. What we are pointing out is that the trick here is to know what the process should be from including someone detecting that something is

seriously wrong, call someone, someone is doing evaluation, etcetera, etcetera, that results in the actual decision. That is where the problem is.

And we have not - we have not had, for example, an emergency situation where that process, for example, is not allowed to take more than maybe six hours. How do you handle that? Is that possible at all? If it is the case that the answer to that question is "no" that is a good thing to know.

Jonathan Robinson: Okay I've got a line which includes Jeff, Tony, Mikey and Steve so, Jeff.

Jeff Neuman:

Yeah, I'm just trying to get my head around the notion of taking back an entire TLD as opposed to individual second level domains. And so I know that there's discussions, you know, within the TLD, right. So I can see an individual domain within a TLD causing an issue that you would have to do something to turn that name off or return it to a state where it's giving me expected answer.

So can you help me understand the discussions in the SSAC as to what in your minds would be so catastrophic that you would have to come up with a process to undelegate an entire TLD as opposed to only shutting down certain domains within the TLD?

Patrick Fältström: And I will say we need to include lots of if statements here. But that is the whole - that is the whole reason like being a group that is responsible for looking at catastrophic scenarios we need to look at all potential catastrophic scenarios regardless of how unlikely they are. Let me start there.

> But if it is the case that you combine what we call dotless domains with address records within the TLD together with various different kind of search path issues.

> If you, for example, have a top level domain of fubar and you put an address record in there and you have companies that use fubar.example.com within

their operation if fubar is delegated and the address record is added which is just fubar that is an example where employers and services inside that enterprise will - might go and use the address record of fubar instead of fubar.example.com.

So to be able to trigger a real catastrophic scenario for a TLD you need to have multiple of sort of unknown which - where each one of them might be unlikely just because we already do have, for example, an ICANN decision to not allow address records in the zone which is dotless domains.

We already have delegated, which we now see, delegations of the TLDs without adding any second level domains so we have lots and lots and lots of safeguards. But for us those safeguards still only decreases the risk what we see from SSAC side is that regardless of how small the risk is if we end up in a situation where removing the TLD is the only mitigation method - if that is the case - we need to know what to do.

Jeff Neuman:

So just to kind of follow up, my fear is that the ifs - the what ifs, I mean, I don't disagree with you that you have to solve the what ifs. My concern is that you have to solve all the what ifs before you can move forward. And people will take that - it's not an SSAC concern, right? But it's others in the community that will take that and say hey, we can't move forward on anything until we solve every single what if problem.

And so on your dotless domain example, you know, that's not allowed under contract to add that for the new TLD - new TLDs so we've seen to - you'd have to make the assumption that someone's going to breach their contract and do X, Y and Z.

Like I said I'm not saying we shouldn't consider this and it's not an SSAC issue, it's how people interpret it. And then we'll say, well we can't move forward at all until we solve every single one of these what ifs no matter how unlikely they are. It's, again, not your concern but it's my concern; it's our concern as a community.

Jonathan Robinson: Thanks, Jeff. I've got Tony next. Sorry, Tony, if I could just make sure that speakers do introduce themselves prior to speaking. Thanks.

Tony Holmes:

Okay. Tony Holmes and as chair of the ISPCP. We've got a lot of concerns, obviously, around this issue because it's certainly going to impact ISPs. But I'd like also to focus on the ifs as well, Patrick. And I think some of it builds on some of the questions that Jeff asked really.

Because if I look back at trial delegations it appears there's two ways to do that. And I would suggest that a decision needs to be made soon to cover what are the ifs if we go down the path to trial delegations. From when that assessment is done how that information - well how it is assessed and how it's interpreted is an issue.

But there must be two approaches. And I just want some clarification for all of us on this, Patrick. My understanding is if we go down the path of trial delegations, which is what has been put forward, those trial delegations could be managed by ICANN or they could be put in the hands of the applicant to run a trial delegation.

And if we go down the latter path that would have to be something that is embedded somehow in the contractual arrangements between ICANN and the applicants and would require some changes. Is that thinking correct?

Patrick Fältström: So here's the recommendation. And what we are saying is that if it is the case that you are going to do trial delegation in one way or another, which is proposed, as you see in this slide we - if I understand you correctly our recommendation agrees to what you just said. It's really important to think

about specifically these four issues. And we describe this a little bit more in

the document itself why it's important to think about each one of those issues and also what the pros and cons are.

We also point out that the - we also talk about, if I remember correctly, that regardless of whether you decide on these kind of things before you start a trial delegation or after the trial delegation ends you will still have a discussion on what to do with the data that you are collecting.

So it's - so one can, as well, start to discuss these issues. And if they are soon as possible that's the only way of moving forward as soon as possible, which seems to be the case that people are interested in.

Jonathan Robinson: Mikey.

Mikey O'Connor: Hi, Patrick. This is Mikey O'Connor. Thanks for coming. One of the debates that's been going on a lot and there's a lot of PR around the words "fear", "uncertainty", and "doubt". Can you kind of represent the thinking of the SSAC in terms of the following question.

We know a lot about - well we don't know a whole lot but we know a lot more about the frequency and source of traffic than we do at least right now I think about the impact of what that traffic might do. Is there thinking about how to get better knowledge of what the impacts might be that the SSAC has considered and approaches that they might recommend?

Patrick Fältström: We of course haven't talked about that just like all groups. On the other hand what we have seen in SSAC is that regardless of how that - how that - regardless of how much research you're doing and regardless of how much academic work and simulation you do you have just like what's pointed out in several of the studies that have been done in broad terms you have three different categories of strings, the ones that people believe are higher or high risk or use whatever words you want; the ones which are on the complete other end of the spectrum and then you have something in the middle.

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So the first - so we have a couple of different questions which people are

discussing here. First of all where to draw the boundary between these three

sort of sets; and then what to do with the middle set.

Should that be never used? Should it be used? Where is it on the scale of

risk if you do the calculations of this balance? What we decided to do in

SSAC is that - and what we identified is that regardless of how much

research you do you will still have the discussion about those three things.

And the center area which you can debate until cows come home what you're

going to do with it will still exist, that center piece, center group. What you

might do with more research is to change the size of this unknown group but

it will always exist.

And that's why we, in SSAC, went - we skipped that part and are still talking

about given that you have a situation with these three categories and in one

way another you sort of how to come up with some kind of decision of -

because this is a risk calculation which is not only technical, there are

business risks, there are business calculations, there are all different kind of

things.

But you will still have these sort of three categories and you will have the

boundaries between them. And that's why we believe that what we wrote in

this report are the important issues to talk about regardless of the outcome of

the discussion about where to draw the boundaries and what strings end up

in what packet.

Jonathan Robinson: Thanks, Mikey. Steve.

Steve DelBianco: Steve DelBianco with the Business Constituency. Thanks, again, for the great

work that SSAC does. And so while we appreciate it I hope that you'll

appreciate the fact that here in GNSO and CSG we're trying to align the work

you do with the work that staff and the NGPC, the New gTLD Program Committee are doing.

And those are - sometimes don't even touch each other. You rarely even use the same words. And we have done our best to try to encourage NGPC to take a look at what prior SSAC advice has been.

But now, I mean, the timing is so key right now. On your Recommendation 2, with respect to the trials, the trials are part of what the NGPC said could be part of the primary path to delegation; not the alternate path. The alternate path is being used today where there's a certain level of SLD blocking.

But I understand a lot of applicants would prefer not to just block everything in the middle data; they prefer this primary path. And there's been a vendor hired by ICANN to design some elements of the framework. But so far that framework for that vendor has nothing to do with what you've laid out here.

You've indicated some great questions and what should be looked at in terms of a trial. And how do we merge that so that ICANN's vendor will investigate the notions of, you know, questions that you've raised as part of their deliverable on the primary path to delegation because that's going to be needed in the next couple of weeks.

Jonathan Robinson: Any further comments?

Patrick Fältström: Yeah, I don't really have any more comments on that more than to say that we of course - as you understand we saw the decision by the NGPC when we wrote this recommendation. And this recommendation, as you understand, as you identify very explicitly points at, for example, if you see as bullet number two here, we say that - and identify that how the trial is operated is actually pretty crucial and something that you need to think about carefully.

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While in the NGPC document they lay out, as you point out, explicitly how they believe that same thing should be done. So, yes, we - one could say that we do not agree completely with how fast or how far the NGPC proposal has been laid out.

On the other hand how to operate that that is something that we take for granted that you manage to resolve with ICANN how to do that because the NGPC document is still something that they can (unintelligible).

Steve DelBianco: Try to have those conversations this week because we should try to merge your work with the work of the vendor that's just been hired. And if you go to Recommendation 1, for a second, if you don't mind, Julie, Recommendation 1 with respect to the high risk strings, a question for you?

> Do you believe that any of the recommendation here can be implemented to decide whether DotNail, for instance, which we understood from Google's data had quite a lot of collisions, is that - are we likely to apply your recommendation to figure out if any other string should be in the high risk category?

Patrick Fältström: Let me - let me - as any politician try to not answer your question by instead explaining that our release of this document has already made the IETF and the Internet Architecture Board very well aware of the fact that, for example, they have in RFC 6772, they do have a list of strings listed there that sort of is - I don't want to use the recommend but they list them as being used in private name spaces.

> On the other hand those strings are listed in a (non) normative Appendix G of that RFC. And IETF and IAB is aware of the fact that the status of those strings is unclear and it's probably something that they had to try to work on.

Exactly how that will happen and how that will be synchronized with what is going - here in ICANN I have not idea. But I absolutely have identified and I

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got a lot of email and phone calls and what not from all different kind of people that do understand that his must be resolved in one way or another because the (unintelligible) is in both directions there.

And having strings listed in non-normative text or standards that's not a good thing. That name must be clarified in one way or another.

Jonathan Robinson: Thanks, Patrick. I'm mindful of your time; I'm mindful that we started a couple of minutes late. I've got, at the moment, two more questions. Have you got another session you're going to immediately I see...

((Crosstalk))

Jonathan Robinson: Right. So we can permit at least three - I've got Mason, Jeff and Rubens.

Mason Cole:

Thank you, Jonathan. Mason Cole. So I have a two-part question, Patrick. With regard to the collision that happens now in existing TLDs is the SSAC examining that? And if so how can your findings be applied to mitigation in new TLDs?

And then the second part of the question is assuming you go the route of blocking second level names as a mitigation strategy, at some point after you block those names can you be very sure or 100% sure that the TLD at that point is secure?

Patrick Fältström: We are not looking specifically at various different kind of collisions that are happening. But it's something that ICANN is doing in various different kind of studies. So what we have done in SSAC is to recommend studies to be done; we are not sort of examining that specifically.

> Regarding your second question, no you can never be completely sure that everything - you only talk about what risk there is. So - but on the other hand there are multiple mitigation methods. One mitigation method just like we

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heard about on delegating a top level domain. I think if you ask SSAC members I think most of them are there to say probably and of course think

that easy mitigation methods are always better than drastic ones.

Jonathan Robinson: Thanks, Patrick. I've got Jeff and Rubens and then we'll close the queue

after that. Jeff.

Jeff Neuman: Thanks. So I'm going to try to ask a tougher question and I'm not sure you're

going to answer it. But so this is the outcome of all of your discussions and

this is a consensus, I guess, view of the SSAC.

Can you help us understand the tenor of the discussions and what things you

didn't agree on and kind of what issues were left unresolved?

Patrick Fältström: No.

Jeff Neuman: Okay. I think that's - so and I understand and that's the answer I was

expecting you to give...

((Crosstalk))

Patrick Fältström: No, so here so let me be a little bit more precise because there have been a

couple of other times of course that I have said yes or no because I'm from

Sweden and I use those kind of straight language. But what I have said has

been later then sort of interpreted in various ways which have been quite

unfortunate.

So of course there are different views of individuals within SSAC. What we

have tried to do, which have been the tough work, is to try to get people to

separate exactly what we have heard you talking about - to separate the

calculation of risk which is what - if it is the case that you use this algorithm

and you have a scale - let's say that you have a balanced scale and you put

various things in the various - and try to do the calculation.

We try to separate the design of the scale from doing the actual calculation. And this is extremely hard for individuals to do because when you talk about what algorithm you're going to use you immediately start to do the calculation yourself and you fall into a trap of letting the result of the calculation or interest of certain outcome of the calculation to influence the design of the scale. That has been the problem. Not so much what we actually going to do.

So for example when talking about trial delegation we've been working really hard to try to identify what you need to do a proper trial delegation instead of, for example, talk about what - doing a risk calculation with it. That has been more problematic than, for example, discussing various issues or not discussing various issues, that has not been the case.

Jeff Neuman:

Right so I guess the point of me asking - and I appreciate that - the point of me asking is that the fact that you came out with these recommendations doesn't mean you are - that the SSAC has determined that there is a risk or has calculated the risk it's the what if there is a risk what - or what if there is an issue what should we do about it.

And unfortunately members of the community take away oh my gosh, the SSAC came out with these recommendations so there must be a risk. But what I'm hearing you say is that the SSAC has - or people within the SSAC has a very different view of whether there truly is a risk and most of it was spent after - you didn't calculate that which is fine, totally understand, this is what if there is an issue you're trying to contemplate not is there an issue or is there a risk it's what do we do...

Patrick Fältström: That is one of the things. Another thing - another thing has to do with let's use this metaphor again with three different sort of buckets of strings. Whether, for example, you take the second bucket and decide, no, those should not be allocated ever, ever, ever or you take the center bucket and say they are good enough, let's just move ahead.

There is just no way - we in SSAC is very explicitly staying away from making that decision. What we are recommending also if you look at the trial delegation we are trying to help the community by saying if it is the case that you are doing trial delegation regardless of whether you are making decision of, for example, or let's say emergency rollback to remove a TLD, regardless of how unlikely it is, at one point in time you have data, for example, from the trial delegation and you need to - you need to understand how to interpret that data.

The more you know before you start the trial delegation the easier it will be afterwards to interpret the data but you can never stay away from agreeing on how to interpret the data that you're collecting. So what we are pointing out is that interpretation and agreeing on the data that you get from the trial delegation if you do a trial delegation regardless of who is doing the trial delegation that interpretation, that discussion, of whether the result is leading to bad or good outcome, that discussion is something you, you as the community, must have. So those are the kind of the things that we are pointing out.

Jonathan Robinson: Jeff, I'm conscious of time so I hope you've got - I just need - Rubens is the last in the queue to get your question in Rubens.

Rubens Kuhl: Hi, Patrick. Rubens Kuhl here. Do you see a difference between undelegation and the (unintelligible) itself publishing and empty zone so the (unintelligible) itself could do emergency shutdown of the TLD in case of a risk?

Patrick Fältström: We do point out a slight difference between the two. And the difference is, for example, that if you have a -if it is the case that you still have the TLD that means that you are still returning a referral when you send a question to the root zone so it depends on when you get the next domain response back.

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There is a slight difference there. And we point that out in the document that this is - now we're going to into DNS technical details that which are discussed separately.

Jonathan Robinson: All right that sounds like a perfect way to underline the discussion.

Patrick Fältström: Yeah, I would like to point out can the people that are SSAC members please stand up? And then Jim of course. Okay so here you have some of the SSAC members. We have about 20 people here on board. Please talk with these people as much as possible to try to understand what we are doing because this is important that people understand what we're doing. So don't hesitate reaching out to these people during this week. Thank you.

Jonathan Robinson: Thank you very much, Patrick. Thank you, Jim and thank you members of the SSAC who have come and attended this first session on Sunday morning, really appreciate your time and appreciate the frankness with which you've dealt with the questions put to you.

Patrick Fältström: Thank you, Jonathan. Thank you very much.

Jonathan Robinson: All right, if we could stop the recording and prepare for the next session please.

END