
KIMBERLY CARLSON: Thank you, everyone. Welcome to today's NCAP Discussion Group call on May 6 at 19:00 UTC.

In the interest of time, there will be no roll call. Attendance will be taken based on those on Zoom. Kathy and I will update the wiki with the names of participants as quickly as possible. We have received one apology from Eric Osterweil. Our calls are recorded and transcribed, and the recording transcripts will be published on the public wiki. Again, as a reminder, to avoid background noise and echoing while others are speaking, please mute your phones and microphones. And with that, I'll turn the call back over to Patrik.

PATRIK FÄLTSTRÖM: Thank you very much, Kim. So we have our weekly meeting and you see the agenda. Let's see if anyone have any SOI they want to update or any announcements. I guess that I interpret the silence as a no, so let's move to point #3 if there are any new members. There are no new members to this group, so let's immediately then move to bullet point #4.

Before we do that, let me try to suggest a way of moving forward of the group and I would like to have a little bit of discussion on strategy. Jim, me, and Matt have discussed how to move this working group forward and as we all know, we have two different kind of things that we are discussing. We're discussing the final report of Phase 1 that Karen is working on on request from OCTO. Then we have the questions from the Board that we in this group is discussing as well, which is a work

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product that we are to produce. Our interpretation as chairs of this group is that we think it's perfectly fine to use part of this time of this working group to discuss the report of Karen, and that is also what Matt has requested us to do to come within to work with Karen as much as we can. We see discussions on the mailing list between work party members and Karen and others on various content issues.

What will happen next is that this report after receiving all the input, the report will, according to announcement that Matt has done, go on a public consultation. After the public consultation that report is to be finalized and delivered to the Board. So that report is something that is a production of OCTO on request of the Board that initiated the work on request from us. Because of this, we think that it's really good that we are sending feedback to the report and we encourage the members of the NCAP Discussion list to participate in the open consultation if you feel there is a need for that. But what also is important for us to do in this group is to agree on what we're going to respond to the questions, which is again that item #5 of today to continue to work on the questions where we've done quite some work on bullet point #3. When we discussed the connection between the work that we are doing and the work that Karen and OCTO is doing in the report, the more we talked about those two work products. We found – Matt, Jim, and myself – that it's important that we reminded each other that there are two different work products that are to be produced here.

Let me stop there and see whether Jim or Matt – both Matt Larson and my co-chair Matt – have anything to add to my summary. Maybe I misinterpreted or misdescribed any of our conclusions. So please chime

in if you have anything to add or correct on what I said. Okay, I see Jim said everything is fine in the chat and also my co-chair Matt.

With that, as a reminder that when we are now moving into item #4 in the agenda, this is us allocating time on our agenda to help Karen and OCTO to produce a good report. So let's continue the discussion then on the report and let's see if anyone have anything to bring up. The discussion is really fruitful and I think really it's a good discussion on the mailing list and the last couple of e-mail exchanges I saw was between Eric that unfortunately is not on the call and Karen. Maybe there are others that would like to chime in. Otherwise, we move to our questions instead. Are you all asleep? I see no hands. What is this? Okay. Oh there. Yeah, Jeff, please.

JEFF NEUMAN:

It's not so much a question on the report. I just am not fully understanding where we go from here, what gets communicated to the Board regarding the report. Help me understand, what really is the next step for that? I see Danny probably has a comment on substance, so you can wait on mine until after some of the substance, but I just was curious. Thanks.

PATRIK FÄLTSTRÖM:

No, there are a couple of things that are happening now. One, OCTO and Karen is to deliver this report. They are doing that based on the feedback from now from us but also the input during the open consultation. Then that is one thing that will happen. The next thing that will happen is that we are responding to the Board. We are sending

to the Board the response of the questions that we are working on but we're also to work with the working group or SSAC on suggestions on what to do with Phase 2 and Phase 3. So there are things that are happening in parallel, so it's sort of a fork or a branch that is going on here. That's exactly what I wanted to bring up here and have us to discuss so that we agree in what's going on.

JEFF NEUMAN:

Sorry, Patrik. Just a quick follow-up and again this can wait until after the substance, but I'm not sure ... I guess the question is: what's the role of the Board with respect to Studies 2 and 3? So if Karen is presenting her report along with some other feedback to the Board, then what is the SSAC – I mean, I understand answering the questions but that's not necessarily the same thing as doing Studies 2 and 3. In other words, one might not need Studies 2 and 3 to answer the Board's questions. I understand the things that are going on in parallel but I don't understand the dependencies.

PATRIK FÄLTSTRÖM:

The Phase 1 was started by having the SSAC suggest to the Board that we were going to do the NCAP work in three different phases. And then we launched Phase 1 by having SSAC suggest that Phase 1 was started by using external consultant to do some specific work that is then to be delivered to the party that requested the work to be done. The actual request, because of financing and budget and administrative is used, went from the Board to OCTO to actually do Phase 1 according to the framing and scoping that had been done by the SSAC and this group

currently. I expect that we will do the same thing with Phase 2 and Phase 3. So it might be the case which I think the request really is about that the recommendation, that it can be interpreted as if the recommendations for Phase 2 and Phase 3 might be one in the report from OCTO and it might be different from us and from SSAC on what to do with the Phase 2 and Phase 3. But in reality, the Board is the one that allocates the funding for the various phases. So it depends alluded on whether you ask who is actually going to pay and do the various asks and who is actually the one that comes with suggestions on how to move forward. We suggested the path forward for the Phase 1 and we will make a decision in this group on what to recommend for Phase 2 and Phase 3 as well. Danny?

DANNY MCPHERSON: Can you hear me, Patrik?

PATRIK FÄLTSTRÖM: Absolutely. Loud and clear.

DANNY MCPHERSON: I made a bunch of comments on the mailing list. I'm not sure how many of those will actually find themselves in the work product. But the one that I wanted to bring up was that I was told by the chairs that the definition could be revisited after the work was published so I deferred on that. I'd like for anyone to point out where the current definition means that the type four of collision that's in the report and in the RFP – mind you, so this isn't Karen's fault, this is NCAP's fault – meet the rules

of the definition. They don't for the four types of collisions I stated on the mailing list. So some clarification needs to be provided of that. Also I would state – this is not actually colliding with anything – I would like someone to make a technical case for why that's the case as well. I brought that up, and if it's not done in Karen's report, which I understand as I said again on the mailing list, then I would certainly expect NCAP to provide some clarity in that error in what we provided Karen. Thank you.

PATRIK FÄLTSTRÖM:

Thank you very much, Danny. Regarding the various different specifications for collision, that is something that most group I've seen that were discussing collisions have tried to come up with a list of definitions that they believe is the right one for the specific context within which that discussion is done. I also, myself, when comparing, for example, what we have written in this discussion group when we're answering the questions, for example, question 3 when we're looking at different kinds of collisions and then we look at Karens' group, so Karen's text and then we have the RFP. For me, it's both a question of defining that we should look at what we believe is a name collision or not, and the second one which I think you also talked about that needs to be done is also synchronization so that we don't have any discrepancies between the various descriptions of what a collision or not. I think to some degree we will come into that when we're discussing what we're going to respond, for example, question #3 from the Board.

DANNY MCPHERSON: Thank you, Patrik. Thanks for that.

PATRIK FÄLTSTRÖM: Matt?

MATT LARSON: Thank you. I guess I'm just not understanding the debate about the collision definition because this group produced the consensus document, which is what I just linked to in the chat, and I also made this comment moments ago, an e-mail to the discussion group. That definition is what Karen's been working on and that's been settled from our perspective for the scoping of Study 1 for months. If you look in that document definition of name collision and scope of work for the NCAP, I think B maybe is what Danny is having an issue with. Maybe B –

DANNY MCPHERSON: Re-registration collisions, Matt.

MATT LARSON: Yeah. But I guess what I'm understanding is this group gave us that document to work from.

DANNY MCPHERSON: So this means we –

MATT LARSON: It's way too late to be litigating that definition for the purposes now.

DANNY MCPHERSON: No, I'm saying that that definition is conflicted. It's an error. It's saying we say that within non-RZM namespace – and there's no non-RZM namespace in a re-registration – so the definition is an error and I think we should fix the error, because by definition, re-registrations are out of scope.

MATT LARSON: Whatever this group wants to do with the definition of name collision is fine with me, but I just want to be clear that that is out of scope for Study 1 where we've had the marching orders with those definitions for literally months.

DANNY MCPHERSON: I understand that, Matt, and I said that on the mailing list. I agree. I 100% agree. That's what I said on the mailing list. I don't believe this is what NCAP and at OCTO – and it was an error it shouldn't have. Unfortunately, no one else caught it along the way but it was brought up on the mailing list. When I brought up the first time, the chairs told me we could fix it later, and now I'm told we can't fix it later. I have an issue with that because it is an error. It's a technical error. There is no non-RZM namespace, so by definition, re-registration collisions are out of scope with the work and it's an error no one caught along the way, and so NCAP should correct that. That's all I'm saying. That's what I said on the mailing list.

PATRIK FÄLTSTRÖM:

So this is the reason why I did not use the term what is right or wrong in the report itself, for the same reason that you point out, Danny, and that I don't interpret what Dan has said either as a request to change something in the report because it is [correct] that what you linked to, Matt, is exactly what we agreed to in this group and we've found a problem with that. That's why I think that we must decide how we are going to move forward regarding what a name collision is, and I think part of that, as I pointed out, could be finding the correct words, for example, in the response to bullet #3 that in the document that we are working with, that there will be a discrepancy in what we are working with here and what we might say and what Karen had written that is really what we're trying to understand and that is something that we also are trying to point out that we had a potential – let's call it a fault or a disagreement or whatever we can't find that kind of wording. We're explaining exactly what Danny says that we had a discussion, people like us, chairs, thought that we had settled everything on this discussion, and now that the report is produced and Karen has done exactly what she was asked to do, we detect that this was not really resolved. But it's something I think that we can write and I think that is perfectly fine. Greg?

GREG SHATAN:

Thanks. Patrik, you said about 90% of what I would have said and about twice as well as I would have said it. But in any case, I think this is a discussion group and we are supposed to, in essence, grow our understanding of the issues during this time and I think it's pretty clear that the so-called re-registration collision is not a collision for our purposes. It's not like we have to stick with it to the end of the line

because it was there so far, we don't have to pretend it never existed. Clearly, Karen did exactly what she was supposed to do based on what was there at the time but that doesn't mean we have to stick with this issue. To the extent that it is an issue is a different type of issue entirely, whether it needs study or not, it's not germane to the study that we are currently undertaking as far as I can see. Thanks.

PATRIK FÄLTSTRÖM: Jeff?

JEFF NEUMAN: There's two ways to handle what Danny is asking for. One is to say the error is that the example doesn't match the definition; therefore, you take out the example. The other way is to revise the definition to what the example is included because it is an actual issue that's been pointed out in the Jazz report and elsewhere that there are collisions that do occur. I understand Danny's advocating for removing the example completely, but if we're going to entertain that type of thing then I would just assume change the definition of collision to include both of those or all of those examples. Either way, that example is not within the scope of the Study 1, but I'm not of the view that we should just drop the example and pretend that the issue doesn't exist. If we're going to do something, we change the definition to more accurately reflect the four examples that we've created. Thanks.

PATRIK FÄLTSTRÖM:

Danny, let me just clarify with you. What I read on the mailing list and what also what you say now is that you acknowledge that we might have a screw-up, to be really frank here, in the work that we have been doing in the discussion group by letting this slip through as a collision, when in reality, there might be a risk there or not. It's a risk that had been discussed in various other reports through our re-delegation I think. The first real investigation into re-delegation was done by JPRS I think in the early 2000 or something, but it's not the collision issue.

I feel uncomfortable requesting the report to be changed at this point in time for us. On the other hand, I think it's perfectly fine for us in the discussion group to include text about the specific issue that is not the collision but there might be a different kind of risk in the document that we are sending. And then on top of that, of course anyone that like to can also make that clarification in the response during the open consultation. But I do not really see how we can and should move forward at the moment by requesting the report to be changed given that, as Matt Larson said, what is delivered is what we, unfortunately, ask for.

Jeff, is that an old hand or is it new? I think that's an old, right? Okay. Jim?

JIM GALVIN:

Thanks, Patrik. I probably should have jumped in sooner but let me try to give a little bit of a history lesson here maybe. Patrik is trying to say all of this. I'm going to be a little more direct about it all. More than a year ago, this working group, this discussion group created the

definition of name collisions. We did that for the expressed purpose of being able to give a definition to the statement of work that OCTO could use for work product one. At that time – and I’ve actually said this, I know that I’ve said it several times in this group when I’ve been chairing a particular meeting here along the way – we have always said that the definition is subject to change. It is one of the explicit 10 questions on the board is to define the name collision. I take Danny’s point. We got it wrong. Well, okay, but we will fix it. Our final work product out of all of this will be to have a better definition. There’s no subtlety or nuance here. It’s simply on or task list to create a definition. Although I’ve been trying to say the definition is stable but not inconcrete because I didn’t want to have a lot of discussion about it until we had a reason to have a discussion about it. Danny’s provided a reason. We’ll now have that discussion and we will have to really change it. We probably should do it sooner rather than later since it really does have an effect on all the rest of our analysis. But yeah, there’s no nuance or politics or anything else here. It’s an action; we’re going to do it. That’s all. Thanks.

PATRIK FÄLTSTRÖM: Danny?

DANNY MCPHERSON: I’m just going to say that, Patrik, what you and Jim said made perfect sense to me. That’s actually what I said on the mailing list. I’m not sure why Matt sent another e-mail or people are still talking. I completely agree. We gave Karen something in error and we should have a dialogue on it. So I don’t disagree with that at all.

PATRIK FÄLTSTRÖM: Perfect.

DANNY MCPHERSON: For those of you that haven't been reading the mailing list, go back and look at the e-mail where I said this the first time if you'd like.

PATRIK FÄLTSTRÖM: Thank you, Danny. Anyone else? Jeff?

JEFF NEUMAN: I put this into the chat and I know Danny disagrees, but I just think it's important that even if we change the definition of name collision or provide a different definition, I still think that we need to preserve the fact that there may be risks of re-registration just as was described in a number of papers including the Jazz final report. We can call it something different, I guess it doesn't matter, but I don't think we should lose those discussions simply because we now don't classify it as a name collision.

PATRIK FÄLTSTRÖM: Yeah, Danny, I saw you responded on the chat but please.

DANNY MCPHERSON: That's it. That's all I'm going to say is that yes, the risk that doesn't make them collisions. I remember the Jazz recommendation 14 on drop-

catching which it's orthogonal of drop-catching also because not all re-registrations are done during the drop. So yeah, quote me on that. Of course, re-registrations have risks. You will need to manage the registrations and if something expired and somebody resolves it and there's a new registrant, of course they're a potential risk. Those are very well known. That exists in anything. So I'm not saying that there's not a problem there that's not already well-known. What I'm saying is that doesn't make them collisions. So I think we should have that discussion.

PATRIK FÄLTSTRÖM:

To continue on that, I think it is really important that we define collisions just because we need to limit our scope to collisions because that is really what we're working with. We will probably find things which are on both sides of the line of what is a collision off when we are moving forward, like Jim said, when we're adjusting what is a collision. To some degree, I think it's good but we were looking at a larger number risks and now have to remove something instead of the other way around that we find something is a collision that we previously were not aware of. But I'm pretty sure that we will be able to handle both cases. Steve?

STEVE CROCKER:

Thank you. I'm trying to understand if we're actually talking about the fact that we're in violent agreement that all these things are risks that we want the term collision not to include re-registrations and that we're going to include a note that makes this very clear up front to the reader

who's just getting introduced to it, and we've now spent 25 minutes going round and round. Do I have that right?

PATRIK FÄLTSTRÖM:

I think so, yes. But as the chair that is leading this call, I have allowed us to spend that time because given the sort of misunderstanding I find it extremely important that we all agree that this is the path forward that we are taking that is so extremely important for us, so we don't have to reopen this question again.

STEVE CROCKER:

Let me suggest that somebody write the explanatory paragraph or two paragraphs that we would be included early in the document, circulate that around and maybe we can use the rest of the time on this call for other topics.

PATRIK FÄLTSTRÖM:

Yes. After Greg, I think we can move forward. Writing down that what we just concluded is something that I suggest Jim to do that because you have this in your head. Greg?

GREG SHATAN:

Thanks. I think there are two ways in which we're not quite in violent agreement but hopefully we're getting to agreement. One, there initially seem to be some friction over the idea that we could take this out of the definition of collision or that it was somehow intimated that

the report we received was somehow off target. I think we've resolved that issue.

Second, I think this is what Jeff was raising. This is actually a more of an unsettled issue. It's whether if this is not a collision but it was in our definition of collisions, is it still in our remit to deal with it as a risk factor even if it's not a collision? Or do we say if this is not a collision, we refer this back to whomever for the potential of future study? One can think of all sorts of re-registration problems. There are abusive re-registrations that are intended to be phishing/pharming attempts that are inadvertent, re-registrations that just – you go to somebody's restaurant and it's a different restaurant in a different city with the same name that took the same domain. There's all sorts of aspects of this that could be studied and what the risks are for both abuse and resiliency and attack issues, whatever they may be. But the question is if we're deciding that it is not a collision, is it still our issue? We can dispose it with a proper burial, but the question about whether this is now going to stay in scope even if it's not a collision or go out of scope because it's not a collision is what I [inaudible].

PATRIK FÄLTSTRÖM:

We got that. Jim?

JIM GALVIN:

Thanks. I apologize. I just kind of wrote this. I have hit return here in the chat room. You were assigning me a task to writing a paragraph and I'm thinking to myself, "I'm sorry. There's no paragraph to write." Okay. I agree with you, Patrik. It's appropriate to have a [inaudible]

conversation. It's sort of getting ourselves together to make sure that we all understand where we're supposed to be. But I think that if we're going to talk about the name collision definition, let's have that discussion. Let's open up the document in which we had put that in and then let's walk through all of that technical details analysis and decide what it is and then we'll again put a line under it so that we can move past it. This is nothing to get to Karen's document. Karen's fine. If anybody in this group would like to comment when the public comment period opens, and Danny would like to make a comment that should be included, or if you think this discussion group – and this would be something we would talk about if you wanted to do this – does anybody think the discussion group should comment in the public comment period, we'll do that. But otherwise, we have a work item here. We're just going to pick up the work item when the time comes when we decide that we're having that discussion, and we'll write that for ourselves. There's no paragraph to write for a document unless I'm really confused. Thank you.

PATRIK FÄLTSTRÖM:

Thank you, Jim. I was thinking of a paragraph to write down to having the minutes of this call so we know where this discussion ended. It is not an addition to Karen's document. We're on the other document. It's a conclusion of this discussion because I don't feel we can afford, like Steve said, to open up this discussion again.

JIM GALVIN: Okay. That was added. You got it. Summary statement of the decision of the working group to the mailing list so it's documented for the record. I got it. That's perfect. Thank you.

PATRIK FÄLTSTRÖM: So we know how to move forward, so we know it's an internal decision/conclusion of where we're moving. Steve?

STEVE CROCKER: Let me make an additional suggestion in line with Greg's idea of having a proper burial. I was going to try to put this in the form of a full prayer. A very short SSAC note that lays out the two terms, re-registration versus collision, and gives full weight to both. We took up re-registration very, very early in the life of SSAC, noting what happens when people let names expire and other people register them that bad things can happen. That's a worthy topic. There's no reason why that shouldn't be pursued periodically and give advice to people about what happens when you let a name lapse, what happens when you register a name that's been previously registered, etc. Then the one I'm suggesting is notionally a one-page, which it turns out to be a minimum I think of five page these days, of SSAC memo that simply lays out the two different ideas and points people in the right direction and then becomes a reference document whenever people try to have this kind of discussion, just point them back to that and say, "We're using collision to mean this and if you want to talk about that then you're talking about re-registration." Full stop.

PATRIK FÄLTSTRÖM: Rod?

ROD RASMUSSEN: Yeah. That sounds like the former chair is giving the current chair a [task], so thanks, Steve.

STEVE CROCKER: That's what I'm here for.

ROD RASMUSSEN: Yeah, I know. Love you too, Steve. I actually just posted something. This came across Newswire yesterday or the day before in the instant report and I posted the link on the chat. There is not just re-registration, there's sinkhole and other activities that go on where people take data that gets leaked out of that, and it's really interesting. It has nothing to do I think with the collisions we're talking about. I wholeheartedly agree when you'd separate these hazards but it's not just re-registration. There's a whole class of problems that both SSAC has said a little bit about before and we were intending to say incessantly about sinkhole and practice and that part never took off. This might express to take another look at that. Thanks.

PATRIK FÄLTSTRÖM: Given that I am leading this call and I would like to move forward, let me put the strawman proposal forward to answer the question from Jeff. If it is the case that we find that ... sorry, let me take a step back. There is a risk with re-registration – we agree on that – and there are various

flavors just like Rod said regarding re-registration of the domain name itself, of nameservers and all that kind of stuff and sinkhole and all other different kinds of risks. We in this group, we are not working with any of these. We are not working with re-registration, not even in the way that we include it in the name collision originally when we wrote that original definition that we are now adjusting. Just like if we in the future would like to include something that we so far have not included as a collision, we will include that if it is the case that we find that that will be included. So when we are defining that the border is changed or what is inside and outside of collision that also implies that we are changing the scope of our own work. That is what I hear. If no one objects, that is what I suggest we agree to and then move forward. Jeff?

JEFF NEUMAN:

Just one little tweak but we're all in sort of agreement. Re-registration, whatever we call it, was never in scope, even when we listed it as part of the ... I don't see this as us changing the scope of what we were doing. I just see it as a narrowing of the definition. So just be careful when you say that we're changing our scope because that sends the wrong message. It was never in our scope. Thanks.

PATRIK FÄLTSTRÖM:

Okay. Please remember that myself and many people on the planet are not native English speaking persons, so my apologies if I use the wrong wording here. But we are in agreement I hope and you English speaking people can help find the correct words anyway so no one will misunderstand, not even myself. Danny?

DANNY MCPHERSON: I don't want to be pedantic here and belabor this, but those four types of definitions in Karen's document says it's in scope. So while we're saying it's not in scope, we handed Karen something that led her to believe it was in scope and so when we clarify that it's not in scope later then that's part of probably what SSAC or someone else is going to do. Jeff, I agree with you, I thought that was the case, but it's explicitly in scope according to Karen's current report. That's where my issue was.

PATRIK FÄLTSTRÖM: Danny, this is absolutely noted. We'll note that Karen's document is saying that. We in this discussion group need to find a way on how to explain the situation and literally pull us out of the hole in the ground that we have dig down into, right? But that is our problem to try to find a way out of there. No, we have not started to discuss how to get out of there and getting a text and description that we agree with. But I think given that we have this violent agreement regardless of – Jeff, my apologies – but regardless of what wording we're using and I might have used the wrong words, we now agree where we are and now we can move from here forward, right?

DANNY MCPHERSON: Yes, thank you. Thanks very much.

PATRIK FÄLTSTRÖM: That was 38 minutes but I think very well spent 38 minutes. Now what you, Jim also, understand what I think you as the strawman, writer of

the strawman and asked to be co-chair should agree on the text that explains to us internally what we just agreed to and how to move forward.

With that, let's move over to point 5 on today's agenda, which is continued work on the questions where we are working on question #3 and I would like to move there. So can we change that document, please, Kim?

You see here on this question #3 that we are talking about the harm and we're starting to discuss what harm is. Imply physical, cyber, reputational? We know that there had been some discussions regarding the wording in one of the documents regarding reference and how explicit or implicit harm to humans or something else.

We have also a little bit further on, if we scroll down a little bit, Kim, we have interception and manipulation. It's sort of one class of things that are going on, which means the collision of the string itself. Then we have the signaling interruption which is more the NXDOMAIN that is going away, if I simplify things a little bit. Then we talked about the explicit example of the PKI issues where we have domain names as part of the attribute values in X.509 certificates.

That is how far we have come. Is there anyone that would like to continue their thoughts here? Unfortunately, I was not on the previous call but when I read this text and tried to look at where we were, it feels like this was interrupted because the clock went all out. So, is there anyone that would like to continue literally where we are when discussing PKI, or alluded backwards in question #3? Matt?

MATT THOMAS:

Thanks, Patrik. I'll state that most of this rambling in this document is my thought that I had given to the question. This has not really come up in previous calls but this was just some words to paper that I had put in there. To me, this main question in here really needs to focus on what the definition, their connotation of harm is here. I think us getting a better thought around what that actually means will help us scope the work, because a lot of this is all about risk assessment. And from the Board's perspective, doing a risk balance and assessment for that is fundamental for name collisions, and so I think understanding exactly what they're looking for in terms of defining harm and how we interpret that harm here is important for us to be able to answer some of those questions. Please do not take my text here as the gospel or anything. This is just some rambling thoughts that I had when I was looking at that.

PATRIK FÄLTSTRÖM:

Thank you. That clarifies a few things. One thing that was a little bit nervous about was that people on the previous call really wanted us to go through the various different kinds of things that could happen regarding signaling and all that kind of things, because my interpretation was also very similar to what I now understand that you talked about is more – we're going to talk about the harm, which is given that we have these various different kind of things that might happen, which are a couple of broad categories, for example, when you are looking at something, you're not looking at what you're supposed to look at, basically. There was supposed to be a response, but you get a

different response or you're supposed to not get a response but do get a response. But the details of those things, it doesn't really matter in this question 3. What is interesting in question three is instead given that we have this kind of changes in behavior or false response in why they're now they're just cause of the collision, what are the implications and what is the harm? What you started to write about here is trying to understand what kind of situations might occur and then try to find the harm from there. Did I understand you correct?

MATT THOMAS:

That's a very good way to describe that. Yes.

PATRIK FÄLTSTRÖM:

The question is, is there anyone that have been thinking about how to describe the various harms? Jeff?

JEFF NEUMAN:

Sorry, I raised my hand before you asked that question. I didn't raise my hand to answer that question but more to say that also, isn't it implicit in this question that we should help or provide guidance to the Board on how they can weigh the different harms? Because we can list a lot of unexpected results that would happen in the event of a collision and we could even classify them as negative results. But at the end of the day, we need to help the Board understand whether strings that are being proposed to be delegated are of a sufficient level of harm to either not delegate them or do some other form of mitigation. So we do a good job here starting to list all the potential negatives but we also need

within our group to figure out, is harm a loaded term and how do we help the Board weigh these different negative consequences? Thanks.

PATRIK FÄLTSTRÖM:

Okay. Before Warren, I would like to suggest some responses to that. The first one is a lot of things that you're talking about, personally, I think should come as responses to later questions, and I think one thing we should be careful about is not to repeat responses of questions over and over again because to some degree, they can be viewed as overlapping, specifically if you look at each one of the questions in isolation. But there are actually eight questions which are asked all together and we should give one response. It's not one response per question. Because of exactly what you point out, my suggestion is that we view the whole document as a response, not each individual question.

Second, when we have some kind of strawman understanding of what we think the complete answer is to all eight questions, including a strawman response for each one of them and our understanding, let me suggest that we go back to the Board, for example, Merike Kaeo, which is the SSAC liaison to the Board, and ask whether our understanding is correct or not on, for example, when we are talking about discussing and expanding on the definition of harm, whether our explanation matches the thinking of the Board. So I think it's really easy for us to make sure that we are not guessing, we can actually ask the Board. And Merike is on the call. If you would like to clarify what you think about the process, from your perspective, I'm happy to listen to you. While

you think about that, because I didn't want to put you on the spot – Warren?

WARREN KUMARI:

Thanks. I was originally going to be bringing this up in the Any Other Business thing, but Jeff sort of provided a good opening so I figured now is a good time. For the definition of harm and determining what the level of harm is, I think that it's going to be really hard or almost impossible to get to an answer for that. For moving this along until the second set of questions, what I want to ask is, what do we do about the fact that there are a number of instances now where we are seeing a significant increase in collision strings? More specifically, there is an application called Console which is made by HashiCorp. Console was released in 2014, I think actually April 2014. And between then and now, it now accounts for – I think it's the third most first queried for an NXDOMAIN response.

Matt actually has a nice graph which I can bring up and he said can share, but it's sort of one of those classic hockey stick up into the right type graphs. I don't know if I could actually share the numbers but from talking to other people, there are in the hundreds of millions of NXDOMAIN queries per day for .console. Many of them are coming from one ... or being relayed through one large recursive resolver. But this is a new collision string off to the new gTLD sort of things were launched. It is growing quickly. And what Console is is a cloud orchestration platform. So if .console were to be delegated, there are an unknown number of people running cloud services whose systems will potentially just stop. How can we assume that we are going to be

able to come up with a definition of what the harm of people use cloud services just stopping in the end?

PATRIK FÄLTSTRÖM: Merike?

MERIKE KAEQ: Thank you, Patrik. Thank you for actually do putting me on the spot but I actually don't mind. So I have been listening into these discussions because I do want to also make myself available that if there are any kind of questions that this group has in terms of what does the Board want, what does the Board think, I would be more than happy to help bring that to the Board Technical Committee who is shepherding this work on behalf of the Board. So if there are any questions in terms of what would the Board think about this, is this what the Board wants, and what is not clear in terms of the questions that were posed and that this work is trying to address then I'd be more than happy. But all of the issues that I've heard or the discussions around risk are right on the mark. Because the Board primarily is going to be looking at what is the risk for these collisions and can they be mitigated. That's all I want to say right now.

PATRIK FÄLTSTRÖM: Thank you. Danny?

DANNY MCPHERSON:

I was just going to pile on to what Warren said. I think there's no better example of a collision occurring at the root that could be and applied for gTLD that outreach to the primary source of the queries is likely going to result in no more queries to the root for .console. Matt Thomas and I were speaking with Warren early this week. He did some things to help address the collision. And it was number three of undelegated TLDs at the root of all query volume today and it was nowhere on the radar three years ago. By doing one e-mail and some outreach to someone who knows something somewhere, there's no better example of the effects of outreach and preventative measures to mitigate name collisions.

I just think it's a great example and I think there's a long list of those that have evolved. And at least Verisign, I'm not sure about other root operators, has a very large dataset that were willing to make available and accessible to people to do some of that work and hopefully help with things like what Jeff Neuman wants to detest. To say, "Are these things too risky? If they shouldn't be applied for, don't accept my money up front or let somebody put a business on the line." So thanks for bringing it up, Warren. I really appreciate it.

PATRIK FÄLTSTRÖM:

Warren?

WARREN KUMARI:

Thank you. A couple of quick things. First, Jeff was saying that we make sure that we don't reward those who design services by giving them the rights. Some quick clarification on Console. HashiCorp made the Console

app or software. It is released as at least some portion of it is open source, so HashiCorp is not making money off this and people have gone off and installed it. And when they install Console, it starts generating queries that end in .console. So this is not something where, as an example, HashiCorp/Console would want the string or be able to use the string or even that it's really a product that they're particularly commercializing. We needed a way to do something. There was no way to do this. So they did not have a good option. They released software which generates this name when you first create a console cluster and there are going to be more of these.

Also a quick follow-up to what Danny said, I think that it's not sharing too much to note that a huge chunk of these queries were coming through one large provider but that's because that large provider was forwarding queries. These are not queries that are being made up. So one person cannot mitigate this, it's anybody who has installed the Console app in a specific configuration will now be generating queries for non-existent names in .console. And I believe that if the name is delegated, people running this cloud orchestration software, their cluster basically just stops working. They impact to people doing this, and again it's not a commercial thing. It's potentially their service just stops working.

PATRIK FÄLTSTRÖM:

Thank you. Jeff Neuman?

JEFF NEUMAN:

Sorry, it took me a second to get off mute. I understood that there may be these kind of what's called unicorns out there and absolutely want those to the extent that we could know about them in advance and to not take people's money if that were even possible. But on the other hand, in order to preserve the space, we do need to disincentivize in some way the development of future applications that rely on doing this. Otherwise, we're basically just saying that, "If you want to play legitimately by the rules and want to actually actively use the space, you have to go to ICANN. But you know what? There's this kind of backdoor way you can do it to or others can do it."

So we have to strike a balance and we have to not just say, well, anything at that time, it seems like it's generating a large number of queries, we automatically have to protect them because they may have gone around the rules. I understand, Warren, that you're going to say that they didn't go around the rules, that this was ... But at the end of the day, we can't always have the top level, the root be subservient to any platform or service that someone else develops and can be used in a certain way, the easiest way, simply because they do that. We can't keep doing that.

I mean, there were people in the ICANN community that were really annoyed about .onion, and that took a lot of discussion and people to understand the role of the IETF and the Memorandum of Understanding and everything else finally got that calmed down. But if there's going to be a bunch of strings that we're going to reward by not ever allowing them to be delegated, then that's going to be a tough explanation to the ICANN community.

PATRIK FÄLTSTRÖM: Warren?

WARREN KUMARI: Thank you. I wasn't actually going to say that they didn't go around the rules. What I was going to say is they could not have gone to ICANN and requested the string. At least in the last Applicant Guidebook, there is no way to go along and request a name that can be used for something like this. Same like for .onion, there is no way that [inaudible]/tor/whoever could have applied for .onion because the ICANN rules require that you have the name delegated, that you have registrants, that you allow registrants to register in the namespace, that you have nameservers and report a whole bunch of stuff that you have a zone file for stuff like console, onion, a huge number of these other things. A, there isn't many but apart from that, B, there aren't registrants in the traditional sense within this. And so there is no way for people to follow the rules and get a name like this. This is a use of the namespace which does not fit in the ICANN model. And if the ICANN model doesn't have a way for people to legitimately fit in and develop as they want to, they're going to find ways to just go around and do something else.

PATRIK FÄLTSTRÖM: Thank you. We're running out of time. Before you, Jeff, I clearly see that this unicorn issue regarding people that start to use strings in protocols that looked like top-level domains, but they are not top-level domains according to the ICANN definition, that is something that we clearly

need to discuss and describe because what will happen at the end of the day is something that ends up being like a collision. So I think we have agreement that we need to talk about this and we have various mitigation methods like Danny and others are talking about outreach is very effective, etc. so that we have to do something is pretty clear. Now quick responses, please, Jeff and Jeff. Jeff Neuman first.

JEFF NEUMAN:

Just to respond. Thanks. Warren, I think that's a red herring. The whole SubPro process has been trying to figure out what other things could be applied for in innovative way. Brands don't fit the actual ICANN model either. To basically give up and not work within the ICANN process, to come up with a way that they could is giving up, and I don't think that that's right and I don't think that should be rewarded. If people want ways to apply for these types of things and think that there should be different rules or exceptions for these types of innovative TLDs, then work within the system. Don't just say that there is no way. We've been trying to get an open round now for almost a decade and there's consistently going to be excuses. So I think we should find a way to bring them into the system as opposed to just automatically considering them outside. Thanks.

PATRIK FÄLTSTRÖM:

Jeff Schmidt?

JEFF SCHMIDT:

When I say, what we did the last time worked, this is an important part of it, right? We, collectively. The unicorn strings, each one has its own individual story. Corp with the story. It's Microsoft products, it's history. Dot mail is a story, it's a send mail configuration. Dot home is a story, it's an ISP. When I say what we did back in 2012 worked, finding those and chasing those stories is a really important part, and then making the risk decision on whether we should do something, block it or something different, but there's no one-size-fits-all. There's no list we can generate in advance. There's no criteria we can generate in advance because each one is a different situation or a different story. I could not agree more that this is important and this is what we need to be focusing on if we're ever going to put things in there again. Thank you.

PATRIK FÄLTSTRÖM:

Thank you very much. We're out of time. I think we have an agreement, even on this last bullet that unicorns will exist, as long as the rules that ICANN ... If that someone will not be able to get whatever they want, it might happen that they will try to get what they want anyways in this single application, single vendor cases like you just explained, we just need to write something about this, and also try to understand what can be done to minimize that can that kind of risk. This is just an evidence that this discussion group is needed and also the result that we expected to produce.

With that, unfortunately, a few minutes late, my apologies, but it was a good discussion. Thank you very much for today. I would like to offer someone to say something if there's anything they have really urgent need to say, raise the hand now. I see no hands. Thank you very much,

everyone. Have a nice day, night, evening, morning, wherever you are on the planet. Thank you very much and goodbye.

[END OF TRANSCRIPTION]