
KIMBERLY CARLSON: Hi, everyone. Welcome to today's NCAP Discussion Group call on December 2nd at 19:00 UTC.

In the interest of time, there will be no roll call. Attendance will be taken according to Zoom. I and Kathy will update the wiki with the names of the participants as quickly as possible. No formal apologies have been received. All calls are recorded and transcribed, and the recording transcripts will be published on the public wiki. And with that, I'll turn the call over to Jim.

JAMES GALVIN: Thanks, Kim. Jim Galvin here, chair of our illustrious group of folks here. Thanks, everyone, for joining. I know that we've been on a little bit of a break, partly the U.S. holiday last week. It seemed to get in the way, at least from the point of view of the discussion group. But on the other hand, your NCAP Admin Committee, your co-chairs, and Rod and Julie, and Merike, the SSAC liaison to the Board, have actually been meeting diligently to move forward with a project outline and creating a budget proposal and something a little closer to what is essentially a statement of work for use by ICANN. So we're going to quickly review some elements of that here in this meeting overall. This meeting is a bit of an organizing meeting in that sense, but we believe that we're prepared to start to kick off some work here. So we're just going to level set with where we are, give you an update overall or project outline and the process, the proposal that will go through to the Board. So that's my welcome and introduction for the moment. We'll just skip to the agenda here.

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.

Next up, we have updates to SOI, Statement of Interest. Is there anyone who wants to jump in and give a Statement of Interest update? Matt, you have your hand up. Go ahead, please.

MATTHEW THOMAS:

Thanks, Jim. This is Matt Thomas, one of the co-chairs of the NCAP. Welcome back, everyone. It's good to have the weekly meeting again. I do have an update to the SOI that I'd like to bring forth to the group. A few weeks ago I applied for the SSAC, and since then the SSAC has invited me as an invited guest. I believe a process still remains that the SSAC will submit a request to the ICANN Board to appoint me to the SSAC. I'm not sure what the timing of that is, but assuming that approval goes through, I think there was a logistical component to the structure of the NCAP chairs, having some be to the outside open community and not just the SSAC. Jim, I don't know if you wanted to expand on that at all. I just wanted to update the group with that update on my SOI.

JAMES GALVIN:

Thanks, Matt. I appreciate that. Welcome to the SSAC. I'm speaking for myself. I think you're an excellent and welcome addition to our group of people in the SSAC. But aside from that, the question that Matt is raising is something which we do want to bring and put to the discussion group here. We're certainly interested in getting some input and reaction from the group. We don't have to make a decision today. So it'll be an open question but if anyone wants to speak up and say something, that would be good.

We had originally, when this project was first proposed, we had suggested and offered that there would be three co-chairs, two from SSAC and one from the community. And at that time, we kind of went through a little bit of a process here. Matt Thomas is the guy who had stepped up and volunteered, and so he became part of our team here. So there's kind of two related questions here for the discussion group. What is the reaction to people, now it looks like we have three people from SSAC who are chairing this group, and so we're interested in reactions from people on that point how strongly do you feel about making sure that we have a community person who's one of the co-chairs?

Then of course the related question is, if we want to press on that and do all of that, and of course we will if that's where the discussion group wants to go. We would, of course, need a volunteer. Folks may want to consider how they feel about it and what they might want to do or not to as far as that's concerned. So open for some discussion here and any comments that people want to make. Steve, you have your hand up. Go ahead, please.

STEVE CROCKER:

Yeah. I think the solution is simple, either you or the other co-chairs have to leave SSAC.

ROD RASMUSSEN:

No.

JAMES GALVIN: Thanks very much. I will take that under advisement. And that was Rod, I believe, who screamed out a no.

WARREN KUMARI: First in, first out.

JAMES GALVIN: Yeah. First in, first out, right. Okay. I know where that goes. That puts me on the chopping block. All good.

Anyway, yeah. So open question. Any other comments from anyone, any feedback? Actually, any volunteers from the community, non-SSAC members. I think this group is generally about half and half, who might be interested. If you are interested in being chair and you want to explore that possibility, please do let us know. Any one of us, you can let us know. You can talk to Rod or Julie, of course. There's no emphasis.

What we're going to do here—and I see Rod's hand—one last comment for me. What we're going to do, we decided we're going to continue to move forward with our three co-chairs as is, but we'll just kind of remind people about this question for a while here as we go forward. We certainly want to make sure that we remain responsive to the community here. So you have time and an opportunity to comment and reach out whatever your interest is. So with that, Rod, you have your hand up. Go ahead, please.

ROD RASMUSSEN:

Thanks, Jim. Welcome, Matt, at least in preliminary. We don't have an issue at the moment because there is a process that has to be gone through and it's largely pro forma, but Matt is still not a full member of the SSAC until the Board does their action. But that being said, we set this up originally to make sure that we include the community—and obviously we did—and the member from the community impressed us so much, he's now part of SSAC. So great work. Nothing like showing that you're willing to really work hard to get SSAC members to go, "Hey, we'd like to have somebody like that working with us." Really, at this point, this is really up to the discussion group. There's no requirement. There's no list written down in stone anywhere how we do this. So, personally if there's not somebody who wants to be a co-chair then that kind of solves the problem, it solves itself. If somebody does, we will certainly work out the shuffling of the deck chair, so to speak. But don't feel that there's an obligation.

But if there's somebody who's from the community who feels comfortable with it and putting in the work—because there's a lot of—we meet as the Admin Committee an extra half hour to an hour every week as well, and then there's been working with ICANN staff quite a bit on background and project planning and other things like that. So there's a fair amount of work involved. Not to discourage anybody but I just want to make sure that if you do want to put your hand up, there's a fair amount of work involved and expectations around that from the full group. Again, it's not written in stone. We can press on as we are. And if at some point this comes up and folks feel strongly about it and we do have a volunteer, then we can make that happen. If not, I think we're in fine shape and can continue forward. Thanks.

JAMES GALVIN: Thanks, Rod. I appreciate that. Patrik, go ahead. You have your hand up.

PATRIK FÄLTSTRÖM: Thank you very much. I just want to emphasize what Rod just said that we have of course been talking about this in between the three chairs and the leadership of SSAC. To some degree, I'm not surprised that we, SSAC members, immediately started to sort of joke about this in the chat and elsewhere, here at the meeting, and SSAC members do dominate the participation on this call as well. So I do understand if people that are not members of SSAC feel a little bit overwhelmed over both information and the joking and whatever else that just happened. So let me, on behalf of us co-chairs, my apologies for what just happened. That said, please think about it, specifically you who are not members of SSAC that should think about this and come back to any one of us, just like Jim just said. Thank you.

JAMES GALVIN: Thanks, Patrik. And thanks again to Rod. Both very good comments. Last call for any other comments from anyone. Then I think we'll draw a line under this for now. In terms of formality, as Rod said, it's not an urgent issue to deal with. It's also not a requirement, but it is important in our connection with the community and presentations work in the community that we make all this visible and give people an opportunity to comment and also to express some interest so that we can deal with that. So thanks very much for that. Again, feel free to reach out to Rod or Julie or any one of the co-chairs—Patrik, Matt, or myself—if anyone

has any particular interest or questions and we'll certainly follow up on that.

Okay. So let's move on and jump into talking about the Study 2 proposal. You can open up the document there, Kim, and just show that to people, although I'm not really going to talk to the document per se. We have a project outline and it is actually from this document in here. Maybe if you bring this down to Section 4. Yeah. So we'll just kind of leave it there or folks can open up themselves and look at it.

We have a project outline that we produced. ICANN has engaged a consultant, Bernie Turcotte. For those who have been around from the earlier work here way back in the beginning when this project was first started, you might recall that Bernie had helped us in developing the original project proposal, meaning the budgeting side of it and all the money that was involved. So it's good that he has some history to all that. He's good with doing this kind of thing for ICANN.

So we have a project outline, which we really can't share with you directly, unfortunately. I'm going to going to speak to some of the items that are in here to give you an update on where we are based on the project proposal that's there that we've talked about several times over our last few meetings. And from our outline and some of the details that are there, Bernie is now actively working on producing a budget to go with what is ultimately has turned into. So I'm just going to walk through some things here between us co-chairs, and Matt will help out here at one point as we get down there. If you have any questions, I'm going to try and keep an eye here on looking for hands. Feel free to jump in at any time. If you want to ask something, I'll probably try to

pause at a couple of key times, too, just to make sure and see if anyone wants to add anything.

So I'll start first off with this notion with resources. One of the things that we're going to do in the revision is, as compared to what this project proposal was prepared as years ago, is we really are going to look at the discussion group to do a fair amount of the analysis work quite directly. We're hoping to have some friendly access to data is the way I'm going to phrase it. So we do have a few people that we're hoping will work with us and, given a set of specific questions from us, they will query the data sources that they have and provide us answers about that. We'll be able to use that to go forward and produce our final end product. So we are going to depend a little more on the discussion group than we had originally thought of three years ago when we first kicked off all of this work and we're giving it some thought. We'd kind of hoped on providing a consultant who might do a lot of this, but we're thinking it would be better if we did it ourselves at this point and instead just go with friendly access to data.

So with that in mind, we do want to try and get a technical writer to help in being present in all of our meetings, keeping all the documentation that goes with it, will be responsible for all the preparation of the reports, helping us manage comments, all of that kind of stuff. So they'll be coordinating with a program manager and participating in all of our meetings and helping us with all of the documents and presentations that we might have to do as part of this. So that's one person and they'll be with us, really, for the duration of this project. I probably should have started with the program manager on top. Since I mentioned the program manager, I'll jump there.

Obvious responsibility, in a project like this, you need to have a resource rather than volunteers. We're all volunteers here. For Study 1, Matt Larson at ICANN, as part of OCTO, really served as the program manager. But we're looking now for a directed resource and ICANN will have to fill that role with somebody to manage the project and all the details of it from that point of view and, of course, all the money, that kind of thing. So it's all the things that you would expect from that particular role.

We'll also have a technical investigator. The primary purpose here will be in the project proposal to go back to Section 4 there. The first thing on top there, the Study 2 task, is item one is to conduct a root cause analysis. So what we're imagining is that there'll be a person whose job is will be to do exactly that. There are 40-some name collision reports that ICANN has received over the years since the last round. And the idea here is for them to go out and just gather up as much detail as they can about what happened there, answer all of the obvious questions you would expect—what happened, how it was found out, what they did about it, any kind of lessons learned, gather all of that up for us, see if there's anything that we can learn from it and add that to what we get from the JAS and Interisle reports, plus our own analysis that we're about to get into here. So that's just sort of a chunk of work that we can give to someone who could then go run off and go do that, and then come back and report that back to us.

Lastly, in terms of resources, obviously there'll be administrative support. As you know, we have Kim Carlson with us now and, of course, the SSAC Secretariat staff also support that and support Kim, but you have to identify that kind of support. Someone who does all of the

organization about the teleconferences, all of our meetings, manages the wiki space, those kinds of things and, of course, provides whatever support the technical writer and program manager need.

Okay. That's just sort of the direct costs that come with this project and stuff that we're going to be doing. Steve, you have your hand up. Go ahead, please.

STEVE CROCKER:

Thank you. Two thoughts to share. With respect to looking at, you said, 47 different reports about the name collision. I hope that somebody is able to coalesce those down to a relatively small number of easily understandable and identifiably distinct clauses. Otherwise, we're going to have a hell of a time communicating any of this and speaking to it. So somewhere in this mix, the list of people that you listed or maybe it will fall to us as a group, somebody's going to have to think about how to take all this bottom-up stuff which is excellent raw data and think hard about—call it concept formation or pattern recognition or something. That I think will be one of the key contributions that has to exist in this process. I think it's important to do. And I think that when it's done, it will be an important contribution.

The other thing I was going to suggest just from a process point of view is to actually try writing a draft of the report right up front and with identifiable holes as to what's going to be found during the process so that we can manage both what the target shape and structure of the report is, and then work toward filling in the substantive pieces of it as we go. I think that will speed things up tremendously.

JAMES GALVIN:

Thank you, Steve. Both of those are excellent suggestions. Let me give you a quick reaction for me. On your first point, I would say that that's going to fall to this group. What at least my initial reaction is I would be looking for the investigator mostly to gather up all the details for all that. If we happen to have someone who is knowledgeable and comfortable enough, they might provide some additional analysis on part of it to give us a head start on doing the categorization that you're talking about, that would be excellent. But I would say that's going to fall to us to manage. We'll see how it plays out with whoever the consultant is who ends up getting selected to do all of that to see how we can manage that. But I agree with you. That would be an excellent contribution to all of this is understanding those categories.

On the notion of pre-writing the report, I like that concept. My initial reaction is that once we have our technical writer on board, maybe we can take a step back and try to approach that. As you're going to see when we get to talking about the actual work here, we're going to try and start digging in now and start gathering data that we can do and doing things that we can do while we're waiting for some of these elements to come through, because there's obviously going to be a time lag as a proposal goes to the Board—hopefully it gets approved—and then ICANN goes through procurement, and all of that sort of comes together. So I don't know that I want to take time right away to do all of that, but we can certainly give some thought to that and then be prepared to take that on when we have a writer working with us, who can then start that process and do it. I like that.

Matt, you have your hand up. Go ahead, please.

MATTHEW THOMAS:

Thanks, Jim. Three or four [times], I just wanted to tack on to both of you guys' comments there. The first is going back to why we're kind of more heavily relying on the contributors of the discussion group, and that is that there are new Study 2—it really changed one of the original goals of the study before in which it was to create this data repository. Since we're eliminating that step due to PII, GDPR, and just legal concerns, it really kind of leaves us in a position where there's a handful of people with access to relevant datasets for this kind of study. And I just wanted to publicly say that I'm very committed to doing that analysis based off of the DNS telemetry data that we have at A and J root servers. Unfortunately, Verisign no longer has its recursive service. We uploaded that a week or so ago. So we'll be able to still do our analysis on A and J, going back longitudinally for probably six, seven years with high fidelity data. I think that will be hopefully a starting point for a lot of the measurements that we're going to be talking about before the technical writer and the contractor starts coming on. I think that may be something that we'll talk a little bit more about, Jim, later on the call about what kind of work we're going to start doing in the interim, and specifically maybe looking around the data sensitivity analysis.

The only other item I wanted to also call out on the RCA report is I think there is an important other data collection piece that we want to identify there is, if applicable, that the investigation should also go back and look at traffic patterns, pre-TLD delegation to see if there are any

kinds of signal in the data that would have been a good warning or highlighted the risk of that collision happening. So that would help better influence our assessments going forward with the rest. I think that's an important thing that we want to keep an eye on. Thanks.

JAMES GALVIN: Thanks very much, Matt. All excellent additions here to the discussion. Steve, go ahead, please.

STEVE CROCKER: Building up Matt's comment. It's a really good idea to look at the precursor to the delegation. But in addition, while you're doing that, look at when that began because one of the hypotheses is that in anticipation of delegation, various parties might have an interest and then have started hammering the root or causing other things to happen, so it's qualitatively different in my mind if it's been a persistent background or if it happened at a relatively short time ahead of the delegation.

JAMES GALVIN: Thank you, Steve. Good questions. Yes, we'll have to account for all of that. Jeff Neuman, you have your hand up. Go ahead, please.

JEFF NEUMAN: Steve made partially my point, but also that applicants for new TLDs, especially a company like Donuts, were doing lots of queries and lots of different types of things for several years prior to the application

window opening. That's just to add on to what Steve said. It's not just prior to—I think the word Steve used is prior to delegation, but it's really prior to the application round and for a number of years prior to the round.

JAMES GALVIN:

Thank you, Jeff. Alter to more broadly the principle here, which we have not actually used this word per se in the Study 2 proposal, but in the original NCAP proposal from years ago, we do have to get due consideration to gaming. What can we do or not do, can we detect it, how to find it, that kind of thing. So it's part of our discussion as we get into analysis of data, we do have to think about that. And we do have to provide some advice about that as we consider our responses to the Board questions. That's an issue. And in broad terms, that's really what we're talking about here is people attempting to sway a decision one way or the other, based on the presence or absence of name collision.

Okay. All right. So let's jump into talking a little more about what the organization is of the project. So you have in Section 4—if Kim can bring us back up there—you can see that we kind of had broken this down into four tasks, if you will. We have kind of reorganized this a bit in terms of how the work was going to get done, and also because we were thinking more about how the parts fit together, whether they overlap, do they have to be done serially, that kind of thing, and where things are. So we've kind of structured this into three major project elements, which are all covered by those four tasks that are listed there.

Quickly, one of the obvious ones is the ICANN collision report. So it's doing that study. That still seems like a nice separable piece. That can get started as soon as we have somebody who can do it and it'll run its course for however long that takes, and then we'll have that data to work with. Probably the largest project element really is pretty much the rest of the work. Well, there's the data analysis now part of the work and that's the impact data sensitivity analysis. And I'll just mention what the third part is and that is where we actually sit down and take all of we've done in the impact analysis and we actually work out how to respond to the Board questions. I think we've said enough about the root cause analysis of collision reports.

Let's say a little more about the impact data sensitivity analysis. So I'll let Matt up in here. He's really going to be in charge and lead that effort. So let him expand a little bit on what he imagined is going to go on there and the time that we're thinking that's going to take.

MATTHEW THOMAS:

Thanks, Jim. There are a couple of different components to the impact analysis and sensitivity analysis. We captured a large portion of that in our technical gap document where as time has progressed over the last eight years since the name collision assessments have been done, the DNS ecosystem has evolved quite a bit. So I think one of the first initial baseline measurements is to kind of get a sense of where are we today versus where are we yesterday or back then. So looking at things like deployment rate of QNAME minimization or other technologies like hyperlocal root deployments, seeing how that's going to impact our ability to conduct any kind of meaningful measurements based off of

various different data sets' position either at the root or at the recursive levels. So I think an initial report of the sensitivity analysis will be kind of just base lining that and understanding exactly what we see now versus what we saw then, and how that will influence our contextual ability to understand what these queries coming up—either leaked queries or intentional—mean in terms of name collisions.

Then I think the second component of that, once we start having a little bit more grasp of what we're looking at, is then to also understand at some future point in time when ICANN does decide to evaluate the risk for various set of strings. If it is only given access to datasets X, Y, and Z or a subset of those, how does that subset of data availability influence the guidance that we would provide in our answers? It's having one letter compared to all of the letters out of the DITL collection sufficient. And if it is, it isn't like what would be the impacting factors from the ability to capture a whole dataset versus having a very small subset versus 1 of 13 roots.

That's I think a portion of the sensitivity analysis that we can start off immediately. I'll obviously be starting to do some of that with A and J. There's existing data, hopefully, like from RSSAC002 data published on all of the root servers that I hope will give us a broad picture of at least the evolution of the DNS traffic patterns that we can use to understand some of what's going on without having to do a lot of data processing to get there.

The rest of the impact analysis is going to kind of go back and call out those explicit case studies around .corp, .home, and .mail, as well as a few other strings that we identified. Within the project plan, we used A

and J data and drew a line in the sand saying, “If these strings received more than 100 million queries a day, then we’d also include them in this set of specific strings to do this analysis on.”

I believe that brought the count up to six or seven different strings. But we’re going to do a detailed case study on those, looking at the track patterns again back over time, and what they see now, and based off of the understanding that we gain off of the sensitivity analysis to understand if the risk profiles for those have changed inherently or the signal is actually being impaired because of the evolution of the DNS protocol and various components within. So I think that that will be a large portion of the rest of the impact analysis, and then combining that with the sensitivity, as well as the root cause analysis that should hopefully give us some actual quantitative measurements to help influence our development of the Board’s advice that we need to give back or answers to those. Thanks.

JAMES GALVIN:

Thanks, Matt. You have some questions. Do you want to manage your queue? Or I can do it. Go ahead, if you want.

MATTHEW THOMAS:

Okay. One second. Yes. One of the questions is about if we’re going to do the root studies first. Yes. So the plan is that we are going to start with the root data. Once we have more specific, tailored, very precise questions that we are looking to answer, we would plan to take those types of questions out to other DNS sources such as the recursive resolvers, and hopefully be able to get a very precise answer without

having to do a whole lot of work, as PII is probably on the top of their mind there, but to help us inform our study.

I don't see the other question, Jim.

JAMES GALVIN: I'm sorry. You have hands up. So let me just say, Steve, go ahead while you get that sorted out.

STEVE CROCKER: Matt, you mentioned having access to only some of the root data. It occurs to me. I've now heard something like that in multiple conversations. To what extent is there clarity about how much variation there is across from one root to another? If there's a lot of experience that says it doesn't really matter which one you look at, you're going to see roughly the same pattern, that's one thing. And if there's huge variations then that is a whole different matter. I simply don't know. I don't have access to any of the data myself. But I'm just curious over the years, whether or not there's been any study of that or any sense of whether it's adequate to look at A and J, for example, or whether or not you really need to look at a whole bunch of things in order to get any kind of sense. My instinct is it ought to be fairly stable across the different letters, but I don't have any data on that.

MATTHEW THOMAS: Thanks for that, Steve. That's a great question. I might be a little bit biased on this, but I authored a paper back in 2013 for the workshop on name collisions and prices done by Verisign, and it has explicitly looked

at this using DITL data. There is shockingly a fairly large amount of non-overlap. Let me restate that. There is a good amount of non-overlap between the different roots, and while studying go much further into it, we can see it even within just the differences between A and J, and that's largely due to the placement in the announcements of different letters at different sites and locations around the world.

So, for example, I know there was a collision string .cba that was coming out of Chiba Japan, and that was largely going to one of our roots because we had more sites in placements there specifically to that. So I think there's going to be a pretty broad amount of difference in terms of what you see with what root where. And I think even some of the data that Matt Larson and ICANN OCTO showed recently with the COVID-19 data kind of alludes to that as well. Thanks.

Russ? I see your hand up.

RUSS MUNDY:

Thanks, Matt. You mentioned RSSAC002 data and that's good. But RSSAC also fairly recently, like within the last year, published RSSAC47 which is identifying a different set of data to be collected, analyzed, and so forth. And Paul Hoffman of ICANN OCTO is in the midst of working on at least a preliminary implementation of collecting that data. I don't know how much value will be present but it is potentially another significant source of a different dataset than what RSSAC002 and DITL data give. So I think it would be worthwhile to at least consider including that in the datasets that you look at in the study.

MATTHEW THOMAS: Thanks, Russ. That's a great suggestion. That also kind of made me also think of maybe we should also look at some of the ITHI data that ICANN has been doing. Maybe there might be some useful information in there as well.

Warren, is your hands up?

WARREN KUMARI: Yes. Hopefully audio is working properly, different mic. Yes, there is quite a bit of variance in which letters see what and also which individual nodes within letters see what. But I think that there's enough similarity that we can at least test the methodology using any old letter or even just using a small bit of DITL data. We can design the experiments, test the methodology, etc., using A data or J data or whatever other data.

One thing we do need to keep in mind and account for is that different types of collisions are going to have different amounts of visibility. Certain sets of collisions you will see the full string, and then for other ones they are going to be much more occluded by things like aggressive NSEC or local root. Within certain organizations, there's huge chunks of DNS data which are currently being hidden by local root usage and there's simply no way for people outside that org to see that. And some of these are sort of like large [inaudible] provider type orgs, and so if certain strings were delegated, there'd be no visibility but a bunch of things would stop working. And I don't know how one gets visibility into any of that.

MATTHEW THOMAS: Thanks, Warren. I totally agree with you on all fronts over there. I don't have any other comments on the impact analysis or sensitivity, Jim. Did you have any other specifics that you'd like me to elaborate on, or do you want to continue on with the rest of the project timing with the discussion group?

JAMES GALVIN: No, I think we can draw a line under this and go on. As we can see, and we're telling ourselves here, there's going to be plenty to talk about as we really get into start looking at data and consider the issues and the edges of things as we seek to develop some guidance for the Board to evaluate these kinds of things. So, plenty of interesting discussions to be had.

Okay. I'm drawing a line under that. As I said before, the third major project element here was just having some study about responding to the Board questions that really is the major work. And that really is going to be done by us. That's essentially a tabletop exercise by us. We're going to be taking all of this quantitative data and what we learn, the empirical data we learn from the root cause analysis, and we're just going to start walking through what we see is guidance that we can give to the Board about what data it should ask for and get and how it should consider how to review all of that data for itself as it decides whether or not to delegate. So there's some work involved there.

I think with that, let's move on. The next item on the agenda is this discussion of the structure of NCAP DG calls, but let me add to that, maybe put right in front of that discussion about timeline here and what

it really means to do work. The Admin Committee has really had quite a lot of discussion about level of effort and how to do this. On the one hand, in the original NCAP proposal, we had imagined that we'd give a lot of this analysis work over to a consultant, and then that could be done and we would just have the responsibility for responding to the Board's questions. But as we inherit that, as Matt described for the reasons he talked about earlier, now there's the question of how much time is it really going to take, how much time do we have to put into this, and what kind of timeline are we looking at? We could serialize all of these elements here, and of course if serialize all that, we're pushing this project out quite away.

What I will say is that what we're trying to do is we're targeting the following, which is we're targeting the timeline ending in June of 2022. So roughly 18 months of a project here in order to fit all of this in. And clearly, there is a lot to do in those 18 months. So that's the calendar time. The idea is to be able to deliver a final report to the Board at the June of 2022 ICANN meeting, essentially. So, you can back up from that to include all the public consultations that have to happen. You got to slot all of that in. We have our own ideas about proximate level of effort for doing these major components that are there. We're trying to examine what we can overlap and what we can and what to do. But in the end, the bottom line comes down to this. There's a lot to get done. And we're not convinced, quite honestly, that 18 months of calendar time is enough time for a group of volunteers to do this meeting one hour a week on a teleconference.

We're not really sure what the best answer, best response, is to that, quite honestly. So we really like to put that question to the group here

and ask for any comments or concerns or questions that you have. We are still thinking about the idea that if and when ICANN ever gets back to physical meetings, it would be good to get some nice face time so we'll probably still include doing a full day meeting prior to ICANN meetings when that's possible. Before then, a lot is going on virtually. Options to think about: can we meet twice a week and have two hour-long meetings a week? Other options that we've sort of tossed out for ourselves are maybe a longer meeting, maybe multiple longer meetings. We don't really know yet, and interested in some thoughts and feedback. Now I see some hands so I'm going to be quiet and we'll just sort of take in from the group here. So, Jeff, go ahead, please.

JEFF NEUMAN: That 18 months is just Study 2, right?

JAMES GALVIN: Correct.

JEFF NEUMAN: Have we scoped out Study 3? If Study 3 is essential to answer the Board's questions as well—and that doesn't even start until 2022, you're talking about 2024-2025—so we need to do a couple things. One is I think 18 months is way too long but I hear your thoughts on we're volunteers. So, perhaps getting some money to help that is not all volunteers. But we need to answer the Board's questions. I think—and I've always tried to make this argument, although we haven't discussed it—is to do Studies 2 and 3 together because I'm not sure that they are

completely co-dependent on each other. So I'd like to talk about that after we get through this.

JAMES GALVIN:

Thanks, Jeff. That's a good point. I'll only add that we have talked about Study 3 in the Admin Committee, too, and we do have similar concerns from you about what to do with that. It is something for us to think about here. Do we want to try to capture that work while we're doing Study 2? We've decided at this point in time that, at least for this project proposal, we just want to get this out and get this going and get that out the door. The question of what to do about Study 3, we can certainly take that up as we get going here and think about that. I do believe that there is an opportunity for us to, as you were suggesting, do some of that in parallel, but we do have to be careful. There's limited resources here, and everybody should think about that, too. So the focus here is on this project too. We're not dismissing this question of Study 3. But yeah, once we get this going and out the door and we get into our work here in this discussion group, we can open that question for ourselves and see how we want to slot that in with what we're doing. So thank you for that, though, and for not letting us forget that.

Steve. Go ahead, please.

STEVE CROCKER:

Thank you. You mentioned that this group meets one hour a week and you presented that as if that were a major factor in how long it will take to complete this. The picture I have is that the strong pieces of work will be done by other people by contractors and staff and so forth,

and that there will be particular points along the way at which this group needs to spend some in-depth time. Rather than think about physical meetings or a day-long meetings, we could divide it up a little differently and say there will come a point at which the group needs to focus substantial time on a particular question, and then organize a longer than one hour but not at all-day and not necessarily many days and certainly not a physical meeting in which there is good preparation and then an in-depth two- or three-hour call, as I say, with good preparation. That may move things along at the critical junctures very substantially and sort of find a happy medium between these hour-long calls once a week and day-long or multi-day meetings or something like that in person.

JAMES GALVIN:

Thank you, Steve. Excellent suggestion. That does require some really careful agenda management by your co-chairs, and we are well aware of that action item. I agree with you. We had talked about the idea that maybe we don't need every week two-hour meetings or two meetings every week, as you say, there will be a bit of ebb and flow about the work. But I think it's important for all of us to keep in mind that we have a target deadline here and we have to keep up with that ebb and flow. I guess we're giving the entire team here a heads up. We can either consistently have meeting slots or we have to be prepared to make adjustments and be flexible about that when the need arises. In my experience with ICANN meetings, regular consistent meetings tend to be better than meetings which seemed to come and go. They get problematic anyway. Again, I don't know what the answer is. But this is more about what does the discussion group itself think? How are we

willing to work? What would people like to do? I like your suggestion, Steve. I'm interested in what others have to say. Warren, go ahead, please.

WARREN KUMARI:

Thank you. Hopefully, this doesn't sound too grumpy. It's not intended to be. But it feels like we're having almost the exact same meeting every time we meet. We've got the same very similar set of topics which we repeat—there's a lot of things where there's not visibility because of local root and aggressive NSEC caching. It would be great if we could get some more info from places like recursive resolvers, but sadly, we can't, etc.

What I don't know is how we get out of that sort of paradigm and into something where we can have, "This is a really short summary of what we discussed last time. Let's move on and discuss something new this time." It feels like this meeting that we've just finished was almost indistinguishable from the last meeting we had and the one before that and the one before that. This is not grumpiness pointing at the chairs. I suspect a fair bit of it is we have different sets of people show up for different meetings, and so we kind of have to repeat. But how do we break the cycle and move on to getting from "there's the set of what we need to do" to actually getting it done?

JAMES GALVIN:

Thank you, Warren. I feel the hand slap. All good, though. It's fine. You're absolutely right and I really do agree with you. I would say that the intent of this meeting is in fact to break that cycle. What we'd like to

do with this group is actually to start digging in now into the impact analysis. As Matt Thomas said earlier—hopefully everyone heard him say this—he is prepared to begin doing data analysis with the Verisign root data that he has access to. So what we’re going to do is, use that as an opportunity for us to begin to develop the detailed questions that we want to ask of other people who have data. So mass prepared to be very interactive with us. We’ll go back and forth, develop our questions, to get that process started right away so that we’re actually digging in now. Then whatever amount of time it takes us to get to a really good set of questions then we’ll begin to spread that around to other friendlies, if you will, who have data and ask them if they would be willing to ask this set of questions of their data and provide answers to us so that we then have all that quantitative data to access.

So that’s a bit of a long-winded answer to say, ideally, our next meeting will be to jump right in and start figuring out what we want to do about asking data and the impact analysis and get started on that right away. It’s also important to realize that we’ll start that process and we’ll get doing that with one root data. Maybe we’ll get some other roots, probably L at least right away because that’s ICANN and hopefully we’re pretty comfortable saying that they will volunteer data to us. There may be some others, too, and we’ll keep moving that process along. We still have to take this project proposal. It still has to go through SSAC, it has to go to the Board. They have to approve it. And then ICANN has its own process in order to hire the people and spend the money that we need to get the other stuff that we need to move this along. There’s a time lag in getting all of that together. Hopefully, we can have the contractors that we need by the end of March, and then we can maybe

pick up speed a little bit at that point in time. But hopefully the next meeting is going to be to dig into it, Warren. So thanks for that.

Patrik, you have your hand up. Go ahead, please. And you took your hand down. Okay.

Jeff, I see your question in the chat room. "Will the data be reviewed by third parties?" Well, unfortunately not. I know that when we originally had created this proposal, one of the reasons for doing a data collection and having the data was the idea that it would be independently verifiable by third parties. We had hoped to be able to do that. We spent an awful lot of time in the project proposal we had years ago, thinking about legal agreements and what it would take in order to have arrangements with somebody who's got data. I would say that we have resigned ourselves to the idea that we're not going to be able to guarantee that the community is going to be able to check the data. We will publish whatever data we can. In fact, we're even leaving the door open for anyone who does some queries of their data on our behalf could do whatever they think they need to do in order to anonymize that, if that's something that works for them and facilitates making that data available to us. So, unfortunately, that's where we are. And in fact, that's the reason for the data sensitivity analysis, Jeff.

One of the real questions that we have to consider is what is the Board going to do in the future? What is really going to be available to the Board as it attempts to evaluate the presence of name collisions? So it's not just about the community verifying our report, it's about what is the Board going to do in the future on this issue, and that's a real problem.

Matt, go ahead, please.

MATTHEW THOMAS:

Just one comment on that, to Jeff's comment about if it's independent or reviewable, I think there is an opportunity if there are certain measurements that we want reproducibility for that I can make a concerted effort to use the same days of data from A and J that are in the DNS OARC DITL repository within OARC and do the analysis off of those so that it's open to the general public. It's just I have that data in a different platform and system internally that's a whole lot easier for me to process it there, but at least that same raw underlying data would be out there for someone to be able to reproduce if they wanted. That's where those are going to come from.

JAMES GALVIN:

Great. Thanks, Matt. I see Jeff's comment in the chat room. He's also saying, "Thank you. That will be important." And that's true. We'll do our best to make all of that visible and try to separate that analysis so we can see what's going on. Okay.

That is the timeline discussion. We're getting right up at the top of the hour here, and call is going forward. A quick question here for the group. We're coming into the to the December holidays. There are a variety of holidays in this month here, depending on where you live and your culture and nationality and stuff. Anyone, the discussion group—I hope that people know how to raise a check mark or whatever up here. I think people can do that, can't they, Kim? Actually, looking, I think I can't raise a check mark. But you know what, raise a hand if you want to

start meeting in January. That's the question I'm going to ask. We could probably have two meetings right now, but I'm going to say raise your hand if you want to meet in January. I'm just looking to see how many hands I get out of the 17 that are there among panelists. I'm only seeing three, four. If you don't raise your hand, I'm going to assume that you want to start meeting next week.

WARREN KUMARI: What was the question? Your question was ambiguous. Do you want to start meeting in January versus –

JAMES GALVIN: Yes. My question is, do you want to start meeting in January?

JEFF NEUMAN: Can ask a question? So now that we have this, what is the date that this is going to get to the SSAC? What is the goal for the date for the SSAC to get it out to the Board? What is the goal for the date for the Board to be able to vote on it? Do we have action items and decision points? And can we just make sure that we follow a schedule?

JAMES GALVIN: Thank you, Jeff. We don't have dates for those things in the following sense. We've been actively working with Bernie to iterate and he now has this project outline. He's got a nice timeline done out in the spreadsheet. He's actively producing the budget. As soon as he's done with that, which I expect to happen within a week, we'll then go to—

this notion of the project proposal will go through SSAC, although the data for the budget will also be held back from there, that will just be held back in the SSAC Admin Committee. And then it'll just be handed off to the Board. I don't know when the next Board's agenda is so I have no idea what the schedule is when to get it on the Board's agenda. Maybe we can get Merike to speak to that and say something on the mailing list about it for us. To me, I'm looking at that as a parallel process. We're just trying to do it as quickly as we can, and we're going to let it go through and take whatever steps it's going to take. It's not on the schedule that we control. That's what I see in front of me.

ROD RASMUSSEN:

Let me just add there, Jim. The SSAC process is not a long process on this. So it's really around fitting into—this'll probably have to be introduced through the BTC, and then brought to the full Board. The BTC is probably going to want to take a look at this. I know that there's been liaisoning already internally there so that shouldn't be a major shock or anything like that, but that's going to basically run through that. So realistically, rolling this up, I would assume that in January/February timeframe for the next time the Board could take a vote on things would be the time we'd actually get that launched off.

JAMES GALVIN:

Yeah.

ROD RASMUSSEN:

That on their schedule and what's on the docket.

JAMES GALVIN:

Thanks for that, Rod. Thanks for the question, Jeff. I understand really what you're trying to drive to and have dates. I think from our point of view, we're assuming that there is actually going to be approval, it's all going to happen, and it's going to go. And so what we want to do is kick off this work as quickly as we can. So we believe we're in a comfortable place that we know what we're going to do. So my question earlier was about, let's have our first meeting of the discussion group in January. Let's just start doing the work. Let's start doing the impact analysis. The rest of this is going to happen as quickly as folks can make it happen.

And we think everyone wants to move this along so I think that's going to happen as quickly as it can. We're going to do our part and hopefully it'll get through SSAC before the end of the year and get to the Board there. But again, it's the holidays. As Rod said, I skipped that step of it'll go to the BTC first. And then I don't know what the Board process is going to be to smooth it through their process, but Merike, the SSAC Board liaison, we'll have to manage that. I know they're expecting it. So it shouldn't hit any stumbling blocks as far as that's concerned. It's just a matter of them making the time to get through it all, and then ICANN will do its procurement process and that's going to take whatever it takes. So we just want to start the work, and the rest of this is a parallel process. Probably not the most satisfying answer but, unfortunately, that's the best I have for you.

What should we come prepared to do in January? The Admin Committee will make that clear. We'll take that on as an action item. You'll probably get some mail from Matt Thomas on that, and we'll get

something out here in a week or so, so that people can get ready for that. The first meeting will be on January 6, I would say, that first Wednesday in January.

I see a hand up and that is Steve. Go ahead, please.

STEVE CROCKER:

I think Jeff's question and desire to have a sort of top-down view of what the schedule is and the visible milestones is perfectly reasonable, and I understand your answer to that. The parts that aren't under our control will take however long they take and our job is to get going as quickly as possible. So I think both of those are correct. I particularly want to speak in support of what Jeff was saying. It doesn't have to be your job. It could just be a straightforward staff job to lay out what the blocking and tackling sequences of SSAC Board Technical Committee, which I created, actually, so it's another piece of machinery there, and then the Board itself. Those are moderately predictable that the BTC could see it in parallel, as you suggested, so that they're prepared to move it along and you could get feedback on that process. But somebody ought to be tracking it from the whole of it. And from a political point of view, both inside of our group and externally, having recognizable milestones that can be achieved and noted I think would be helpful all around.

JAMES GALVIN:

Thank you, Steve. Excellent suggestion. I like it. So we'll do that. The NCAP Admin Committee will take on the job of at least making our list of action items here. That and we'll make that visible to us. We'll find a

spot for it on the wiki so that we can begin to track what's going on and when it happens. So when the submission happens, when approvals happen for each of those individual task items. Even if we don't schedule a target date for them, we should at least be able to track that they're taking place. So thanks for that. That's a good suggestion. I see that Jeff is saying in the chat that he likes that, too. So we'll take that as good information.

Let me come back to my question of when to start our meetings. I'm sorry, we're after the hour. I appreciate that folks are hanging in here with us. I guess I was just thinking that we would start our actual work and kick off our project work. The question is when do we want to kick off starting our project work, separate from the rest of this approval, project proposal, administrative stuff that have to happen? I was just kind of looking at the schedule and thinking to myself, well, we probably only have two more weeks in December. And after that, we're going to lose enough people to vacation and other things that we're not going to meet them for two weeks. Well, for three weeks, probably.

So I was just wondering whether we should get started next week or start first week of January. Should our first work meeting the next Wednesday, December 9 or the first Wednesday in January, the 6th? I was trying to make the question binary—and I'm sorry that I didn't do a good job last time—but my binary question is if you'd like to meet on January 6 as our start date, raise your hand. I'll ask the other December 9 question, second. I see 4 hands, 5 hands—we have 17 people out here—6 hands. Don't even have half of you voting. What are the rest of you doing, you drinking coffee? Seven hands. I need two more to at least get 50%.

PATRIK FÄLTSTRÖM: I'm not voting because, for me, it doesn't matter. I will adapt to whatever the group decides.

JAMES GALVIN: Fair enough. I get it. Okay. So clear the hands and I will now ask the corollary question. We had seven there. I'll ask the other question: how many people would prefer to meet next week, December 9? Raise your hand if you want to meet on the 9th next week. I see one hand to get started right away. Because I agree with Patrik, the chairs will adapt. We'll just do whatever the group decides. And that was just Julie. Oh my goodness. So sorry, Julie. It looks like most people are looking for a quieter holiday month here, a seasonal month here in December.

Okay. So that's what will happen. We'll have some messages on the list to keep you up to date about what's going on. And we'll have our next meeting on Wednesday, the 6th. And now I'll do Any Other Business call. Rod, you have hand up. Go ahead, please.

ROD RASMUSSEN: I'll just say the caveat. If something comes up where we want to pull the group together, we'll send out an e-mail because if something breaks or we have some breaking news or something that comes up in this process, and we need to have a discussion group meeting, we can certainly call one within the month of December.

JAMES GALVIN: Yes. Good point. Thanks for that, Rod. Folks, keep up with your e-mail and watch for things. If we need something, we'll let you know and call a meeting.

STEVE CROCKER: The SSAC calendar will be updated appropriately?

JAMES GALVIN: Yes. I'm sure that Kim will take care of that post-haste. So all of that is true. Okay. With that, any other business? Anyone else? Last call.

Thanks very much, folks. So much for my thoughts and beginning about not running over. I appreciate you taking the time and some extra time in your day to get through this, but we're on our way now. So I look forward to everyone. Enjoy your holiday season here and be safe, please, in times of our stressful pandemic times here, and enjoy your holidays. We'll see everyone on January 6. We're done.

ROD RASMUSSEN: Thank you.

KIMBERLY CARLSON: Thanks all. Bye.

[END OF TRANSCRIPTION]