ICANN78 | AGM – SSAC Public Meeting
Thursday, October 26, 2023 – 9:00 to 10:00 HAM

KATHY SCHNITT: Thank you. Hello. My name is Kathy, and I'm monitoring this chat room. Sorry. And welcome to the SSAC Security and Stability Advisory Committee public session. Please note that this session is being recorded and is governed by the ICANN Expected Standards of behavior. During this session, questions or comments will be taken at the time set by the chair of the session. To ensure transparency of participation in ICANN's multistakeholder model, we ask that you sign in to Zoom using your full name. And with that, I'm happy to hand the floor over to SSAC chair Rod Rasmussen.

ROD RASMUSSEN: I turned it off. There we go. Thank you, Kathy. Welcome, everybody. Glad to see we have at least a few folks here first thing in the morning in the last day of, I think, a pretty successful ICANN meeting. This is the SSAC open public meeting. I will note that we opened up several sessions this ICANN meeting of our working sessions to the general attendees to come to and we had several people come by and listen to us talk about really cool technical stuff and watch the sausage getting made as they say. So, we will be continuing that going forward, I'm sure, and continuing to try and open up a bit more and be more transparent to the community in how we're doing our work and the like.

Can I have the next slide, please? So, this is the agenda for today. I'm going to go over what the SSAC is. This is a meeting where oftentimes there are people who aren't quite as familiar. And we're going to talk about up upcoming leadership changes, and we're going to go into various work that we have going right now, what's going to be coming out soon as far as reports and the like, and then talk about what we're going to be doing going forward, and then also talk about member outreach. And then, time left at the end, we'll have a Q&A. And I do hope that folks who have come here who may have some questions about stability and security in relation to the ICANN context, have some questions for us at the end. So, with that, I'll move on to the next slide, please. Oh, Jim?

JAMES GALVIN: So, Rod, I apologize, but I'd like to take a moment to interrupt your flow of operation here and your agenda and insert something that's not on your agenda. I think that on behalf of the ICANN Board, we would like to take this opportunity to spend a few minutes and recognize you and Julie and your six years of just long leadership.

ROD RASMUSSEN: Good or bad or anything?

JAMES GALVIN: Okay. Yeah. Well, that didn't come out quite right, but okay. Yeah

ROD RASMUSSEN: I get the hint.

JAMES GALVIN: It's early in the morning. What can I tell you? But, no, I think that it is important to acknowledge our leadership. They make a very strong commitment, dedication. Their leadership on the technical side, in Rod's case you took over at a time just before the pandemic, and you led this group through the pandemic and managed to keep us organized and on track and getting work done.

Julie, as vice chair, you had the seat of chairing our membership committee, and I can say from my own experience too that you were driven and bringing more expertise and attention to how SSAC manages its membership process and the people that it brings in. And of course, you've set the stage for even greater plans going forward. I know that you put a lot of work into how to engage with next generation leaders and the fellows. And our new leadership team is going to have the opportunity to implement that stuff as we go forward and bring that stuff there.

So, with that, I want to take this opportunity to introduce Tripti Sinha who the chair of the Board from ICANN, and she is going to come here and wants to say a few words, and we have some gifts for you too.

TRIPTI SINHA: Thank you, Jim. Congratulations to both of you for very long term. The Security and Stability Advisory Committee has two S that are tied directly to our mission, and your constituency is very important and

what you do. And to lead this group the way you've led them in during difficult times, COVID times. Thank you for your dedication. And as we just met and I told you, this group will take a stronger profile going forward. We've got to put the technical community on the map, and I'm hoping the future leadership, I know there's four of you. Where's everyone? Suzanne? Barry is there, and Jeff's missing, I guess. All right. So, all the best to you as you take this forward. So, Rod, thank you. Julie, thank you for your service and your commitment. And we have little, small token.

One last comment. Julie, I was so happy to see a woman in a leadership position, and you haven't broken the streak. So, keep that going. Thank you very much. Yeah.

ROD RASMUSSEN: Well, thank you, everybody. It's much appreciated. Oh, you want to--

JAMES GALVIN: Yeah. No. Thank you. Well deserved. Tripti said it in quiet here, but she does have other responsibilities here and some place still to be. So, she came in for a moment to bring this acknowledgement, and so she had to excuse herself. That's all. Thank you.

PATRIK FALTSTROM: Thank you very much. Being the chair that handed over the baton to Rod and Julie, I would like to, and also on behalf of Jim, also being the outgoing vice chair, thank you very, very much for carrying on SSAC the excellent way which you have done it. COVID is just one of the things,

but also the world has changed, and the world is changing. So, I think, personally, I think that the words from Tripti that the security and stability and also the technical agenda on how to get that together is something that I've heard in the corridors of this meeting.

And the income leadership under Ram and Barry and Tara and Jim, and Beth, sorry, you have a big package to carry. The backpack is full of rocks, but I'm pretty sure that all of us in SSAC, we are prepared to helping you to actually carry that forward. So, all the best, and thank you once again, Julie and Rod, for what you've done.

ROD RASMUSSEN: All right. Okay. Thank you all very much for that. I do want to mention just a couple of things real quick. This has been an adventure and, hopefully, worth it at the end of the day. And as Patrik said, the world is changing. There's been some ups and downs. I've always said internally, we're like a family. We do have our disagreements, but we get together for fun and things too.

I would be remiss not to mention, that the toughest thing was not COVID. It was losing two of our members during our tenure, Ben Butler and Don Blumenthal. So, I thank them for their contributions, and we miss them greatly. But we're very encouraged with the new memberships that's come in, and I'm fully confident that Ram and Tara and the rest of the leadership team are going to do a great job going forward. So, Julie, did you want to add something?

JULIE HAMMER: Yeah. And I also want to add that it's always lovely when you can hand over a role to a group of people that you have complete confidence in that they will create a new legacy that builds on the one that you've left. And I think the new team will just go from strength to strength. But I'd also like to acknowledge that the people that have made Rod and my job so, so easy is our fantastic support staff led by Steve who is just the most amazing technical as well as people leader. Kathy, Andrew, and Danielle, I just cannot speak more highly of them. They just keep everything running so smoothly, and we know that we would be completely lost without them. So, thank you to them.

ROD RASMUSSEN: Yes. Definitely, the only reason we look good at all. At this point, Danielle completes my sentences for me as we're talking or as we're having a discussion. All have seen everything you've all got all the plans in front of you because Kathy keeps mailing them out ahead of time, and I think Andrew's written more than half of the words in our documents for the last several years now. And of course, Steve keeping it all under control. So, we really do appreciate the great work that those folks have done for us, the community, and the Internet.

So, with all that frivolity done, hopefully, we'll have some time for Q&A at the end. So, we'll go through this quickly here unless there's any more surprises. Okay. Good. All right. So SSAC, Stability and Security Advisory Committee. We look at SSR issues, Stability, Security and Resiliency, so we didn't go SRAC, though, I guess. But, anyways, there's 38 of us today. SSAC is appointed by the ICANN Board, which is

accurate. The Board does appoint us, but we do have a self-selection of membership, and we'll talk about that at the end.

121 publications over the 21 years that we've been in existence. We will hopefully have a few more out before the end of the year, so we'll get closer to a 125 by then. And we bring a wide variety of expertise in order to bring different viewpoints of the various threats that are out there and things that are changing, like technology, things that may affect the name naming and numbering systems, etcetera. We advise the community, but we have a specific role to the Board to provide advice on SSR issues.

And so, that ties directly into ICANN's mission. And as Tripti mentioned earlier, two of the S's in SSAC are actually in, I believe, the first sentence of the charter or first paragraph of ICANN's charter. So, it's an important role.

How does this work? We have, in the lower left, the orange, reddish orange box there is kind of how we do our work internally. We have an issue topic that either comes from internally created or as a request from the Board or some other part of the community to look at an SSR issue. We form what we call a work party. It's a group of experts that are interested in that area and have expertise in it. We do a lot of research that's often assisted by staff, either ICANN staff or even sometimes outside research being done, and that group then gets together right and report.

And then the SSAC as a whole, after the work party thinks it's good with its report, we'll review the whole thing, and that often leads to a little better back and forth and challenging of assumptions or

recommendations. And then once we get through that process so we can get to a consensus, we will publish that. That will sometimes contain recommendations, and sometimes it won't, and sometimes it's a mix of things. But we do strive to fully explore the problem space and alternative ways of looking at it, and then hopefully, provide some recommendations on how to deal with whatever the issues at hand are.

If there are some recommendations to the Board, we submit that to the Board. They take that on board and then make a decision what to do about various policy, implications or just actions coming out of that. So, if it's a policy related thing, it'll often go to the GNSO or the ccNSO or both. And if there are other parties, including like the IETF or other places, that'll get forwarded over to them for consideration as advice to take on as they will.

And well, there's some things that are more just this needs to be implemented by the ICANN org itself. And of course, they can always decline our advice, but when they do so, there's needs to be an explanation for why they thought that wasn't the advice they would want to handle. So, it is an important role. It's very important for us to be clear in our recommendations so that they are actionable. And we've been working on evolving that over the years as the whole ICANN community has been evolving that.

So recent publications, and these are getting a little bit old now. We've got several that were about to come out. We talked about routing security, internationalized domain name, variants, and some context around SubPro type items were our most recent publications, and they

were a little while ago. And there's some information on that slide about where you can find more information about the SSAC.

All right. As was already mentioned, Ram Mohan's going to be taking over as SSAC chair as of January 1st, and Tara Whalen as vice chair. And Barry Leiba and Jeff Bedser are going to be assisting on the admin committee with the various work items that come up. And then it says it starts on January 1st. There will be the transition meeting in December where we kind of hand off all the processes and things like that, but it should be a very smooth transition. Ram is one of the original SSAC members, so he has kind of a clue. He's been on the Board as our liaison for many years as well, so I think we're in pretty good shape there.

So, I'm going to turn this over to Suzanne, I assume, because I believe Matt is not able to join.

SUZANNE WOOLF: Yeah. Matt is unavailable for some family issues but send his regrets. So, all right, I'm not going to spend a really long time on this because there have been multiple opportunities through the week to discuss name collisions. I will say that the discussion group did spend some time together and we made significant progress, I think, on a number of issues. At least one of these slides is going to look different the next time folks see it.

But starting with the background, the ICANN Board tasked SSAC to conduct studies, to present data analysis and points of view, and advice to the Board on name collisions, which sort of came and snuck up on

people in the previous new gTLD round. And the idea is to study what we're dealing with to how much the name collisions are going to be an issue with the new round and to get ahead of how to deal with them. So, we were asked for specific advice regarding home, corp, and mail and some more general analysis and advice regarding name collisions going forward.

Studies to be conducted in a thorough and inclusive manner, including technical experts. And we've actually had a pretty large and active discussion group and a couple of dozen community observers, so it's actually been a pretty broad-based group.

We have completed a large amount of the background analysis. Case study of the collision strings, perspective study of DNS queries for nonexistent top-level domains, and the root cause analysis of a couple of name collision, historical cases, and wide range of impacts. We spent a lot of time looking at what types of measurements are going to be informative, and we should basically plan on setting up in kind of a standard way for the future. The sort of the bottom line there is just that name collisions are still and will continue to be a difficult problem to identify and remediate. They're kind of have always been with us and will always be with us at some level.

We have spent an enormous amount of time setting up the workflow including name collision analysis as part of the analysis of any applicant string. The sequence of events that any application has to go through for the next new gTLD round to ensure that named collisions can be assessed and ensure there's an opportunity for a mitigation or remediation plan to be developed and also assessed. This does require

understanding causes of name collisions such that we can evaluate a mitigation for effectiveness.

It turns out the workflow diagram is probably going to look different the next time folks see it. We have made some progress this week, and we'll be finalizing a picture that will look a bit different but is basically again, the underlying idea has not changed. There's a sequence of separate analytic steps that a technical expert panel, what we're calling the technical review team, will be going through with any applicant string. And if there's no cause for concern, that will be clearly documented. And if there are name collision risks to be analyzed and dealt with, that's intended to come up also as part of this process. The idea is that the applicant and the review team, the intention is that it's a collegial and open process where there can be discussion and remediation can be discussed and undertaken.

So, the workflow. Again, we have to update the diagram, but the idea is the same. The technical review team that will be undertaking this piece of the applied for string analysis. Say that three times fast before 9:15. The TRT needs to be independent and neutral experts, and again, this is an existing idea that ICANN has used. This is intended to be similar to the kinds of expert panels that ICANN has used in many processes over a long period of time. We feel this is something the community does know how to do, and we like reusing existing expectations and tactics.

Technical expertise must include: Knowledge and understanding of DNS specifications, provisioning. Knowledge and understanding of Internet infrastructure, where it intersects with the DNS, and where it intersects with the usage of the DNS by applications and services.

Ability to understand data collected, including the critical diagnostic measurements. And we've actually continued to discuss a wide range of available measurements.

And ability to understand assess risk. And where that comes in has been just the basic framework we have sort of come to in dealing with the analysis of potential name collisions. And the consequences is just that the basic nature of this problem, as with so many others that the community has to deal with, it's risk management. It's risk analysis and risk management. Because there is no certain or perfect answer to the questions we have to ask here. So, it's a matter of understanding the potential dangers and challenges and being able to weigh those as part of the larger picture.

And the primary responsibilities of the review team. Assess the visibility of named collisions, document data findings and recommendations, assess mitigation and remediation plans that might be offered and to have some kind of plan and ability to deal with urgent situations that might arise in the course of analyzing some of these risks.

So, that's kind of the snapshot of where we're at. We have made some really strong recent strides on this. I want to thank everybody in SSAC and the larger discussion group that's been-- People have really stepped up the pace, and we're making very good progress. Hope to be done with the draft of Study 2 ready for public comment before the end of the year. We are still working on the findings and recommendations, but I'm optimistic that we're in a good place, and we'll have it. We'll have a Study 2 that will be helpful to the community as SubPro planning goes forward.

So, that's sort of the whirlwind tour. And any comments, questions? You can I guess, take here or catch me at the end of the meeting. Happy to talk to anybody interested.

ROD RASMUSSEN: Thank you, Suzanne. Now let's save Q&A for the end of the meeting. Please, if you do have questions on NCAP, hopefully, you've already asked them somewhere else, but if this is your first opportunity--

SUZANNE WOOLF: No. SSAC can be a proud parent.

ROD RASMUSSEN: Yes. Yeah. But we'll take them on anyways. Okay. Let's go on to the next slide. That is updates on our work parties. We'll have a few of these, just to hit highlights from them. I'll have the work party, one of the chairs or co-chairs go through those. Just note that DNSSEC and security workshops are an ongoing thing that we do. Typically, on Wednesdays. We had a really excellent set of presentations yesterday and some thoughtful discussion around several different items in those sessions. DNSSEC DS Automation. Peter, I believe you will be covering this one since I don't see Steve.

PETER THOMASSEN: Yeah. That's right. I can do that. So, yeah, just like Suzanne said for the NCAP, this has also been talked about a few times this week, so I'll try to keep it brief. So, when it comes to DNSSEC and getting your

delegation secured, it's necessary to set up DS records to include your validation key in the chain of trust. And the SSAC observed that that is often a difficult process, especially when the DNS operator is not the same as the registrar because then it can't be done internally between these two functions. And then there has to be information change that is usually coordinated by the registrant.

And yeah, so that's something that is lacking automation in the gTLD space specifically. There are some SSAC automations protocols available, but deployments only exist in the ccTLD space. So, the SSAC is working on a report that is pointing out that there are gaps in this field. And the motivation mainly is that when security technology is easier to deploy for those who want it, then it'll be a better experience for everyone.

Yeah. So, this is pretty much the findings that I just explained orally, and it's the wording taken from the draft. And what is important to note, in addition to what I said before, is the last bullet here. And it says that the manual method of configuring these things when the DNS operator is not the same as the registrar. It's a process that has been found to be onerous and error prone in many cases. And registrants find it difficult to do, and it's often a frustrating thing, especially if you have a lot of domains or if interfaces vary greatly.

So perhaps you can skip one slide ahead and go, yeah, next one. Yeah. So, here's, for example, screenshots of interfaces, what the registrant has to do. So, on the left-hand side, there is an interface of a DNS operator where information is played, and the registrar has to take that information and put it in the form on the right-hand side, which is at the

registrar. And the difficulty here is that there are format differences. For example, on the left-hand side, you can observe the digest type field, which says SHA256. And actually, that means the same as the numerical value 2 on the right-hand side where there is a drop-down fee for the digest type and not mnemonic field. Right?

So, this mapping from SHA256 to digest type 2 is something that one can't expect a person who doesn't really deal with DNSSEC on a regular basis to know, and still, this is how the process feels like. And these interfaces are idiosyncratic for each combination of DNS operator and registrar. And that's the situation that is complicated and needs to be improved.

So, on the next slide, there are additional findings from the draft. So, this kind of process with human intervention isn't aligned with registrants' expectations, and it doesn't scale if you have a lot of domains. Let's say you have to go through this process from the previous slide for like 500 domains, it's going to be quite a tedious process. And it also turns out that the process in many cases, even when attempted, isn't completed by registrants.

There is research from 2017, I believe, for domains hosted with Cloudflare where Cloudflare does the DNS but are not the registrar. And so, when you tick the box and turn on DNSSEC at Cloudflare, they show you instructions how to set up your DS records with the parent. And apparently, 40% of registrants don't complete that process even though they actively did enable their zone to be assigned. And that seems to indicate that it's really I think that isn't easy to do for registrants. And apparently, that 40% fraction also hasn't improved

much over time. The study looked at a period of a year or two or something. I don't remember exactly.

So, on the next slide, there is an overview of how the process could work more smoothly. So now there is a concept where the registrar and the Child DNS operator interact directly, and there is no relaying of that information via the registrant. And there's another way of doing this in the next slide where the registry actually does this and then relays it back to the registrar to keep the registrar up to date about the state of the delegation.

Now the question is how to precisely organize this interaction. One way of doing it is, for example, using CDS and CDNSKEY records that the child DNS operator would publish in their zone, and then the parent level organizations like the registrar or the registry can discover those and then validate them in some way and act upon them.

So, on the next slide, there is the current thinking of the SSAC work party that's working on the report. And essentially, the thinking is that it's important to resolve this problem industry-wide So, ICANN org and people in the gTLD, registry, registrar community should begin to think about how to support this kind of automation technology. And if you do that, you have to consider a bunch of operational aspects like scalability of the automated method, safety measures like validation checks and how to roll back if there is a problem, and various other things like, for example, when your domain is locked, how is that supposed to interact with this automatic updating of delegation, DNSSEC information and so on and so forth.

I'm very happy to take questions on that if there are any, but I don't want to repeat things that people might have heard already. So, I'm going to skip to the end and essentially just say that much of these issues perhaps need some additional standardization by the IETF. So, there's actually some work underway. There's a draft mentioned in the last bullet, to address one of these problems. And so, we expect that more of these issues might be addressed by the IETF in the future. And so, then we hope that that would push towards more simplified ways of running DNSSEC. In that way, reducing the chance of errors and making deployment more easy. Thank you.

ROD RASMUSSEN: Thank you, Peter. Yeah. If there's any questions on this, again, we'll have a Q&A at the end of the session here. Can we the next? Registered Name Management. Ah, Jim, your name already was here. Thank you.

JAMES GALVIN: Yeah. I got selected early. Unfortunately, the co-chairs for this activity were unavailable, and I'm just an active work party member here. So, I, agreed to give this discussion.

ROD RASMUSSEN: It's not your fault.

JAMES GALVIN: That's right. Not my fault. So, the Register NS Management problem. This actually, this work party is kind of an ideal example of exactly the

kind of work that SSAC likes to dig into because it's all data based. Somebody went out there and Gautam and Akiwate, in fact, he had done a research paper as part of his graduate studies and identified a problem with Orphan Glue creating some hijack scenarios.

He had done a lot of work in this space, discovering over half a million domains that are implicitly exposed to at risk being hijacking. And I don't remember the number, and it's not on any of these slides here, but I recall it's something in the tens of thousands of domains that have actually been hijacked. So, there's real data behind the fact that there's a real issue going on here, and, of course, it's a security issue, and so it's something that we care about.

The problem for anyone who's just moderately involved in how DNS works, you'll appreciate that, what happens is when you have a domain name and when a registrant decides that they no longer want that domain name and they want to delete it. But if that domain name has a subordinate name, for example, ns.example.tld1, then you can't delete that domain name. Most registries today uniformly have a rule that won't let you delete a domain name if it has a subordinate name that exists in glue. The DNS needs the glue, of course, in order to operate properly.

So, registrars have over time, just developed some business practices as an ordinary thing just to sort of keep things moving in order to allow them to delete that name, but leave the glue, because the glue, of course, could be used by others. There could be other domain names that use that particular name server, and so that's what creates the Orphan glue and causes it to exist. The registrars will rename the

object, the host object in the database at the registry, the glue object. And that just allows it to continue to exist and still continue to be used, and that creates this problem.

SSAC took this paper, and Gautam, who had originally who's the principal author on this paper and had done this work, he started with SSAC as an invited guest getting involved in working on this work with us, and he has since become an SSAC member and continues to participate in this work product. So, we're lucky to have him to help us with this, but we're looking at the scope of work in two particular dimensions. One dimension obviously is what can we do going forward so that this doesn't keep happening? What kind of business practice can we suggest? What can registrars do?

And toward that end, we actually do have a couple of registrars who are part of the work party, and some additional registries who've been invited, and they are in invited guests to the work party to help plus examine the scope of what's going on here, the actual details, and discuss different options. The other obvious second element of the scope of work is remediation. There clearly are about half a million domains out there that are already at risk. And so, what can we do to mitigate the risks that they're experiencing?

And we'll be looking at various options and documenting them in a way to show their benefits and burdens and residual risk if the option is implemented. In essence here, there is no single best solution to this problem space. So, really, what SSAC is going to end up doing here is documenting the problem as clearly as we can in a way that registries and registrars can easily accept, and then proposing a small set of

solutions and then leaving it to the community to take a step back and talk amongst themselves to figure out how to move this forward and how to deal with it.

So, the first set of options. This slide lists the set of things that we're currently talking about in how to remediate currently exposed domains. And you can see here that we're actually thinking about this from all of the obvious sort of parties that are would have an impact based on what you did. Obviously, the registrants themselves, someone who might be using this glue, which is now orphaned. There's some options there for getting them to do the right thing, which mainly is getting them to properly manage their domain names in the first place.

One of the things that's interesting is people often don't pay-- it seems that they often don't pay much attention to their name server records. Once their domain is working, they just sort of set it and forget it kind of mode, and that clearly is not a model that really works.

Registrars have a set of things that they could do. They're probably the ones that are most at risk. Well, they're not really at risk themselves, but they're the ones who really sit in a central location and probably have the greatest obligation to figure out how to do their business practices differently so they don't create this problem.

Registries are probably more in the remediation side. We're ultimately going to want to engage with registries to go through and look for these scenarios and these situations, and then do the bulk operation that they can find that all will agree to so that we can fix this problem as it is today.

And then, of course, there's third parties. People use third-party DNS providers, and DNS providers providing domain names. There's just some policy considerations between the relationship with the registrant and their DNS providers and the interactions that happen at the registrar. So, there's a bit of help that can go on there, some education opportunities, and perhaps even for the DNS providers to seek to have some business practices that benefit registrants more directly and sets them up so that they're less likely to have these kinds of problems. But all this will be documented and explored.

So, these are a harder look, a more detailed look at the options that are laid out on the previous page in words, but here we are at a technical level, what those options really mean and the different way that they look, and these are the ones that we're looking at in the document. We'll be tagging these. There'll be a chart in addition to some text to go with them that tags each of these options with who benefits the most if this is the option selected, who has the greatest burden in making that option work. And then, of course, the residual risk is downstream. Not any one solution doesn't really fix everything. So, there's always some residual risk that's left around.

So, all of this has to be explored, and it's entirely possible that multiple options will have to be deployed in different places in order to move this along. But in general, from SSAC's point of view, this is a pretty serious opportunity here, a pretty serious security risk. Orphan Glue that it can be easily hijacked, that can be registered by people once they're orphaned. If they're not part of any particular domain name, they can be reregistered by hijackers, and that then allows them to set up the contents of the zone file anyway they like. And that really is the rest to

those who find themselves in this situation. And I believe that's it. And I am done. Thank you.

ROD RASMUSSEN: Thank you very much, Jim. Thank you for stepping in. Appreciate it. Evolution of DNS Resolution. Barry, over to you.

BARRY LEIBA: So, over time, SSAC has taken to publishing some documents that are more of information for the community, something to chew on about a particular topic, and we've done that with Internet of things, with routing security and a few other things. And this is one of them that's like that.

We looked at the paper we published on DOH and DOT, the DNS over HTTPS. And wanted to see if there was anything more we had to say about new mechanisms for DNS resolution and that sort of stuff. And this is what we came up with. We're looking at alternative namespaces such as blockchain-based namespaces, how that interacts with the DNS, what you need to know, what you might have to think about.

One of the main things that came out of this is that increasingly, the names themselves are less visible to users. Users are using search engines and dedicated apps and scanning codes on a cafe table and things like that to get to where they want to go. And that decreased visibility in the names makes a different user experience and puts importance on the context of the resolution. Where are you scanning this code? What are you doing at the time?

So, all of that's in here, and we discuss a number of different alternative resolution mechanisms and alternative namespaces. We're just about done with the paper. It's in SSAC review now, outside the work party, and we hope to publish this by the end of the year. That's all I want to say about it.

ROD RASMUSSEN: All right. Thank you. Oh, you have more slides, but that's okay.

BARRY LEIBA: Oh, we generally had one slide for this. So, yeah. I've said what I need to say on it. You'll see it soon.

ROD RASMUSSEN: There we go. Brief and to the point. All right. So over to me. Let's have the next slide, please. These are some of the things we're looking at. Well, actually, this is current top priority is aligning with ICANN's top priorities. And the big three things in the broader community that we're looking at are DNS abuse, access to registration data, and new gTLDs.

This slide here is really informational to provide some pointers to things that we've recently said about these three community topics of high interest. So, this is largely just to be informative and point out that we have done a lot of work in these spaces. I would also note that we didn't include it here, because it hasn't been published yet, but the work on NCAP is a huge part of the new TLD question, as far as those items that are important to accomplish in preparation for opening up for additional TLDs to be added to the gTLD space.

And we continue to have work in DNS abuse and registry and access to registration data. We previewed upcoming small report to several parts of the community just before the ICANN meeting around the urgent request proposal that had been formed as part of the implementation. It was very much along the lines of the GAC's published letter, pointing out that an urgent request for that would be effective of the potential to affect someone's life imminently. That definition doesn't jibe with a three-business day response time, which could be much longer than three in in reality. So, that will be published shortly once we get some feedback from some of the folks that we sent that to, including the Board and GNSO, and others.

So, these are items that we've done. And as I mentioned, we have many more that will be related. In fact, I believe that's the next slide is our topics of interest. And so, you will see that some of these are very much in line with the top priorities for ICANN, but others are in other areas.

So, the just to give you a brief idea of what some of these things are, one of the things that has come out of recent thoughts from some of our members and other parts of the community is taking a look at where we stand vis a vis the deployment of DNSSEC, the use of DNSSEC, how it's being used, what it's being used for successes, challenges, etcetera. And take a good look at where we are for determining how we want to move forward as far as emphasis we place on it, areas we work on, things that if you're going to invest in things, are those investments of time, money, effort, etcetera, worth it? And where can you best get your most efficient use of your limited time and resources.

So, that's something we're looking to do in the very near future. It's a good time, especially in conjunction with the ICANN 5-year strategic plan getting kicked off for the next one, because DNSSEC has been one of the subpoints in that. It would be good for us to have a good idea of where we are and where we need to go.

The next one is long-term implications of namespace expansion. This is kind of a theoretical exercise in taking a look at what if we kept adding TLDs to the root forever. Right? What does that look like, what's often termed a flat namespace? What are the implications of that? And we potentially in a path to do that or not? And if we do get into that path, what would that look like? And over time, how would things need to be adjusted to deal with that? So, again, kind of a theoretical thing.

This came up in conjunction with SubPro and the discussions around, well, what's the endgame here, what's the goal? Because people often throw around, well, we're going to add a thousand TLDs, or we're going to add hundred thousand TLDs, or we're going to add million TLDs, or billion or whatever it is. And as I said, theoretical, but at the same point, you also want to kind of understand your bounds of how things, when you need to start worrying about your changing the model completely from what you have today.

Another item is a technical, not political, economic, or other ramifications of a forced removal or transfer of a TLD. This gets to if you take out a TLD out of the root, what might that impact and what might those ripple effects be? Bot the why you did it and who's going to get mad about it, but the technically what will happen type of thing so that

it can inform policymakers who want to make decisions about doing those kinds of things in the future one way or another.

We've also been doing a lot of research. A research fellow John Kristoff has been spending a lot of time taking a look at the data that ICANN collects and data that ICANN has access to as well as some other security and infrastructure data and taking a look at where the gaps may be in that and what else to be done with it to better inform the community of trends and things like that. When and if we have a DAAR 2. 0, we'll probably be taking a look at that and what that delivers and how that might be useful and where it might be improved.

The PSL is a public suffix list. We did a report on that many years ago. Lots of things have evolved since then. We think it might be time to take another look at that. So, you may have heard the talk about this in the meeting with the Board, the EBERO, the Emergency Backend Registry Operator process. There's been some rumbling about how that is, how effective that may be or not be, and that may be something we very much take a look at. n conversations with ICANN org that I had yesterday, it sounds like they want to do a review of this process as well, so we may be able to time that in conjunction with work that they're doing, hopefully, and do it in coordination rather than competition. So, we'll see how that works.

And then reviewing of the number of allocatable variants of the labeled LGR, which is labeled generation rules. Thank you. I almost had all my acronyms today. All right. Next slide, please. Julie, over to you.

JULIE HAMMER: Thanks, Rod. So, to wind up our presentation, I'd just like to talk a little bit about our membership and the approaches we take to making sure that we have the skills and attributes to put out good advice. And a core tool that we use is our member skills survey. And in that, it's a very extensive list of questions about the technical skills that fall into these eight groups that our current members and any potential members might bring to the group. But as well as that, we also ask about non-technical skills such as legal skills, risk management.

And importantly, because we recognize that the greater our diversity, the more able we are to understand issues of technology in particular cultures, we also ask quite a few questions about the nationality that somebody has, their country of residence, their language skills, and importantly, whether they bring any work experience or understanding of technologies that are used in other cultures and other countries other than their own.

So, we facilitate the updating of that skill survey each year for existing SSAC members, and we ask potential SSAC members to fill out this survey. And when we aggregate the data of all of our SSAC members each year, the admin committee has a look at that and has a look at the sorts of topics that we want to work on in the future, and we come up with a list of important priorities for our outreach to encourage members with these skills and attributes to actually apply.

So, we've got this list of important priorities. I'm not going to go through them. Other priorities that we are interested in potential new members fall in these categories. And the other expectations that we have of our members and of potential new members is of course to

behave in accordance with the ICANN code of conduct and to treat everyone with respect, but to bring an open mindedness to our discussions both in the way in which they conduct their work, but also open mindedness regarding technology and security issues.

We do have an expectation that all members need to participate, and they participate according to the particular the skills that they bring, and hopefully, for some members it also offers them the opportunity to learn from others in the group and build new skills. We also like members to be willing to volunteer to represent the SSAC in other roles. And that's increasingly become important in recent years where there's a lot of cross-community work and we need to be there participating.

So, for potential new members, we do have a bit of an annual cycle where we from about now through to late April, we try and do outreach as best we can in forums such as this, and we encourage every SSAC member to outreach to potential new members in the different forums that they participate. And in theory, we like to have a grouping of potential new candidates to evaluate in the April to June time frame.

Having said that, I must confess that if we have someone who really does bring some very useful and helpful skills and perspectives, we don't like to hold them off for too long. The membership committee does make a decision whether they're happy to process that application straight away, and very, very frequently that happens. We do try and, when we bring on new members we try and support them as best we can by doing some familiarization sessions and also assign them a mentor who's really more like a buddy, someone that they can go to in the first instance if they've got any questions or queries.

So, we do try and create a supportive environment for new members within the SSAC. And we're very interested if there's anyone in this who believes they might be able to bring some of the skills that we need and would like to participate in SSAC. Please do get in contact with our support staff. We'd love to hear from you. Thank you.

ROD RASMUSSEN: All right. Thank you, Julie. I believe that brings us to--

KATHY SCHNITT: That's it.

ROD RASMUSSEN: Oh, I thought we had the Q&A slide. Okay. Leave that up there because that's a good one to leave up there. So, we've very cleverly gotten us to two minutes for questions. Now, of course, we were planning this. There wasn't this surprise party at the beginning, so we would've had 10 minutes. So, any questions, especially from non-SSAC members, that they'd like to bring to the table? Please do. Like at least one. Yeah. Just grab one of them. Feel free to have a seat.

UNKNOWN SPEAKER: I don't really have any questions, but I'd like to offer support. And I have a house in Ireland, Annaverna, and its air code is A91V253. And we're in very dark times in the world. I'd like you all to come and visit at your leisure. It's a large property. I can sleep maybe 50 people, but I will also offer refuge to anyone who needs it. I can give them safety from these

dark times. I grew up in war. Thank God that war is over four decades of war. Nobody told me it was over.

I've just had Sir Peter Bottomley and Baroness Virginia Bottomley stay with me on Saturday. I now know that that war is over. Thank God. I mean, I've just entered my fifth decade on this pale blue dot that's flying through this universe, and I hope my fifth decade is even tougher because it's made it possible for me to help other people. Thank you.

ROD RASMUSSEN: Thank you for that generous offer. It does remind me that we have entered into a period of time where the Internet has become a battlefield as well. The SSAC is well aware of that. And many of our members have been and helping trying to keep things like the Ukrainian namespace working and other things in this in this area, working on ways to fight disinformation and other online abuses tied to that. So, while we don't have an operational role here at the SSAC at all, we do have members who take part in that. Very quickly, please.

UNKNOWN SPEAKER: Very quickly. When you set out on your journey to Ithaca, pray that the road is long, full of adventure, full of knowledge. The Lestrygonians and the Cyclops, and the angry Poseidon. Do not fear them. You will never find such as these on your path, if your thoughts remain lofty, if a fine emotion touches your spirit and your body. The Lestrygonians and the Cyclops, and the fierce Poseidon you will never encounter. Pray that the road is long and the summer mornings are many. When, with such pleasure, with such joy you will enter ports seen for the first time;

purchase fine merchandise, mother-of-pearl, coral, amber and ebony, and sensual perfumes of all kinds, as many sensual perfumes as you can. Visi Egyptian cities to learn and learn from scholars. Always keep Ithaca in your mind. Arrive there is your ultimate goal. Do not-- Okay. I'll finish then. I think you may understand. Thank you very much.

ROD RASMUSSEN: Yes, thank you. We get the point. Any other questions? Okay, thank you all. We appreciate your attendance. And thank you to the SSAC members for being here and participating. We do have one more internal session this afternoon. Hopefully, we can make it because there's a lot to review from the week. With that, again, will thank all of you and for Julie, and we're very pleased that this is our last ICANN meeting having to be at this end of it. We'll get to sit out over here later, and we will enjoy that as well. So, thank you all, and enjoy the rest of your time here in Hamburg.

[END OF TRANSCRIPTION]