

---

KOBE – SSR2 Review Team Face-to-Face Meeting Day 2  
Saturday, March 09, 2019 – 09:00 to 17:00 JST  
ICANN64 | Kobe, Japan

UNIDENTIFIED MALE:           Okay, let's go ahead and get started, please.

JENNIFER BRYCE:            Good morning, everybody welcome to day two of the SSR2 face-to-face meeting at ICANN 64 in Kobe. My name is Jennifer Bryce, ICANN Organization. We'll go around the table. If you could please just state your name into the microphone for the attendance records. Thanks.

NEGAR FARZINNIA:           Negar Farzinnia, ICANN Org.

ZARKO KECIC:                Zarko Kecic.

RAMKRISHNA PARIYAR:       Good morning, this is Ramkrishna.

NORM RITCHIE:              Norm Ritchie.

---

***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.***

---

ERIC OSTERWEIL: Eric Osterweil.

NAVEED BIN RAIS: Morning, this is Naveed.

LAURIN WEISSINGER: Good morning. Laurin Weissinger.

DENISE MICHEL: Denise Michel.

RUSS HOUSLEY: Russ Housley.

JENNIFER BRYCE: Thank you, everybody. Please remember that this meeting is being recorded, and please remember also to state your name for the record before you talk. With that, I'll hand it over to you, Russ. Thank you.

RUSS HOUSLEY: Good morning. Thank you, staff, for arranging the dinner last night. It was fun. Beautiful view from the 29th floor.

---

Today, I want to do a couple things, one that's not on the previously distributed agenda. I'd like to go over the table we had up yesterday where we had all the topics for the three work streams, the list of people who were going to work on them and how many questions are unanswered, and I'd like to tag one of the people who's listed there as lead to come and drive that topic to closure.

So the people who actually are here in the room will have an advantage in terms of –

DENISE MICHEL:                   Saying “Not it?”

RUSS HOUSLEY:                   Saying “Not it,” exactly. But that way, we'll all be aware of where the focus is, who's got the baton and that person can coordinate among the team to get the work done.

Then the second thing we're going to do is turn to the DNS SSR work stream. Apparently, Eric did a huge amount of work on the airplane, so he has some strawman for us to talk through. And Eric, you're going to get hat to Jennifer somehow?

---

ERIC OSTERWEIL: Yeah, I was just trying to upload to the drive, but I'm going to just send it to you, Jennifer, if that's okay. Okay.

RUSS HOUSLEY: Okay, so the first thing is to go through that table.

JENNIFER BRYCE: I forgot to mention, sorry, that Steve Conte is online as well, and at this time, we have no other review team members or observers joining us remotely.

RUSS HOUSLEY: Hi, Steve. I think you're in Spain. Great, yes, that's the one. Okay, so we'll hopefully very quickly go through these tables, so the first one, I don't think any of them are online here right now, right?

Okay, so can we just tag Noorul? Just select his name and make it bold, that'll be fine. DO you understand what I'm asking?

JENNIFER BRYCE: Yeah. [inaudible].

RUSS HOUSLEY: Okay. Yes. Perfect, thank you. Okay, Boban's not here until after lunch, is that right? Yeah, I think we should tag him for that one.

---

Risk management, Laurin, Boban or Kerry Ann? Laurin? Yeah, thank you.

LAURIN WEISSINGER: [So you don't feel] responsible.

RUSS HOUSLEY: Alright. Since we tagged Noorul earlier, let's tag Scott. For number five, you can tag me. Okay, and six, which of you two – are you going to arm wrestle for it?

LAURIN WEISSINGER: [inaudible].

RUSS HOUSLEY: Okay, Norm gets it. Thank you. Seven. Can you scroll it up? Denise or Kerry.

DENISE MICHEL: [inaudible].

RUSS HOUSLEY: Seven. Registrar agreements and the consensus policies. Okay, Denise is going to take that one. Okay, moving to DNS SSR. KC has already started writing on the data sharing, we know.

---

It was working. Thank you. Okay, Zarko, will you take the next one? Thank you. Name collisions, Denise, you're the only name there so it's you. Okay. Scroll, please.

Yes, Eric.

ERIC OSTERWEIL:

Hey, so the DNS SSR I kind of took liberties by just doing a whole bunch of writing, so it would probably be worth, at some point, for people that are looking at any of these to see if there's some text that we should merge. Again, not real proprietary about what's there, but like data sharing stuff has some text on it now. So it would just be good for us to wind up synthesizing something together.

RUSS HOUSLEY:

Yeah, indeed. Just trying to make sure there is a lead to get that actually done.

Root zone change management, Laurin or Boban? Laurin, or Boban?

LAURIN WEISSINGER:

[inaudible].

---

RUSS HOUSLEY: She's trying. I guess not.

LAURIN WEISSINGER: [inaudible].

JENNIFER BRYCE: [I'm sorry, did you ask me for something?]

LAURIN WEISSINGER: Yeah. [inaudible].

RUSS HOUSLEY: Okay, so pick a name –

LAURIN WEISSINGER: I think I have one, so [give two to Boban.]

RUSS HOUSLEY: You each have one going into this.

LAURIN WEISSINGER: Then – wait. Give two to Boban, I am on more things.

RUSS HOUSLEY: So whoever's name's first, bold it.

---

JENNIFER BRYCE: [inaudible].

RUSS HOUSLEY: Okay. The next one, bold Alain. Okay, let's bold KC here since we just gave Alain one, and then bold Eric, and Kerry Ann. Okay, propagation delay. Eric or KC? Eric, okay. And then Scott.

And the KPIs, we were discussing this yesterday when it was no one's name there.

LAURIN WEISSINGER: [inaudible].

RUSS HOUSLEY: So, Eric, KC or Laurin? Who's got the lead?

ERIC OSTERWEIL: I spoke with Laurin briefly on the way in today, and some of the text that I've put together above dovetails into this, so I'm happy to take the lead on that and work with KC and Laurin.

JENNIFER BRYCE: So [inaudible].



---

ERIC OSTERWEIL: That's Eric.

RUSS HOUSLEY: That's Eric, yes. Norm, you're going to take DAAR, is that right? Isn't that what we decided yesterday?

NORM RITCHIE: Sure.

RUSS HOUSLEY: Okay. So the reactive versus proactive got merged.

JENNIFER BRYCE: Yeah, I'll do that.

RUSS HOUSLEY: Okay, thank you. You went too far. Okay, so this one, leadership, big stick. Who wants that one?

LAURIN WEISSINGER: [inaudible].

RUSS HOUSLEY: Laurin, Norm, KC or Denise. We're at the big stick. The abuse remediation initiatives and take action.

---

DENISE MICHEL: Norm, do you know what we're talking about?

NORM RITCHIE: Yeah, I just want to make sure that [inaudible].

ERIC OSTERWEIL: I thought there was a question and an answer on this one. I see the last column is zero. When I was looking –

RUSS HOUSLEY: That means unanswered questions.

ERIC OSTERWEIL: I thought there was an answer from that.

RUSS HOUSLEY: Exactly. So there's no unanswered question.

ERIC OSTERWEIL: Oh, unanswered question.

DENISE MICHEL: I'm happy to do this one. It really dovetails with the other one as well, so [inaudible] compliance together.

---

RUSS HOUSLEY: Okay. Alright, I'll take the next one. That one's done. Yeah, true enough. Except there's two unanswered questions that may change the answer when we get them.

Laurin or Eric on the software [inaudible].

ERIC OSTERWEIL: [inaudible].

RUSS HOUSLEY: Okay, give it to Eric. It's your baby. Pretty much. Okay, future challenges. Coalescence.

ERIC OSTERWEIL: I'll take this one.

RUSS HOUSLEY: Okay. Access to data?

LAURIN WEISSINGER: I'll take it.

---

RUSS HOUSLEY: Okay. New crypto, I'll take that one, unless Ram wants it. No?  
Okay. New uses for DNS.

UNIDENTIFIED MALE: [inaudible].

RUSS HOUSLEY: So you want to give it to Kerry Ann?

UNIDENTIFIED MALE: I'm just checking if we gave [inaudible].

RUSS HOUSLEY: Okay, we'll give it to Kerry Ann. Alternative name –

UNIDENTIFIED MALE: [inaudible].

RUSS HOUSLEY: Okay. Alternative naming.

ERIC OSTERWEIL: I'll take that one.

---

RUSS HOUSLEY: Okay. Root server protection. Are you suggesting Naveed take that?

UNIDENTIFIED MALE: [inaudible].

RUSS HOUSLEY: Yes, that's what I'm asking.

UNIDENTIFIED MALE: [inaudible].

ERIC OSTERWEIL: Sorry, is this future? Because I thought that one got punted to future. Are we in the futures now?

RUSS HOUSLEY: We're in future.

ERIC OSTERWEIL: Okay.

RUSS HOUSLEY: Alright, let's select Noorul. We'll reach out to him and see if that's a problem. Alright, and that's the last one, right?

---

JENNIFER BRYCE: Yes.

RUSS HOUSLEY: Okay, thank you.

UNIDENTIFIED MALE: There is [privacy] protections on the next page.

RUSS HOUSLEY: There is?

UNIDENTIFIED MALE: Yeah.

RUSS HOUSLEY: Privacy. So, Eric, I asked you to handle that clarification request. Did you see that in your mail? Okay, would you please? So the one question that's unanswered, they said, "We don't understand" and asked to follow up to understand the question. So fair enough. Thank you.

JENNIFER BRYCE: Thank you. Just a note, KC is online now.

---

RUSS HOUSLEY: Welcome, KC. Alright, Eric, we're going to then turn it over to you. Jennifer, do you have the document?

JENNIFER BRYCE: I do.

RUSS HOUSLEY: If you look in your mail, it's Eric in all caps – okay.

ERIC OSTERWEIL: Yeah, that's what I'm looking at. I just want to make sure I'm looking at the right one, because yeah, that's what I'm looking at.

RUSS HOUSLEY: That's the one, yeah. I don't think it'll take you more than two minutes to answer that. Thank you.

JENNIFER BRYCE: So I posted a link into the Adobe Connect room for the document you sent, Eric. If you could all access it that way for the time being, and I'll try to work on displaying it up on the big screen here. The reason I'm having difficulty is that I've put it in a Google doc because I thought that probably be – does that make sense? Do you need to make edits?

---

ERIC OSTERWEIL: Yeah, Google doc is fine, I was just doing it on the plane, that's why it was regular. Yeah, I'm happy if you want to overwrite the entire old document. I just did V2 just in case.

If you go to the second page, you should see some text with a big block around it. Or third page maybe. There, that's it. Those things are new. Russ, did you want me to start now?

RUSS HOUSLEY: Yeah.

ERIC OSTERWEIL: Okay. Alright, so yeah, the formatting looks like it's a little bit different just because it went from Word to Google Doc, but I don't think it changed anything. So the work that I wanted to use to sort of start us all off was just examples, so we can completely iterate, and if we feel like discarding, etc. But I thought a lot of these things now have a starting point for discussions at least.

And the way anybody looking at the DNS SSR outline document, now rebranded V2, can find these as just there's a big box around the new text that I added. And I added them below basically all the notes and discussion points that we had had so that I could



---

be as close to what the team was talking about as possible when I started our writing.

So the first box is on page two. It looks like it's just below the beginning. So there was a section where we talked about root zone management and some comments and some links, and again, I did a lot of this on the plane, so where there were links that have substantive data, I either didn't write something, or what I wrote may have been out of tune with what's online. So we may need to work on that.

But this one, root zone management, I started each of these off with just a little bit of a blurb about why this topic was relevant or important for us in this particular venue, and then I came up with a sort of strawman recommendation. And again, I didn't get all the way through the document, so I think it makes sense to go through these just to get us on the same page, and then maybe we can back up and go over them in more detail or figure out what the right way to use our time together is. So in this one, I'll just do some slide reading for everyone since maybe no one can read but me.

ICANN curates, manages, serves, and is otherwise responsible for sets of data and internet services that result in measurable client behaviors, the transparency of how these services are operating, how they're being used, and the external traffic they receive, e.g.

---

query load, distributed denial of service attacks, etc., is critical information to many.

Recommendation: a codified set of measurables such as statistics, metrics or other specific codified data should be created for each data set and service that ICANN operates or otherwise has purview over. ICANN should create a public – okay, so this might need some editing – master list of all data sets it has responsibilities for, what measures can be create for each, and prepare periodic reports of these.

The set of measures and any data deemed relevant should be produced and posted for public comment and updated based on community feedback. The measures associated data and periodicity of reports should then be proposed and posted for public comment, and then updated based on community feedback. All this information for all data sets must be located in a single place on the ICANN.org website.

So this was sort of under the vein of data sharing. And I suspect that there are any number of initiatives under way and whatnot, and my thinking on this was basically to enable the ability to execute this and give a little bit of a direction on making it central, etc.

Does anybody have any thoughts or comments on that? Go ahead, Norm.

---

NORM RITCHIE: There is the open data initiative. Do we want to be more specific and say that should reside there with all the other data that they're putting there?

ERIC OSTERWEIL: Yeah. I don't mind that. I left it pointedly vague so that we weren't too directive in how we asked it to be done, but for example if ODI were to spread things all over, it would run afoul of this recommendation. But if ODI was under like odi.icann.org or something, then it would allow them to satisfy this, but it would make it – what I was imagining is that this recommendation would allow them to do what they're doing with ODI, but it would sort of put some boxes around it, make sure it's ingestible. But do you think we should call out ODI specifically?

NORM RITCHIE: Maybe not say it has to be there, but say suggest.

ERIC OSTERWEIL: Does that look okay? Yeah, and we can iterate on this. Go ahead, Russ.

---

RUSS HOUSLEY: KC I know was working on this some yesterday. Is this direction in line with where you were going, KC?

KC CLAFFY: Can you repeat that? I walked away from my screen when I heard my name, KC, right before. I'm looking at –

RUSS HOUSLEY: So, is this in line with where you were going yesterday during the time you were working on this? Because Eric's putting this forward as a strawman for discussion. You obviously were spending some time on the same topic, so I'm curious if you were going in the same way.

KC CLAFFY: I was. I thought I worked on actual text. I don't see it on here. Oh, because it was in the –

RUSS HOUSLEY: It was in the document he just – of course it was.

KC CLAFFY: I mean, either just note that I [inaudible] in some other document, the Q&A document. Okay, hold on, let me just read it. Yeah. This is in line with where I was. The ODI initiative, I'll be honest, I don't

---

know if – the ODI [initiative] isn't specific to root zone management, right? You're just saying use that as an umbrella?

ERIC OSTERWEIL: Yeah. I think we're trying not to be too directive but so that it can sort of find its own way, but to sort of give an example and certainly tip our hat to maybe what's going on.

KC CLAFFY: Yeah.

RUSS HOUSLEY: So, is the way this [document] will ultimately look is all these bullets on top of the box will go away, root zone management stays as a section, and then what's in the text in the box is what we want to say as a section on root zone management?

ERIC OSTERWEIL: I'm okay with that. I basically started from the perspective that when I downloaded this document and then I started working on it, this was my best example of what the group's thinking was around what was important, and then I tried to sort of synthesize from what I could see what we might have as a starting point for discussions.

---

So I imagined that we may sort of iterate, but in the sense of trying to put a fork in things, that we said root zone management was important to us and that we could basically say that as a heading. There's a little bit of a blurb to talk about why we think it's an important heading, and then go on with the recommendation. But I'm certainly open to refactoring in any way.

KC CLAFFY:

I guess I'm just a little concerned with the vagueness of ICANN should go off and figure out what data should be collected, which I guess it's going to punt back to the community and say, "Hey, what data ..." The community isn't asking for any specific data set that we're not collecting. So I'm not sure how we close that loop. Go head.

ERIC OSTERWEIL:

So my two cents is just that I think it would be real easy for us to get into a deadlock if somebody doesn't step up and say it's my job to figure something out. So I recognize that one of the things that shows up in some of the later text that I didn't get a chance to merge back in because of fatigue was basically it doesn't have to be the responsibility of any party to do it themselves if they want to commission the work or do it as a sort of survey of literature, but that somebody needs to take the responsibility for putting something forward instead of saying like "We really need

---

something but it's not really our job, but we know we need something.”

So it's an attempt to have the recommendation give somebody preemption.

NORM RITCHIE:

Yeah. I defer to KC on this because you're the expert in this area, but I just wonder, rather than specify which data should be available, specify which metrics or data points you want to glean from it. Then that would drive what data you want to have available.

KC CLAFFY:

Indeed. And the question is, whose job is that? There's too much passive voice in this recommendation right now, and seeing that SSAC consistently gets beat up over that it writes all these documents and advisories to ICANN and then it doesn't make it clear [who it actually recommends to do what.]

So when we say a codified set of measurables should be created, well, whether ICANN commissions it or not, I guess the responsibility we're trying to say is it's ICANN Org's responsibility to get this set of measurables. I don't know if I like that one. But anyway, to have it come into being.

---

I want to put that on ICANN Org.

ERIC OSTERWEIL:

So I think measurables is probably an autocorrect, but modulo that, this is my question to the group, and that is, I think we could, if we wanted to, say that it's ICANN Org's job to figure out what the set of measures – supposed to measures – are and it's more explicit in some of the follow-on text because I didn't dovetail it back in here, but I think producing statistics and high-level stuff is important so that it's ingestible. But I think part and parcel with this is that we should start off by saying that the data needs to be exposed as well for transparency, reproducibility. I say that explicitly in later recommendations, and I think it might be worthwhile putting it back in here so that somebody has responsibility for either using staff or commissioning external resources to say this is what is useful data about this space, and it's our job to make it available to folks. And I think the sense I got was informed heavily by a lot of the DAAR discussions where metrics that have come out and are sort of maligned a little bit because they're not transparent. So I wanted to put some teeth behind you have to do that for these other areas as well, and you need to make the data transparent and it needs to be kind of a first order part of the process.



---

That was my thinking, but I am completely deferential to the group on this.

KC CLAFFY:

Why don't I take a whack at writing this? My concern is that I've seen this conversation all the way down the rabbit hole, and you end up with, "Well, we can make it transparent because of these proprietary agreements that we've signed with the data feed companies." And I want to jump past that somehow. Or I think you're suggesting we jump past that too and say if there's a metric it's going to purport, it needs to also include the raw data that gave rise to that metric. And I don't know how we deal with the reality that if ICANN outsources it, it may outsource it in a way that it only gets the derivative data and not the raw data. Norm is going to have more to say than I on this, I guess, or more idea of how to break through the impasse.

ERIC OSTERWEIL:

So my sense was that we were talking about data that's not currently being collected or exposed. So the sense would be that if they were to go down that path, they would be well advised not to sign a contract that would not allow them to expose that data. They'd have to find a source whereby they could expose the data, and then that might be involved in vendor selection, etc.

KC CLAFFY:

Okay. Then I think we need to try to enumerate the set of data we're talking about. And this is under the root zone management issue section. I don't know if we kind of transcended that at this point or we're just talking about B root, L root, and to the extent that ICANN bears some umbrella responsibility for all the other roots. We're just talking about staff, about the root servers themselves. Or do you mean to imply this extends to other sorts of data that ICANN has access to? I think you mean just root zone stuff. But then you say, "ICANN should create a public master list of all data sets [that it has responsibilities for.]" Well, that's a bit vague, because it actually has some responsibility for the proprietary feeds that it's renting out, but it certainly can't make those public. So I think we need to be more precise here on what we're actually recommending. And I can try to do this, but I need to know what we mean, and then I can try to write some text.

ERIC OSTERWEIL:

So yeah, by all means, feel free to pick up the pen, I think, if you have a strong sense of how you'd like to direct this. And by all means go forward, but I think the gist of it is there are a number of things that ICANN has the ability to do measurements for. So the comment that really sort of caused this to become a riff was "Get an update from [inaudible] ITHI," etc.

---

So from the sense that there are a number of services that produce measurable statistics, then those should be relayed and communicated to the community. So I think I'm not sure where we're having a disconnect, but if you want to take a pass at it, I think that's fine. I think the recommendation's trying not to be directive, because I'm not sure what we want to be in a position to say exactly what metrics should look like for this. I think it's more open to a longer sort of discussion, if there are even metrics to get. But certainly, coming up with at least a list of measures, if not metrics, then that should be sort of like, "Alright, you may not come up with the perfect set of measures, but at least you've tried and you're trying to represent to people how the system is functioning." Does that make sense?

KC CLAFFY:

Yes, but I think the disconnect is that now I hear you talking well beyond the root zone, and so this section of the report, I thought, was on the root zone. So I thought there were other parts of the report, other parts of this document that were about data in general. And maybe I'm wrong about that. Maybe this is where we're going to talk about data in general.

ERIC OSTERWEIL:

So let me reflect that back then. We have these headings because we kind of did brainstorming, we got to these sections kind of

---

organically, and maybe the text here veers off of the spirit in some way. But if we were to sort of say the same thing in multiple places about different services, would it be better to have multiple recommendations that sound like they're saying the same kind of things about specifics? Like here's for the root zone, here's for the IANA, here's for the IANA registry, whatever? Or would it be better to create a broader recommendation about data in general? I don't really know what the right answer is.

KC CLAFFY:

Probably we'd know better once we see the whole report. So right now, we just need to write the text that we want, and then we can refactor it later.

And that's what I tried to do in the other document, which maybe I should find it. It's under the question – I think I wrote "Ready to review. Done, ready for review." There's not much there. Alright, let me take a whack at this. Can you go to something else and come back here in, I don't know, 15 minutes? And I'll see what I can do.

ERIC OSTERWEIL:

Yeah. Thank you.

---

KC CLAFFY: Thanks.

ERIC OSTERWEIL: Okay. Yeah, let's move on. and KC, you can totally hold the pen on this one. So down below, the next box is – so there was DNS crypto, root crypto, and then there were sections that were highlighted because they got moved to other groups. And then there was one remaining, DNSSEC below root TLD DNSSEC deployment.

So I wrote, "ICANN's remit includes stewardship of DNSSEC for the DNS root zone and policy aspects of DNSSEC for the top-level domains. While ICANN's purview does not extend below the TLD, its community and interests include the entire DNS. As the community steward – probably meant community is the steward of the global – as a community stewards of the global DNS root, ICANN should assume the leadership role in making global DNSSEC deployment measurements systematically available." So I'm kind of trying to thread the needle with this one.

Recommendation: ICANN should propose a set of global holistic DNSSEC data that is both knowable and meaningful, i.e. what the community is likely to find informative and also tractable to measure. This data may and likely will involve the cooperation of external to ICANN Org resources. ICANN should propose a set of data that can be used to assess the global deployment of DNSSEC

---

and post this proposal for public comment. ICANN should then incorporate community feedback and produce a plan to create this public data repository and an access model for this data.

The gist of this was heavily informed by a recent blog post by ICANN Org saying DNSSEC should be deployed everywhere, implying that there was some appetite in the organization to promote DNSSEC beyond the root and TLD. So this was basically saying, figure out what we can measure about that deployment, and because it seems to be of importance to the organization, represent the data and statistics gleaned from that periodically. Anybody have any thoughts on that? Zarko?

ZARKO KECIC: I really don't see the role of ICANN in there, what ICANN can do.

ERIC OSTERWEIL: Yeah, so again, all this stuff is just strawman, so I'll just tell you what my thinking was, and then I'll defer to the group on this one. But the thinking, like I said, came from the fact that ICANN's already taken a role publicly stating that it wants DNSSEC deployed, and this is something that can be measured. And my proposition is that if that's something worth a blog post, then it might be worth also saying here's some statistics, as opposed to going into like external repositories to learn about DNSSEC

---

deployment, maybe ICANN could take the role in representing how DNSSEC is being [pervaded since as the root and steward of top-level domains] it kind of starts with ICANN.

ZARKO KECIC: But we have some measurements, and it says that verification of DNSSEC is less than 15% globally, and deployment is less than 2%.

ERIC OSTERWEIL: Denise?

DENISE MICHEL: Yeah. So yesterday, we discussed the utility of getting a briefing from John Crain on the intersection of their historic DNS efforts and some of the abuse that's occurring and the highlighting of adoption of DNSSEC and all of that. But I'm wondering if the work stream on this, others in the work stream would be interested in taking a step back and looking at the utility of ICANN's effort over the last decade on DNSSEC and having a sort of more holistic discussion of DNSSEC in addition to other measures and how ICANN's using its resources, how it's prioritizing its efforts that relate more broadly to security. What do you think?

---

ERIC OSTERWEIL:

I think that would be really good for someone to do for sure, and I think there's a lot of probably really good conversations we could have about that. I'm happy to lead a discussion on it here if we would like. But to Zarko's comment, the deployment of the system and its status is orthogonal to tracking the status of the deployment.

So to your point, Zarko, if penetration of DNSSEC is about 10% - I mean I track about two million zones myself – that doesn't say that tracking it is good or bad, that just is the status of it, and I can sort of throw a graph up there of the deployment for the last 15 years. But at the same time, this is just saying if you think something's important, measure it. And if you consider yourself a steward for it, then it may be your responsibility. You certainly have every reason to be a touchstone for where do I go to get those measurements. Like if you wanted to know what the global deployment of DNSSEC is, it seems like the organization [of L-root] could be one of the places you could go.

ZARKO KECIC:

Yes, but at CENTR, we have deployment measurements, so every ccTLD which is part of CENTR reports how many domain names are DNSSEC-signed. So that's the measurement. And one thing is measurement and another thing is to force anybody to deploy DNSSEC.



---

ERIC OSTERWEIL: Yeah. I don't think ICANN has a position to force people to do things. But they certainly suggested it recently. Denise, and then Naveed.

DENISE MICHEL: I think my – perhaps somewhat of a tangential – point was – and this is not an area that I'm by any means an expert in, but it's been almost a decade of promoting adoption of DNSSEC. And as you note, it's at 15%. I guess in addition to measuring what's going on in a more formal way if you feel that's needed, do you think that review team should ask the more high-level questions of if it's been ten years and we're at 15%, do you want to just keep doing this for another ten years, or should something different be done? That's what occurs to me. Thoughts?

NAVEED BIN RAIS: I was thinking that one of the main hurdles of DNSSEC deployment, and for that matter, the [inaudible] related to that is the deployment in ccTLDs, and this is what we are struggling with communicating with those to deploy. And ICANN has no control over that.

This comes at the TLD level where you can't even do a second-level or tertiary level unless TLD is not – so are we considering that

---

into this? Because even if we propose something like this, ICANN will never have anything to do with that. They can just push them, propose to them, try to approach them, but they don't have any mandate over whether they should deploy it or not.

ERIC OSTERWEIL:

So I think that's a good point, and I feel like that's in a very similar vein to what Zarko was saying, but my observation is that there's a different aspect, which is what's trying to be communicated by the text, probably not very well, which is that the interest or the authority to mandate deployment of DNSSEC clearly is beyond ICANN's purview, no doubt whatsoever.

However, tracking the deployment and representing its status is different than trying to influence it, trying to motivate it, trying to be responsible for it. And I would have been a lot squirrellier about writing this text before seeing the blog post saying, "Everyone deploy DNSSEC everywhere!" It sounded a lot like HTTPS everywhere from the IETF. IETF has no right to tell people to deploy HTTPS everywhere, the EFF has no right to do that, but they said it's a really good thing.

And I'm not even saying ICANN should do that. I feel like ICANN kind of did that with their blog post. What I'm just saying is if you're going to talk about it, measure it. And that's kind of what this recommendation says, is if you're interested in it, measure it.

---

It's nobody's responsibility to track the global deployment of DNSSEC. Nobody has that responsibility. But it's a utility to everyone. So the question is, is this the right thing for ICANN to consider doing? Go ahead, Zarko.

ZARKO KECIC:

I have a problem with this, because we have to do research before we throw something on the table. There is ISOC, who is doing measurements, there is many other institutions that are doing measurements. I told you about CENTR. There is APNIC with their measurements and stuff like that.

So throwing something at ICANN, okay, they can collect all of that and public on ICANN webpage. But there are a lot of resources where you can see the level of deployment.

And to answer to Denise, the problem is not DNSSEC. Actually, it is, but DNSSEC deployment is not that bad as verification. That's the problem. So why should I sign my domain with DNSSEC if I know that less than 15% are verifying that? So 85% are open for attack.

DENISE MICHEL:

Yeah. It seemed to me a fruitful area of a discussion, perhaps particularly at the work stream level. ICANN has spent money and significant staff resources in promoting the adoption of DNSSEC,

---

so it has been a very concerted effort within ICANN for almost going on ten years now. So it occurs to me that it's an area that we might be able to bring some value to if there's an interest in addressing this and related issues.

ERIC OSTERWEIL:

So yeah, I added a bullet right below – just a brief try to sort of channel the [inaudible] of what you're saying so that we can have that discussion. So go ahead, Naveed.

NAVEED BIN RAIS:

Yeah. I was just thinking if we can propose something like asking or recommending to ICANN to have or to come up with a plan to provide some incentives to deploy DNSSEC eventually, because we have been seeing this in the past that it's not working. Just promoting, just encouraging to use is not working. So they come up with a plan to have reduced cost, for example, of domain name payment or something, or contractual something like that, incentives that can promote the deployment of DNSSEC in general.

The second thing is, here, I don't see that this recommendation is measurable in the end, for example, down the line five years if we're going to review this again. So how do we come up with something that whether this was implemented as a whole or not

---

or what is left or what is not? We should be thinking that way as well, how to make it a binary kind of thing at least to be idealistic, like whether it is done or not done, something like that.

ERIC OSTERWEIL:

So real quick just to sort of jump the queue, I tried really hard to make all these measurable, and I believe the last sentence or the last couple of sentences are very measurable. They're things that – or maybe not. So if they're not, maybe we should fix them, but that was absolutely the goal. So everything I tried to write, I tried to make sure you could literally go down and say, “Was this done or not?”

Now, whether this is the right thing to say or not, we're having the discussion, which I think is very good, but yeah, I agree. Every recommendation I tried to write in a way that you could say absolutely empirically, “Was it done or not?” So I totally agree with that.

But I guess I'm confused. I think we're cycling, and I'm having trouble with that. Sort of the spirit of this was if this is important and you want to talk about it, you should measure it. That's the whole spirit behind this. But I feel like talking about whether DNSSEC has been successful or not, Denise has brought that up as a separate topics, and I think that I put it up there in some form, so I think we should have that discussion.

---

But this is just saying – so the underlying observation of this is presuming that ICANN is interested in the global deployment of DNSSEC, so maybe I should start there. Does anybody disagree that ICANN Org has a stated interest in the global deployment of DNSSEC deeper than just the TLDs?

Okay, so Denise says yes. Does anybody say no? Okay. So nobody says no. This recommendation is saying ICANN.org is now empowered to coalesce measurements and represent them. It doesn't mean that they have to do the work. It doesn't restrict them from doing the work, but they could literally contract with someone that has a [corpus of data] and say we would like to replicate or at least point to his off our website. And that's done. That's the gist of this, to say I am a DNSSEC newbie, I decided I'm interested in this weird thing, and I want to go and know what the deployment is. I'm going to start at the organization that curates the root. That was the spirit of it. Zarko, I'm looking at you because I know you've got consternation about this. So I don't want to buffalo you on this. No, come on. I think I'm not hearing your point, so I'm trying to iterate to hear your point clearly.

ZARKO KECIC:

Eric, we are trying to do SSR work here. I don't see measurements which are done by different institutions and that already exist are that important to be in our recommendations.

---

ERIC OSTERWEIL: Okay, so maybe that’s the wrinkle. I think they are. I think that my personal view is that – and this is my personal view, so I've taken my hat off and I'm going to defer to the prevailing winds in the room, but I think that if you don’t measure it, you don’t know it. And I think that if you want to take a pole position, a leadership role in something like for example DNSSEC, then your job is to say this will be where you go to find stuff. And I think if they point at CENTR, if they point at some external whatever, or they better yet replicate it, then it at least ensures it’s all available to somebody who’s struggling to find it in the first place.

That’s what I think, and that’s why I put “external to ICANN Org resources,” to just make it clear it doesn’t have to be on any one thing. So they could make a deal with CENTR, replicate the data. Does that make you feel any better, or am I missing you still?

ZARKO KECIC: No, because we are, again, talking about security, stability and resiliency. If I know that deployment is 5% and next year it’s 7%, and three years later it is 12%, how we are more secure?

ERIC OSTERWEIL: If at the same time you’ve noticed instability in the root, or you’ve noticed that hyper local roots have come to prevalence while

---

another metric has started to decline, by having this data set, you can look for correlations. So this data set itself is available for external processing.

ZARKO KECIC: How deployment below TLD can cause instability in root?

ERIC OSTERWEIL: Roll over and die.

KC CLAFFY: Well, that's not [inaudible].

ERIC OSTERWEIL: Roll over and die is something that happened when DNSSEC was being deployed. It was a resolver behavior whereby when there was a wrinkle in DNSSEC, resolvers went nuts and they banged the entire hierarchy all the way up to the root. So you saw massive traffic volumes, you saw a lot of operational problems because of resolver behavior, because of DNSSEC. It wasn't foreseen, it's been taken care of, but it illustrates that this is an underlying infrastructure the uses of which can cause SSR issues. And that one is just an exemplar for the fact that when you have a big deployment – there was also jitter in the root when they started rolling DNSSEC out to just A and whoever. They looked and you



---

could see traffic behavior differences when the [DRS] keys started being served.

So my belief is that if you don't measure it, you don't know it. So I'm just saying, have measurements. And who's responsible for doing that? Right now, nobody's been responsible for it, so there's a whole bunch of history that's been lost. But I'm saying someone should be responsible for it. KC, I heard you try to –

KC CLAFFY:

Can you hear me? Sorry, my screen froze a little bit. So I feel there's a lot of ideas getting convolved here, so let's try to tease them apart. And maybe use Steve's comment in the chat window as a framing for that.

There is a set of data that ICANN makes available. It might help if we get really concrete about how we could improve that data to give more transparency.

The reason I see things slightly differently than Zarko on why measurement matters here is that there are only so many tools that ICANN has to execute its mission to sort of coordinate, steward, whatever you want to call it. It has a limited set of tools, and by some accounts, it doesn't use those that effectively, although it begs the question, how do you know?

---

One of the tools it does have though is transparency. And I think a lot of the community thinks that's the main tool that it should be using, or one of the main tools.

So why I think 3%, 7%, 12% would help with improving security is that if the 3%, 12% also gave me as a user or a researcher or reporter, or somebody who could then propagate the data to other places, information that could affect consumer behavior to go in a direction of more protection rather than less, I think it could improve security. I think it matters.

But I think more to the point is there is only so much that ICANN can effectively do. so I do agree with Zarko that the bigger – and this is an empirical fact, that one of the problems is the validation as opposed to just the signing of the zones. Like what's the point of signing a zone if the validation isn't going to work? And validation is just really even more out of ICANN's hands than the registries and registrars and ccTLDs to varying degrees.

So although it could go gather data, like the stuff that Geoff is doing with Google on client-side DNSSEC usage and it could collate that into its DNSSEC page, and that would give more visibility into the macroscopic aspects of this ecosystem, I take Zarko's point that, why should we – and I'm not saying I agree with this, but I understand Zarko to be asserting, why would be recommending something like that if ICANN can't do anything

---

about that end of the ecosystem because it doesn't even have contracts with them, never mind whether it actually enforces compliance of the contracts anyway.

However, I do think it behooves us, the committee – we probably won't agree on this, but i think it would be good if this committee could outline exactly those complexities, if it could say there's only so much that ICANN can do about DNSSEC deployment, and here's what it can do and here's how it could help, and here's where transparency, we think, could make a difference. And here's how we think that transparency could be improved above what it's already doing, which is not zero. And here's other areas where DNSSEC is really a big gap, and this is outside of ICANN's purview. And if transparency is going to be provided here, it might have to come from somewhere else. And Zarko could make a comment on where that is.

But I think what would be very valuable for us is if we could draw that out and not just have a recommendation without context on why we're saying this transparency should be provided. We need to tie it to the ultimate goal, which is SSR, and I do think there's a tie. But I understand why Zarko might think it's a little obtuse. I'll shut up.

ERIC OSTERWEIL:                   Okay.

---

KC CLAFFY: You probably want me to go write something down, don't you?

NORM RITCHIE: Listening to the discussion, all very valid points, and I get the fact that, is there any authority beyond the delegation? So what [to do with a TLD?] Certainly with ccTLD, there is no authority over it, right?

But a point about it's been ten years, and we're not getting anywhere. Maybe that's what the recommendation is more about. So I'll do that assessment and analysis of what are the barriers to DNSSEC adoption, and can they be addressed somehow? Maybe that work's already going on? I don't know.

ERIC OSTERWEIL: Okay. So that, I think, was a very good point. I think that echoes what Denise was saying, and I think maybe I'm hearing sort of the suggestion that we table this one or something. But before we table it, I'm just having a lot of difficulty understanding her concerns, because this is absolutely measurable, this is absolutely – not trivially, but this is absolutely measurable data. And you don't have to be responsible for the zones that you're querying and studying.

---

So I don't understand the consternation from Zarko and KC, because you can go to a zone and you can request data about it, and you can catalog it. The DNSSEC zones. The question is discovering them, but you can query DNSSEC data and you can track it longitudinally anywhere in the hierarchy. So I'm confused about why this seems intractable.

ZARKO KECIC: How you can go to the zone and track DNSSEC data?

ERIC OSTERWEIL: You query it. You go to the zone –

ZARKO KECIC: Query the entire zone?

ERIC OSTERWEIL: No. You don't have to query the entire zone. I'm not suggesting you make a CZDS for every zone in the whole internet. I'm suggesting that if you go to a zone, you can ask for its DNS keys, you can verify its SOA, you can track them over time, you can look at their signature lifetimes.

---

ZARKO KECIC: Eric, when you go to TLD zone and you end up there, you don't know how many domain names are signed within that zone, unless you query entire zone.

ERIC OSTERWEIL: If you want to traverse the entire 354 million zones in DNS, I agree that that is an intractable problem, unless you're a search engine. But nevertheless, if you were to have a corpus of data, if you were to get a feed from resolvers, there are ways to do this. And I'm not saying they have to be done, and I don't think this recommendation is trying to say they have to be done. It's certainly not saying they have to be done by ICANN. But my meta point is that I don't believe you know how the system's running unless you monitor it. And I don't believe the root and the TLDs are where the purview has to stop. That's my proposition.

We can decide to nix this or table it, or we can come back to it later, and that's fine with me. But the meta point, since we're talking about kind of the spirit, is that if you don't measure the system, you don't know how it's working. And DNS is globally queryable, otherwise it wouldn't work.

So I sense that we may be exhausting the oxygen in the room, so how about we circle back to this one later? Any thoughts on that?

---

RUSS HOUSLEY:

I would like to ask one question first. It's just kind of a sense of the room question. Since most people in the room have been quiet, I'd like to know where the people who have not spoken are on this issue. ICANN has spent quite a bit of time on DNSSEC. They're not responsible for whether it gets deployed or not, but since they have a demonstrated interest in seeing it deployed, including managing the keys for the root, the question is whether this group wants to say anything one way or the other. And I'd like to know where people are on that. So if you haven't spoken, would you please – let's just go around. Laurin, I think you're the first one who hasn't.

LAURIN WEISSINGER:

Yeah. I think this is one of the ones I would say we keep it here for now, and when we go further in writing recommendations, we check what else we're having. I had a quick look at what we already have for recommendations and DNSSEC kind of shows up, the data problem shows up, etc. So I'm wondering if it might make sense to discuss this in context at a later stage to see if it fits, if it falls under another recommendation, etc.

RUSS HOUSLEY:

Naveed?

---

NAVEED BIN RAIS: Yeah. [I just see this] very relevant. The only thing is how we put this together, like for example DNS, if we go beyond this top level and go to the second level, I can see the [interest,] because if you don't validate or don't implement that in any of this change, then the whole thing doesn't work actually. So your signing and the validation does not work if any of the inter mediate component or node does not implement it.

On the other hand, I'm just looking at it from the publishing such data from the commercial aspect which might create – I'm not sure any problem. For example, if you're publicizing or publishing something that this second-level or third-level are validated or not implemented, are you saying that people should go for those when they use their commercial URLs or whatever? So will it have any implication from that perspective? So this is what my concern is. So publishing anything related to that might have commercial consequences as well.

RUSS HOUSLEY: Norm? Where do you [fall?]

NORM RITCHIE: I certainly have no problem of measuring this. I'm just not convinced that that's going to change anything. And I think there's something bigger. The recommendation needs to be



---

bigger than “Measure this and make the metric.” I think we’re missing something here in the recommendation. So I agree if ICANN is going to have a leadership role in this, then there has to be more done. But it’s more than doing the measurement.

RUSS HOUSLEY: Ram?

RAMKRISHNA PARIYAR: Yeah. I don’t have any problems, like we have to stick one of the parties, like we’re the security, stability and the resiliency for the DNS, and [inaudible] is what I think.

JENNIFER BRYCE: Russ, KC has her hand up, just so you know.

RUSS HOUSLEY: Thank you. KC?

KC CLAFFY: Two things. [I want to know] what Zarko thinks we should say about DNSSEC, if anything. And second, I do acknowledge that I think when we talk about DNSSEC, it should be in the larger context of relative priorities for protecting registry information

---

and this whole concept of duty of care that seems to have gone out the window. But that can all come in later.

And if I'm going to write this data transparency section above, that sort of transcendent root zone stuff into other stuff, I can squeeze some text in about DNSSEC and Zarko can punch on it then.

RUSS HOUSLEY:

Okay, so at this point, since we now have a sense of the room, I think we do need to move on, or we'll be on this topic all day. But I did think it was important to get a feel for where everyone's head was.

ERIC OSTERWEIL:

Okay, so we're moving on. So the next one – there's two bullets that showed up that don't have any text on them because they just showed up, so I'll skip over those now, and maybe we'll circle back to those later.

Okay, KSK roll frequency and process. The text I put down was, "The DNSSEC root recently rolled over its key signing key for the first time since the deliberately unverifiable root zone [DRS key.] During this process, there was much debate, and there have been many calls for analyses of details of the roll. One particular aspect

---

of this roll illustrated the necessity for properly functioning exception legs in the procedure.”

That should probably be process.

“Specifically, the rollover was delayed for a year while measurements could be used to allay concerns. Discussions have already begun about timing procedure for future rollovers. These discussions have included additional complexities that future rollovers will include, such as algorithm rollovers.”

So the recommendation I drafted was, “ICANN should create a formal process modeling tool language to specify the details of future key rollovers. Verification of the key rollover process should be done by posting the procedure for public comment – should, again, probably be process – and community feedback must be incorporated. The process should have empirical go/no go acceptance criteria at each stage. This process must be repeated at least as often as the rollover itself, i.e. the same periodicity so that lessons learned can be used to adjust the process.”

If people want me to do a voiceover of what that is supposed to mean, I'm happy to.

ZARKO KECIC:

Can you explain?

---

ERIC OSTERWEIL: So the gist of it was people do formal process modeling. It's actually even an active area of research. There are tools that do it graphically, and they're done for things like medical safety so that somebody doesn't die in a hospital. And my surmise from this was that root KSK should be part of a formal process as opposed to a qualitative one, and that at every stage, there should be exception legs that can be followed to put the DNS back into a stable state or state that it can't, etc. and so forth.

And I think we exercised a couple of exception legs in this recent rollover that proved that we need to have proper exception management. And I'm just proposing that we actually codify this process or we request that ICANN codify this process. Laurin, go ahead.

ZARKO KECIC: Thanks, Eric. I think this is a good one. We might want to do some small edits regarding language. I don't think we have to do that right now, but I think it makes sense.

RUSS HOUSLEY: It's a Google doc. Make the edits.

---

ERIC OSTERWEIL: Yeah, you got the duty. Anybody else have any comments?

NAVEED BIN RAIS: [inaudible]? Okay, yeah.

ERIC OSTERWEIL: Cool, so we'll move on.

RUSS HOUSLEY: I just want to say I really like the go/no go part of that. I remember we had some discussions about that in LA, and thank you for capturing it.

ERIC OSTERWEIL: Alright. If it's good enough to launch a space shuttle, it's good enough for DNSSEC. Oh, there's a box here that doesn't look complete. Did I type that? Oh, man, I might have been more tired on the plan than I thought. Hold on a second, I have to go look at my original document to see if that's a fragment or there's something more there.

No. Wow, that's all I wrote. I don't know what I was thinking.

Okay, so periodic tabletop rolling KSK. Oh, that's right, because it's basically part and parcel of the one above. Creating a procedure and following a plan are not the same.

---

Recommendation – this is in regards to the tabletop above. Probably needs to be fleshed out. “ICANN must create a stakeholder group of relevant personnel from ICANN Org and/or the community to periodically run tabletop exercises that follow the root KSK rollover. These tabletops must follow the exact process specified for the rollover, must be performed at least as often as the root KSK rollover and must be done as far out of phase from the actual rollover as possible. I.e. if done at the same periodicity, must be performed at the midpoint between rollovers.”

The gist of this was if you're going to do it, practice it first. If you're going to practice it, practice it as far between the actual events as possible so that for example if there's a problem, you have time to fix it. And this was taken out of the recommendation from the LA meeting that we have tabletops. Zarko, go ahead.

ZARKO KECIC:

I don't get that one, because there is no problem with exact KSK rollover. There was a problem with adoption of keys. And we got lucky this time, and we should propose to have – actually, ICANN already know that, didn't need us to tell them. [inaudible] to measure how many resolvers are out of date and using only old key.

---

So I don't see the need to practice KSK rollover where difficulties and security issues are somewhere else.

ERIC OSTERWEIL:

Okay, so before I open that up to the group to comment, I'll just reiterate that in the LA meeting, there was a strong sense that doing tabletop exercises for the KSK rollovers in the future is a good thing. That's where this recommendation came from, was that there was a sense in the room that doing tabletops, not just because we know that there was a validator key learning issue, etc., doing tabletops to do the muscle memory around the operations was an important thing, like it is in a lot of other places. And someone said we should do tabletops for the key rollover, especially as it becomes a periodic event. That was the gist of this. So the recommendation is written around that.

ZARKO KECIC:

I am not against any training and probes, but as recommendation, I really don't understand.

ERIC OSTERWEIL:

It's just saying you should do tabletops. And maybe it's too long in the tooth about how they should be done or when they should be done, but it was a recommendation to capture there should be tabletop exercises for the root KSK roll in future.

---

ZARKO KECIC: I believe they were doing that. We should check.

ERIC OSTERWEIL: Then it will be an easy recommendation to satisfy, no? We can yank it if people want, but there was a strong well of support before, so I don't want to yank it until everyone weighs in.

NORM RITCHIE: Yeah, given this is a fairly infrequent event, this kind of falls into post-quantum, right?

ERIC OSTERWEIL: [inaudible] think about doing it like every year. Some people want to do it every year.

NORM RITCHIE: Oh, okay.

ERIC OSTERWEIL: Sorry, I wasn't on mic. I was just pointing out to Norm that some people are trying to position that we do a root KSK roll every year.

ZARKO KECIC: Actual KSK rollover?



---

ERIC OSTERWEIL: Yeah. If for example it got to be that systematized, I think doing tabletops would be required. So, does anybody feel like we should yank this?

RUSS HOUSLEY: Zarko [does.]

ERIC OSTERWEIL: We'll iterate on the text itself. So I'm not saying it's perfect, but I'm talking about [yanking.]

ZARKO KECIC: No, I would just remove timing, because they can propose to do tabletop tests and [inaudible] about that.

ERIC OSTERWEIL: Okay, so just sort of strike out the part about periodicity and midpoints and stuff like that?

ZARKO KECIC: Yeah.

---

ERIC OSTERWEIL: Okay, anybody have any thoughts? Okay, cool. Moving on. So the disaster recovery plan. The text I wrote is, “The review team received no information about disaster recovery plan.” I don't know if that's true from when I was on the flight.

ICANN created a DR plan for the global DNS root, post it for public comment, incorporate community feedback, and then implement it. This plan must be reposted for public comment at regular intervals and updated with community feedback. An external auditor must be engaged to verify compliance aspects of the implementation of this plan. So this, I did without the input of the various DR stakeholders on the team, so I suspect it will get some love from those people now. Zarko and Scott McCormick may have some thoughts on this, and anybody else.

NAVEED BIN RAIS: Can I say something? When we say something like this, that ICANN should come up with this, do we mean that ICANN should come up with something like this through one of its communities, or as an organization? So what do we mean? Like it can be like something coming for example from SSAC or any relevant So or AC related to ICANN, or are we saying that ICANN Org should do it? So just for clarification.

---

ERIC OSTERWEIL: I just wrote the text saying, ICANN should come up with it and get community feedback, but I whether they take the pole position initially or someone else does, is it being too directive by suggesting ICANN do it first and then get feedback versus coalesce the community into a document?

Again, I should probably back up on all these. So this was inspired by the discussion in the room in LA that there should be a DR plan for the root. So from that starting point, I guess I took the liberty of imagining that ICANN would draft the first version and then get community feedback.

LAURIN WEISSINGER: We could just do an “Either do that or do that,” and that solves the problem, whatever they see as appropriate.

ERIC OSTERWEIL: Okay, so I'll pitch this to Naveed and Laurin to do another pass of. Deal? Sweet. Moving on.

Okay, so the next section was under name collision. And again, there was some discussion in the room, so it [inaudible] so I wrote something about it.

I wrote, “SSAC has convened a work party – I don't know if it was a work party or a working party, but KC can help me with that –

---

NCAP to investigate and address the name collisions issue. The SSR2 review team believes that the name collision issue is critical and must be investigated by ICANN.”

“Recommendation: ICANN must produce findings that describe the nature of the incidents and relevant concerns regarding the issue of name collisions. ICANN must either ensure that NCAP be supported through its eventual completion and any recommendations be adopted, or if it is not completed, that NCAP starting point be used to start another initiative with the same goals. The results of those studies must be produced by a stated date, and any intentions to continue the work, periodically reassess, etc., must be included in that statement.”

So what I was intending to write here was that there's an NCAP thing happening already, so we're not going to interfere with that, and it should be supported. And if it falls apart, something else should be started and the results need to be made public. Anybody have any thoughts on that?

KC CLAFFY:

I just don't know what it is. I think we should be more precise about what we think should come out of that, because ICANN's already convened a study, and this is part of I think why the work party or the community is sort of paralyzed right now on this. They convened a study, there was a report, they sort of checked

---

our box, and then they went on and said, “Okay, we've got this mitigation approach.”

Now, there was apparently a call for using all that data from the first round of name collisions and the mitigation approach that was in play to then inform a second round. I don't know if any of that happened. We don't have any visibility into that, I think. There certainly were, in the meantime, some peer reviewed science. I think Eric's name is on a couple of papers that got published in academic papers and journals and such that could be used to I guess inform additional debate or additional measurements or mitigation measures. Bu the way that it's written now, you're using NCAP as a term to encase a black box of conversation that I think needs to be extracted a little bit in that SSR2, the team, should decide what has to happen there.

Maybe that's not our job to say, but I've also been watching this for years now, and it just seems like there's a lot of fuzzy dialog. And I wonder if we could provide some more crisp dialog about what the goal should be.

ERIC OSTERWEIL:

Okay, so I'm confused by one thing you said, KC, so I just want to jump back. I thought NCAP was still starting up. I didn't realize that – they had like the three projects and I thought they hadn't done any of it yet.

---

KC CLAFFY: Yes.

ERIC OSTERWEIL: Oh, they have?

KC CLAFFY: I think you could say they're still starting up, except they might be going in a negative direction, because I don't even know if it's going to happen. And I think part of the dilemma is they don't – well, what is the dilemma? I don't know, actually. They don't know exactly what –

ERIC OSTERWEIL: Yeah. Okay. That's what I thought as well. So if NCAP is starting up and they don't continue, they get shut down or whatever, the name collisions problem that started that work doesn't necessarily go away just because the work party falls on hard times.

But at the same time, I was worried if we write something very directive here, it might run afoul of whatever they find. Right? And maybe I was doing a bad job, so I'm not trying to be defensive. I'm just saying the starting point was if there's a group over there that's already doing this, let's let them do it. If they get shut down

---

or they don't come to convergence, then let's just enshrine that it was a good starting point and something else has to come along after them then. That was the gist of it. Laurin, you have your hand up too.

KC CLAFFY: Okay. I'm done. [I might] add a sentence to this paragraph, but I'm done. Thanks.

ERIC OSTERWEIL: Yeah, KC, you could definitely take the poll on this one if you'd like. So Steve has his hand up.

STEVE CONTE: Yeah. Thanks, Eric. Thanks, all. I absolutely do not have visibility to the NCAP project, so I can't speak with any kind of authority on that. But in the wording, I have a little bit of concern. Let me pull up the wording here, where you were saying that ICANN must – any recommendations from that project must be adopted, and yet with the – infancy is the wrong word. Just with the newness of this project, it's hard to say that ICANN must adopt anything that's coming out of that, because they could say we want elephants with red hats. We don't know what's going to come out of that yet.

---

So “must” feels like a very strong word in this context with a project with an unknown deliverable at this point. Thank you.

ERIC OSTERWEIL: Okay. Yeah, we can soften that. Any other thoughts? And KC said she was going to take a pass over this, so maybe we’ll move on.

KC CLAFFY: Yeah.

ERIC OSTERWEIL: Okay, so the next one’s a little ways down. There was some green text, and I think I remembered green meant some other working group or work stream took it, so I didn't get into that. I don't know if my recollection’s correct. If it’s not, we may have to circle back. But the next one that I tackled was down below, best practice plus system hardening of L-root.

“Look for publications that indicate L-root’s adherence to published best practices, RSOs” etc. and so forth. So I wrote the smallish text, “As an RSO, ICANN’s role in operating a critical part of the global DNS resolution infrastructure is critical.” That’s awesome. And I didn't use a period either, so I was obviously getting really tired.



---

“Recommendation: ICANN should issue periodic – and I posited yearly – statements of its adherence to recommendations from RSSAC or any lack therefore, should maintain a living document of the hardening strategies done on L-root’s instances, and whenever relevant, issue publications of practices that ICANN believes should be best common practices for resolution operators.”

I don't know if this overreaches, but the spear of it was periodically say what's going on with L-root, and offer advice to other people if there is any. Page, there's a four at there's a four at the bottom on my screen.

I'm going to propose based on the extreme enthusiasm in the room that maybe now is a good time for a break, Russ. What do you think?

RUSS HOUSLEY:

That sounds really good. Why don't we take ten minutes? Be back at the top of the hour. Thank you.

Can we restart the recording and get going?

JENNIFER BRYCE:

Thank you. We are returning from the break. This is SSR2 day two of face-to-face meeting in Kobe. The meeting is being recorded,

---

and please remember to state your name for the record. Thanks.  
Over to Eric or Russ.

ERIC OSTERWEIL:

Okay, over to me. Thank you, everyone. So now I'm on the bottom of page five. I think it's the next box we were to talk about. Thank you.

Okay, so this one was alternate root deployment and coexistence, an issue we talked about in LA. So I drafted, "ICANN's role as a steward of the global DNS root zone implies a responsibility to understand competing forces in that part of the namespace, the root. One type of competing force is the existence, operation and developments of alternate root zones deployments."

So the recommendation I channeled was, "ICANN should produce or commission the production of annual reports that produce measures of its root zone, a list of alternate DNS root zones that are known to be in production offering global resolution. These reports should be in the form of evolving measurement studies that produce snapshot measurements, longitudinal analyses of measures and deltas, any observed qualitative analyses such as the impact of alternate root zone traffic, structure, protocol, evolution, etc. and any observations of issues that relate to the coexistence of alternate roots with the official ICANN global DNS root."

---

That’s kind of a mouthful. The gist of that was basically anything that is known as a sort of a globally resolvable alternate root should just get measured. And this might also allow sort of a delta measurement, which I think are already in existence of the ICANN root, but then create deltas of what the other roots look like, size and any sort of observations of something’s happening.

I imagine this would be an easy box to check, but what does everyone think of that? Seeing no dissention. I saw a couple of nods. Okay.

Next down below, SSR measurements, top level domain SSR measurement reports.

So I drafted, “The top-level domain [CLDs in] the DNS represent some of the most critical points of stability in the DNS as the set of delegated TLDs continues to be critical for online services, and there exists the potential for new generic top-level domains to be added in the future. Periodic measurements and longitude analyses are critical necessities for understanding the SSR of the global DNS.”

“Recommendation: ICANN should produce or commission a periodic study – yearly, question mark – of measures of security, stability and resiliency in the DNS’ TLDs. These measures should be produced as summaries over both the previous year and longitudinally to illustrate baseline behaviors. Community

---

feedback should be called after each report, and where appropriate, incorporated into following reports. The data used to measure the results in these reports should be archived and made publicly available along with any and all methodologies to foster reproducibility.” If you're going to deploy it, measure it.

Any thoughts, pro or con? I'm allowing a pause for people to digest. Laurin?

LAURIN WEISSINGER: Hi. Very specific point: community feedback should be called after each report? Is that a good wording, or should we maybe edit that? other than that, I think it makes sense.

ERIC OSTERWEIL: Yeah, whatever. Do you think – is it the wording, or is it the objective? Do you think it's a bad idea to get community feedback? Or what are you worried about?

LAURIN WEISSINGER: No, community feedback is obviously good. My question is, should we maybe reword this so it's actually clear what they're supposed to do with that community feedback? Because from reading that, it's not clear to me.

---

ERIC OSTERWEIL: Cool. Yeah. By all means. The gist of it was sort of what you decide to measure one year may change over time, we'd rather measure something else. But how about I hand the pen to you on that? Is that okay? I'm certainly not proprietary. Was it the word "call?" I was tired. Alright. Yeah, okay, by all means please fix that. Zarko.

ZARKO KECIC: What is the purpose of those measurements? Because I do think that ICANN together with DNS work are doing measurements of TLDs.

ERIC OSTERWEIL: Yeah. So produce or commission periodic studies. So it might be that that gets done automatically. But it just sort of makes it a required sort of operation.

NORM RITCHIE: Wasn't there something very similar in the SSR1 recommendations?

ERIC OSTERWEIL: [I don't remember that.]

---

NORM RITCHIE: No? I thought the recommendation was to have metrics for SSR. Could be wrong. Well, it's just something to check later, final edits.

ERIC OSTERWEIL: Yeah. Good call. Okay, I was going to move on unless anybody either has a comment or wants more time to read this wonderful prose. Okay, moving on. The next couple are very similar, so we'll have chances – so Laurin's changes may need to get propagated or they may need to be coalesced.

But IANA registry SSR measurement reports. "The IANA registries include many needed parameters that are specified by RFCs in the IETF. Their availability and correctness is paramount to the needs and needs to be clearly illustrated to the community."

"Recommendation: ICANN create a set of measures that demonstrate the size, growth and composition of the IANA registries and also global network availability of these registries. These measures should be used to create periodic public reports yearly that illustrate the status of the IANA registry over the past period and longitudinally. These measures should be produced as summaries over both the previous year and longitudinally to illustrate any baseline behaviors. Community feedback should be learned after each report, and where appropriate, incorporate into follow-on reports [of data] used to measure. The results and

---

these reports should be archived and made publicly available along with any and all methodologies to foster reproducibility.” So it’s very similar at the end.

This one basically says do the same thing for the IANA registries that you're doing for the above bullet. This one I don’t think was in any previous report or recommendations from other places, and I think it’s a gap we've identified a couple times, the IANA registries.

Okay, moving on. We can always circle back if people want to. The last one in these three is similar again. The root zone SSR measurement reports.

“The DNS [root] is perhaps the single most critical zone in the DNS. Periodic measurements and longitudinal analyses are critical necessities for understanding [inaudible]. ICANN should produce, commission periodic study yearly of measures of security, stability and resiliency in the DNS root zone. These measures should be produced as summaries over both the previous year and longitudinally to illustrate the baseline behaviors. Community feedback should be taken into account – Laurin beat me here –in each report. Where appropriate, feedback should be incorporated into follow-on reports. The data should be measured, the reports should be archived and made

---

publicly available along with any and all methodologies [to foster] reproducibility.”

Third [verse] same as the first. Basically, this one says do the same thing that we just talked about in the above for the root zone as well. So in a sense, I wondered if I should have just put this all in one recommendation, but it was on the plane. These were three separate things we talked about in face-to-face, so I left them separate. We may, as a group, decide to coalesce them or not. Totally fine with me. I think there's merit in either approach.

Seeing no signs of life, I will move on. Okay, so next one, compliance SLAs, for what, with whom. That one felt like it was a bit outside my bailiwick, especially on an airplane without access to all my resources, so I left it. That one, we'll probably need the people who are interested in discussing SLAs to weigh in on that. And I see that – I guess that was Boban, it looks like, who got the duty on that one. So I didn't touch that one. That remains outstanding.

The one I did do, propagation delay and consistency of changes of zone contents across name servers for the root. Looks like root got dropped out, but not in the one I wrote.

“The global DNS root is served by 13 instances of name servers, letters A through M which are each operated by numerous servers. As a result, when changes are made by the root zone



---

maintainer, they get propagated to all the instances. The propagation delay between publication to each of the letters and then each of the letters' instances is not well understood. However, propagation delay was illustrated to be an SSR issue recently as the 2018 KSK rollover when some instances were observed to not have been updated as fast as others.”

“Recommendation: ICANN should create or commission the creation of a framework for assessing the propagation delay of root zone changes to instances. This framework should be used to create periodic studies yearly that should be produced as summaries over both the previous period and longitudinally to illustrate any baseline behaviors. Community feedback should be [Laurined] after each report, and where appropriate, incorporated into follow-on reports. The data used to measure the results in these reports should be archived and made publicly available along with any and all methodologies to foster reproducibility.”

So this one might very well need to get managed by the team here. So please feel free to weigh in.-Laurin, go ahead.

LAURIN WEISSINGER: Yeah. I'm just wondering, do we want to not put the recommendation more into a context of what is the appropriate timeframe for changes to propagate? So that should be defined

---

and then efforts should be made so that changes propagate within that timeframe rather than just studying it. Zarko says no.

ZARKO KECIC: No, we should just ask for measurements, and somebody else should put SLA and require timeframe.

LAURIN WEISSINGER: Okay. I'm happy with that. It was just an idea if it makes more sense to kind of go into that direction.

ERIC OSTERWEIL: I see signs of consternation, so I'm pausing for anybody to weigh in if they'd like to.

JENNIFER BRYCE: Steve has his hand raised.

RUSS HOUSLEY: Steve Conte, go ahead.

STEVE CONTE: Yeah. Thank you. I'm just looking at this and I'm trying to wrap my head around it. Is this something that maybe we should suggest – I'm looking at this in context with some of the CCT

---

recommendations that just came out where it was passed through ICANN to the appropriate bodies, and then in this case – excuse me, I'm fighting a cold – the appropriate body to look at this might be the RSSAC. So, would it be worth considering wording it as such to recommend that ICANN take this to the RSSAC to let them determine SLAs, proper propagation times, [inaudible] things like that, and offer to make this a community-based project, which it is in this case? Thank you.

ERIC OSTERWEIL:

So thanks. Yeah, I think I like that course correction, but I would sort of say that pushing the project onus onto RSSAC makes a lot of sense for doing the work and getting the right kind of result, but I think having a recommendation that says that the result needs to be displayed periodically kind of puts the impedance back on ICANN Org to say we have to do something. If you say, “RSSAC, what's the right way to do this, and should we do it?” And they come back and say yes, it's good, and then it doesn't show up, then we don't have this [inaudible]. But if ICANN then sort of said, “Clearly, we can go to RSSAC to do the job that RSSAC should do but we have to produce something as a result,” I think it sort of gives some energy to the possibility of having a periodic result. Does that make sense? Norm?

---

NORM RITCHIE: Generally, and to Steve’s point, we just need to get educated on how to word a recommendation so the board can act on them. If they're worded in such a way that they cannot just accept or reject it, it has to be modified, I don't know what they'd do in that case. So I think it raises a good point on [how much, how specifically make] some recommendations and how do we actually word them properly so that the board can easily just accept or reject.

ERIC OSTERWEIL: I think that’s a really good point. I think those are both really good points, and I think that sort of suggests the text needs some attention. So who can I look to to sort of spend some energy on that? It’s the one on the top of page seven. That one. Or no, above that one.

RUSS HOUSLEY: This is the propagation delay one.

ERIC OSTERWEIL: Yeah, that one.

RUSS HOUSLEY: And we tagged Eric with that.

---

ERIC OSTERWEIL: Yeah. So I wrote it, and now people are giving me feedback. So I can take a stab at incorporating that. Basically, if I understand the gist of what Norm and Steve just said, it was that RSSAC is kind of the right body to do all the heavy lifting here, and we need to sort of be sure that a recommendation is written in a way that can be ingested and acted upon by the board. And I think both of those are in line with the spirit of what I was writing, so the wording probably just needs to be fixed, so I can take a stab at fixing the wording, and then if you two will be diligent about reviewing it, that would be awesome.

Cool. Can I get a thumbs up from Steve? Anybody watching the chat room to see if there's thumbs up? Alright, cool. Awesome.

JENNIFER BRYCE: Steve said yes.

ERIC OSTERWEIL: Sorry, Steve, I'm not on the chat room. I'm jetlagged. Alright, so I'm very suspicious that I may have at this point run out of energy. Namespace abuse. Yeah, I didn't do any more work. I slacked off at this point on.

But I think what happened was I was very tired, and namespace abuse, I saw a whole bunch of initials and none of them were mine on the first one, so I decided I would circle back. And I never did.

---

So we've reached the end of our odyssey on Eric's plane ride across the pacific.

DENISE MICHEL: Thanks for all the work.

LAURIN WEISSINGER: Thanks for all the work, Eric.

ERIC OSTERWEIL: I had to earn my keep eventually, I figured.

RUSS HOUSLEY: So let's go back to the one that KC wanted to do some work on. I forget, number one or number two, whatever that was. Okay, let's go back to that.

KC CLAFFY: But unfortunately, I have not done more because I've been trying to follow the discussion when I've been at the keyboard. So I need a break or something. I need another ...

RUSS HOUSLEY: You're not ready yet, is that what you're saying?

---

KC CLAFFY: That is correct. Although I don't know if it's a good use of the whole room's time, but I would like to pick Eric's brain about the set of services that we are referring to when we talk about the data that ICANN manages, the multiple data sets that we would like ICANN to create. So it's kind of back to this question earlier, and I know Steve gave one example. And I have a bunch of root server examples. In fact, we could review them. But no, it's just a paragraph. [inaudible].

Can I ask anybody, maybe Steve, if he has any understanding of the status of the open data initiative? There's a line here about that.

STEVE CONTE: I know we turned it operational, which means it's been moved from the OCTO group to the ICANN Operations department. I can ping them and get a status of it, or see if they can write a blurb to send back to you guys on what the status is.

KC CLAFFY: Do you know the URL of it? Because the only page I found did not talk about –

STEVE CONTE: Off hand, I do not.

---

KC CLAFFY: Here, let me put in the chat room what I'm aware of, if I can find the tab. So that's what I know, but that just says we'll publish details here, and there's no details published here. Is that right?

STEVE CONTE: I'll take that as an action item, I'll send an e-mail to the ops team and see if there's an updated webpage that just hasn't caught up to where they are that I can point you guys to.

KC CLAFFY: Thanks. And then I guess actually, it's the same about the ITHI internet technology health indicators. I should have asked this question before, but some of these, [I'm not getting until I get into this.] But I'm wondering how the success of these efforts are being assessed. So what is the ITHI, how is it different from the ODI?

I guess the [ITI] is metrics that ICANN's going to generate itself or derivative metrics.

STEVE CONTE: My understanding of ITHI is that ICANN receives data from other parties as well as data we collect to determine the metrics that are being displayed. But I can also take that. Jennifer, I'll pass



---

these on to you to record. I'll take that as a question as well that I'll bring back to the OCTO team, which ITHI still is within OCTO.

KC CLAFFY: So Eric, can you brainstorm with me a little about what other data sources or services you think we're going to want covered?

NORM RITCHIE: KC, [you have] for each service that ICANN operates, this is specific to root zone management, right?

RUSS HOUSLEY: It's supposed to be.

NORM RITCHIE: Yeah, okay. So would it be for each service and process within the root zone management?

KC CLAFFY: My takeaway from the earlier conversation is that this box was not ultimately going to be restricted to root zone management. If it is, then we definitely should be writing it differently. For example, we should say root zone services. So it's fine with me if [this does,] but maybe I just misunderstood earlier. Does the room have a pulse there?

---

For example – and again, I don't know what Eric had in mind when he wrote the next part of this. “ICANN should create a public master list of all data sets that it has responsibilities for.” Was that intended to be just about the root zone?

NORM RITCHIE: Can you repeat the question for Eric? He was occupied.

KC CLAFFY: The sentence that talks about ICANN should create a public master list of all data sets that it has responsibilities for, what measures can be created for each and prepare periodic reports? When you wrote that sentence, did you have in mind only data sets related to the root zone?

ERIC OSTERWEIL: We can take it whatever direction anybody wants. So trying to remember what I was thinking at the time. I think I was hinging off of the ODI and ITHI comments transcribed from the LA meetings, so it may be that we want to sort of rein it in. Is that what your thinking is?

KC CLAFFY: Okay. For the sake of progress –

---

NORM RITCHIE: Yeah, getting back to the comment I made before about wording these properly so the board can act on them and not have to – the options can't be “We have to modify it before we agree.” That’s not a good recommendation. So the recommendation should be such that they either agree, yes or no, out, but not this, “It needs to be modified.” So if we make it too broad, they’ll all be rejected. So you have to piecemeal.

KC CLAFFY: Yeah.

NORM RITCHIE: So I'm suggesting that this be specific to the root zone, and if there's other ones that are broader, we can add them later.

KC CLAFFY: Okay.

ERIC OSTERWEIL: I think we’re all in agreement then.

KC CLAFFY: Yeah. But then I don’t understand the whole recommendation in that case, because for each service that ICANN operates or has

---

purview over, does that mean just B-root and L-root? I think that just means B-root and L-root. In which case we should say that.

STEVE CONTE: My understanding is we do not have purview over B-root. I believe that's still with USC-ISI. I could be wrong, but that's my belief.

KC CLAFFY: Okay, so it's just L-root. Maybe I put that in there. Sorry. Thanks, Steve.

ERIC OSTERWEIL: So just make it specific to the root zone.

KC CLAFFY: Yeah, but ICANN doesn't even have purview over that, does it?

ERIC OSTERWEIL: IANA does. What are we fencing over? Yeah, IANA is the author of this root zone. It's not the maintainer, but it's the authority for what's in there, right?

KC CLAFFY: Okay, so you just want [inaudible]. Alright. I guess my question is what's there now and why isn't it good enough.

---

ERIC OSTERWEIL: So should we read what you have – I'm sorry, KC, I want to make sure we're supportive, but what's your consternation over the current text or the text that I started it with?

KC CLAFFY: To Norm's point, I don't know what we're recommending here that ICANN isn't already doing.

ERIC OSTERWEIL: Alright. Do you want me to take a pass over the text and homogenize it? Because it still says ICANN curates a whole bunch of stuff, and we just agreed to rein that in. So should we rein that in?

KC CLAFFY: No, I think I'll cut it out. Don't worry. [I'll try. Give me five minutes.] Sorry.

JENNIFER BRYCE: I'm just reading a comment that Steve has posted into the chat. He says IRT NCAP. I've just heard that he board technical committee is making a recommendation to the board and they are currently considering the recommendation, suggestion to

---

pause name collision wording until after the board meeting in Kobe.

DENISE MICHEL: Sorry, was that last part to pause what?

JENNIFER BRYCE: Name collision wording until after the board meeting here.

ERIC OSTERWEIL: So we're having a discussion – I'm just putting it back on the record – about a question that we asked, and the answer – basically, we asked a question about how NS, DS records, what the process was for updating those and getting those in the root zone. And the answer we got back was not about the root, it was about ICANN.org. So we don't have an answer to that question, but I think we're two years into this three-hour tour, and so I think we're going to need to write a recommendation based on the data we have as opposed to waiting for another go around of asking a question and not getting answers.

So my two cents would be at this point we don't have a public description of the process that is used to get records, NS records and DS records in the root zone and update them in the root zone, and I think I would suggest that based on the discussions we had

---

where people thought this was important that we write a recommendation saying that that process needs to be publicized and maintained and held up for a public review. I think that's down below in the document somewhere, and I don't think I had the juice to write that on the plane, so we can maybe do it this weekend.

RUSS HOUSLEY: I'm unclear what we're waiting for.

ERIC OSTERWEIL: So just make sure that KC's done with editing before we review.

KC CLAFFY: Oh, I didn't know you were waiting for me. Okay, I'm done, yes.

ERIC OSTERWEIL: Okay. I was also snoozing. So everyone take a look, please, at what KC wrote. In a second, we'll just sort of take a pass.

KC CLAFFY: I don't know what that bottom line in that box is. [It crept] into that box somehow. [inaudible].

---

RUSS HOUSLEY: It used to be below the box.

KC CLAFFY: I guess I'll just ask Steve as long as you're here. When somebody asks for some data set that ICANN might generate, how do you find it on the website?

STEVE CONTE: Not sure how to answer that. How do I find it, or how it should be found?

KC CLAFFY: How do you advise somebody? If I say, "Oh, I'm looking for [CZ DS] health statistics, do you just google, or is there like a tree structure of data on the website?"

STEVE CONTE: If there is a tree structure on the website, I don't know about it. I'm a big Google user when it comes to the ICANN website, and I think comms who oversees the website – and I think that's part of the ITI, the information transparency initiative acknowledges that looking for data is extremely difficult to do on ICANN, and part of that project is to make data much easier to access. So we're kind of – and unfortunately, it's a multi-year crack, but we're caught in a crack right now of looking for this data and then



---

having ITI spin up fully and have that data and the structure much more methodological – can't talk, sorry – as far as [inaudible] the data from the website.

KC CLAFFY: And Russ, remind me, is there a separate recommendation on the website? I think there is.

ERIC OSTERWEIL: So KC, while you're going back and forth, one of the things that looks like it dropped out – and maybe it was on purpose, in which case we should just discuss and it's okay either way, is that there's no report of these statistics periodically, they're just sort of presented online, and my thought on that just as no hats on was that when you produce a report, it sort of has a canonical timestamp of this is when this was observed and whatever, and if nothing else, that becomes a sort of data point itself. So do we want to just propose [the data sort of has that home] and it's accessible, or do we want to also say it needs to kind of be codified, enshrined or something like that?

Basically, I would just propose adding to what's there, that there needs to be a periodic report that summarizes this in addition to everything that's there.

---

RUSS HOUSLEY: So Eric, I'm not sure how they get the community feedback via public comment unless there is a document.

ERIC OSTERWEIL: Yeah. I think it feels like it fits right in there, so I'm just proposing we add that in there. But yeah, I guess I'm not hard and fast on this.

JENNIFER BRYCE: Steve has typed into the chat, “To KC’s point about finding data and Eric’s comment, it may be worthwhile to call out the difficulty of finding data in logical places. It may be worth exploring a recommendation on that by itself to [inaudible] all the other reporting the review team is contemplating.

ERIC OSTERWEIL: Yeah, I agree with that. I think maybe – is that a separate recommendation, or is that something we just reiterate multiple times? What does the team think about that? I also wonder if there's some vein of this that’s addressed in other places as well, and I don't know how we feel about, like the ODI probably has some stated view of how data should be managed and disseminated and centrally located. We can certainly state our perspective, and it might harmonize well with that. Or I don't

---

know if we want to defer and say ODI is doing something like this and we think they should come to conclusion, or what.

RUSS HOUSLEY: I think what you're saying is maybe ODI is the home for this, right?

ERIC OSTERWEIL: It could be.

RUSS HOUSLEY: Such as under the ODI initiative is probably enough. Yeah.

KC CLAFFY: We don't know what that is, so we just want things to [be more findable.] Sorry, Denise.

DENISE MICHEL: I agree with KC. I think we should put a pin in this and check out the latest on ODI and maybe come back to it.

ERIC OSTERWEIL: Okay. Yeah, so then actually, that harmonizes well with KC, Steve, Denise, etc., like there may be a separate recommendation, but certainly, we should go and spend some time to look and see

---

what the current status is. And then if it comes back that there's a gap, then we may make a recommendation on it.

KC CLAFFY:

Maybe this came up when I was gone earlier, but we've sort of changed this sentence instead of adding a sentence. I guess Naveed took the pen here, and that's not quite what I was going to do, so I want to discuss that.

I actually think that what I had before is ICANN should publish [the statistics about these] datasets and then take feedback on those stats and update as needed, not just however many years go between a public comment. Because one thing we learned about these statistics about the Internet is they're sort of a dynamic thing. As we learn more about them, we can refine and improve them, and certainly make the presentation clearer.

So I guess I don't want it just to be via whatever the typical public comments, but I'll go ahead and try to make a sentence. It's not going to change the import of it. So maybe we can just move on to the next – unless somebody disagrees with what I just said.

ERIC OSTERWEIL:

No, I think that's fine, KC. If you think there's a better mechanism [than] public comment, then yank out public comment and put what you think makes sense.

---

KC CLAFFY: So can we move to the next thing?

RUSS HOUSLEY: Yes. So we have about a half hour until we break for lunch, and so I wanted to share in a similar way some of the text that was produced yesterday, get the group feedback on it. I'll start with the IDN stuff that Laurin and I worked on.

Jennifer, can you bring that document up? It's in that recommendations document. Thank you. Alright, Laurin, you want to take them through the text?

LAURIN WEISSINGER: Let's wait for the text to show up. It's second to last page, Jennifer. Yes, this is the IDNs impact of security, stability and resiliency. Essentially, we have a short introduction/reasoning paragraph. AS you can see, it's already marked by me to be moved in the report. We just don't have a space for it right now.

There are three recommendations coming out of this. Number one is that ICANN should contractually enforce guidelines for the implementation of IDNs for gTLDs and recommend to the ccTLD operators to do the same. There will be a link to these guidelines,

---

but essentially, it is a rather detailed document on how to kind of deal with IDNs and associated issues.

Second recommendation is whenever possible, ICANN should include [or] highlight abuse using visually indistinguishable names, IDN and ASCII, in the DAAR reporting. Footnote, we are aware this is not a perfect process, but the idea behind this recommendation is to provide something and hopefully over time, that would become more accurate. Jennifer, could we scroll down a little?

And the third recommendation, we were talking about something Zarko mentioned. So the current guidelines for the implementation of IDN [inaudible] this document again, should be updated to include a section on trademarks and the function would be that if a requested name is recognized as similar to a registered trademark or well-known brand, so this would be a list that will have to be created, and the recognition would be based on a table of similar-looking glyphs, again would have to be created and updated – there are some already – that registration should be denied, tracked after registration, or other otherwise addressed. So it just depends, essentially, on what is functional in a specific case.

---

NAVEED BIN RAIS: I was just wondering, do we need to approach the IDN team working on this to get their feedback on what they think about this visually indistinguishable characters? Because when they're working on it, they must have thought about that one. So if they have some alternative to that, or if they think that this is not a potential threat, then we plan the recommendation accordingly, because the team should be here for this week, so we can approach them.

RUSS HOUSLEY: So the document referenced in the write-up actually has a whole section on that, and so I think we're just saying let's make it more than just a guideline, let's put some teeth behind it. That's the whole point, not to revisit the how you do it.

LAURIN WEISSINGER: But addressing that point, I think there is no issue in checking who is around and just have a quick chat with them, see if there's anything they would like to see added or if they're doing something already that we can kind of then reference in these recommendations, if there was anything that that would impact. Any other comments?

---

NORM RITCHIE: I don't know the current status of emoji domain names, but are they included within the – because they are Punycode, were they included in the IDN guideline implementations?

RUSS HOUSLEY: They're not excluded in the sense that it only talks about Unicode characters.

LAURIN WEISSINGER: So, should we then kind of change the wording so that this is clearly included? I hear Russ saying yes.

RUSS HOUSLEY: Okay, so we'll let you go off and add a few phrases, maybe just a comma, including emojis or something. That's probably all you need.

LAURIN WEISSINGER: [inaudible].

RUSS HOUSLEY: Yeah. Any other feedback on the IDN stuff here? We are still waiting for two questions to be answered, and depending on how they get answered, there may be another paragraph or a change to one of those paragraphs.



---

Okay. Norm, did you and Ram produce any text yesterday you want to share with the group?

NORM RITCHIE: Not yet. I'll write that up and have it for whenever we meet the next time.

RUSS HOUSLEY: Thank you. Denise, did you produce any you want to share, or are you still in work? Still working, okay. Well then let's go ahead, and logically, this is a good place to go on lunch break, and I notice they've got it all set up, so why don't we do that? Let's take an hour.

Okay, could we get started soon? Okay, let's get started.

JENNIFER BRYCE: Good afternoon, everybody. The session is being recorded now. This is the afternoon session of day two SSR2 face-to-face meeting at ICANN 64 in Kobe. Online, we have KC as well, and I'll hand it over to you, Russ. Oh, and I should note also that Boban joined us and he's here now too.

RUSS HOUSLEY: Welcome, Boban. We missed you. While you were traveling, we took the table that we had with the various topics, we added a

---

column for how many questions have not yet been answered on that topic, and then we went through and picked a person in each of the topics to be the lead to just kind of drive it to closure. So I wanted to make sure you realize that within your stream, which ones you have been tagged for.

So the business continuity management, we tagged you for, and then – I don't remember whether we bolded him for anything else. Oh, yes. And then down here in the DNS SSR section, you and Laurin had this block of three topics, and so we tagged one of you for each of those. Looks like you skirted being lead on any of the others.

Anyways, so the expectation is that the person who's the lead will reach out to the others on that topic as needed, but we wanted someone to drive the process.

So the plan for this afternoon is to do like we did yesterday afternoon and break up into the small groups and get some text written. We also have the breakout rooms throughout the week. Jennifer sent a mail that says what rooms we have on what days at what times, so please, in your groups here, organize and self-organize and get some work done. That's the extent of the group session today.

---

We will meet again more formally on Thursday, and hopefully, we'll have a bunch of text from these breakouts to go over as a group and see whether we have consensus or additional work.

Questions? Okay.

JENNIFER BRYCE: Just a note, there's a comment from KC in the chat. She says, "I'm available if anybody wants to discuss any parts of the text offline. I'm wondering if we shouldn't factor out all the define and report metrics and statistics on XYZ."

RUSS HOUSLEY: Eric, do you want to respond to that last part?

ERIC OSTERWEIL: Yeah. I think that sounds great, we should definitely chat, KC.

RUSS HOUSLEY: So the two of you are going to set up a chat session or something?

ERIC OSTERWEIL: Yeah.

RUSS HOUSLEY: Okay, great.

ERIC OSTERWEIL: KC and I have each other's coordinates, so we'll figure something out. We have the video thing right here, so maybe we'll stream it.

RUSS HOUSLEY: Alright. So let's go ahead and adjourn and wrap up the recording.

JENNIFER BRYCE: Thanks. I think what I'll do is send calendar invites to everybody for the times and the room numbers. So just look out for that, and obviously as Russ said, pick and choose as you like. It doesn't mean you have to be in that place at the time, but at least then you have it in your calendar. And with that, we will end the recording for this session, and thanks very much. Alright.

**[END OF TRANSCRIPTION]**