RECORDED VOICE: This meeting is now being recorded.

LAUREEN KAPIN: So this is Laureen. First of all, thanks everyone who has joined, and a big thank you for everyone for all of the hard work at the face to face meeting. I thought we got a lot of good things accomplished, particularly narrowing down our list of questions and topics as we go forward, and dividing things up for our first, one of our first tasks in terms of the impact of the safeguards and the public interest commitments, and just a chance to see everyone in person is always, I think, a really, really effective thing.

So thank you for that. I want to open it up, open up for discussion for our agenda, both items one and two, that is, if you have questions about any of our outcomes or discussions at the face to face meeting, or if you have questions about upcoming tasks, now would be the time to ask questions.

So I mean, I open it up to folks.

JAMIE HEDLUND: Hi, it's Jamie. I just joined.

LAUREEN KAPIN: Hey Jamie. So I'm just opening up the discussion about questions for upcoming tasks and assignments.

EN

DREW BAGLEY: Hey Laureen, this is Drew. Yeah, I guess I was wondering, I was looking at the chat we're supposed to fill out last night for the DNS abuse safeguards. And for a lot of our safeguards, figuring out if a safeguard is triggered, or how it has been used will require, some of them might require the surveys. So I was wondering what your thoughts were in general, I guess, for all of us on all of our topics, on how to approach that chart now before we undertake the additional research.

LAUREEN KAPIN: A placeholder, basically. That's a very good question. If it's something that we're going to need more data for, but we haven't received it yet, then we should mark it with a placeholder, and identify the data source that we hope will provide the information, just so that, you know, this chart is completely filled out as is possible to do at this time, you know, realizing that in some cases, we're not going to have the information yet. Does that make sense?

DREW BAGLEY: Yeah, absolutely. I just want to make sure we're all on the same page with that, that there was going to be stuff that we wouldn't have the information. That sounds great. And then Brian [inaudible] helpful, the one that already put together before last week's meeting and during the meeting, for helping us identify the ways to go about getting the information for each of those.

LAUREEN KAPIN:	Perfect. So that's a perfectly fair question. Any other questions either about, either about the face to face meeting, or our tasks for the week ahead? Which is to try to fill out to the extent we can, this impact of the safeguards and public interest commitments.
	Okay. So I'm going to encourage everyone to reach out to your sub-team members to divide and conquer the work, and I, myself, am going to reach out to Carlton and Carlos today so that we can divide up our work. That's my shout out to Carlton and Carlos saying that we need to do that also.
	And to the extent that folks haven't been able to connect to their review team members, I encourage you to do so, so that you're not doing, everyone is not doing their duplicative work for this safeguards and public interest commitments part.
	So, I'm looking for hands, I don't see any hands up. I do want to spend a little time harping on some information from Jonathan. Jonathan is probably going to be joining our call late, but in looking at our chat, he had interpreted our tasks a little differently than I and others were interpreting headings for our readings chart. So let me refocus people only for articles that they think actually are going to be productive.
	So, this is not an ask of everyone go and re-do the chart wholesale, but what I am going to ask people to do is just go back into the reading list chart, and for those articles that you have coded as green, i.e. this is going to be a source that is productive for our review team, I want you to think about some of the headings a little differently. And I'll send a

follow-up email on this, but I also wanted to discuss it and open it up for questions.

In terms of observation heading, Jonathan had interpreted that observation heading, not as the observation set forth in the article, but an observation made by the review team. So for example, if we had the observation, for example, that a low cost of a domain name was likely to result in more abuse, that would be the sort of observation we would put in there.

And then the hypothesis would be posed by the review team to explain the observation. So I guess that's… Part of this, I have to say this is a very confusing construct. And, you know, maybe it will be best to let Jonathan explain it more, but I think his main observation is that, for both the observation and hypothesis, that shouldn't be tied to the article itself, it should be tied to what the review team observers.

So for example, my, I'll rekey my example. If our observation was that there may be more abuse in certain new generic top level domains and our hypothesis is, perhaps that is explained by differences in price, then the rest of the columns, i.e. research and findings and recommendations, would be key to that. So I think the real difference between what Jonathan thought would be the most useful versus what all of us, including me, most of us, including me, has done, is that this observation and hypothesis should be a team observation and hypothesis, rather than something that is in the article.

So I don't think it's productive for people to go back and redo everything, but I do think it's productive for people to go back and key

the observation and hypothesis only for those sources that you think are going to be productive sources for our review team. So I mean, I asked folks to do that.

I do apologize for the misunderstandings and just say that this part of our, this is just part of our process. But I want to open it up to questions, and when Jonathan joins the call, you certainly can post questions for him. But let me just open up that point about our reading list charts for questions. Any questions on that?

Okay, I don't hear any questions, and I don't see…

DAVID TAYLOR: Laureen, David here, if I could. [CROSSTALK] Have you got a written example of how to do it? Just so that it might clear it. I know you went through them, I'm sort of [inaudible] because I'm on this train. But I just [inaudible]… written example might have been circulated, because I might have missed it if that's the case.

LAUREEN KAPIN: I will circulate a written example. I think I am taking responsibility folks astray, because my example was how I understood it, but apparently Jonathan and I understood the headings very differently. So that's why I'm trying to clear this up. So I'll make sure that we have an example sent around, and that's a very helpful and reasonable request.

DAVID TAYLOR: Great, thanks, thanks a lot.

LAUREEN KAPIN: Okay. So, any other questions or comments on either the upcoming assignment or the adjustments I've now asked people to take to the reading list. And again, I'll send around something after the meeting to provide a little more meat on the bones for that.

Okay, so then what I would like to do is continue with the presentations that we weren't able to get through in our face to face meeting in DC. And you can feel free to try and apply this new rubric on the fly, but it's certainly not mandatory. But I think the real key here is that we are going to have certain observations and hypothesis based on the things we know already.

And the question is, you know, are these articles helpful in relating to those observations and hypothesis? So think about that while giving your presentations. They should be fairly short. Really just a headline summary. Is the article useful for our effort? Because if it's not, there is no need for you to go into as many details about it, but if it is useful for our effort, then just a brief discussion of how it relates to the questions we're looking at, and drilling down to where particularly in our inquiries this is going to be a useful source.

So I'll take volunteers regarding who wants to go first, otherwise I'll just start asking folks. And maybe if we can bring up the chart… This is so great, this is like my wish is a command. It appears, thank you magical ICANN staff for doing that. Who would like to go first? We have Calvin, Carlton, Carlos, I don't think Gao is with us, Jamie and myself.

And since you've already heard my voice so much, I'm going to want someone else to jump in here.

CALVIN BROWNE: Calvin here. I can volunteer to go through my reading list.

LAUREEN KAPIN: Perfect. Thank you Calvin.

CALVIN BROWNE: What's the key to alphabetical order?

LAUREEN KAPIN: So maybe we can scroll down to Calvin's part of the reading list, whoever is managing the slides here.

UNKNOWN SPEAKER: You all have scroll control.

LAUREEN KAPIN: Oh good, good, good. So we can do this ourselves, perfect. Okay so Calvin, take it away.

CALVIN BROWNE: Okay, great. So the first thing that I had, let me just get my notes in front of me, was the DNS [inaudible] project. This was a project that

seems stale, the Wiki was last updated in 2014 with [inaudible] put in there in 2011. And I didn't see any mention of it elsewhere. You know, [inaudible] I was fairly intrigued, I Googled it and I couldn't find it, any links to it, outside of its own article.

They had two goals, and that is to spread the awareness to the broader internet community about behavior that effect the DNS as a whole, and individual users online experience. And then to publically recognize actors within the DNS industry that are ideal to industry practices in order to promote the responsibilities [inaudible] and proactive approach to stopping DNS abuse.

LAUREEN KAPIN: I'm sorry, I'm just going to jump in Calvin, because I'm having a hard time finding which article you're talking about. You haven't been able to fill in the chart yet, yes?

CALVIN BROWNE: That is correct. I haven't filled in the chart yet.

LAUREEN KAPIN: So which article are we talking about then right now?

CALVIN BROWNE: I'm working from the reading list, and the first item with my name on it is against it is, about the DNS deal project.

LAUREEN KAPIN:	DNS deal project. Okay, I just wanted to make sure I'm orienting myself correctly. So we're talking about the DNS deal project now, thanks. Sorry to interrupt.
CALVIN BROWNE:	No problem. Okay. Right. So basically, as far as that project, yes it's a good idea, but I don't think it really is going to help us at all, to be honest.
LAUREEN KAPIN:	Fair enough, then I think you can move right onto the next source.
CALVIN BROWNE:	Maybe if it actually had been taken somewhere or something had happened, then yes. Okay, let me go to the next one. The next one was WHOIS primer. Okay now, the WHOIS primer, as far as I'm concerned, should be required reading for everyone on this group. It gives you a nice distinct overview of the issue around WHOIS, and I would urge everyone to go read it.
	And it's probably as comprehensive and as distinct as it needs to be. In terms of giving us input, well I think we should really take note of it, we should read it so that we can all going to be on the same page when it comes to the WHOIS information. Other than that, I don't think we're going to be able to get stuff from it, in terms of metrics and so forth.

LAUREEN KAPIN: So I'm just jumping in with a question, Calvin. So you think it is good as a background source, so that when we're looking at WHOIS related issues, and there are safeguards that connect to WHOIS related issues, we have sort of a common understanding. Is that a fair way to put it?

CALVIN BROWNE: That's a fair way to put it, yes. I would almost say it's required reading, and all of that.

LAUREEN KAPIN: Great. So I will add that to my email to ask folks to look at that. How long is it Calvin?

CALVIN BROWNE: If I remember correctly, it was around four or five pages.

LAUREEN KAPIN: So this is like perfect. It's required, succinct reading folks. So great, thank you.

CLAVIN BROWNE: Right. Okay, right, the next one was… Let me just see here, and this isn't actually tying in with my notes. Is take advisory on DDOS text, [inaudible] DNS infrastructure. Oh yes, I've got it as DDOS [inaudible] leverage in DNS infrastructure. Okay. Right.

This particular recommendation, ICANN security and stability advisory committee recommendation, never made the guidebook say, it's actually kind of after the guidebook was published, but basically if I wanted to spell this into one piece of advice I would say that, it basically says that the new gTLD operators should support rights limiting on the names service.

That's point four and six in the report, and it talks about, it also talks about all authoritative name server operators should actually support that. And I don't see it as given us any metrics or anything like that. [Inaudible], it's more a recommendation of people who operate infrastructure as to what they should do.

Hello?

LAUREEN KAPIN: Yup, we're still here.

CALVIN BROWNE: Okay, good. Sort of silence there. So basically yup, a good recommendation but I don't think it's going to help us get, too much. In any case, the next article that I had, just one sec. Okay, the next article is also ICANN security, stability advisory committee, thing is basically a comment on [inaudible] records and the [inaudible] applicant's guidebook.

Okay, so this is one that [inaudible] the applicant guidebook…

LAUREEN KAPIN:	And just, those of us who aren't as well versed, can you explain what these are? Orphan view records.
CALVIN BROWNE:	Sure. [Inaudible] actually [how I started with?], and so basically an orphan view record, when you register a domain name, and one of the name servers, one or more of the name servers, is in that domain name. So for example, if you reach the example dot com, with the name server in it, dot example dot com, then that name server is required to have an area code inserted into the zone file, so that the DNS tree that needs to be traversed down, can actually be going down for [inaudible] for that, from that name server.
	Now, hopefully that has not confused anyone and has made that a little bit clearer.
LAUREEN KAPIN:	Actually Calvin, can you give us an example?
CALVIN BROWNE:	Sure. Okay, if you register a domain name, let's call it domain name dot com, and you can basically have two types of name servers in, for domain name dot com, what we call [inaudible], so it's in the scope of the domain name, it's dot domain dot com, or something that's outside the scope, so it's [inaudible] dot other domain name dot com.
	Okay, now the first one that I gave you, [NS?] dot domain dot com, when you register domain dot com, is invalid. It requires a view record

to be added to the zone file, otherwise that domain will, otherwise that name server name will not be able to resolve when the DNS goes down, when the resolvers go down the DNS tree.

Are you with me?

LAUREEN KAPIN: I think so. Just…

CALVIN BROWNE: I think what I must do is I must put it a little presentation together, because I've got something on my screen, and if I take a screenshot and send that through to the list, it would be a lot easier to understand.

LAUREEN KAPIN: Who is controlling the screen for us this morning?

BRENDA BREWER: This is Brenda. I can control it.

LAUREEN KAPIN: Okay, so can you send it to Brenda?

CALVIN BROWNE: Yeah, I can try. [Inaudible] but let's just see if I can…   [Inaudible] image, there you go.

Okay.

[Inaudible] because it's exported and not going [mumbling].

Okay, so this is not actually going, going to… [Inaudible] print screen…

Okay. And you say I should send it to Brenda.

LAUREEN KAPIN: So, you can continue while Brenda is doing that, in your explanation, and when we get that up, maybe we can go back to it. So tell us why this is important.

CALVIN BROWNE: Okay. Basically, the guidebook makes a recommendation, and the recommendation is that it needs to be a [sane?] approach, I don't know, when it comes to the removal of orphaned [view?]. In the new gTLD registries. And it's quite a technical thing to exploit in terms of security, and the problem doesn't quite go away with the removal of orphan [view].

LAUREEN KAPIN: Calvin, how is it exploited? Why is it a security risk?

CALVIN BROWNE: It's a security risk, okay. Yeah, I really need my thing in front of me. So if you just hang on a sec, can we maybe crop this and let me try and get

[inaudible], Brenda? And then I can talk to it once we've got that right here in front of us.

LAUREEN KAPIN;   Okay. Has Brenda received it, do we know?

CALVIN BROWNE: No, not yet. I haven't sent it yet. Just one sec.

Okay.

Okay, I'm having trouble sending this. I think, let me go on, and then I will just try and send that to her.

LAUREEN KAPIN: Okay, that's fine.

CALVIN BROWNE: And we can just [inaudible] this particular one for now. Okay, so let me just continue with the others, I'll try to get that imagine to her and then we can come back to that. Okay, so the next one on my reading list, the WHOIS accuracy system reporting.

Okay. Right, now this one ticks all of the boxes for something that you can look at it. [Inaudible] it's an ongoing project [inaudible] with metrics, the WHOIS accuracy with ongoing refinement as well, to the project. So I really think that this particular system is something that we

can look at and get a sense as to how the new gTLD program has addressed WHOIS accuracy.

And this is definitely I would mark green on our, as soon as I get it loaded up onto our results page.

LAUREEN KAPIN: And Calvin, do you have any observations or hypothesis regarding how WHOIS relates to the issue of consumer trust?

CALVIN BROWNE: Yes. I think that the more accurate WHOIS, the more one can rely on WHOIS within the rules, the more likely you are to trust the whole system to trust who the registrants of the domain name is, and so forth.

LAUREEN KAPIN: And in terms of, Carlton, in terms of this article, which is about the WHOIS accuracy reporting system, is the article more descriptive of the system? Or does it have any data that reflects what the experience has been in the new gTLDs? And I guess I would say particularly regarding domain abuse. Or is it more of a descriptive article?

CALVIN BROWNE: It's actually not the article at all, it's actually the system itself. So it's basically raw data. The actual WHOIS accuracy reporting system itself, it's an article about it, it says ongoing data added on an ongoing basis, and we would have to draw our own conclusions from it.

LAUREEN KAPIN: So could you describe it for us a little more specifically? So we have more of an idea of what it is that you looked at. Because you're saying it's the system itself and there is lots of data in it, but can you give us some more details so we can have a better sense of how we could look at this regarding the questions we're grappling with?

CALVIN BROWNE: Sure. Okay, just one sec. [Inaudible] in front of me.

Okay. So it was a systems [inaudible] by ICANN, okay, I'm just now going to it now. And it's basically to identify and report on accuracy in a systematic way, and proof of quality of contact data in the WHOIS system itself. So, really just as an ongoing project, ongoing as it stands, where the various measurements are done [inaudible] it has actually been.

LAUREEN KAPIN: And is this data, just does it distinguish new gTLDs from legacy gTLDs in any way?

CALVIN BROWNE: I'm not actually sure to be honest with you.

LAUREEN KAPIN: Fair enough. So that's something to think about. Did you have any other thoughts about how this source connects to our review process?

CALVIN BROWNE: No. Like I said, I think this would definitely be one that we need to look at, and it would be useful.

LAUREEN KAPIN: And did you have any other articles, Calvin?

CALVIN BROWNE: No, I think this, my [inaudible] of the five that I had, I think that that's them.

LAUREEN KAPIN: Did we have any luck in getting that graphic to Brenda?

CALVIN BROWNE: No, I [inaudible] right now…

LAUREEN KAPIN: Okay, maybe let's, do folks have questions for Calvin?

                        Margie has her hand up?

MARGIE MILAM: Yeah, this is Margie. I just wanted to clarify since I've been involved in the development of the accuracy reporting system. It's basically a study report that looks at, took a sample of WHOIS records and looked at it

from two perspectives, whether the syntax of the record is accurate. So is it addressed in the right format?

Is the telephone in the right format? And then it also looked at the operability of the data. Is it, you know, does it have the right number of digits? Is it…? That sort of thing. Could it be delivered if it was mailed? And so, if you look at the report, it actually does look at accuracy in all kinds of perspectives, one of them being the difference between prior gTLDs and new gTLDs.

So if you want to understand, you know, what is the difference in accuracy rate? You know, I would point you to that report. And then the other thing I wanted to point out is that there is a webinar that the team that pulled it together is doing this week. So if you want to really ask any questions specific to that, you'll have all of the folks that have developed the study that is done in coordination with several vendors, including the EPU, in ROC at the University of Chicago.

So that webinar is on June 16th from 14:30 to 15:30 UTC, so just in a couple of days.

LAUREEN KAPIN: Thanks Margie. That's very useful. So what I heard you say is that there is certain data in there that distinguishes between legacy and new gTLDs. Is that correct?

MARGIE MILAM: Yes.

LAUREEN KAPIN: And it talks about that in terms of that basically the different ways to look at, is the data accurate? So you talked about syntax, and you talked about the operability of the data. So it's these different lenses on the accuracy of the data from this technical perspective. It's not saying whether the data is true or not, so to speak, it's just saying whether it's in the right format. Is that correct?

MARGIE MILAM: Well that's the syntax. I think on the operability, you'd have to read the report, but I believe they may have said email, for example, to the email address to verify that, you know, they did some sort of tests like that. So in their view, they could determine whether it's operable data versus just the syntax alone.

LAUREEN KAPIN: Okay. So there is sort of a validity component to this as well as a syntax component.

MARGIE MILAM: Right, but not identity. So they didn't, the person was actually, you know, if you look at the registrar and they entered it as Margie Milam, they didn't confirm that it was Margie Milam, you know. They just… So they didn't go as far as going through identity validation.

LAUREEN KAPIN: Got it. Okay. Any other questions for Calvin?

                          Okay. Great. Who would like to go next?

                          Carlos. You're on.

CARLOS RAUL GUTIERREZ: Yes, hello. This is Carlos for the record. Can you hear me?

LAUREEN KAPIN: Yes, Carlos.

CARLOS RAUL GUTIERREZ: Okay. I had four papers. I'm sorry, they are just about green line by Drew Bagley, secure domain foundation in the page 21, page 20 and 21, if you want to scroll. Okay. So, I had four papers, so let me just give you of the four [inaudible]. One document is another [Symentech] report. And so Fabro already reported in Washington on this [Symentech] yearly report, the one I got was pretty similar.

                          It's called IFPR, Internet Security Threats Report. It's pretty similar to the yearly [Symentech] report that Fabro presented. I would make note that it's a very comprehensive document, of all type of problems that happen on the internet, but has one short chapter on web threats. It's very short, it's about 10 pages long, and it will put you up to date on [inaudible], shellshock, and heartbeat.

                          Those are the names of the most recent tracks. So it's really technical. I mean, we know [Symentech] is promoting itself, their services to the

industry, and they're very good at that. I mean, if you want to be up to date on [inaudible], shellshock, and heartbeat, you should read the 10 page. But in a way, it's not directly useful for our report.

Then there is, let me see, going upwards, sorry. Then there is a technical paper, a pure paper, a pure academic paper dealing with bot nets, very well written, let's say, by three academics. But again, this is purely academic stuff. It's readable, even for the people who are not technical.

Then if I go up, sorry for working it backwards. Then there is one very interesting document that I cannot classify it. It's by [inaudible] since promoting software, a software they promote for the DNS industry. The software is called [Name Centric]. It's promoted by [inaudible]. It produces real time statistics about abuse directly related to specific domain names.

So I think it's a very good example to go through this name-centric. Although it's a promotional document by [inaudible] used by their software. It's written by a member of the SSAC, or by somebody who is a member of the SSAC. And it's very interesting that everybody takes a look at this short [inaudible] leaflet, I will call it, because it's a very good reference statistics.

My worry is that these statistics are being produced by a proper [inaudible] software outside of ICANN. I don't know how to put it, but I think ICANN should be producing the statistics, and then people should be out there trying to fix the problems, but it seems to work the other way around.

So it's an interesting reference, not directly related to our report, but everybody should take a look to these names of the abuse report. The document I'm looking at doesn't have my comments on that line. I don't know what happened. I wrote a few comments here. I don't see them, I will have to go back to my notes and see why the Google Doc didn't record those comments.

But this is very short. It's very easy, full of colors, full of graphs, wonderful. We should keep an eye on our side and bring it up in a future discussion. And then the last one, going down, up, it's a bottom up process I'm applying here, is another promotional leaflet, it's called Trust in the Internet 2016 by the NCC group, IDG research services.

This does not go as deep as the [inaudible] paper. It's really only promoting consulting services. They say it's based on a survey they did with 5,000 people in the UK and 5,000 people in the US. It's really just promoting consulting services. If somebody has pleasure in that, they should take a look, but no deep… It's a bit interesting. With the new gTLDs, consultants are trying to make other differences, but no specific content for the report.

So if I go back to the four papers that were handed to me, I really will call attention to the [inaudible], the name center paper, to take a look. The other ones are not directly relevant. As I heard, Calvin I heard your question, at the very end. If we had more questions to come, and remember our discussions together, I think we have to locate our work in relation to the WHOIS effort and in relation to the security stability work.

Those are two of the reviews, they were done before. And I'm meeting, all the time, relations and mentioning things about WHOIS, and now we've got some extra papers of the security and stability work. So we need to have a clear differentiation. Why is the competition review different from the WHOIS review from the security and stability review?

And what materials are we going to cover? Which data are we going to cover? So we avoid overlaps. I think this is crucial for our next few weeks, or the next face to face meeting to be aware that they are other reviews that clearly overlap, or are closely related to these things. They call it security and stability, the WHOIS call it WHOIS, but and we are constantly seeing that.

So we need to think hard about this. So this is a short summary. I owe the contents of the name center abuse report, [inaudible] report, I will look into my notes, and fill the boxes. I prefer to keep it short to see if there are questions. Thank you.

LAUREEN KAPIN: Thanks Carlos. When you go back, do me a favor and also put your name next to the articles you read, just so everyone knows that those were assigned to you. Right now they're blank.

CARLOS RAUL GUTIERREZ: Yes, I'm annoyed because the Google Doc I worked on had my name, and now this document that we have on the screen doesn't have it. So I don't know why this is lost, otherwise I wouldn't have found my papers.

But this is not the document I worked on. I don't know how to put it back, so to say.

LAUREEN KAPIN: It sounds like some technology challenges. You may actually need to go back and make sure that the current document has the information you intended it to have. And it sounds like you may have to do some things over, which I would be annoyed at too. These are our technology challenges.

Jonathan has his hand up, and then I'll have some questions too, but Jonathan, go ahead.

JONATHAN ZUCK: This is Jonathan Zuck for the record. Can you hear me okay?

LAUREEN KAPIN: Yes.

JONATHAN ZUCK: Okay, great. So yeah, basically I think, Carlos before I ask my question, part of that you may be seeing is the fact that there was one document in which, we received documents on another document in which we were supposed to get that report, and they were two different documents. That may be part of what you're seeing.

I mean, I guess I just wanted to chime in on your last note about, you know, maintaining focus, but I guess, I'm not sure that we should just

assume that because there is a WHOIS review, that everything related to WHOIS falls outside of our remit, but we should definitely, and I guess this is Calvin's assertion as well, we should be able to draw a bright line between some aspect of WHOIS and the impact on consumer trust, to the extent that we do incorporate it.

I could certainly theorize or hypothesize what those connections might be, but it seems like it's [inaudible] assume either way that it's relevant or irrelevant, but instead we need to find those connections, if they exist, and be specific about them in order to minimize overlap with the other review that may be doing a much more style review of accuracy, as opposed to looking at that issue in context of consumer trust.

CARLOS RAUL GUTIERREZ: Thank you Jonathan. If I may respond to Jonathan. Laurren, if you allow me. I wasn't [inaudible]. The same way that Calvin said we should read the WHOIS primer, my suggestion is we have to read the WHOIS review, and we have to review the security and stability review. I mean, I think that's part of our duties and obligation to read those reports, which proceed the competition review team. And we will have to make reference to them and it's our duty to find the boundaries or suggestions for them if possible.

I think we should add them to our reading list, the previous reports on WHOIS and SSAC.

EN

LAUREEN KAPIN: Thanks Carlos. I think that that's a fair observation, that these are areas that bump into the same things that we're doing, and it would be useful for us to have that as context. So maybe I can ask our fabulous staff to put links up to those reports on our Wiki, so that people can find it. Maybe we can add it to the end of the reading list document as a heading, background resources.

Something like that. Just to set it apart from the rest of the things that we're looking at. Calvin has his hand up. Calvin, go ahead.

CALVIN BROWNE: Yeah. Just speaking to the [inaudible] report. I do know that they were had some litigation, and I think that litigation has actually forced them into bankruptcy due to some issues, I'm not exactly sure 100% [inaudible], but I thought that there was some background information on them.

CARLOS RAUL GUTIERREZ: They are backed by Afilias, I understand, they are a subsidiary of Afilias because of the bankruptcy. So I guess it's kind of a technical arm of Afilias by now, but I cannot confirm.

CALVIN BROWNE: Okay. Something like that.

LAUREEN KAPIN: Carlos, I had a couple of questions for you. You had said that the trust in the internet survey wasn't so useful because you thought predominately as a marketing piece, and I haven't read it so I can't speak to it. So when I looked at the way you described it in your report, you did say that there were 5,000 people surveyed from the US and then an additional 5,000 from the UK, and one of the things they surveyed was this issue of verification of new gTLDs, and the perception of their being a desire by the public to have their data protected.

On their face, those strike me as issues that go to the core of some of the things we're looking at, but you thought this wasn't useful. So I just wanted to drill down a little more about why you didn't think this was, this contained any useful information for us.

CARLOS RAUL GUTIERREZ: It's a promotional paper, so you can read it. It's very pleasurable to read, you will read it in less than 20 minutes, but this promotional leaflet, and it's not research. So it's very interesting. It's a very interesting, but [inaudible] these kinds of sources for our report. [CROSSTALK]…

LAUREEN KAPIN: …marketing efforts. It's…

CARLOS RAUL GUTIERREZ: Yes, yes. It's nothing I would recommend for using on our report because it doesn't even give [inaudible] statistical data, it's here. So it's

very interesting and very readable. It's just I wouldn't put it in a footnote in our report.

LAUREEN KAPIN: Okay. Any other questions for Carlos?

CARLOS RAUL GUTIERREZ: Let's compare it with [inaudible]. [Inaudible] is also a promotional document, but this is very good. I mean, it really shows the results of their proprietary software. So it is more transparent in terms of the analysis, although they want to sell you the service, that the service is not a consulting service. The service is the software. And the way this software does the analysis, the real time of analysis of [inaudible], it's interesting.

It's illuminating. Should we look deeper into that direction or not? Or should we recommend that this is done for all new gTLDs? That's something to think about, the next one, the [name centric] one. This is really, really research on the impact of new gTLDs. Not research, but I mean they're offering something there.

LAUREEN KAPIN: So just to sum up then, Carlos, really the only article you thought could possibly be is the [inaudible] piece.

CARLOS RAUL GUTIERREZ: For us, I think the [inaudible] piece, because the [Symntech] work, my feeling is closely related to the more technical perspective of the security and stability people. I don't know if Fabro is on the call, I don't remember exactly what Fabro recommended in Washington to the group in terms of the other [Symntech] report, but this is… I'm not an engineer, so it's really highly technical stuff.

Maybe it's easy for Calvin and Jonathan to give an opinion on those reports than for me.

LAUREEN KAPIN: Okay, fair enough. So, Carlton or Jamie, either one, who would like to go next? Oh I'm sorry, I missed Brian's hand. Brian, go ahead.

BRIAN AITCHISON: Hi, thanks everyone. I also just wanted to add a bit on that [inaudible] versus [Symntech] report. The neat thing about the [inaudible] report, is it specifically focuses on abuse in new versus legacy gTLDs. So I think the most useful aspect of it is that it can serve as kind of a research, or sort of a model for what we produce with any kind of vendor. It shows what's possible, and what any report we produce could potentially look like, even if we decide not to go with a more commercially oriented vendor.

I agree with a lot of what Carlos says in terms, we should be concerned about using any kind of methods or commercial vendor that has proprietary methods, but I think we're all on the same page on that. So the [Symntech] report is very general. It covers the whole DNS. So, it

might be useful for reference at this point to show you the state of things, but again, I agree with Carlos. It's not necessarily something we would want to reference in our report as an authoritative source on how we view DNS abuse or something like that.

So that's my two cents on that. Thank you.

LAUREEN KAPIN: Thank you Brian. That's a very helpful perspective. So Jamie or Carlton, who would like to go next?

JAMIE HEDLUND: This is Jamie. I'm happy to go.

LAUREEN KAPIN: Thanks Jamie. Go ahead.

JAMIE HEDLUND: Where, I'm trying to find where in this chart… I think I updated this chart, I'm just trying to find where it is on here.

Here we go. So, the short answer is, I don't think any of these are going to be that helpful, specifically for generating this report. Like the WHOIS primer though, I think some of it may be helpful background reading. So, just going in order. The first one, the [inaudible] password reports…

LAUREEN KAPIN: And we're on page 11 for folks who are scrolling.

JAMIE HEDLUND: Yes, we're on page 11, for those keeping score at home. So this document is a page that ICANN maintains. It's a monthly report, and it's basically the number of credentials that are issued for access to the zone files of particular new gTLDs. So one of the improvements in the new gTLD program was that, [inaudible] a way for IP interest, law enforcement, others to get easier access to the zone files, which is the second level domain name files for each TLD.

So rather than, in the past you had to, my understanding is you had to, for example, if you wanted to get access to dot com, you had to sign a contract for that access, and that contract was for that one time. And similarly, you had to, if you wanted it to do with any other TLD, you had to find them and find the operators and sign a contract.

With the centralized zone data service, the zone file access, you go in to a single interface. All of the TLDs are listed there, and from there, you make a request to get access to the different zone files. And they give you a credential or a password, and you are allowed to review that zone file. You know, as long as you maintain the credentials.

So, the all this is, is a listing of the number of passwords that have been generated by top level domain. You can infer some things like the ones with the highest number of credentials may have the greatest concern for abuse. But that's not necessarily the case, and you have to look at additional information like actual abuse reports to see if there is a correlation.

So, for example, Guru has the most, as of May, Guru had the most passwords, 1300 or approximately, and some of the IDNs had the least, some of the brands also had the least. So, anyway, it's interesting data, but on its own, I don't think it's terribly reliable, but perhaps in correlation with other data, we find out that Guru, for example, has high incidents of abuse, then it would make sense it would have the highest number of interested people in getting credentials.

Next one, DNSSEC deployment report, I should say all of these are, all of them are DNSSEC related. This is a data set of signed top level domains and second level domains, is you know, we all heard DNSSEC is a way of authenticating that the pages for the, the thing that you're looking at on the internet is actually what it says it is, and it's not someone else's website or objects.

So with DNSSEC ICANN and others have gone to great lengths to sign the root zone, and almost all top level domains are signed. There are relatively few second level domains that are signed. So one hypothesis is that there isn't enough information, or it's too difficult or costly to sign second level domains, so there isn't that added security. Another possible hypothesis is that, I guess those are the two.

Not enough awareness, or it's too expensive, or there is not enough confidence in DNSSEC to justify the added expense or to deploy it. The next one, TLD DNSSEC report is similar to the one above, and again, almost all of the top level domains are, the new gTLDs are signed. The next one is a deployment guide, this is a basic, a very short how-to guide.

It's more of a blog than a research program. So the question here is whether efforts like ISOC have had an impact or what, you know, what additional efforts they could do to increase uptake DNSSEC at the second level?

Next one is Cloud Flare, which is a cyber security firm, and describing how DNSSEC works. This is a vendor-ware. It's a pretty good description of DNSSEC. And then finally, the last one is an out of date document that ICANN did on DNSSEC before the root zone was signed. So, ICANN staff went through the process of updating it, but before it gets updated, it's probably not worth reading.

So those are my readings. Any questions?

LAUREEN KAPIN: Thank you Jamie. My connectivity has now evaporated. So I can't see if people have their hands up. So people should chime in if they have questions for Jamie.

JAMIE HEDLUND: There do not appear to be any hands up.

LAUREEN KAPIN: So is it fair to say Jamie, that you think that these are…? None of these are really literally useful for our efforts? The first one regarding DNSSEC, actually, I take it back. The first one regarding password reports, [inaudible] correlation there?

JAMIE HEDLUND: Right. That's right. [CROSSTALK]…

LAUREEN KAPIN: …want to make sure I understand it. That's because the folks who are likely to want access to the root zone files…

It's so weird…

JAMIE HEDLUND: So maybe I could just answer it. The people who are most likely to ask for zone file access for a particular TLD are people with IP interests, intellectual property interests or rights, or law enforcement. Those are the primary users, the researchers as well, but the top two are the ones that most likely, and so a possible indication of domains, of top level domains that have higher levels of abuse, may be the number of passwords that are issued for that top level domain.

That's a hypothesis, and there could be lots of other reasons why people are interested in it as well, other than abuse. But if we find a… If we identify a domain that does have higher levels of abuse, it would be interesting to look back at this list and at the report, and see where it sits on the number of credentials requested.

Does that make sense?

Anyone? Can anyone hear me? Hello?

MULTIPLE SPEAKERS: I can hear you.

JONATHAN ZUCK: Yeah, we can all hear you.

JAMIE HEDLUND: Okay, thanks. Any questions? If not, I'm done.

UNKNOWN SPEAKER: Laureen, I think you may be on mute if you're speaking.

UNKNOWN SPEAKER: Have we lost Laureen?

LAUREEN KAPIN: Can people hear me now?

UNKNOWN SPEAKER: Yes.

LAUREEN KAPIN: Yes, do you hear me now? Okay, good. Carlton, I don't think we are hearing you.

Okay, so it sounds like we're having a problem connecting to Carlton, but folks can hear me now, yes?

UNKNOWN SPEAKER: Yes.

LAUREEN KAPIN: Okay, good.   Good that you can hear me, bad that you can't hear Carlton.

So Carlton, I guess we are going to have to hear from you at another time, unless we can figure out, unless we can figure out a technical solution for Carlton. In the meanwhile though, Calvin have you by any chance been able to connect with Brenda and that graphic that you wanted to show to us?

CALVIN BROWNE: I have [inaudible], I'm not sure if it has been received.

LAUREEN KAPIN: It looks like there is an upload in process, so I am optimistic. Oh great, oh this is great. So Calvin, this should probably help enormously in explaining what orphan view records are. I would love for you to take us through this.

CALVIN BROWNE: Okay, yeah. Please excuse the typos and so forth, but this was done at 3,000 feet above the North Pole somewhere. Right. So we've got to top there, and the register domain name example dot com. And I've got two name server names there, one that is in the domain. So if you look,

if you register example dot com, you have a [inaudible] inside that example dot com, and one outside not example dot com.

So the one is inside in the domain name itself, the one is outside the domain name. Now, in this particular case, [inaudible] needs to be added for inside that example dot com. So the actual view record that would be added to the zone file would be inside that example dot com, I-N-A, and I just made up, obviously, a number there, 127.0.0.1, and that is inserted in the zone file.

And then what happens is, example dot com is deleted, but the error record stays behind, and this leads to the orphan view record situation that we talk about. Now if we go to the right, you've got to registration two, for example, and if that is that name server, then anyone who comes along and registers that name, example dot com, with the old view record inside that example dot com, could actually direct people, or that registration two, to the name servers that are now controlled by a bad hacker, for example.

I'm hoping that this diagram makes things a little bit clearer, and my speaking to this diagram makes it a little bit clearer what an orphan view record is.

LAUREEN KAPIN: So Calvin, just to put it more simply for someone like me, the risk here is that because there is an orphaned record that cut off…

Mute, okay, thank you for muting. So the risk here is that because there is this orphan record that's no longer attached to its original domain

name, that a bad actor could come in and then misdirect people, misdirect members of the public who are using the internet to a place they don't intend to go. Is that the risk here?

CALVIN BROWNE: Potentially, it's not quite that simple, but potentially yes.

LAUREEN KAPIN: Okay, right. I know I'm oversimplifying it. And so your bottom line with this source is that it is a useful source for us to look at because it is one of the protections in the applicant guidebook?

CLAVIN BROWNE: It is one of the protections. The guidebook basically says that a sane approach or sorry, not a sane approach.   Registries must have an orphan removal policy, which can get quite interesting sometimes because certain registries, it's not possible to have orphan view at all. Yeah. But it's there, it's in the guidebook, and all registries have to have one.

Yeah.

LAUREEN KAPIN: So is this source still a useful source for our review team, Calvin?

CALVIN BROWNE: That's a good question. Let me just think about this. No, not really, because it doesn't give any metrics as to how many times anything has been exploited. It merely just puts in a policy recommendation, and that policy has been followed through.

So I don't think it's useful to give us anything like we can take further. You know, maybe we would want to see if the policies have been applied, but further than that, I don't think so.

LAUREEN KAPIN: Okay. Thanks for giving us a more detailed explanation of what these orphan view records are and why we should care about them. It sounds like, from the chat, that Carlton's line is working now, so let me give our last remaining time over to Carlton, if his line is indeed working.

Brenda is typing, so I'm wondering. Carlton is in process of dialing in. Okay. Okay, so we're just going to wait for Carlton for a moment.

JONATHAN ZUCK: Laureen, this is Jonathan. You said you couldn't see hands up. Could I ask a question?

LAUREEN KAPIN: I apologize, I can see you now, please go ahead.

JONATHAN ZUCK: [Inaudible] but I guess this speaks to a question that came up at the face to face in Washington, which is in the absence of evidence surrounding

consumer trust, even in the States with such evidence, as we saw with the results from Nielson, we talked a little bit about coming up with proxies for consumer trust.

In other words, have we done all that we can to kind of earn the public trust? Became sort of the way that we were talking about this portion of the review, and I don't know where that leads necessarily, but that's where things like this come into play. In other words, this was an example where something was anticipated and acted upon, and sort of acts as a proxy for trust, and that's it's helping the extent to which policies [AUDIO INTERFERANCE]…

…trust over the wrong term. So I don't know how we want to handle that discussion that we began [AUDIO INTERFERANCE]…

LAUREEN KAPIN: So just to respond. What I hear you saying generally is that we need to be considering what these proxies are for consumer trust, particularly policies that have already been implemented with an eye towards creating a safer, more trustworthy environment. And what I'm also hearing is, for example, with this orphan view policy recommendation, which was in fact implemented, even though the source that Calvin is discussing may not have useful data, it's still perhaps bears mentioning because it is a policy that was put into place with an eye towards creating a safer online environment, and it may have done just that.

Is that a fair summary? I just want to make sure I'm understanding your point.

JONATHAN ZUCK: Yeah, I think that's fair. I guess it's… We're asked whether or not the new gTLD program enhanced consumer trust, and as we're finding from the survey, that's tough to measure the trust itself. What we talked about in DC was figuring out if there was an addition, at least, to that survey were ways to measure trustworthiness, right? And did the new gTLD program take steps to enhance trustworthiness, and this might be an example where that is the case.

So I don't need to single this one [inaudible] on this, it just raises that question of kind of, looking at what alternative metrics make sense to look at trust in the review that was in the narrative of the review, if it proves difficult to measure trust itself.

LAUREEN KAPIN: Thanks Jonathan. I think that's a question that we're going to continue to grapple with, but I think that's an excellent point about thinking for the narrative of our discussion when we lack actual data, are there other…?   Are there other practices and policies that have been implemented that have related to this issue of trust? Particularly if they were implemented with an eye towards creating a more trustworthy environment, even if we don't have data about whether they did in fact do that.

Carlton, it sounds like you're on now so I wanted, even though we're approaching the end of our time, I thought perhaps we could at least briefly hear from you, if you were able to connect.

CARLTON SAMUELS: Yes, I'm here.

LAUREEN KAPIN: Oh good, I hear you clearly now.

CARLTON SAMUELS: Wonderful. Okay. So let me just get straight into it. The ones that I looked at where the [inaudible] 45 and 62. There were additional documents that we took onboard from the face to face. There is [inaudible] but I will do these two today.

SAC 45 pertains to involuntary queries at the root level. This one is a problem in the domain name resolution process, versus history and user behavior. Here is what happened. There is a potential problem when a new gTLD applicant uses a string, that has seen measurable, what they call measurable and meaning frequencies in queries for resolution by the root system, historically. The data in 2009 showed that 26% of queries to the root could be traced to invalid TLDs.

And of those 26%, 10 invalid TLDs, those are just the generous strings now, represent 10% of the query to the root server. And this is something that they've seen over the last four or five years, at the time, 2009, [inaudible]. All of this backs up into how the root, the domains are resolved in the DNS, right?

When there is a whole series of, there is a very defined process. When you look up a domain name, what happens, and how it is resolved. It is

a very well-defined process. I won't go through it here, but the three conditions actually exist [inaudible] resolution, the string that you look for, is delegated in the root zone, and it is resolved.

So you find what you're looking for. The second one is that the string is never really seen in a query. So if it's the first time somebody is using it, and the string has been queried before the root zone, and you get many different [slots], which is to say, it does not exist, it's not delegated, it doesn't exist. And they introduce a new one, a possibility. The string could have been in the root at some point, but was withdrawn subsequently.

So these are the four conditions. What happens, SAC…

LAUREEN KAPIN: Carlton, I think we lost you because I can't hear you anymore.

Okay, I think we lost Carlton.

So what I think we're going to need to do is, I think what we're going to need to is reschedule Carlton for our next phone call, and Carlton and I will wrap-up the presentations. So apologies that we've had so many challenges with hearing Carlton.

So to wrap-up, I know we're a little bit over time. What I want to encourage people to do is, make sure you've consulted with your team members…

CARLTON SAMUELS: Hello?

LAUREEN KAPIN: Hey Carlton, now you're back. I'm thinking that it probably makes more sense to have you and I do our presentations on the next call, because we're now already over time, and it seems like we've had challenges keeping you connected. How does that sound?

CARLTON SAMUELS: That's all right. [Inaudible]

LAUREEN KAPIN: Okay. So I'm just reminding folks to connect with their teammates for the deadlines for next week. I'm going to send around a template for the charts that reflects Jonathan's adjustments to our understanding. And Jonathan, I'm going to be reaching out to you to make sure that what I'm sending around accurately conveys your intent here.

And again, this is only going to apply to articles we think are useful. No need to go back and do this for articles that we don't think are useful. And we didn't have time today to discuss templates for the discussion papers and the new work plan, so we will do that during our next call.

In the interim, if you have questions for me, please feel free to reach out and thanks to everyone for going over time, and for the good presentations today. I think the big takeaway here is that we really need to be thinking about how these sources relate to our questions that we're grappling with for this review.

EN

Really looking at things through that lens, and thinking about not only is there data to support whatever observations and hypothesis we have, but also, as Jonathan notes, is what we're looking at, can that be viewed as some sort of proxy for trust? Since we know already that the data is limited there.

So thanks to everyone, and again, if you have questions, please reach out. Thanks to our great support folks who continually make sure we're heard, and handle our documents, and all of the other things that we do without even having to ask. Thanks. Take care folks, good evening, good morning, and good afternoon.

[END OF TRANSCRIPTION]