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RySG RSP Discussion Group
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Stéphane Van Gelder: Hi, everyone. My name is Stéphane Van Gelder. This is a meeting of the Registry Service Providers Discussion Group. That's a group that the Registry Stakeholder Group has formed to discuss this issue, and we will be talking for an hour and half. You have the agenda in front of you. I don't know if - we don't need to do roll call, do we? No? Yes. So can we please start the recording and get the meeting started? Yes, good to go.

Okay. Great. So just to set the scene for those of you have not followed the work of the group, the group has been in existence for a few months. We have been looking at a variety of issues that as soon as I get time to open my computer I will read out but I don't know them off my heart. And recently after giving ourselves some main work items, we have been looking at volunteers that would take each of the issues that we have -- we call them work tracks and we have six of them -- and help us dig deeper into them and move them along.

In the process of doing that, we have also been having very constructive discussions with ICANN staff. I have Francisco sitting here next to me to my left. And so we've been getting feedback into the way that we're looking at these issues and the issues themselves from ICANN staff. So that's been very helpful. And we are aware that this issue is also being looked at elsewhere by other groups within the ICANN community, and we are trying to take that on board as we work through it.

But this group is very much what it's call, a discussion group. I - we are trying to get a better handle on the issues that we're looking at and work - talk through them to try and get ahead, look at some of the operational aspects of backend operations, etc. So that's the general concept of what we're doing. Francisco, do you want to say a few words or - okay.

And in that framework, we have had a call for volunteers, as I said, to tackle some of the issues. Now that call is still open and we have a few volunteers, but the first order of business today that I would like to get to is to put some names next to the work tracks that have just appeared in front of you on the screen.

Let me just read out these work tracks, which were - I should stress that these were - we got to these by working with ICANN staff as well and getting feedback from them on the issues they were seeing with the current back end registry service providers, I should call them. So we are trying to see how we can get to more secure, stable, and resilient registry service provider operations.

Sarah Langstone from VeriSign -- she's sitting over there -- has volunteered to tackle that. Thank you, Sarah. More streamlined process associated with changing registry service providers. Does anyone want to volunteer to take that? Good. Okay. Transition from technical testing to an ongoing monitoring solution.

Rubens Kuhl: Stéphane?

Stéphane Van Gelder: Sorry. I thought I you were volunteering, (Rubens).

Rubens Kuhl: No, no. I had volunteered for that but you ended up with me doing number four.

Stéphane Van Gelder: Oh, did I get you wrong?

Rubens Kuhl: So you want to volunteer me to also (unintelligible) but I actually volunteered for number three and (unintelligible).

Stéphane Van Gelder: That was a slip up. Sorry about that. So (Rubens) has volunteered for number three and he's about probably to volunteer for number four, we'll see. Okay. Thank you, (Rubens). So number four, improve services by creating the option for a direct communication between -- and there's a typo there -- ICANN and RSPs. So does anyone want to volunteer for that besides (Rubens)? We'll stay here until someone does. Okay. No one? It's an exciting thing to work on. I'll give you some money. Good. Thanks. Thank you very much, (Raedene).

Number five, reducing the financial and administrative burdens for the registry. I thought we had someone for that. Donna would...

Sue Schuler: Donna volunteered for one but she didn't know what.

Stéphane Van Gelder: Is she not here? Why don't we put Donna down for that one? I can blame it on someone else. Okay. And enhancing the security and stability of the DNS. Sarah has volunteered for that as well. Thank you very much. Sarah. So we have six volunteers. If we can go back to the agenda.

The next issue then becomes to open up discussion on those and the - to me the best way of doing that is perhaps to get the track leaders to talk about it.

But before doing that, I would like to open it up for just general discussion on the work that we've done so far, anything that anyone wants to say about what we're doing and how we're doing it and should we be doing anything different. Maxim?

Maxim Alzoba: Maxim Alzoba for the record. I have a question. If we're talking about enhancing security and stability, we do need to understand why do we need to enhance it more. Do we have some grounds to say that it's not stable and secure now or do we have any like factual grounds from FAC saying, no, the current situation is horrible, we need to improve it more?

Stéphane Van Gelder: That's a very good question, Maxim, and I actually glossed over that point. We've - in our discussions, we've asked ICANN for more specific data on - we have been told that there have been some are they SLA breaches or just - yes, Francisco, do you want to...?

Francisco Arias: Sure. Francisco Arias from ICANN staff. Yes, so we have presented and shared data with you about the issues we have seen with the SLA monitoring system on the registry side, particularly the - I think the data point has caused the most attention is the we're having on average two issues per quarter in which the emergency protocols are breached by TLD. So I think that's the data point that has caught the attention of most people. And, Stéphane, you're right, Donna has more details on the data and we're looking into that. It will take some time to figure out this - a lot of information there.

Stéphane Van Gelder: Thanks very much.

Maxim Alzoba: Maxim Alzoba. Do you know currently the level of like hypothetical more strict SLAs and have you run the historical analysis? For example, you have a curve of time and the SLA doesn't by average or some TLD, and actually SLA is a line which intersects it. And if you make line lower, you'll have more territory covered by it so you will have worse situation. Because it's just a mathematical analysis and they have - the first question is do you know the

I'd say improvement of SLAs you want to have hypothetically in the next step? And the second question, have you run any historical analysis of what would be the picture like if you applied that in the past this hypothetical level?

Francisco Arias: Francisco from ICANN staff. No, we have not done that analysis. I understand what your suggestion is, do analysis on looking at the data of the data we have seen, if we were to have more strict SLAs to see what would be the impact, how many more cases we will have, right, that's what you're asking? And the answer is, no, we have not done that analysis there.

In order for us to be able to do that we will need to first do that, the first step, which is what we are already looking into doing which is to collect all the data so that we have the details on the failures we have seen. And once we have that, we could do this type of analysis that is interest on us to do that.

Maxim Alzoba: Yes, small clarification. Do you have the historical data on good part of behavior? As I understand currently, you have something breached, then you have incident in your system and then you track what go in after that. And do you track what's before the breach? So do you have historical samples of all the probes all of the time?

Francisco Arias: So we have the data of the - all issues. The complement set of that is they were working on the ways we will have seen developed in the system. That's - by default we consider the service up. So only when certain conditions are met and (unintelligible) then the service is considered down, but only if those conditions are met. So in a sense we have that as a complement of the data we have.

Stéphane Van Gelder: Thanks. I have Kristina and then Jonathan.

Kristina Rosette: Kristina Rosette, Amazon Registry Services. Francisco, I think I might be missing - I'm not connecting a couple dots. I'm struggling to understand what it is that will -- how do I say this -- it's my understanding that ICANN first

made known to this group quite a few months ago, at least, you know, earlier this year, that there had been a number of instances in which the emergency escalation process could have been triggered, and I think at that time we'd asked for some more information about it.

And I guess I'm just having a hard time getting my head around why it's taking so long, and maybe it's perhaps that you all are doing more data analysis than just providing us with the pure data. But if you could help me understand that, that would be really helpful.

Francisco Arias: Sure. Francisco Arias from staff here. So I think we started talking about this issue at least last year during the Amsterdam GDD summit, but the request for more data - so then we shared the data about the failures - the two per quarter data point emergency protocol breaches, let's say, and then the request for more data came from Donna I think it was two weeks ago I want to say, something like that. And so...

Man: Yes it might be a bit (unintelligible).

Francisco Arias: A couple weeks ago, yes. I don't have the specific date. And what happened after that is we went to look for internal resources to do this analysis. I'm embarrassed to say that the data - the way we need to look at it it's some manual resources to be taken. We don't have, at the moment, a proper system to store this data. So it's looking at e-mail alerts. So we have a thousand or a few thousand emails that need to be looked into in order to extract the specific data points. That's why it's going to take some time to do.

I finally got the resources, someone to do this job, and so we're coming up with a plan finding where exactly we're going to extract, and that's the reason why it's going to take some time.

Stéphane Van Gelder: Follow up?

Kristina Rosette: Yes. Thank you very much. That's very helpful. I guess my follow up would be is the goal of getting some kind of tool or system that will allow this data to be collected and tracked more easily as opposed to something manual, is that goal on someone's roadmap for this upcoming year?

Francisco Arias: Thank you for the question. Francisco here. Yes, indeed, we have that in the roadmap for the SLA monitoring system to have changes to the system to - so that we can sort the data in a way that we can easily query. That's coming up. At the moment we're working on an update to the architecture of the system. We need it to expand its capabilities getting to - at this point the system is getting to the - very close to the maximum that it can handle in terms of the - I'll just give you a data point.

The system handles - it operates something close to 20-something terabytes of data and - per year and at the moment we are right in the very close to the limit to what that system can handle. We are in the middle of a project that is going to critically change the scale of what the system can handle. And once we do that migration, we will be able to start having automated capture of data in a stricter way so that we can more easily correlate them. And I don't have a specific timeline for that, but for the moment I'm afraid the only option we have is to get the data in this manner or form.

Stéphane Van Gelder: Thanks, Francisco. Jonathan's next.

Jonathan Robinson: Thanks. Jonathan Robinson with (Affilias). Thanks, Francisco. That's helpful. I have a question and a comment. I think the question was largely similar and related to what Kristina was saying. And I guess it comes down to one specific and that's really when you think, Francisco, that - I heard you and I understood and you gave a very clear explanation of where you are so that's useful, but when do you - in terms of the current situation with the manual data processing, when do you think you'll be able to, you know, can you give us any kind of time?

You said it will take some time to prepare but are we talking days, weeks, months? Just to give a feel for when that might be available. And then I want to make a follow-on comment afterwards. But just let me permit you to answer that first.

Francisco Arias: Thank you, Jonathan. Francisco here. So I don't have the specific timeline. Just before coming here is when I got this resource, this person to help us do this analysis. And the first task was to explain to this person what we were needing to extract, and that person is currently looking at that and he's going to provide us with an estimate how long it will take. I'm expecting it would be in the order of weeks but I can come back as soon as I have that information.

Jonathan Robinson: Okay. So thanks. We'll look forward to you updating us shortly. And I guess my other point was a comment, and I heard you make reference back to Amsterdam when this sort of process kicked off. And so - and I think what - - and I'm going to just put my thoughts on the table here -- at the time of the Amsterdam meeting, we sort of dived straight into the RSP accreditation or not question, and various of us reacted in different ways to that and we then went on with various discussions.

And it appeared that there were really two parallel issues. One was how do we deal with current operational challenges, and the second was how do we link that any planning or policy work that's going on with subsequent PDPs. And it's great that Jeff here and that, you know, and it's clear that there is an explicit question about the use or not of RSPs in the Subsequent Procedures PDP, but as you and others will be aware, my understanding is this is very much focused on how we best work with ICANN as registries in and around the issues that you face in monitoring registries and all back end providers or so-called registry service providers.

Nevertheless, any work that we do there will naturally, should naturally be linked into and feed into the work on the Subsequent Procedures PDP. So the challenge for all of us is making sure those are coherent, and it's not so

easy because they're kind of operating in parallel. But hopefully we, in doing structured, effective work with real-life problems and issues and concerns now, we can create credible information, data, and potential solutions that could be used in subsequent rounds as well.

So that's just my kind of a bit of a high level comment. And I know you've covered some of that in the intro, Stéphane, but I just thought I'd be useful to make a couple of remarks, especially when you reminded us that things went back as far as that Amsterdam meeting, Francisco. Thanks.

Stéphane Van Gelder: No, I think that's very useful, Jonathan. It's a great way of framing it. I have asked Jeff to give us a short update from the Sub Pro working group because, as you've just explained, that is extremely tightly linked to the work that we're doing here. Obviously the Sub Pro's looking at a lot of other issues but it also looking at this issue and we - and matters of PDP, so we need to, as you've just explained, our discussions, which are more operational looking, should at least be aware - we should at least be aware of what's happening over there. And we would hope that they are aware of what's happening here, which I think they are because Jeff's an active participant in this group too.

So (Kurt) wanted to speak and then I'll go back to Jeff. And just one thing I also wanted to add because I had this question just as I was coming into the room, this group is an internal registry stakeholder group discussion group, sorry lots of groups in that sentence, and as far as Registry Stakeholder Group members are concerned, if you want to join the discussion group, just send me an e-mail. It's an open group within the registry. So someone was asking from the Registry Stakeholder Group how to join. Just send me an e-mail and we'll add you. Thank you. Let's go to (Kurt) and then to Jeff.

Kurt Pritz: Thanks, Stéphane. I don't think SLA monitoring and the number of SLA violations is synonymous with stability, security, and resiliency. As Maxim pointed out, if we tighten the SLAs, we'd probably get more violations but

we'd have a more stable environment because more registries would be taking action earlier in the game. Similarly if we relax the SLAs, you know, we'd get less violations but probably a less stable and secure environment.

So when we talk about enhancing stability and security, I think we should be thinking about not what happened before but looking prospectively and saying what can we do to mitigate the risk of future failures. There's all sorts of things going on in the environment. You know, some controlled by registries, some are external to registries. So it's a worthwhile goal for us to consider enhancing stability and security without focusing necessarily on SLAs and how they're monitored.

Stéphane Van Gelder: Thanks, (Kurt). Donna, do you want to have a quick question, comment, whatever?

Donna Austin: Yes thanks, Stéphane. Donna Austin from Neustar. And, Francisco, I'm sorry that I came in late into this conversation but just to be clear about the additional information that we requested, it's not necessarily a case of more data but it - but more data is probably helpful. What we're trying to understand is what are the root causes of the EBERO kind of threshold breaches so that we can have a better understanding of what they are so that we can, you know, have a discussion around what makes sense in trying to mitigate against that in the future.

The stats that we got from (Gustavo)'s presentation are really helpful. Thank you, you know, indicate that there are some things that we potentially have to have a look at but they also suggest that there were - they are over three years and there were some initial problems, but it seems to be that over time a lot of that has been resolved. So what I think would be helpful is just understanding whether, you know, is some of the problems that were experienced because of it was early in the program and maybe systems weren't as good at gathering information and understanding the information.

But obviously when a registry operator gets to a certain threshold, ICANN is monitoring that and they do take action and have a conversation with the registry operator and the RSP. So I think it would be helpful if we understood what that process is too so that we can, you know, have a little bit more of a discussion about how do we resolve those issues to ensure that you aren't experiencing the number of thresholds that we think are a concern.

So I just wanted to make sure you understood that the request was not so much about more data but it's an analysis of that data so that we understand what's the root cause of the problem so that we can then a discussion about how we resolve that and what we can do moving forward, you know, to manage that.

The other comment I'd like to make too in relation to what the - and I know Jeff is going to talk to this but in terms of what the Subsequent Procedures PDP Working Group is doing and what our group is doing here, some of what we're doing overlaps but I'd also like to say that what the Subsequent Procedures PDP Working Group is looking at, efficiencies for the application process in the next round. As most of us know, there were a series of technical questions that had to be answered in the 2012 round and it became evident that the RSPs had largely put those answers together for the 1,900 applicants. So we think there's repetition in that and we're trying to work out how we get some efficiencies in it.

I think this group that we have put together within the Registry Stakeholder Group we have some immediate issues that we're looking at. One of them is how do we swap out - how do we get some efficiencies in swapping out an RSP. So that's one of the topics we want to discuss, but also, you know, the monitoring that's taking place now that ICANN is doing and trying to understand how we can use that as a tool to ensure that we are enhancing security and stability, or at least we're not, you know, going backwards in any way, and also, you know, how do we manage that relationship between the

RSP and ICANN and the RSP registry operator, that kind of triangular relationship.

So to me there's a little bit of a clear line as to what the Sub Pro is doing and what this group is doing and there is some overlap, but maybe Jeff has a different opinion on that. Thanks.

Stéphane Van Gelder: Thanks, Donna. And just, your first point is key to the work that Sarah's going to lead on the first point because we'll be looking at security - getting a more secure, resilient, stable RSP operation, and we obviously need to understand why it's not or if you have data. So I think we keep on requesting that. So I think you've hopefully got the message that we need it. But that I'm sure you're expecting to have that data.

Jeff, can I turn it over to you.

Francisco Arias: Sorry, can I...?

Stéphane Van Gelder: Oh, sorry. Francisco and then Jeff. Apologies.

Francisco Arias: Thank you, Stéphane. Sorry, just quick, regarding to a comment you made, Donna, about the presentation that (Gustavo) gave in Madrid. Data that was presented there was from up to December 2016, and the reason for that was just because that's the data we had when at that point we had to collect the data for some reason, I cannot remember why, and that's what was presented. In terms of the instances when breaches of the (unintelligible), unfortunately that is a trend that still exists. We still have - I mean we are at the end of the first two quarters of this year and we are still on track. We still have two on average per quarter, so that has not changed.

Stéphane Van Gelder: Thank you. Jeff? Maxim, did you have a follow up to this? Okay. Sorry, we'll get to you eventually, Jeff.

Maxim Alzoba: Maxim Alzoba. What was the nature of those breaches? Are those like the registries didn't make a scroll of empty TLDs which just launched so potentially no hard or were there like inaccessibility of DNS or Whois, or what was the nature?

Francisco Arias: Francisco from staff here. I don't have data for all the instances but I can talk about the last ones just because it's fresh in my memory. And the last instance we had where a couple of TLDs was involved it was a failure - it was a double failure as we saw from the system, the sentence we were seeing and later confirmed by the RSP they were having an issue, both DNS was not responding intermittently and, second, they were also having an issue with some DNSSEC appliance so we were getting - when we were getting responses the responses were not a complete DNSSEC response. So we had a double failure in that case. That was the last case I remember that was affecting a couple of TLDs.

Stéphane Van Gelder: Thanks. Jeff?

Jeff Neuman: Okay thanks. This is Jeff Neuman. I was just looking around to see if anyone else had any questions. And I also want to draw - Sara Bockey's in this room as well. She's one of the leaders of Work Track 1, so this - if she wants to add anything to what I say, I'll leave it open. But I do like Donna's description where she said that there is - there is a fine line on some aspects of what's going on in Subsequent Procedures versus what's going on here.

Just to do a little bit of a history on why this is an issue with Subsequent Procedures is that when there was a discussion group, even before the PDP, there were a number of people that submitted comments saying, you know, complaining about having to be evaluated 300 times, let's say, if they submitted 300 different applications but it's the same technical system.

There were people complaining about having to do PDT 300 times, again, with the same systems. There was a complaint that when they had to be

evaluated if was from different evaluators there were different results, so they were inconsistent. There was also a complaint in the process of having to have a registry service provider with your application and not knowing whether your registry service provider was going to pass the evaluation.

So a number of a brands had to select, for example, a back end provider that they may or may not have known simply because it was required in the application, but they had to do it on blind faith that the registry service provider would pass the evaluation. So there were a whole bunch of comments that came in during discussion group time that ultimately ended up in the final report for the PDP and then charter.

So the registry program, the registry services provider program, which has had many different names, but unfortunately any label you give it seem to cause certain people consternation problems so we now just blanketly refer to it at the program.

The status right now it's in Work Track 1 of Subsequent Procedures, as of - and actually will be a topic that's discussed tomorrow during the face-to-face session from 8:30 to noon, and really where Work Track 1 is at now is trying to develop a core set of requirements or actually, no, a better word is principles, draft principles, that if we were to set up a program here are the types of things we want to make sure.

So things like, you know, security and stability of gTLDs must not be negatively impacted by, you know, a program, that efficiency and evaluation and pre-delegation for ICANN applications and RSPs must be improved, and RSP programs should be designed in such a manner so it does not increase ICANN's liability, and there are a bunch more principles that we'll talk about tomorrow that have been gleaned out of the conversations. And I'm sure there's more than seven that we have so far.

But - so the discussion is really focusing in Work Track 1 at a high level, and then ultimately will, if the RSP program is the way to go, that they'll be working on questions like, okay, so assuming we want an RSP program, how far in advance should that start, should there be contracts with RSP providers and ICANN -- by the way, the majority of feedback is no, but just that is a question that is being looked at -- and some other policy-related questions.

However, one of the other issues that - where's the overlap there seems to be some concern that's been expressed in this group that -- and from registries -- is a fear of if you have such a program, there's a fear of kind of what's called the race to the bottom, that you'll essentially be setting minimum criteria for registry service providers and that nobody's really going to try to achieve better than the minimum, that, you know, whatever that minimum is that that's all that certain providers are going to try to meet, and that may end up with more SLA failures in the future and so on.

So one of the items that - where I see an overlap is if we as a group, if this group, finds that there are mechanisms we should put in place to increase security and stability and communications and all that other stuff, I can easily see RSP issue then go to Work Track 4, which is the technical group, which could consider not just increases for RSPs and this RSP program and requirements but if there were an increase, it would be for all registry service providers and that would be something that definitely would fit into Work Track 4, which is the work track that's tasked with looking at the criteria for technical evaluation, looking at things like PDT, sorry, pre-delegation testing, and looking at all the technical criteria.

So if we, as registries, all want and believe with ICANN and the community that the bar for registries should be raised for fear of a race to the bottom, then I think the appropriate place for that would be Work Track 4, where you could talk about the criteria and all of that. So this issue of RSP - of the RSP program really can fit - right now it's in Work Track 1 be we're actually trying to decide whether there should be a program and what the overarching

principles should be, but I could easily see parts of it moving to Work Track 4 if one of the criteria is improving the security and stability of the RSP - of the registry service providers.

So that's where we are right now. Please come tomorrow, 8:30 to noon, where a part of the time will be devoted to Work Track 1's principles.

Stéphane Van Gelder: Jeff, thanks very much for that update. Just a practical question. How do you see the work that comes out of this discussion group feeding into or informing the work that your PDP working group is doing, I mean in purely practical terms? Because you're in both groups, would you be informing the working group or would you be looking for some kind of written update from us or should there be no direct links? How would you see that?

Jeff Neuman: Yes thanks. That's a good question. Sorry, it's Jeff Neuman. I would not be the one who would communicate that to the - to Work Track 1 or to the full working group. I think that there should be people within the RSP group, this registry stakeholder group that communicates effectively with the work tracks. I know there's a bunch of people at the table that I see here that are in both of those that could easily perform that role.

This is an issue, as far as the RSP program, is an issue which is in the charter, so the PDP is going to address it no matter what. They're not waiting for the outcome of this group but I think if this group does operate and can move on some of these issues, I think it could be certainly valuable, very valuable input for Work Tracks 1 and ultimately Work Track 4 on an RSP program but also just on the general criteria for how ICANN evaluates new applications from a technical perspective.

Stéphane Van Gelder: Now that we have volunteers for all our six work tracks, would it be useful for me as chair of this group to write to you I guess and just say we're working on this, please inform your groups, some kind of formalized - would that be useful?

Jeff Neuman: Yes, I think it would be useful. I would expect to get - I wouldn't be surprised if feedback came back from others that aren't in the Registry Stakeholder Group that might want to say, hey, if that discussion's going on there I want to be a part of it, and so that's kind of a question you all will have to figure out how to respond to.

But, yes, I think knowing that there's a group working on it and, do I see (Rubens) in this room, he's down there, yes, (Rubens) is one of the leaders of Work Track 4. So that would certainly be something he would communicate with Work Track 4 that this work's going on. So I think that would help but just expect a response back saying that they'd like to participate.

Stéphane Van Gelder: Yes, okay. So I'll write to you. And is it Avri that's your co-leader?

Jeff Neuman: Yes.

Stéphane Van Gelder: Yes. I'll write to you and Avri. I'll work with this group to formalize a short letter and we'll do that, and if people want to participate in this group, I think we have a ready - an answer ready for them, which fits in one word, starts with an N. Jonathan?

Jonathan Robinson: Yes. Without needing to go down using that N-word, I mean I think the important point to Jeff, I understand the point you made, it might be a reasonable and rational response, if there's relevant work going on elsewhere, why can't we be involved, I think the important point here is to go back to the principles of why this group was formed.

This group is dealing with some current operational issues but in so doing it naturally has an overlap with any future planning. And so I think my sense is if we rationalize that, the existence of this group, and why it is and the willingness to share actual operating knowledge and working experience with the group and acknowledge the work of the Subsequent Procedures PDP I

would hope that we can explain how these two coexist rather than creating an impetus necessarily for people from the Subsequent Procedures PDP to feel that they need to come into this group, rather that we can do some helpful work here in assisting the Subsequent Procedures Working Group - PDP Working Group in their deliberations.

And, as you rightly point out, Jeff, that doesn't absolve us of the responsibility to come along and participate with you in Workstream 1 and 2. So it feels to me like that's - we just need to put that in an opening paragraph and then say these are - and hopefully that heads off that problem that you highlighted. Thanks.

Stéphane Van Gelder: Thanks very much, Jonathan. So I'll draft a very short draft, and once that's done, distribute it to this group and we can work on it together, and then I'll send it to you. Jeff?

Jeff Neuman: Yes, thanks. I'm torn between whether it should be short or whether it should be very specific as to the question this group is looking at. So if the more specific you are, I think the better the full working group will accept what Jonathan said, that these groups could coexist and that it's - it'll be valuable input. But if it's a broad letter that says we're looking at everything RSP program wise, that's not going to go over as well. So short could be okay as long as it talks to the specific points this group is looking at.

Stéphane Van Gelder: Yes. I was thinking of short with a list of the six work tracks, a short intro on how the group came about, and then Jonathan might like to add what he just said, and others might like to work on this as well. Good? Okay. Perfect. Donna, did I - no, you didn't have your hand - I saw that. That was an earlier hand.

So with that, perhaps I can move it into the discussion on each of the work tracks where we've eaten into a little bit of time that I had allocated for that. But as some of the volunteers that we now have have just volunteered and

weren't necessarily ready to start that discussion today, perhaps that won't be such a bad thing. But I know Sarah's been looking at this for awhile so, Sarah, can I get you to start off with the Work Track 1, please?

Sarah Langstone: Sure. So Work Track 1 is a more secure, stable, and resilient RSP operation. And for transparency purposes, I'm Sarah Langstone. I work for VeriSign and VeriSign did operate as one of the RSPs, 37 RSPs in the 2012 new gTLD round.

And so when I talk about a more secure, stable, and resilient RSP operation, it's probably worth pointing out that I'm talking about the current situation as an RSP, as an independent contractor that provides services to registry operators that enables registry operators to meet their service levels that are required by ICANN for their TLD. And that, as we all know, or most of us will know, as part of the new gTLD program, ICANN deemed that five functions were very critical to the operation of a registry.

Those five things were DNS, and for those of us that aren't particularly technical, I mean that's making sure that once a domain name exists it resolves; DNSSEC, again, making sure that the data hasn't been modified or tampered with as it's traveled through the Internet; Whois, where you can obtain information regarding registered domains; EPP or the provisioning systems, or in other words managing the database of all of those domain names; and also data escrow, or in other words storing the registry data with a neutral third party.

So we've talked a little bit, there are emergency thresholds around these five things which are supposed to trigger an emergency back end operator function. At this point in time, as we talked about, EBERO is not being used but we do know that the threshold has been triggered 27 times.

Now after the GDD summit last month, there was a DNS symposium and ICANN gave the community a bit more information about the nature of these

issues. And, Francisco, I know that you said that you were working on some more analysis around some of these points, but I just wanted to remind the group what (Gustavo) said in Madrid. He said that 11 out of 37 RSPs have had at least one TLD that reached the EBERO threshold and at least one service. That's 11 out of 37.

Twenty-seven had experienced DNS or RDDS service failures. Twenty-one of the new gTLDs have reached the EBERO threshold and at least one service, whether or not it's DNS or RDDS. Thirty-two out of 37 RSPs have had at least one DNS service failure since 2014. And, Francisco, you said at the beginning here that you continue to see I think about two EBERO triggering incidents every quarter.

And we've asked, as Donna talked about, you know, to provide a little bit more information about some of those things, the severity I guess of some of those things that might help us get ahead of this as we're doing our planning with regards to creating RSPs that are more secure, more stable, and more resilient.

As part of this discussion, we've also in general there have been some conversations about the economies of scale that we've all pretty much said can doubtlessly be introduced into the pre-delegation testing process. But it's worth pointing out that even with the breadth of testing that occurred during PDT, even though RSPs were tested hundreds of times as they'll say, we still had 32 out of 37 of those RSPs having a DNS service failure going back to ICANN's own statistics last month.

So I think that you have to bear in mind that all of the testing in the world it's not going to prevent a box from unexpectedly stopping working for no reason whatsoever. So I mean that was kind of the introduction and the summary to what I was thinking about some of these issues, and I'm very looking forward to hearing what the rest of the group think about this. And, you know, and ask when we talk about a more secure, stable, and resilient RSP operation, are

we talking about these five critical functions that make up a registry operator's obligation, are we talking about something more, something that people want to see that exist outside of that.

Stéphane Van Gelder: Sarah, thank you very much. That's a very comprehensive intro into the work. I think- my own personal opinion, I think we are looking at the five critical criteria. We have to look at those. We were - when Francisco wrote to us, he outlined them as well, so that's obviously something that we have to look at.

Any discussion on this? What we can do this morning is just have the six - five leaders -- Sarah's doing two -- just talk briefly about each work track, leave it as is, and then take it offline and continue the work, which is really what I was intending to do anyways to, you know, get the work started that way, or we can have a conversation each way. Jonathan?

Jonathan Robinson: I think I'm just in sense supporting you. I thought Sarah scoped that out very well. I mean it's concise and it's clear what the issue is, and so that helps really focus what the work track might do. So I'm both supportive of the framework Sarah laid out and the other thought that you have of simply going through and ideally trying to capture similarly concise and well scoped framework for each of the work tracks because that really will set us on the path, and it may even provide some more substance for your letter, we can see as we develop that. But that seems like a good plan. Thanks.

Stéphane Van Gelder: Thanks, Jonathan. I absolutely agree. And I think one of the things that we could do is ask each of the leaders after this meeting to just send a short update of what they're presenting to the group both so that I can use it, as you suggest, Jonathan, to feed into the letter, and also that we more so - we can have a baseline for everybody to document their work. We've not set ourselves any time limits or time periods for the work, but it's an open-ended work group, but I think that would be useful. If you're all willing to do that, that would be very useful.

I have Donna and then I'll go to you.

Donna Austin: Thanks, Stéphane. Donna Austin from Neustar. Thanks, Sarah for the outline. I think it was pretty good. But one of the things that we probably need to think about too is EBERO and - because I think (Akram) has pointed out to us a few times that perhaps EBERO isn't necessarily fit for purpose in some respects, so maybe we need to have a think about EBERO and how it fits into - because there's thresholds as it relates to it but actually taking that step to move a registry operator into the program is more time consuming and difficult than just trying to resolve the problem that might be being experienced at the time. So maybe that's something we need to think about as well.

But, Jeff, I think EBERO is also being discussed within Subsequent Procedures PDP Working Group so we probably need to understand what that conversation is too and how it relates to back to this group as well.

Stéphane Van Gelder: Maxim?

Maxim Alzoba: Yes. I might have - yes, I have a short report on this. The short version, the current process of changing the back ends currently is quite complex. It requires assistance of both back ends of future and support past back end and if you do not cooperate, they do not cooperate, you just cannot go, or worse you can reach thresholds and get out of the business. So the idea is to simplify it and make it more predictable. And if anyone has any questions about it, I might - yes, I will share the data.

Because in Amsterdam I think we had a presentation which effectively you said that you have to have full cooperation of both back ends, then you go through simple 54 or 57 steps process, and in the end you might have new back end. Thanks.

Stéphane Van Gelder: Thanks, Maxim. Sure.

Rich Merdinger: Rich Merdinger with GoDaddy. And appreciating that this is registry stakeholder group and we are for GoDaddy a member, when Donna earlier mentioned that there is a triangle of parties that are involved and we talk about the ring sensing of a registry service provider change ending with registry operators and registry service providers being affected, et cetera, it's glaring to me that the distribution channel that is equally impacted and essential in maintaining the stability and security and the ability of registrants to be able to manage their assets be included in the discussion.

Having a different change in registry service provider is a burden on the channel, and if we don't take into consideration, we run the risk of not having an efficient process that will actually function and process in the real world.

Stéphane Van Gelder: So I think that's an excellent point and one that we have actually considered. We just recently I think it was Donna again that suggested that we might want to include the registrars in some of these discussions. To be honest, it's come in very recently. We - some of us said that would be a good idea but we haven't worked out quite how to do it yet. But certainly something that we need to think about I think. Maxim?

Maxim Alzoba: Yes. It's actually second and yet equally a part of the job of registry to prepare in advance all notifications, all training kits or to provide registrars with plans of change. Because, for example, unique identifiers are to be changed. It's - we have to do that. So the - to ensure that registrars have test environments in advance that they have all plans in advance, that they have - that they are fully aware of changes to technical policies, because technical policies of registry is usually a reflection of what (unintelligible) can do.

Because, for example, if you do not accept some particular symbols on Friday, you should be aware, you should - and the registry needs to talk to its registrars to understand the timelines, for example, how many months

registrars in advance to provide information to registrants - registrars to registrants.

So it's a good idea to bring registrars into the discussion, at least to - yes, they will have suggestions because some registries are I'd say client-friendly, some they think independently of clients but it's up to them, like the security framework where it should be - it could be some good ideas to take into account when you're thinking about the back end change.

Because some registries they don't fully understand the depth of the question because the implementation and creation of proper plan, internal proper plan, not even talked through with ICANN, might take up to like months or so because all departments needs to take a role in creation. So, yes, I do support the idea of inviting registrars into these discussion so they can feed us with like good and bad ideas so the resolution is more friendly for the ecosystem.

Stéphane Van Gelder: Thanks. So I have Sam, Jonathan, Rich.

Samantha Demetriou: Thanks, Stéphane. This is (Sam) from Fairwinds. This was a pretty robust discussion topic during one of the breakout sessions at the GDD summit. I'm seeing some nods. I think you were in the group too. And I think that Elaine Pruis from Donuts actually captured a number of the kind of pain points that registrars feel.

And, Maxim, you're exactly right, a lot of registries weren't aware of some of these issues that come up. So perhaps as we're thinking about involving registrars, starting with this kind of documents, these notes as a structured way to get that input, is a good place to start.

Stéphane Van Gelder: That's an excellent suggestion. Can Elaine send that to us? Okay. So, Jonathan?

Jonathan Robinson: Yes thanks. Two things. I guess, I mean the early comments from Maxim obviously seem a bit predictable but clearly reliable and stable as well, you know. These are always the competing issues. I think it's great the Rich is here. Thanks, Rich. I mean it's pretty clear that as you articulate, I won't try and repeat it, we need, on this one it makes sense. And it actually really highlights for this group that there may be specific work tracks where it's entirely appropriate and logical to have the registrars involved. So it sounds like we're emerging with a plan, and thanks for nudging us in that direction properly. So, good.

Stéphane Van Gelder: How would you see that happening? Is that just me saying - sending (Graeme) the same letter I could send the Sub Pro working group and saying, you know, if registrars want to be involved...?

Jonathan Robinson: I'm sure others will have comments but, yes, that may be - we could copy them in on the letter and say, look, we sent this to the Sub Pro and we've identified one or more of our work tracks that we think would benefit and/or are necessary - it is necessary to have a registrar, active registrar participation, please make your members aware of this, something along those lines, yes.

Stéphane Van Gelder: Thanks. I have Rich and then Kristina.

Rich Merdinger: Sure. I'll be - this is Rich Merdinger with GoDaddy again. I'll be brief. Something to remember, in some cases the registrar is actually a contracted party with the registry service provider through the RAC, the registry access contract. So when it comes to changing back ends, it's not just simply here's the new policies you need to follow, it's you need to create a new legal contractual relationship with the new registry service provider and it may not be feasible in certain cases.

That being the case, I'm hoping that the 57 steps I believe you mentioned, or however many there are, includes the development of the planning for the

bulk transfers that will have to take place when registrars opt not to go along with the change. Thank you.

Stéphane Van Gelder: Thank you. Kristina?

Kristina Rosette: I'm going to just go off topic but wanted to just flag for folks that I'd asked Jeff when he was still here when he would - when he anticipated that the Subsequent Procedures Working Group would need to receive input from this group in order for that input to potentially find its way into the preliminary report, which is expected at the end of the year, and obviously we can confirm with him tomorrow, but he told me mid October. So we're looking at basically, you know, three and half months to get this work wrapped up if we want it to have a meaningful input.

Stéphane Van Gelder: That's very useful. Thank you. I had Sarah and then Donna.

Sarah Langstone: I just want to thank everybody for the input into the discussion. I just wanted to read back what I've heard to make sure that I captured it correctly. I heard that the five critical functions of the registry are certainly in scope but EBERO, which is a remedy mechanism in case of the failure of the five critical functions, is also in scope.

Remember that this is regarding the -- I can't read it properly -- the security and resiliency of the RSP, and so I totally - there's no doubt that the burden that registrars when a RSP transitions is significant, and believe you me whenever you minimize the channel, it's always a mistake. You always need to have them involved right up front. But I'm not sure it falls into, number one, where does it fall or does it, do we need create a new category?

Stéphane Van Gelder: That's a good question. Rich?

Rich Merdinger: Hi. Rich Merdinger again. If you're looking at number one as a snapshot in time of the state of the RSP and the SRS itself less so, if it includes the ability

for individuals to maintain their naming structure, name servers, things of that nature and to be able to have that, continue to be able to modify those on a regular basis, the question comes into play how is it stable if there - if the channels through which the registrants operate aren't able to communicate with the registry service provider back ends.

So I think that it depends on your definition there, but I would not think that a point in time snapshot of the Internet functioning is really what we're after. I think it's more robust than that.

Stéphane Van Gelder: And just to open that up, I would suggest that if I send the letters we suggested, they have the six work tracks and they may be able to help us identify the issues that are key to them. So it might - that might be the way to do it rather than us predetermining what's interesting for the. I have Donna and Jonathan.

Donna Austin: Thanks, Stéphane. Donna Austin from Neustar. Kristina, just to your point, the CC2 comments that the Registry Stakeholder Group put together on the RSP questions in particular I think are really helpful to the work of the Work Track 1 and what they're doing on RSP issues, and this group should not kind of forget the comments that we provided on those, the CC2 input as well because they're relevant. So. But it's also good to know that we've kind of got until October. That gives us a little bit of time to hopefully get our act together here and make some progress. Thanks.

Stéphane Van Gelder: Thank you, Donna. Jonathan?

Jonathan Robinson: Two very small points on this whole linking with the registrars. And it feels to me like there was clearly a first order effect or direct impact effect in the one group we talked and a potential second order. So in communicating this, we can say we've identified that the registrars are directly and immediately potentially impacted in one or more of these groups, and here we have it. But if there are thoughts that they'd like involvement in others, you know, that's

also reasonable. We can just leave it open for that because where we've identified - we will have identified some of those areas. Thanks.

Stéphane Van Gelder: Okay. Do help me when I come to draft the letter. I may not have - I'm taking notes but I may not have captured everything, so do help me out. And just I should also say that although we have leaders for these work tracks, the whole group is expected to work with the leaders. It's not - we're not, you know, creating smaller groups within the group, we're just trying to organize the work. Thanks.

So can I - Maxim, can I go to you for the streamlined process associated with a more streamlined process to change RSPs? Is that something that you're ready to talk about or should we just put that up as a placeholder, which is fine as well?

Maxim Alzoba: Yes, I shortly delivered the current states of affairs and, yes, the outcome of our current conversation is, yes, I think we do need to invite the registrars because without them the huge, important - I think it's like a 50% of the change plan could be missed and we need to (unintelligible) in which some registries might not be aware of that and might cause like disruption of channels of communication and overall I'd say global customer dissatisfaction with like registries and loss of trust and things like that. Thanks.

Stéphane Van Gelder: Thank you. Any comments or further discussion? Okay? Can I go to (Rubens) for the work item three?

Rubens Kuhl Thank you, Stéphane. Work item three started as what-if scenario. I'd say if what if we replace PDT with SLA testing, and it still is a what-if scenario. We've tried to divide that into two parts. Some parts of the technical testing are related to the specific string that is being served by that RSP and some parts of that is technical testing unrelated to that specific string. So it starts with an assumption that anything that's unrelated to that string is possibly

already being tested forever and ever by SLA monitoring, by users on the Internet (unintelligible) so far.

So the question becomes what is dependent on specific string or specific attributes of that registry like IDN tables and things like that. And so that comes up to a point where we need to compare what is currently being available at ongoing monitoring systems. And just a note that this is not what is currently used by ICANN because they actually have more features, more software systems being used in operations, but it is - and they're available. But even that may or may not cover what is being tested for PDT spectrum of testing.

So we can actually now have a quote, unquote, formal question to ICANN staff on what would be the differences between what is evaluated at ongoing monitoring system or could be evaluated and what is being done by PDT. Francisco, do you want to respond to that?

Francisco Arias: Francisco Arias from staff. I think you're referring to the question sent to the Work Track 4 of the new gTLD subsequent procedures?

Rubens Kuhl No, not quite. It was the idea that (unintelligible) before of comparing what SLA monitoring could test for a string that is being moved from one RSP to another and what is being evaluated by PDT. So if we just have an ongoing monitoring system for that string that is moving RSPs, what would - could that system detect that PDT couldn't and what only PDT could detect at this point? So like a future comparison between the two systems.

Francisco Arias: Okay. Francisco here. Yes, so in that sense I think I don't have data detail comparison but, from memory, I think they are slightly different. They're certainly are intersections there between the two. But the SLA monitoring system is focused on performances looking at the response time, the properly DNSSEC sign of response from the servers and not much more. In the PDT

case for example, there are tests about ensuring consistency between the respondents of the different servers in the set of -- is that better -- okay, sorry.

I was saying there is an intersection between the two sets but there are differences. And then - so it seems like there is not the setup that you can do is PDT is as broader, because at that point the TLD's not functioning in production so you can, for example, insert names and test the SRS system to see if it's doing what it's supposed to be doing. When you have something in production, you may not want to do that.

In Whois there is a similar case. The SLA monitoring system is only looking at am I getting a response and very quick checks to see if you are getting something that it seems like output but is not by any means looking at the format, the proper format of the output, which is something that is done in PDT. So there are differences in the two systems.

Now having said that, we are planning to develop a more detailed set of tests for the existing contractor provisions that we are calling technical compliance monitoring it. As opposed to focusing on the performance issues that - the performance provisions that the SLA monitoring system is looking at, we're thinking of the assistant to look at the kind of things that you have in PDP and other sections of the contract that are not being tested that are not necessarily time constrained but that are more things that you can check once a day, once a week, whatever makes sense, and just get a sense that the TLD is being operated within the requirements. So that's something we are already thinking of doing in that regard.

Rubens Kuhl

Thank you, Francisco. So just to be clear, this is - can only compare what's being done by monitoring systems, either now or new to be deployed, and actual PDT testing because PDT is currently both testing and evaluating. So some part of the tests are actual tests and the other are self-declarations or paper review. So the idea was to compare what is being actually measured and actually tested.

Stéphane Van Gelder: Thanks very much. Anyone else have any comments or questions on this? Sure.

Maxim Alzoba: Francisco, as I understand you are working towards the system which actually checks basically what's in the contract, so it's more like the PDT. So it checks like addition of domains, deletion of domains. For example, you add and delete, yes, the domain you ask registries for example to reserve for like only testing purposes. But as I understand it, it would require you to spend quite a round of conversations with registries about the basically giving you creative insight of our systems.

And, given that we have to deal with all clients of ours as equally, we will have to invent the ways around our internal policies to provide you with those like technical creative for mingling with some artificial domains in our systems, because without it we won't be able to check if a service works or just says hello ICANN, goodbye. So please be sure that you include in the planning and that you talk to registries. Thanks.

Francisco Arias: Francisco here. Thank you for that, Maxim. Yes, we have heard that very clear and comments from - that have raised this. And of course once we are more balanced in these plans, we certainly plan to talk with the registries when we get to a point where we can start monitoring things related to the DNS server system to EPP.

We understand that's a different set of issues - that presents us a different set of issues than when you are monitoring a public service like DNS or Whois where you can just send a query and expect a response according to specs. EPP certainly is a different issue and we certainly plan to work with the registries once we are ready to have that conversation.

Stéphane Van Gelder: Thanks very much. So I'll move on - bearing in mind we have ten minutes left, I'll move to Work Track 4. (Raedene), you're probably not

prepared to talk about this. Just to remind everyone that this came about because, as you may realize, RSPs are not contracted parties so - as such. So, I mean there may be contracted parties but in their RSP capacity. So how do we build or construct a mechanism to allow ICANN and RSPs to talk? There have been suggestions on how to do that. Kristina, if my memory is correct, had a suggestion that was useful on how that could be done. So that's just setting the stage for that. We may just leave it at that for now and then take it offline and allow you to get to grips with it, or do you want to add something?

Raedene MacGary: No, that's fine. But from (Centranix)'s perspective, I mean we certainly have an issue because we're not a registry operator so we - this is a very important issue for us to be able to have a direct line of communication, because the number of things we do manage is on behalf of some 40 different registry operators, so there's plenty of opportunities for efficiencies in terms of communication rather than having multiple messages. So it's something we can take offline.

Stéphane Van Gelder: Sure. Thanks. Okay. Moving on to item five. I'm sorry, Francisco?

Francisco Arias: Thank you, Stéphane. Francisco Arias from staff. Just something to consider in this number four, I wonder if it would be worth including the conversation that our escrow agents provided. They are not sure if we consider them to be an RSP or not. But they may have a similar situation as the parties that we traditionally call RSPs in the sense that they are not a contract party to ICANN but they are involved and they are - they can make things work, not work, with one of the critical functions (unintelligible). So maybe we'll want to have them be part of the conversation.

Stéphane Van Gelder: Thank you. Donna, do you want to say a few words about track 5?

Donna Austin: Thanks for the person who volunteered me. Okay, thanks, Stéphane. I'll get my head around it later and get back to you all.

Stéphane Van Gelder: Thanks. Yes. And lastly, Work Track 6. Sarah, do you want to say a few words?

Sarah Langstone: Yes. So consideration has been given to preserving and enhancing the security and stability of the DNS. To give you examples, and I'm looking for others that should be in scope or suggestions about what should be in scope or out of scope for this, so we've got DNSSEC was mandated at the first level, there was specifications around IDNs and their labels and what they look like, there were rules around how many TLDs could be delegated into the root zone across any period of time, there's rules around no wildcarding, no dot-less domains, there was some late thought given to how we could prevent new gTLD strings that had been used to address internal machines from being registered as domain names because of collisions.

We know that ICANN received 37 formal reports of name collisions occurring during this 90-day period. So, you know, consideration certainly has been given. What I'm curious to now from this group is is that scope, some of those out of scope should more be in scope? That's the kind of conversation that I'm interested in having, Stéphane.

Stéphane Van Gelder: Thanks very much, Sarah. I'm not sure that we'll get on to it now or that we should even try, but once again we will put these - I will ask all the work track leaders to send a short recap to the list. I will include it in my letter, just a recap on what I've - my takeaways are from today, and I think its been an extremely useful meeting, certainly for me, in helping to frame our work. So I want to thank you all for that.

I will draft and pass to the list a letter that will be sent to both the co-chairs of the Sub Pro working group and the registrar leadership to inform them of the work that we're doing. We will be, as far as the registrars are concerned, looking for ways to include them - well, asking them if they want to be

included and looking for ways to include them, if they do want to be included in the conversation.

And one thing that I think that we need to flag is that we may not have an infinite amount of time to discuss this. There was a 3.5 month time limit that was given to us as being something that we need to keep in mind if we are to make sure our work is relevant to the Subsequent Procedures Working Group. So those are the main takeaways that I have. (Sue) will help me capture any of the action items that I may have missed during the meeting, and we'll send an update to the list and continue from there.

So that's it. Can I call for any other business before closing the meeting? Looks like we're all set. Thank you once again. I want to thank Francisco for coming in and answering questions on the fly. The help that you're giving to our work is very much appreciated. So thank you very much. Thanks, everyone. This meeting is adjourned.

Sue Schuler: Thank you. We can end the recording.

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