

**Transcript**  
**DNS Security and Stability Analysis Working Group (DSSA WG)**  
**29 September 2011 at 13:00 UTC**

Note: The following is the output of transcribing from an audio recording of the DNS Security and Stability Analysis Working Group (DSSA WG) teleconference on 29 September 2011 at 13:00 UTC. . Although the transcription is largely accurate, in some cases it is incomplete or inaccurate due to inaudible passages or transcription errors. It is posted as an aid to understanding the proceedings at the meeting, but should not be treated as an authoritative record. The audio is also available at:

<http://audio.icann.org/gnso/gnso/dssa-20110929-en.mp3>

On page: <http://gnso.icann.org/calendar/#sep> (transcripts and recordings are found on the calendar page)

**Attendees on the call:**

**At Large Members**

- Olivier Crépin-Leblond
- Andre Thompson
- Cheryl Langdon-Orr (ALAC)

**ccNSO Members**

- Takayasu Matsuura, .jp
- Katrina Sasaki, .lv
- Luis Diego Espinoza,.cr – on adobe connect

**GNSO Members**

- Scott McCormick (CBUC)
- Mikey O'Connor – (CBUC) (co-chair)
- Rossella Mattioli – (NCSG) – on adobe connect
- Rick Wilhelm, Network Solutions
- Keith Drazek – (RySG)

**SSAC**

- Mark Kosters (SSAC)

**ICANN Staff:**

Julie Hedlund  
Patrick Jones  
Bart Boswinkel – on adobe connect  
Nathalie Peregrine

**Apologies:**

Edmon Chung (ALAC)  
Greg Aaron – (RySG)  
Jörg Schweiger, .de (co-chair)  
Wim Degezelle, CENTR  
Don Blumenthal – (RySG)  
Jim Galvin (SSAC)  
John Levine  
Jaques Latour, .ca  
Otmar Lendl, .at  
Ondrej Filip, .cz  
Arturo Servin (LACNIC)  
Carlos Martinez (LACNIC)  
Sean Copeland, .vi  
Patrick Vande Walle – At large  
Chris Wright, .au  
George Asare-Sakyi – (NCSG)  
Adam Palmer – (CBUC)  
Andrew de la Haye (NRO Member) - for the next 4 weeks  
Mohamed El Bashir (At-Large)  
David Conrad (SSAC)  
Rafik Dammak, GNSO

Coordinator: We're now recording.

Nathalie Peregrine: Thank you very much, (Ricardo). Good morning, good afternoon, good evening. This is the (DESA) call on the 29th of September. On the line today we have Rosella Mattioli, Olivier Crépin-LeBlond, Cheryl Langdon-Orr, Mike O'Connor, Scott McCormick, Takayasu Matsuura, Katrina Sasaki, Rick Wilhelm, Andre Thompson, Patrick Jones and Keith Drasek.

For ICANN staff we have Julie Hedlund, and myself Nathalie Peregrine. We have apologies from Patrick Vande Walle, Jörg Schweiger, Don Blumenthal, Jim Galvin, Greg Aaron and Bart Boswinkel who will be joining us on the Adobe. Thank you, over to you Mike.

Mikey O'Connor: Thanks Nathalie. I think Mark Kusters plaintively asked to be included in the folks listed on the call; poor dear. And Rosella Mattioli is only on Adobe so we'll give her permission to correspond with us through chat only.

And welcome to the gang. We're - just to give you - who missed last week's call - an update we made it through the threats list. And everybody heaved a huge sigh of relief and then I unbuttoned the vulnerabilities list and dampened everybody's enthusiasm.

So we've now switched over to sort of quickly reviewing the vulnerabilities to see which of those are in scope. And that's the plan for today and probably next week as well. This is a pretty long list to get through in one week. So with that off we go.

On your screen is the vulnerabilities list and the secret code is the red ones are ones that we've ruled out of scope; the green ones are ones that are in scope and the white ones are ones that we...

((Crosstalk))

Mikey O'Connor: ...need to discuss. And I have to admit being a little bit puzzled. I think I'm going to just pick off a few of these white ones right off the bat. I'm not exactly sure why we skipped these on the last call; if anybody can remind me that would be good.

And so I think that insufficient identity verification from SAC 7 is probably out of scope but if anybody is familiar with SAC 7 and could remind me of what's in there that would help. That may be why that one's still under discussion. So we'll leave it for now and I'll do an action item this time to go figure out why. That wasn't what I was expecting at all. What happened there? Sorry.

Cheryl Langdon-Orr: Well we know to blame you though.

Mikey O'Connor: Yes, there - I don't know what that was all about. Sorry. That was pretty exciting. That - that's not what I was expecting either but that's better. All right so in the next category we have orphaned glue records which came out of SAC 48.

And as with many - we had a conversation on the last call that most use cases of some of these things are out of scope because they don't affect the top level. However one use case may be in scope and that's the use case where actual DNS infrastructure is involved.

And I'm just curious if such a thing as an orphaned glue record, which is what's being described in SAC 48, whether that's an issue that happens at the top level. And this is something I have no idea whether this could ever happen at the top level or not. Mark Kosters is saying it could. And Rick is - oh Rick, you've got to speak - LMGTFY.

Richard Wilhelm: Let me Google that for you.

Mikey O'Connor: Thank you. Oh that's a good one; that's going in the dictionary for sure.

((Crosstalk))

Mikey O'Connor: So I think what we're saying is yes this could be in scope, correct? Going to put it in scope for the use case to get my little thing going here. And so I'll write a little scope statement. That's what I wanted it to do; I don't know why it didn't do that before.

So can we describe the use case that affects the DNS or point to something that does? Welcome (Diega). Somebody needs to - so is that the link that you pasted in there, Rick?

Richard Wilhelm: So that was on the domain hijacking report. The description of what orphan glue - is actually pretty well described up there in the definition.

Mikey O'Connor: Okay.

Richard Wilhelm: So - that where it says - well the term orphan is used to signify the record is not part of a - no longer part of a parent NS record. And so, yes, it's...

Mikey O'Connor: Okay.

Richard Wilhelm: ...pretty well described up there.

Mikey O'Connor: All right so I'm going to pull that down into the scope thing so that we've got that reminder. Okay good deal.

Next one is from SAC 38. It says inaccurate and/or unavailable registrar/registry abuse contact information. There's the summary of the issue from the SSAC Report 38. Again this is a question for the group. Is this a DNS issue or is this a question at the second level?

Richard Wilhelm: Well - this is Rick Wilhelm. It can (unintelligible).

((Crosstalk))

Mikey O'Connor: ...music. Oh, good deal.

Richard Wilhelm: Yes, this is Rick Wilhelm. It can turn into a DNS issue because if for example someone finds malware or something else bad going on with the DNS the abuse contact information at the registrar is usually the point of first investigation and then failing that typically registries are contacted - where the registry in question is contacted if the registrar fails to respond.

Mikey O'Connor: Okay so if the - would this - I guess, you know, this is back to the issue that Greg raised. I can see that at the second level where there's abuse happening at a second level. Domains - could this happen at the TLD and/or root level too?

Richard Wilhelm: Doubtful.

Mikey O'Connor: Yes.

Richard Wilhelm: This is a second level phenomenon. I mean, in theory at the CC - I mean, I guess there are some - this is Rick - there are some ccTLDs that could be, you know, sufficiently obscure as to make this an issue. But for most - most things this is a second level issue.

Mikey O'Connor: Now could it become more of an issue when we have a larger number of TLDs?

Richard Wilhelm: Well, yes I would say because then you're - if we're talking about, you know, 500-1000 new TLDs each of those TLDs tends to have more of the - well we would expect them to have more of the - many of them to have operating characteristics more in common with small CCs.

Mikey O'Connor: Yes, okay.

Cheryl Langdon-Orr: (Diega) has his hand up.

Mikey O'Connor: (Diega), go ahead, I'm sorry. (Diega), can you speak or are you coming in through Adobe? (Diega) is typing. I think he can only speak to us through chat. Yes. So go ahead and type away while I type on the screen and then we'll - I'll read your comments back out to the group. Let's see.

Cheryl Langdon-Orr: Now are we calling that in scope because of potential of scale?

Mikey O'Connor: Yes, I think the point that Rick is raising is that in the case of a small TLD whether it's a CC or a G. This could be an issue, correct Rick?

Richard Wilhelm: Correct.

Cheryl Langdon-Orr: Okay if we leave that in scope - can I go back to SAC 7 which I've just quickly reread. And could anyone explain to me why domain name hijacking impersonation (base) or otherwise would be a top level issue because I don't think it is; I think it would be out of scope.

Mikey O'Connor: Which one is that?

Cheryl Langdon-Orr: But I'm willing to be educated.

Mikey O'Connor: Yes, this one here. No - which one on the...

Cheryl Langdon-Orr: Insufficient identity verification.

Mikey O'Connor: Yes this is one that's just under discussion. I'm not sure whether this one's in scope or out.

Cheryl Langdon-Orr: Well I just read SAC 7 again...

Mikey O'Connor: Okay.

Cheryl Langdon-Orr: ...while we've been in the meeting. And I don't think it is. And I'm hoping someone will tell me if I'm right or wrong.

Mikey O'Connor: I am quite cheerfully willing to put that one out of scope if others agree. What do others have to say?

Richard Wilhelm: I think that's a second level.

Cheryl Langdon-Orr: Yes.

Mikey O'Connor: Second level phenomenon, okay.

Cheryl Langdon-Orr: That's how I read it.

Richard Wilhelm: Yes this is Rick. I think that's a second level.

Mikey O'Connor: All right so we'll put that one out of scope if I can make the thing dang rippin' frippin' thing do what I want.

Cheryl Langdon-Orr: Thanks, Rick. I just assumed it was but I wanted confirmation because I...

Richard Wilhelm: Yes, you're...

((Crosstalk))

Richard Wilhelm: Yes, you're right, Cheryl.

Mikey O'Connor: Okay. All right good. Take that one off. Okay this one is in scope in one limited use case. In scope which is the small TLD phenomenon. Okay. Now (Diega) commented in the chat and I'm going to open this up just a little bit so that we can see it because it's getting too - oh now I've done it. Thank you, Mikey, for that great work. What an idiot. I don't know what I'm doing here. Totally screwed everything up. Okay everybody stop...

((Crosstalk))

Cheryl Langdon-Orr: That really improved it, Mikey, thanks for that.

Mikey O'Connor: Yes, I'm sorry, I'm sorry. Let me do this all over again. Forget what I'm doing.

Richard Wilhelm: This is going to be great in the transcript.

Mikey O'Connor: Yes, this is going to be great in the - well transcripts of Mikey-operated calls are often quite strange because - it does get a little silly when I go crazy. And - see how can we - since we have nothing interesting in the agenda let me do this. Quite a bit interesting in the chat.

Okay so (Diega) is saying there's a working group going now to build a contact repository for emergencies in the CC community. And one of the big issues there is to keep up to date with the contact information. And it's directly related to the ccTLD. So I'm thinking that, (Diega), you're with us on the notion that this should be in scope, correct? Yes, okay. Good deal.

All right let me get us onto the next one. A registrant who does not have complete knowledge used to create his own file for a domain - I think this one is primarily a second level. Again this is one - the question would be is there a use case at either the root, which I find really doubtful, or the TLD level where a person doesn't know how to make their zone file. Or can we leave this one out of scope?

I'm not seeing anybody throwing their body on the track so I'm going to put this one out of scope unless - I mean, I think at some point we have to presume a certain level of competence and that anybody who's operating a TLD would know how to put together a zone file.

And we will not presume competence in spelling...

((Crosstalk))

Mikey O'Connor: The joys of...

Cheryl Langdon-Orr: Mikey, to some - Cheryl here for the record. To some extent when we were doing threats and we were identifying some of those issues which really could be bundled under sort of best practice or standardized levels of

operational competency this as a vulnerability would sort of fit in there I would have thought.

Mikey O'Connor: Oh well we could do that.

Cheryl Langdon-Orr: As a subtopic, you know...

Mikey O'Connor: Yes.

Cheryl Langdon-Orr: ...not to dismiss it outright but to suggest that, you know, in the scheme of things...

Mikey O'Connor: Yes, okay.

Cheryl Langdon-Orr: ...these are the sorts of baseline stops that, yes, we are making the assumption. The hypothesis is that there would be a base level of competency. However in the absence of a base level of competency we may have different stories.

Mikey O'Connor: Let me do that. (Diega) has raised his hand so he's going to type so I'll keep an eye out for your comments, (Diega), go ahead. So we'll - add an action for me. Put this back in scope. And (Diega) is pointing out that there's a huge discussion on the DNS operations (OR) list about how to keep zone file integrity.

Cheryl Langdon-Orr: Oh okay. Oh that's good.

Mikey O'Connor: So I'm...

Cheryl Langdon-Orr: Yes.

Mikey O'Connor: ...getting confirmation...

Cheryl Langdon-Orr: That's another - yes.

((Crosstalk))

Mikey O'Connor: ...at a minimum is in scope and should probably go into the - what it sounds like, Cheryl, is that the - the competence of a TLD operator is a big in scope topic for us and that this is one of the subtopics of that.

Cheryl Langdon-Orr: It's sort of a basket of...

Mikey O'Connor: Yes. Yes, okay, good deal. Nicely done, folks.

Registry transition; this is - there's a whole SAC 47 report. And it's funny to me - I thought I summarized that somewhere. I wonder if this is a duplicate. Keith Drasek agrees that the competence of a registry as operator is within scope. I'm thinking this - this registry transition one I would view as in scope. And I think there is another...

Richard Wilhelm: Yes, we talked about that last - or a couple times ago.

Mikey O'Connor: Yes, so I'll put it in scope and take an action to find its home because I'm sure that we've already covered this one.

Cheryl Langdon-Orr: It might be duplicated.

Mikey O'Connor: Yes that's what I'm thinking too so let me do that. Okay and then this scope statement is in general about these. And it came of some of the early ones in there. So ta-da, we're done with one; good for us. Now you think you're done but you're not.

But wait there's more. Just to give you a sense of the size of the task we're up against here there's a lot in this that we have to get through. And so our goal is to have this scope work done by Dakar.

What we're going to do is we're going to work as hard as we can right up to Dakar to get this done but we may not quite make it. And I would rather have it be something that we are comfortable with and feel good about than try to make an arbitrary deadline of Dakar. And then what we'll do in our status update to Dakar is just say we're close...

((Crosstalk))

Mikey O'Connor: ...and here's where we're at at the moment.

Cheryl Langdon-Orr: Yes; works for me Mikey.

Mikey O'Connor: That's the plan. Having been through a few working groups where we had some somewhat arbitrary deadlines I'm sensitive to that. So that's what's going on.

All right so here's our supporting infrastructure topic. This one's in fairly rugged shape; we may want to go through and sort of reorganize this or we could just say that this whole shebang at this level is in scope and use the stuff that you see on the screen as examples at this point.

What's your preference folks? Do you want to go through these one by one or would you rather just - I could put these all in a category of examples for further analysis.

Cheryl Langdon-Orr: Yes.

Mikey O'Connor: And cover it in one blob like that.

Richard Wilhelm: The one you might want to look - this is Rick Wilhelm. The one you might want to look at there is that there's an SSAC - I'm sorry, a DNS SEC item in there right at the bottom which looks like it doesn't fit very well with the

others. So probably DNS SEC is in a different - within a different bucket rather than this supporting infrastructure one.

Mikey O'Connor: Yes because we've got DNS SEC called out somewhere else. Part of the trouble that you're seeing here is the different cycles that we went through to develop this document so it's good to catch these ones that are misplaced. Maybe give this one a different color just to remind myself because this one is pretty far down in the hierarchy.

But otherwise we're feeling like this - what if we - oh just real quickly - topics for analysis. Because really where we're going with all this is to try and form working groups - sub working groups that are then going to go take a look at all these things. So rather than do it like this.

So now we have a bunch of topics for the subgroup. We call this one in scope and let the sub working group sort out the details of this. Let's see, (Diega) is saying - it's back to Rick's comment about the DNS SEC and saying the impact on infrastructure should be there. It's not just the DNS SEC concept.

Rick, you're - I'm pretty clueless about DNS SEC. Do you want to respond do (Diega)'s point?

Richard Wilhelm: Well let me see. The DNS - about DNS impact on infrastructure should be there but not a DNS SEC plain concept. I guess, you know, there are a number of things that could cause...

Mikey O'Connor: Oh maybe it's scaling. Maybe this is a load issue that he's talking about. Could that be it?

Richard Wilhelm: Yes. In this case, you know, sometimes there's the concern that broadband routers and firewalls will not be able to cope with DNS SEC. So in this case it feels like a - I think this is a last mile comment.

Mikey O'Connor: Ah, correct, yes, yes, yes. And so the question is - really what that gets to is the scope of what we are thinking of as infrastructure. You know, up until now I have been thinking of the DNS and TLD infrastructure.

Richard Wilhelm: Yes.

Mikey O'Connor: I think that this point is really aimed at endpoint infrastructure and the question to the group is do we want to include that in the scope - do we want to include endpoint infrastructure issues in the scope of our analysis? Don't all speak at once.

Olivier, go ahead. Olivier. Oh you may be muted. You may have made so much background noise that the conference folks muted you. Nathalie is that true? Have we muted poor old Olivier?

Nathalie Peregrine: No he hasn't been muted at all. He's on now.

((Crosstalk))

Olivier Crépin-LeBlond: I'm unmuted now.

Mikey O'Connor: Oh there we go. Now we have Olivier.

((Crosstalk))

Olivier Crépin-LeBlond: ...for some reason I couldn't unmute. I think that the infrastructure that surrounds the DNS server itself is particularly important. It's - as seen from a customer's perspective - from an end user point of view whether it's the path to that DNS server or the DNS server that is at fault the result is still the same; the resolution doesn't take place. So I think that it has to be taken into account.

Mikey O'Connor: So that would be - okay. Other thoughts on this? Rick, you want to chime in on...

Richard Wilhelm: You know, I think this is not an ICANN thing. We're talking about registries and overall - this is more of an Internet thing.

Mikey O'Connor: Yes, I...

Richard Wilhelm: And I haven't been as in touch about our in bailiwick, out of bailiwick discussions but this feels - this feels like a stretch because it's getting toward the last mile.

Mikey O'Connor: Yes, I understand the issue that you're raising, Olivier, which is that the path to DNS is interrupted. But I'm not sure that I can imagine a circumstance where ICANN would reach out to end users...

Richard Wilhelm: This is even beyond - this is even beyond ISPs; this is about end user - end user equipment. Because if we're going to throw this in scope then we would almost have to have ISP routers and infrastructure in scope and that feels not like it's not part of TLD infrastructure.

Mikey O'Connor: Yes, I tend to agree with that. Olivier, do you want to come back and defend your thought here?

Olivier Crépin-LeBlond: Thank you Mikey. The way I was reading the (mine) manager topic here was that the local infrastructure they was thinking about was local infrastructure on the registries side. I didn't see it as...

Mikey O'Connor: No this is the broadband router in your house.

Olivier Crépin-LeBlond: Ah, okay, right. Forget it.

Mikey O'Connor: Okay.

Olivier Crépin-LeBlond: I misunderstood that one and - because I think I wasn't part of the call which built those so I thought it was the other way around that we were looking at. Right, thanks. Sorry.

Mikey O'Connor: Yes, I think we'll take this one out of scope. And I think I'm going to capture the scope discussion because this I think is important.

Richard Wilhelm: I'd throw the 035 link in there just for the folks that are reading the transcript.

Mikey O'Connor: Oh thanks.

Richard Wilhelm: Mikey, I unfortunately need to drop so I'll be catching up on email with folks.

Mikey O'Connor: See you in a week. Thank you, sir.

Richard Wilhelm: Thanks. Bye-bye.

Cheryl Langdon-Orr: Thanks.

Mikey O'Connor: So let me just finish my scope discussion here. This applies to end user.

Cheryl Langdon-Orr: Mikey, Cheryl here.

Mikey O'Connor: Go ahead.

Cheryl Langdon-Orr: Just rereading the notes - and I'm not suggesting that it goes back into scope in terms of infrastructure. But rereading the notes particularly under the topics for analysis subheadings there is something to be said about - not dismissing it totally but having it - how to say this nicely - recognized again on a matter of the system is in fact designed for a significant amount of redundancy protection to stop it becoming an issue.

If those failovers and redundancies don't work then it would be an issue. But the way the beast is built right now it shouldn't be. Does that make sense?

Mikey O'Connor: Yes, and I think we've got a lot of those issues already in here in terms of...

Cheryl Langdon-Orr: Yes.

Mikey O'Connor: ...failover, insufficient capacity, name server...

((Crosstalk))

Cheryl Langdon-Orr: Yes, it might need to just be sort of popped in somewhere as an example of, you know, the failover pathways that ought to work should catch this and make sure it's a non-issue from our point of view therefore not in scope. If however there was a failure of the failovers then that would be a different story.

Mikey O'Connor: Now let me just maybe sprinkle a few reminders through these. Because I think that what we're concerned about is the impact of DNS SEC on infrastructure at the root and the first level - at the TLD level.

And SAC 35 is really thinking about impact on the other end of the chain at the edge of the network.

Cheryl Langdon-Orr: Yes.

Mikey O'Connor: And we agree that that's out of scope but we don't want to forget that DNS SEC has an impact at the root and at the...

Cheryl Langdon-Orr: Yes, I'm more comfortable with that. Thanks.

Mikey O'Connor: Yes. And I think that we've got that - part of the reason I took that note - that action item is because I'm sure that we've already got DNS SEC mentioned

somewhere. We have a huge DNS SEC discussion somewhere in one of these documents. And I think that there's certainly an in scope DNS SEC conversation; it's just not the broadband routers one.

Okay (Diega) has got his hand up. Let's see. And (Diega) says, ah, I understand now it's about consumer routers and firewalls and agrees that it's out of scope. Okay so I think we're okay here. Going once - one last time on this topic then we'll move onto the next. All right.

Another big topic in terms of infrastructure vulnerabilities is the single point of failure notion. And we could treat it pretty much the same way that we did this last one; we could take a lot of these examples and just sweep them into a topic for analysis and put this in scope and let the subgroup sort out the details.

How do you all feel about that approach to this one? Put it in scope at this level and let a working group - a sub working group sort of take a look at all these sub topics? Getting a big plus from - a thumbs up from Cheryl. I think that's the way to do this. All right so we'll put this in scope. It's clearly a single point of failure is an issue if there is a - if there is a single point of failure at either the root...

((Crosstalk))

Mikey O'Connor: ...or a TLD that's a problem for the DNS.

Cheryl Langdon-Orr: Oh yes.

Mikey O'Connor: Oh yes. All right so then we'll give the sub team a bunch of topics to go take a look at. Going once, going twice. While I type if anybody feels strongly the other way feel free to chime in. All right so that one goes in there. A whole bunch of these stuck in here. Because I don't want to do the analysis on these scoping calls I really just want to get the broad topic stuff.

Okay registry failover scenarios that need study. We just looked at something about registry failover. Where was that? Maybe what we do - I think this is related to this registry transition topic. So maybe this is the proper home for - so I guess the question is is - here's a question for the group; is registry failover an infrastructure problem or a business problem?

Cheryl Langdon-Orr: It would be both.

Mikey O'Connor: I heard somebody say something but I couldn't - couldn't understand them...

Keith Drasek: Sorry, Mikey, this is Keith. Can you hear me okay?

Mikey O'Connor: Oh there we go. Sure, go ahead, Keith.

Keith Drasek: Yes, and I apologize for the background noise, I'm at the IGF meeting and trying to follow along.

Mikey O'Connor: Oh.

Keith Drasek: Just one second, sorry. So I think the answer to your question - registry failover is the term that ICANN has used for the process by which they would ensure a registry, you know, stays up and resolves and, you know, basically it's a method for ensuring registrants aren't negatively impacted if a registry goes down for some reason.

So the failover itself - in ICANN's terminology is sort of the process by which they keep a registry up and running if something bad happens, right. And that bad thing could be technical, it could be financial, it could be operational, it could be any one of those things that would trigger the registry failover process.

So when we talk about registry failover we need to be thinking of it in terms of like okay, you know, there's this process by which ICANN, you know, moves the systems to, you know, a backup provider or, you know, provides some sort of support or resources to keep the lights on if you will as an interim step.

So I think to answer your question directly is it could be any one of those things that triggers a registry failover.

Mikey O'Connor: Okay and Patrick Jones has been typing away in the chat while you're talking, Keith, and agrees with you and points out that the term has now been changed to be registry continuity. And so that being the case the question I've got is just where to put this. Patrick, go ahead.

Patrick Jones: Yes, so, Mikey, you know, Keith is accurate. And I think by having it listed as registry failover the way it is, you know, it fits with the timing of when this - that document came out. It was only later, as we got closer to starting to develop the Applicant Guidebook that we changed the term to registry continuity.

But I think what you're looking for is, you know, how does a registry failure fit in as a scenario. And that is one that I think touches on infrastructure.

Mikey O'Connor: So what we would do is we would move this one down into the infrastructure?

Patrick Jones: Well it may fit in both places.

Mikey O'Connor: Okay so maybe duplicated.

Patrick Jones: Registry continuity is sort of - that's the process for ensuring that registrants aren't left holding the bag when a TLD fails and there's sort of an organized process to either transition them to a new operator or make it clear what the timing is for taking out a TLD.

Registry failure is what happens to the registry; either it's a business failure or it's a failure for some other reason.

Mikey O'Connor: Okay so maybe I should - I should take this wording and change it back.

Patrick Jones: And this is Patrick again. I would also defer to Rick or Keith or anyone else, you know, from the registry side who was involved in those conversations back in '07, '08 or even currently, you know, for their observations on this topic too.

Mikey O'Connor: Okay. So what I'm hearing is that it belongs in both places. Take that out of there. Put registry continuity into the topics for analysis for infrastructure. Put...

Andre Thompson: Hello, this is Andre Thompson.

Mikey O'Connor: Go ahead, Andre.

Andre Thompson: Yes, I was just thinking about the registry failure. I think it's both an infrastructure problem and a vulnerability problem. At the end of the day what is a vulnerability? It's something that's going to - when it happens it's going to just remove a service or put down a service.

So if somebody attacks a registry or the registry goes off for any reason, power failure, whatever it is, you have a loss of service. So the question is really is that a vulnerability? I personally think it is. Of course it's also infrastructural but I'll just put that to the group whether they agree or not.

Mikey O'Connor: I think that the group agrees. Keith Drasek is typing. Oh and Patrick has been - Patrick typed a note that says the group may want to distinguish between registry continuity as the process to ensure orderly transition of a registry from registry failure which is the point in time when either a business or technical failure happens.

And so, Andre, I don't think there's any disagreement that it's in scope. The distraction I've presented to you all is trying to find the right place to put it.  
But...

Andre Thompson: Okay no problem.

Mikey O'Connor: ...I think that for purposes of this discussion we're in agreement that registry failure and the process of ensuring continuity is definitely in scope irrespective of the cause of the failure.

Andre Thompson: Sounds good...

((Crosstalk))

Mikey O'Connor: I think I've captured that. Let's move this one in there so that it's in the topics for the group. Maybe the thing is that this is as good a spot as any. I don't want to belabor where these go in this document; we will be here all day not really accomplishing a lot if I get us distracted on that. Okay put this one in green so that we don't forget.

All right let's see if we can pick off one more. Oh this is a big one. It doesn't look very big but wait. But wait there's more. There's a whole huge list. This is the point that Cheryl kind of got us going on quite early in the discussion which is that there are a bunch of bad decisions made by the managers of the root or individual TLDs.

Oh I see. I just noticed (Diega) posted in the chat business continuity could be at a higher level in the operational issues. So maybe that's a good idea. So what we'll do is we'll pull this one out of there. That - now it would have its own topic. (Diega), is that what you were thinking? Just get a quick read from (Diega) before we plunge into the next one. I think that's what he was talking about. He's typing.

So maybe...

Cheryl Langdon-Orr: It may be higher, okay.

Mikey O'Connor: Wow. Can't get - oh you mean even higher than operational issues. Well okay I'm game. Put it right there. We'll leave it there for now. I mean, I think the key issue is that registry failover and continuity is clearly a big deal. And we can always rearrange it later. I'd rather have things be bigger deals than we need than lose them. And so it's fine to have it - fine to have it high in the hierarchy now.

I just think that - so let me give you kind of a tour of the managerial choices and so on because this was a whole section that I built out of a bunch of documents that I read. And I made some choices - the not following best practices one is the one that Cheryl suggested as a large paddock that we could put this in.

I just want the group to note my use of the term paddock. It's not a term that's familiar to me as an English-speaker. Trolling for a bite from Cheryl on that one.

Cheryl Langdon-Orr: That's all right, Mikey, I'll bite you when I see you next.

Mikey O'Connor: This - these topics get very large.

Cheryl Langdon-Orr: Yes.

Mikey O'Connor: And I'm not interested in trying to weed through all of this from a scope perspective.

Cheryl Langdon-Orr: The subgroups can deal with that.

Mikey O'Connor: Yes, I think that otherwise we'll be doing - I'm just dramatically thinning this out just to give you a sense of some of the high points. And I think that one way to do this is to say yes indeed we feel that managerial choices are in scope and then leave this whole gigantic pile to a subgroup to evaluate.

Cheryl Langdon-Orr: Yes, yes.

Mikey O'Connor: I'm hearing Cheryl sort of saying yes that's a good plan. Does anybody have a big problem with that if we acknowledge that some of these are undoubtedly out of scope and we'll let the subgroup cope with that.

((Crosstalk))

Cheryl Langdon-Orr: Cheryl here. Let the subgroup do the triage I think that's the...

Mikey O'Connor: Yes, I think that's a good way to do it - scope. And what I'm going to do is my usual copout. Before I do that I just - recognize that this is going to give the subgroup a lot of scoping work to do. And the question is whether people are comfortable with that.

Right now DNS SEC is in there of all places. I'm going to leave DNS SEC out of that. Because I think that - now the pause is because that topic is so large - not following best practices - it took that long for my computer to rewrite the file that's why that took - this is a big topic - that all about.

Adequate documentation of DNS architecture and operations, yes, I think that's still a managerial choice so I think I'm going to put that in there. Some of these are essentially industry standard best practices that are found in the ISO documents and PCI and so on.

And so I think one of the things that this subgroup - oh nicely done, Mikey. I look up - I can't touch type so then I look up and look at all the exciting typos I made. All right so this then goes in scope with that caveat.

Okay any last thoughts about where we're at at the moment? I'm going to pull this one out as unviewed DNS SEC I think is the - it needs to get dealt with separately.

All right it's four minutes to the top of the hour. I'm going to spend those last four minutes just showing you the rest of what we've got to get through.

Cheryl Langdon-Orr: You just want to scare us don't you, Mikey?

Mikey O'Connor: It's actually not too bad but the - the big one is in here...

((Crosstalk))

Cheryl Langdon-Orr: ...it was good, yes.

Mikey O'Connor: That's the one that I think what we've just done is we've just pushed a lot of work off to a subgroup. And I think that's the right thing to do. And I think trying to do this as the whole group on a single call would really bog us down. So I'm pretty confident that we can get through the rest of this on our next call which would be great because that means that then we can...

Cheryl Langdon-Orr: Woo-hoo.

Mikey O'Connor: Yes, at least have a pretty close to final draft for Dakar which would be nice. So with that I will give us all a pat on the back and say thanks a million and wrap the call up. Look forward to seeing you in a week.

Cheryl Langdon-Orr: Thanks Mikey. Good call.

Andre Thompson: Hey, good job, guys.

Mikey O'Connor: Nathalie, I think we can stop the recording and shut everything down. Thanks for your help.

Nathalie Peregrine: Thank you very much, Mike.

((Crosstalk))

END