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COPENHAGEN – ALAC and Regional Leaders Working Session Part 8
Sunday, March 12, 2017 – 15:15 to 16:45 CET
ICANN58 | Copenhagen, Denmark

UNIDENTIFIED MALE:	Good afternoon. This is the ALAC and Regional Leaders Working Session Part 8, ICANN 58, Sunday, 3-15.

ALAN GREENBERG:	Thank you all for joining us. We're running a little bit late, but everyone here knows how to speak pretty quickly.

A little bit of background. As you're all aware, I hope – or most of you are aware – there was a public comment a number of months ago on a proposed way to resolve string conflicts for IDN ccTLDs. The ALAC submitted a comment which basically said, "We are supportive of this."

A day or two after we submitted our comment, the SSAC issued a report saying, "The SSAC has some strong concerns with the process." There has been a bit of to and fro between the SSAC and the ccNSO since then. The ccNSO has just recently sent a letter to the Board, saying, "Please approve this process. It's been going on long enough and we've been waiting long enough."

The ALAC support of the process is one of the things that is being quoted as the reason the Board should follow it. I personally (and I think some other people in this group) have some concerns that, if the SSAC has some strong reservations with the process and those reservations specifically revolve around user confusion – user confusion has been one of the key points that the ALAC has been very consistent about since the beginning of the new gTLD process; we care a lot about user confusion. It's one of the few things we've ever formally advised the Board on.

So, we're now in a position where we have supported and are being quoted as supporting a position which the SSAC says may cause user confusion. That puts us in a rather interesting position.

We've asked SSAC to quickly summarize why they have some concerns. We'll be meeting with the ccNSO later, who will tell us why we shouldn't care about those concerns, no doubt – or something resembling that. Then we're going to have to decide what we tell people.

Over to you, Julie.

JULIE HAMMER: Thank you. I'd just like to acknowledge before handing over to Patrik that we have a number of SSAC members in the room. I'd

like to ask the SSAC members to either stand up or put your hands up just to identify yourselves.

Yeah, quite a lot, including our SSAC liaison to the Board, Ram Mohan. Thank you.

With that, I'll hand over to the Chair of SSAC, Patrik Fältström, to run you through on this issue. Thanks.

PATRIK FÄLTSTRÖM: Thank you very much. We will not do the normal walkthrough of the SSAC activities. You have those slides and you can read through them. We'll dive, as you have requested, directly into this issue.

Some background. When ICANN started to accept internationalized domain names, there was an interest from country code TLDs, and of course others as well, to be able to have their version of their string in a non-Latin script. To be able to handle that, what was developed was something called the IDN ccTLD fast track. That led to the delegation, a few years, ago of the first IDN ccTLDs.

As part of that process, there is an evaluation of the strings to see whether they are confusingly similar with either existing or reserved two-character top-level domains (which are the

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ccTLDs) or whether they're confusingly similar to applied-for or existing gTLDs.

That evaluation for a couple of strings, of course, was already known to fail. And after a few years, when a lot of IDN ccTLDs had been approved – a few have not been approved – there was a subsequent process developed (the EPSRP) by which whoever has failed the first evaluation can ask for a secondary evaluation using slightly different criteria. That second evaluation is the process we are talking about here at the moment.

Another thing that I want to make clear is that it might be the case that SSAC has some views on the fact that, when you fail an evaluation, you can ask for a reevaluation that uses different criteria. That, of course, might have some impact and some interesting risk analysis if you come to different conclusions. That is not what we're talking about here. Okay?

It might be the case that SSAC has some views on the fact that the criteria for internationalized domain name confusability evaluation is different in various processes in ICANN. For example, in the first evaluation in the IDN ccTLD fast track, in the second, which we talk about here (the EPSRP) in the Trademark Clearinghouse in the gTLD application guidebook evaluation, that is not what we're talking about here. Okay?

What we are talking about here are just the criteria in the second evaluation in the EPSRP. That's the only thing we're talking about. To be a little bit precise here, because I hear there are some discussions going around, SSAC in this case – and even SSAC has a little bit unclear in our first statements; so, this is a clarification also on what we have said before and what you said, Alan – we do not have any issues with the process. That is not where we have a disagreement. And you don't have to say "apologies" because this is pretty difficult to understand, and this is why I'm here.

So, from an SSAC perspective, there are three things where we have disagreements between the SSAC and the ccNSO. Let me try to explain them here. By the way, this is our interpretation of these EPSRP rules/guidelines.

The first: they say that, if it is the case that the evaluation of confusability in upper- and lowercase strings (for scripts, of course, they do have upper- and lowercase, which are called a word that I cannot even pronounce; in Swedish we'd say [beekameryl] scripts) – are different, they say that the result of the evaluation for lowercase is what should be the result.

From an SSAC perspective, the results should be according to the most conservative result of the two, which means that if one

of them say that they're confusing, the SSAC view is that, in that case, the evaluation is confusing.

What ccNSO says is that, for example, if it's confusing in uppercase but not in lowercase, it should pass because the lowercase evaluation should win.

What we are saying is that, if any of the two evaluations fail, then the evaluation should fail.

Okay. Holly just asked why. I will explain a little bit why we have our view. You can ask ccNSO why they have their view, but this is one of the things where we must talk more, obviously, between the ccNSO and SSAC.

The next thing is how to evaluate confusability and, specifically, what I just explained – that one has to be conservative. We in SSAC, and also ccNSO, are referencing RFC 6912, which is an Internet Architecture Board statement on confusability within the Unicode character set.

That document is talking about confusability between code points and characters, but it also has one section which talks about how you extrapolate from confusability between code points to be confusability between strings. That is Section 6 in 6912. It is absolutely clear that SSAC and ccNSO do interpret Section 6 in RFC 6912 differently.

One way to resolve that is maybe to ask the Internet Architecture Board what the intention was, but that is the second issue of three. You can read that section yourself.

The third one is that they say that it is the sovereignty and ability for a registry that runs a TLD to mitigate any kind of problems there might be regarding confusability of its string in the root zone, which basically means a registry [can] actually pick anything they want, and if it is the case that the string is confusable with any other string in the top-level domain, in that case it's the registry's problem. If they want to screw up their own zone and destroy for their users – their problem.

To some degree, SSAC agrees with that, but the root zone itself is shared. It has no context. You cannot say what language or what script it's in. All the strings in the root zone are used by every user on the planet, not only the customers of that specific TLD.

The only thing the TLD can do is minimize the risk by applying very specific policies for registrations in that specific TLD. That is why, in the gTLD process, it is part of the evaluation criteria and acceptance that ICANN does for applications to, in certain cases, approve the policy that is submitted by the applicant; for example, to manage simplified and traditional Chinese in the various versions of the Taiwanese and Chinese top-level domains.

So, yes, the TLD can decrease the risk by, for example, enforcing the second-level domain to be in the same script as the top-level domain and those kind of policies. But it cannot eliminate the risks because the confusability might be on the top-level domain itself. Of course, then it's important that you follow the policy and that you can police it, etc., etc.

So, these are the three things. Let me just repeat them. Lower- and uppercase: SSAC views that you must be conservative. For example, if it is confusable in uppercase and not in lowercase, ccNSO says that, in that case, lowercase should prevail.

From an SSAC view, it's like trying to ask everyone that does phishing to only send e-mails in lowercase letters. We think that, given that recommendation, people will probably only user uppercase.

So, that's the summary. Let me stop there and first ask whether any SSAC member would like to add anything.

Okay. In that case – oh, Rod. Please.

ROD RASMUSSEN: One of the things I wanted to point out is that we're already dealing with this issue in the real world with registrations of domains that contain characters that make it very easy to fool users into thinking they're going to legitimate sites. The people

who are out there are taking advantage of the current system as it is.

Adding this at the TLD level makes it even easier to create some of these lookalike sites that you basically can't tell the difference as a user. You have no chance of actually discerning without going to something like a WHOIS record or something like that which, of course, in some of the ccTLDs, that kind of information isn't published.

So, you're really stuck as a user trying to figure out whether or not you're going to something legitimate or not.

PATRIK FÄLTSTRÖM: I'll open the floor for anyone that has questions. Andrei – oh, I was unclear on who was going to run the queue. I can do that. Andrei, please.

ANDREI KOLESNIKOV: Thank you very much. I've heard these three major points: upper and lowercase and the [conservative approach] to the capslock kind of visual confusability. The second is RFC point #6, which really can be interpreted differently by different people. I will speak to myself. I interpret it in the way the ccNSO does.

On the registry mitigation, I think that, among all pro forma rules and bylaws, we should take into consideration common sense in a big way that, for example, in every particular case, the whole set of tasks should be considered. For example, if there is confusability within one registry, I really believe that the registry will take care and will take all the best in their efforts to mitigate the potential risks.

Second, of course I agree that there are two things: the confusability of the TLD itself; but also a very practical and common-sense vision of how domain names are confusable with other domains.

I'll give you one example. When we launched .rf, which is still the big one on the market, it was an absolutely conscious decision that we weren't allowing any script except Russian Cyrillic in a domain name, basically, just to avoid all these kinds of tricks because there's a lot of common letters between ASCII and the Russian Cyrillic. So, it just goes by common sense.

Also, it's very important to understand the different points of view. It's really good that we put together, in the schedule, SSAC and ccNSO discussions in line following each other because I think these kinds of things should be maybe resolved by not just ping-ponging between the stakeholders, but by combining some kind of working group or just putting the minds all together,

sitting together, and say, "I've come to the conclusion…" instead of running in cycles, sending official letters between the stakeholders and the Board, back and forth.

Maybe there's a need, really, to get guys from the ccNSO, from SSAC, and from the At-Large community, put them together, have – I don't know – one hour of brainstorming, have a beer or whatever, and just resolve this issue because it is going on and on in cycles, which is not good; znd the impact on the IDN implementation, which I consider as one of the major and most important tasks which ICANN does in terms of diversity and linguistic accessibility of the users from the different scripts, etc., etc. Thank you.

PATRIK FÄLTSTRÖM: Thank you very much. I have a few comments, before moving on to Alan, on what you just said. Regarding the confusability string within the registry, which is called the third point, this is exactly where I agree with you regarding the policy. But in that case, to have SSAC being calmed down, I think, for example, what you said should be part of the evaluation as part of the EPSRP and not just say, "The registry will take care of it."

For example, one of the simple rules that could be part of an application that then means that the evaluation team might

approve it is, like you say, that it must be the same script in the second-level domain as in the TLD, as we just talked about.

So, the question is, who is doing the evaluation? I agree with you that, from my personal perspective, it should be – probably part of the evaluation 0f the application itself is what policy should be used.

I also want to explain what kind of communication has happened between the ccNSO and SSAC. The ccNSO asked us whether we wanted to participate in the work party. We didn't have any resources at the time. We sent in the comments due in the comment period, which we sent to the comment period and to the ICANN Board. We then got a letter from the ccNSO that we responded to. After that, we also got a copy of the ccNSO letter to the ICANN Board.

On the side, there have been three meetings between people in the leadership for the organization. There will be another one on Wednesday this week. But I agree with you that – and this is something that we in SSAC also agree – if it was the case – and also acknowledge that we could have, by participating better, made this move forward faster. That's one of the reasons why we are working quite hard, trying to explain our situation here: to move forward.

Just so everyone understands – and I hope that people don't misunderstand my personal interests in resolving these issues – I'm actually one of the inventors of this internationalized domain name. So, if anyone wants this used, it's me, actually. So just to make that clear.

[laughter] That also means that people are allowed to blame me for certain weaknesses in the protocol. Thank you.

ANDREI KOLESNIKOV: We remember that.

PATRIK FÄLTSTRÖM: Yes. Thank you.

ALAN GREENBERG: [inaudible] we do.

PATRIK FÄLTSTRÖM: Alan?

ALAN GREENBERG: Andrei and I have had a number of discussions about this, and we started off butting heads – I think is the appropriate expression – completely disagreeing with each other. I agree

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with pretty much everything Andrei said. I'm not sure about dthe interpretation of the RFC because, to be honest, I haven't read it.

But of the other things, I think the real key – I'm taking this out of the technical terms; when I use the term "process," I include all the rules and the whole thing put together, so I was being very flexible with the word – difference is that we really do not want to reduce the standard on whether two characters are confusingly similar because that, to a large extent, is a pattern recognition issue.

It's pretty hard to say the two characters which look virtually alike are not confusingly similar. That should, I believe, be a very different question than whether the TLD should be delegated. That factors in all of the considerations of: are they run by the same group? Are there mitigations, and can we specify what they are so we have confidence that, although the two characters may be confusingly similar, the URLs that a user sees will not be? That, I think, is a real key, and separating those logically I believe is a key.

One of my concerns is that I've been playing this game for a little while and, although the cases we may be looking at as examples may be completely upright, there are occasional sleazy people around. And there are ccTLD that are for sale, and one could imagine an IDN version of them that could be used to specifically

attempt to confuse users as opposed to wanting to make sure we not confuse users.

So, I don't want to lower the standards; but I do want to make sure that people can use IDNs effectively because, as I said, confusion has been a real hallmark of At-Large's concerns, but so has IDN. So, we need to solve the problem rationally but not by lowering standards, I think.

PATRIK FÄLTSTRÖM: Thank you. I brought one slide from other kinds of work that we are doing. I just want to explain this. This is a slide with a matrix. You see on the left where people can try to register different domain names. That's the German "Strasse" ("street" in German} that you can spell with a sharp S and double S. So, if it is the case that you try to look up four different versions – Strasse with a sharp S or double SS, either IDNA 2003 or 2008 – and on the top you have the four different registrations of Strasse with other double S or sharp S. And then in the matrix, which are three times three, you see different things that happen actually when you do these kinds of things.

So, this is why people get a headache when they try to evaluate what is actually happening. The reason why I show this is that, in the top right corner, it says "misconnection." It's a false positive. What we in SSAC from an SSR perspective are looking at is that

and only that. That is the real issue with confusability, none of the other eight squares. It's that very square where you might be able to actually look up one domain name and get the result from the confusing one.

So, if it is the case that you're diving into this, which I encourage you to do because we need more people to think about these problems, think specifically about false positives.

Please.

SEUN OJEDEJI: Thank you very much. Since I can see that the liaison to the Board is here, I'd just to get a feeling for what the Board is saying. Are they reacting to this request from the community, which actually is not in agreement? Thank you.

RAM MOHAN: Thank you very much. This is Ram Mohan for the record and I'm the SSAC's liaison to the Board. In fact, at the Board workshop earlier today, we had a very robust session on this topic. We delved very deep into this area.

What became clear very quickly is that the deeper you go, sometimes the lesser you know. But in this area particularly, there are a couple of things that are confusing when you look at

the word "EPSRP," because there's an EPSRP process; there's an EPSRP working group; there's an EPSRP report; and then there is the ccNSO's recommendations to the Board.

Now, if you look at the working group and the output of the working group and the report, there's a set of guidelines in there. One of the SSAC's documents takes issue with several of the guidelines that are there in that report. That's actually, in some ways, an even larger disconnect.

For this particular area, where there are three topics, if there is a determination of confusability between uppercase and lowercase – if there is a split decision, so to speak – or you have two labels and at the lowercase it appears to be not confusing but at the uppercase it is confusing, the recommendation to the Board from the ccNSO is: you can – I'm paraphrasing – safely ignore uppercase because IDNA 2008 – the protocol underneath it – by definition says uppercase is not allowed in the repertoire of scripts, of characters.

But the SSAC's perspective is that that doesn't take into consideration, adequately, users and confusion that users have. Because computers can differentiate between characters that are in ASCII in one script versus another doesn't mean users can. So, user confusion can then lead to, as Rod was saying, situations like phishing. Longer-term, the effect could be, if you

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have a TLD that is confusable, then you could have situations where operators decide that the TLD is not trustworthy. Or they could make other decisions about what to do with traffic in and out of that TLD or that zone. So, we had that discussion.

At the end of all the discussion in the Board today, the way I'd characterize it is that there's a clear understanding that more work needs to be done. The Board is going to have at least two more sessions inside of the Board itself to get to a basic understanding, including a request now of me as he liaison from the SSSAC and of the representatives who come in from the ccNSO to create a briefing paper, so to speak, that provides the history because there are many years of background that are sometimes useful. So, there is that work.

The Board has committed, at its next workshop, to have another deep dive to understand and consider the issues.

Having said all of that, what's clear is that here in Copenhagen the report that has come through is…more has to be done before that report can be voted on.

Andrei?

ANDREI KOLESNIKOV: Just to fix some of the things which we just discussed, we basically here all agree that, in some particular cases, the

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confusion found in the top-level domains in some circumstances is not the reason for non-delegation. This is what Alan said and this is what I really support. It's important –

PATRIK FÄLTSTRÖM: Let me phrase it differently. Just because it might be possible under certain circumstances to accept the risk, it is a really big danger to open for the general case.

ANDREI KOLESNIKOV: I understand. This is clear, yes. And I agree. Second is that this is my recommendation to you. We know what SSAC is, and the cases of confusability are not dangers to the root zone. This is a very important and an honest statement, as far as I understand. So, the danger to the root zone and its DNS system as an area rather than the danger to the confusability of the customers.

I want to ask a question. You must be recording particular cases where phishing attacks occurred in two instances. The first is interesting to me. In the IDN world, it was recorded and analyzed. There's no question about the ASCII traditional TLDs because we know all about this phishing thing. It has been many years with that. But for the particular case for the IDNs, if you have any recorded with the confusability, where playing with the characters in the domain name caused a major phishing attack –

PATRIK FÄLTSTRÖM: Yeah, we actually have several of those. We are running out of time, but we do have several of those. Rod actually – yeah.

ROD RASMUSSEN: Actually, if I have video, I can actually show you one. I was just showing this in an SSAC meeting that we were having earlier. There was a great domain that was registered using IDN for PayPal. It was registered in 2010 and used for phishing. It was taken down. It was registered again in 2015 for phishing. And then a researcher from Microsoft registered it and put, "This is not PayPal. This is an example of a homographic attack." I don't know if there's –

UNIDENTIFIED MALE: Can you send us the URL?

ROD RASMUSSEN: Yeah, I'll do that. It's actually the domain itself. It's the –

PATRIK FÄLTSTRÖM: Can you also speak to what he was saying, that it has no impact on the root zone?

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ROD RASMUSSEN: Yeah.

PATRIK FÄLTSTRÖM: Because [inaudible]

ALAN GREENBERG: Yeah. Well, I need to wait for Ram to pay attention.

Okay. I have two comments. Number one, RFCs and technical root stability notwithstanding, I'm delighted to hear SSAC using the words "user confusion." I think that is really in line with the kind of things that we are here for, and I'm delighted. I look to them to find rationales for why they can do that, but I like the idea. That's number one.

PATRIK FÄLTSTRÖM: That is exactly what Ram says. Even though the DNS protocol only handles lowercase, the fact is that, in reality, end users can type in and read uppercase in, for example, a browser or an e-mail client. The client or the browser, in a random way, is mapping to lowercase and then using it in the DNS protocol. That's one of the reasons why we're looking at the user situation.

ALAN GREENBERG: Moreover, they can be sent in uppercase.

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PATRIK FÄLTSTRÖM: Not in the DNS.

ALAN GREENBERG: No, no. They can be sent one in e-mail and click on it.

PATRIK FÄLTSTRÖM: That is correct.

ALAN GREENBERG: That is the concern. The second thing is, Ram, may I hypothesize that what the Board really wants is for the SSAC and ccNSO to play nice together and not give you a conundrum?

RAM MOHAN: Alan, thanks. There's actually been quite a bit of, as Patrik was saying, quite good communication that has happened, post the original letters going back and forth. There are real conversations happening.

                     I think part of the problem here, Alan, is that one part of it is a set of interpretations. The SSAC asserts a certain set of principles. Then you have folks on the other side who say, "But I interpret the same things a different way, and your principles

are made out of whole cloth." That is resolvable my conversations.

What I think is not as easily resolvable are assertions that you can ignore uppercase or that lowercase is superior to uppercase in deciding confusability. Yes, you're right: I think the Board would like for folks in the community to look through that. I want to underline that it's not an SSAC and ccNSO issue. It's an issue for all of us because TLDs know no geography; and TLDs actually don't know anything about context, either.

ALAN GREENBERG: Thank you very much, all. We're going to continue the previous session just for a moment which, curiously enough, fits into this one really well.

Rod?

ROD RASMUSSEN: This is the example I was talking about here: this Facebook site. As you can see, somebody has actually registered it and is protecting people from going to it again and it using this is an example of how these kinds of attacks actually work. This was registered twice to attack Facebook over the years.

We've got many examples that are like this in various scripts. We've done a few of these reports for the APWG, an Anti-Phishing Working Group, where we've actually pulled some of these out. They're not very common, but they're common enough in the usage. We're certainly seeing, as more and more IDNs come online, more of these kinds of attacks being done becmause you have more options to choose from.

ALAN GREENBERG: For those of us whose eyesight is not very good, can you actually tell us what the URL says or say what it looks like?

ROD RASMUSSEN: If you look at it very casually, it says Facebook.com, but if you take a look, there's a little squiggle above the A, which is – I don't remember what the term for that is –

UNIDENTIFIED MALE: Accent.

[laughter]

ROD RASMUSSEN: Well, it's accent, yeah, but there's a special term for it. Thank you. So, if you're paying attention, you'll see that. We've seen these kinds of homographic attacks before just in ASCII, where a capitals that translate into lowercase and things like that that can be done. These are very easy to put into a spam e-mail and mail out and the like. It's really hard for a registrar to actually detect these things as they're getting registered because your typical analysis you do with similar strings is blown up because you've got the IDN instead, which doesn't hit the same triggers in your analysis engine when you're looking for lookalike registrations.

ALAN GREENBERG: Just a tiny insight. I deal with accents periodically, either because of French documents or in people's names around here who have accents. Periodically I'll look at something on my screen and say, "Why is there an accented character there?" and I realize it's really a spot of dust on my screen. And it works in both directions. So, that little squiggle over the A may well look like a spot of dust to someone and they think it actually says "Facebook." So, it's an interesting game. Thank you.

Our next guess is Jamie Hedlund. Jamie's formal title – I had to pull it up because otherwise I'm going to get it wrong; now I've lost it – Senior Vice-President, Contractual Compliance and

Consumer Safeguards. Now, ICANN had a consumer safeguards position around, unfilled, for now two-and-a-half year, I think – something like that. But now we actually have someone who bears that title and is hiring someone who will explicitly bear that title. So, I think this is of some interest to us.

I welcome Jamie, and I'll turn it over to him.

JAMIE HEDLUND: Terrific. Thank you. That's not the only title I answer to [laughing], but it's great to be here. Thank you for inviting me and Contractual Compliance to speak here. I thought I'd give just a quick intro and then go through a few slides and then take questions. Is that all right?

I am a lawyer. I'm originally a telecom regulatory attorney by training. I spent most of my career doing public policy in the United States. I live in Washington, D.C. I have three kids who are teenagers, so I'm thinking about moving to L.A.

[laughter]

This is an independent role. I report directly to the CEO, not to anyone else in the organization. I'm still fairly new in the role, so I'm doing a lot more listening than making any bold pronouncements. I really appreciate all the opportunities here

and elsewhere to get feedback and input on contractual compliance.

Next slide.

"Is it possible" – Göran asked for an internal narrative for the purpose of what we do. This is just to show that, for Göran and for us, the Contractual Compliance and Consumer Safeguards has a critical role. ICANN's credibility and legitimacy depend a lot on our robust enforcement of the agreements, as well as our ability to communicate what's in those agreements and what's not.

There are three initiatives that I'm focused on right now. Some of them predate. Some of them will live beyond. One we've heard in a number of places; that there's a new for more transparency with Contractual Compliance. That's something that's going to come out of the CCT Review Team recommendations that are in the draft in a number of places.

One of the things I do is I'm also a member of that team. It was a gift from Fadi. I sit on that team and I say what's really critical for us, what would be very helpful for us, and what would help us to succeed is to understand exactly what you mean by more transparency. Being more transparent is an important principle and an important goal, but it's not actionable. What kinds of

data, what kinds of information, do folks think are not being shared now that should be shared, and why? So, that's one.

Another one is that Maguy and I are working closely with the Office of the CTO, David Conrad's team, looking at opportunities to mitigate what David calls DNS abuse – so, infrastructure abuse. This is different from content abuse and piracy. These are things that go directly to what maybe is within ICANN's scope because they touch on the security and the stability.

So, there may be things that we can do directly under the contracts, or maybe things that we would do more appropriately with third parties whom you know that could be helpful.

Finally, we're looking to set up a community-wide ad hoc working group on contractual compliance and consumer safeguards. This is an idea that was floated in a blog not that long ago. We're still gathering input. I think most of it has been fairly positive, but obviously we'd be grateful for ALAC's and At-Large's input as well as participation.

Next slide.

On the consumer safeguards, this is from the same internal thing. As Alan mentioned, we are looking for a Consumer Safeguards Director. The last time the position was posted, it was towards the end of the year last year. It did not get a ton of

applications, which I guess happens a lot towards the end of a year, according to HR. So we put it up again. It's still open. If you know good people, please encourage them to apply.

This person, first and foremost, will fill an engagement role and work with the ICANN community to raise awareness of existing safeguards, as well as doing external outreach, and facilitate discussions with stakeholders on the perceived adequacy of the existing safeguards and the potential need for additional safeguards and how those could be incorporated. Finally, he/she will facilitate discussion among stakeholders regarding the voluntary adoption of consumer safeguards that are not within ICANN's remit.

I said "finally;" I should not have said "finally" because this is a role that could evolve into more than just that, but as a start, that's what that role will fill.

My initial goal was to have this role filled before this meeting. That has not happened yet but I hope to have it done in the next month or two.

Finally – next slide, please. –

This is the proposal for an ad hoc community-wide working group. This really is a vehicle for transparency. There's a lot of discussion/complaints/debates about particularly contractual

compliance but also consumer safeguards, and they happen within SOs and ACs.

The purpose of having a community-wide discussion on this would be to bring transparency not only to what we do but to the views that different folks have on what we do and be a vehicle to perhaps foster consensus on objectives for Contractual Compliance either that we're doing or not doing enough or that we should stop doing. Community-wide participation in this is key.

Next slide, please. As I said, I'd be grateful for your questions and feedback. These are some questions that we're hoping to get input on. You don't have to give them here. You can also give them offline. I have a completely open-door policy and would be happy to talk to anyone here now, here during the meeting, or when we all return from ICANN 58. Thank you.

ALAN GREENBERG: Thank you. Part of what I find most encouraging – I hope it will remain encouraging – is particularly – and it was in your blog entry – that, despite things being out of scope for ICANN, such as content, we need to acknowledge the fact that domain names, which we are responsible for – and we're responsible for them wider than just the security of them – are used for all sorts of malicious uses. If we can do anything to mitigate that through

one means or another, then that's something we need to not ignore, which we have patently until now. And I find that very encouraging.

We have one request so far from Garth. If anyone else wants to get in the queue, please raise your hand or your card.

Garth?

GARTH BRUEN: Thank you, Mr. Chair. Jamie, hi. Per the RAA, a registrant has 15 days to respond to an accuracy complaint, and a registrar has 21 days to respond to a breach. If I got the details wrong, feel free to correct me on that. So, this is a document that clarifies the response time of those different parties.

Recently I filed a complaint with ICANN about a contracted party. Compliance responded to the complaint and requested that I deliver what I considered to be an unreasonable amount of unrelated data. But that's not my question.

As part of this request, Compliance stated that they would close my complaint if I did not supply the information within six days. So my question for you is, where is the consensus policy or document that mandates a six-day deadline on Internet users? Thank you.

MAGUY SERAD: This is Maguy Serad, Contractual Compliance. Thank you for the question, Garth. What we have done is a standard approach. There is, to answer your question – where is the mandate and the contract? – there is no such thing. But as you are familiar with the Compliance approach and methodology and process that has been in place now for about five years, it's a process where we are holding everybody, including ourselves, accountable for addressing complaints and getting them to resolution.

We start with a reporter, which is the input of any complaint into the compliance system. The team reviews the complaint to make sure we have enough understanding and information before we forward it on to the contracted party.

Upon review of the complaint, if we need more information, we go back to the reporter to ask them to provide us the data within a certain timeframe. If it's not provided, we do close the complaint. If we have the data, we forward it onto the registrar.

The contract speaks to WHOIS inaccuracy [for] 15 days. We'll, we've built into the process, keeping in mind the collaboration with the registrant and sometimes the availability of that. we have also built in the informal resolution process to allow collaboration with the I don't want to say just the registrant, but

also with whoever the complaint is about between the contracted party and ICANN.

It depends on the complaint type. In this case, [WHOIS inaccuracy] the contract does state 15 days. We've built into it – into the three-step notice, which is 1555, to allow us to review and ask for additional information with a goal of a resolution that is addressing the issue and closing it before getting to a notice of breach.

Being mindful of the full environment while putting some structure – as you know, before my arrival, complaints would be open for months and months and months and waiting either on a response from either a reporter or from contracted parties – we brought the structure and discipline to be able to manage it properly and report back to the community.

GARTH BRUEN: Thank you. To redirect the question, where is your authority for putting discipline on Internet users and placing deadlines?

MAGUY SERAD: Thank you for the question. It's not a question of authority, Garth. It's more of an approach to get to resolution. So, if it's not six days, what would you like to have seen, for example? How can we work and get it to a resolution? If it's not six days, what

would be a reasonable amount of time for somebody to provide us the remaining information?

GARTH BRUEN: How do you decide what is reasonable in the view of the Internet user without that information? How do you pick six days?

MAGUY SERAD: Thank you. Usually when people come to us with complaints, it's an urgent matter and they have, in their best interests and also in their interest when they're filing a complaint, to provide us the data so we can help them move it through. Six days was something we have put in place, like the 555 process steps. We put it on ourselves when we are responding to reporters, to contracted parties, to follow up in the process step. It was something that we call a good practice. When there are complaints in any industry, a non-profit or profit, to be able to, any time you're dealing with complaints with the outside world, put a process and a standardization [is good].

So, a complaint is filed, somebody has a problem, and we know it is in their best interest also that they want to help us address it. We're missing data and they respond and provide it. It has not been a problem so far.

EN

GARTH BRUEN:	By your own statement, you haven't actually forwarded the complaint to the contracted party. You're merely collecting data. So then why, at that point, is there a deadline?
MAGUY SERAD:	To avoid repeating myself again, it is… It's like – I'm trying to see what would be a good analogy here. The deadline is in the interest of the process and the complaint that we're trying to address with the reporter. If you think the five days is not enough, we encourage reporters who have filed complaints with us to let us know: "Please, I'm not available. I can't provide you this. Can I have a little more time?" We usually work with anybody who's asking us for that.
	Yes, we did not forward it to the contracted parties because there was not enough information for us to send it forward.
GARTH BRUEN:	I have no further questions.
ALAN GREENBERG:	I see no other hands. We have some significant time. Mark?
MARK SEIDEN:	Hi. I asked ICANN to provide information about data breaches, loss of data, at contracted parties. ICANN collects such data

under the various agreements, but it doesn't make that data available to the community. There's no justification for collecting the data, although it's obvious why you'd want to do it. But not making it available to the people whose information is at risk, although the contracted parties might have to do that under various state breach laws, seems to me to be not in the best interests of the people whose data is being supplied.

Can you comment on why ICANN collects data, doesn't make clear to the contracted parties that that data, which must be supplied, is for distribution to the community, and then refuses to distribute the data to the community later on?

MAGUY SERAD: Mark, don't go yet, please.

MARK SEIDEN: Okay.

MAGUY SERAD: Thank you for your question. I'm sorry. I do not understand your question. What data are you referring to? When you speak of breaches, if I may, when a notice of breach is sent [inaudible] –

MARK SEIDEN: No, no. I'm talking about data breach.

[ALAN GREENBERG]:   Privacy breach.

MAGUY SERAD: Okay. Which data?

MARK SEIDEN: Let's say a registrar or a registry has a security problem which results in credentials of their customers being exposed by crackers to the Internet who break into their systems, for example. Maybe your domain gets hoisted because your account is compromised. Maybe a registrar has a phishing attack against them. There are all kinds of potential breaches, some of which are actually against domain and rights holders.

ALAN GREENBERG: Mark, I didn't know ICANN even collects this data, so that's quite intriguing, but my guess it would be GDD that would be collecting it, not Compliance. I suspect. Or maybe the security people.

Jamie?

JAMIE HEDLUND: Going back [to the] broader point, beyond just data breach, we do collect different kinds of data. Again, it would be helpful either in response to the CCT Review Team proposal or elsewhere to provide specific feedback on the kind of data that you think we have that we should make available and why. That just makes our job easier at being successful at being more transparent.

MARK SEIDEN: Yeah, well the general purpose, I can say, is to improve security among the contracted parties because they're being attacked by all sorts of adversaries these days. And the attacks are against everybody. So, until we can analyses of what kinds of attacks are succeeding, we can't make recommendations.

JAMIE HEDLUND: That data also may go to David Conrad's shop. I'm not aware that we do anything with data breach.

MARK SEIDEN: Thank you.

ALAN GREENBERG: Anyone else? Usually any issues with regard to compliance and the concept of consumer safeguards elicit just a little bit more interest. Maybe we shouldn't have scheduled so much time.

JAMIE HEDLUND: We're happy to come back.

MAGUY SERAD: Alan?

ALAN GREENBERG: Yes? Who…

MAGUY SERAD: This is Maguy for the record.

ALAN GREENBERG: Maguy, go ahead.

MAGUY SERAD: If I may have two minutes of this audience's time just to inform you of some of the proactive monitoring. Is there interest in some of this activity? Because that's near and dear from previous session we've had.

ALAN GREENBERG: Sure.

MAGUY SERAD: Thank you. I promise I'm looking at my clock. Okay. As we have talked about – and this is where this audience always brings to our attention different ideas and concepts – in the past you have shared with us, "Why do you not address the issue instead of a complaint at a time?"; that general concept. I'm looking way to see heads shaking, confirming. It is the right constituency.

Based on that and the fact that we also have a group of team members on the Compliance team that's more mature now, dealing with compliance matters requires an in-depth knowledge of policies, contracts, but also the dynamics and environment that we are in.

Based on that, what I would like to share with you – and I hope also that you guys take time to go read out 2016 annual report. In there, we have provided a lot of updates, which I'm going to summarize briefly.

Proactive monitoring is one of our core functions now in Compliance. What I mean by that is, on a continuous basis, we review our data and we look at holistically. But we also look at it regionally to the level of an issue versus a global thing.

Some of the activities we've conducted by way now: we have the Technical Services Team, and GDD has done additional

monitoring tools that trigger Compliance activities. So, that's internal monitoring that's automated.

Another monitoring the team keeps a close tab on is the review of media and blogs to go and validate what's being reported. Do we have issues in the system that addresses it? Do we need to do a generic approach to it with contracted parties or by region or by issue?

We've also looked at previously-closed – we know WHOIS inaccuracy, as everybody knows, seems to be the hot topic. An issue gets addressed and then when it meets and it's resolved, a couple of weeks later it's back and activated. We have been doing proactive quality reviews of WHOIS tickets, where we revisit and test it ourselves.

We also do reviews of websites because we know that a lot of the community members globally go to registrars' and registries' websites to look at either abuse processes or the ability to file abuse. We make sure that they are all in compliance with that, and that's proactively. We even send e-mails to test how quickly abuses are done. We don't use ICANN e-mails for that.

Also, we heard about concerns in the community, and this constituency led to a couple of efforts for ICANN Compliance last year. One of them is we had heard concerns from – again, we do targeted monitoring and proactive work – the Asia-Pacific region

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on WHOIS inaccuracy and the approach in that aspect. We launched an intense, intense, intense (almost-twelve-month effort) of WHOIS inaccuracy to ensure that verification and validation is taking place. It surfaced a lot of opportunities. Many of you know me. I don't speak of issues. It's all opportunities in our ICANN world.

Based on those opportunities, many of the registrars took remediation steps. Most of them completed it. Some of them are still in remediation by installing and getting their systems ready to address that.

We don't sit and wait for three months. To the contrary, we require timely updates from them, with progress based on the project plan they provided us.

Another remediation validation is that we launch audits. We went back to test and make sure that what was remediated – audits are the best approach to proactive monitoring for compliance because we identify issues, hopefully, before they happen. Once they are remediated, we want to also make sure that there is not an issue.

So, we look in our complaints system. Are we seeing issues in that space? If we do? Guess what, guys. We don't follow the 555 process. We do an escalated notice, which leads immediately to

a breach because we have validated the remediation plan, and a commitment was made that it's corrected.

On that note, I wanted to share with you that our goal also is to bring resolution to many of reporters who file complaints with us immediately, as much as possible. So, we're trying to focus. The third notice is the last phase before a notice of breach is issued. Even though there are very, very few, we're trying to work backwards and make sure that to the resolution to the reporters, to the public, who are trusting us with their complaints, we get to sooner by working proactively in that approach.

With that, I thank you, Alan, for giving me the time.

ALAN GREENBERG: Thank you. I have one other comment, but does anyone else want to get in the queue first? Evin? Go ahead.

EVIN ERDOGDU: Hi. I just wanted to remind everyone to please state your name for the record before speaking. Thank you.

ALAN GREENBERG: Any further comments? All right then. I want to go back to Garth's question. I think it was an interesting one in that, if I

understood correctly, the real crux of the matter was a six-day demand for data, for information, on the part of a user, not a contracted party, not someone who's in the business.

Garth, is that correct?

GARTH BRUEN: Yeah. Thank you.

ALAN GREENBERG: Okay. I don't know the right answer. I used to run a customer service operation, but it's been a few decades now, so I'm sure the standards have changed. When I submit requests to Logitech because my mouse isn't working or whatever, typically they will ask for more information. If I don't answer within six days or five days or something, they'll say, "Are you sure you want to keep it open? We're going to close this within ten days if you don't answer."

Since this is an issue that was raised by a user and therefore it is in their interest in seeing it closed – but really users don't necessarily read e-mail 14 times a day. May I suggest that Garth suggest a reasonable delay, both for asking for a response and a reasonable delay before, after one or two warnings, closing the case? I don't know what the right number is. I don't necessarily need an answer right now, but it sounds like the kind of thing we

can come to closure on pretty easily on a reasonable thing for a user.

On the other hand, you'll not be left with cases that are open forever that can't be addressed. So just a thought.

Garth?

GARTH BRUEN: At a minimum, it should match what's demanded of the contracted parties. At a minimum.

MAGUY SERAD: Thank you, Garth. To answer your question, we give the contracted party, if it's a WHOIS inaccuracy, 15. If it's a URS, it's 24 hours to respond so it is driven. But the five-day is the minimum we give ourselves, and we give the contracted parties five days. For the reporters, we made it six because we realized that maybe we need that extra one-day buffer.

ALAN GREENBERG: I really don't want to try to negotiate here about what the right number of days is. I just think, for dealing with normal users, such as me, who often forgets to respond to e-mail and for whom a reminder or two will help – staff will certify that that's probably necessary for me – you may want a different set of

processes that don't go on forever but give people reasonable answers [in a] reasonable time. There's enough customer services groups in the world that we can come up with something.

I'm just saying that the point he was raising I think is reasonable. Six days with no warnings and then we shut down is probably not reasonable, in my view. On the other hand, four years waiting for the response is probably not reasonable either.

So, let's try to think innovatively and address these kind of things instead of just quoting chapter and verse. Thank you.

MAGUY SERAD: Thank you. We can take it back, but we also welcome a recommendation because this is the audience that faces the world. We look at you as the outward-facing constituency. If you have a recommendation, please let us know. If you are in receipt of a report and you need more days, please let us know. We will respond to you.

ALAN GREENBERG: Seeing no other comments – oh, Andrei? You want to? Okay. We do have a couple minutes left in this session, so Andrei, please go ahead.

ANDREI KOLESNIKOV: Yes, very quick. I would just like to call to your attention that recently there were some malware and phishing e-mails floating through the mailboxes of the domain registrants, asking them to bind to the WHOIS requirements to fill in their data – like WHOIS data for the domain names. There is a lot of phishing. You click on the link and go to what looks like a registrar site but it's not a registrar site. You enter your credentials and your data and they're stolen. The domain can be this kind of thing. Just pay attention because you might have these kinds of calls from the registrars and registries and all of the community.

ALAN GREENBERG: I've even seen one saying it's coming from ICANN. [laughing] They've discovered that ICANN exists and [inaudible]

ANDREI KOLESNIKOV: It says "ICANN Compliance Department."

ALAN GREENBERG: Yeah.

MAGUY SERAD: Thank you. Yes, we were the recipient of one, actually. [laughter] And we escalated to our security officer because – you're right – one, it's coming from us to us, but it's coming from us to the

community. We were the recipient but we also were notified of it by the outside, and we immediately escalated to the security team to take care of it and work with the appropriate party to trace it and all the good stuff they do.

ALAN GREENBERG: Curiously, a colleague of mine got her message a few days ago, ostensibly from his registrar, saying, "We are changing the name of our" – no. It didn't even say why. It said, "Please click on this link," and the link explicitly pointed to something that did not appear to be the registrar, unless you start going down six levels deep in WHOIS, "or your domain will be disabled in five days."

It turns out it was legitimate.

MAGUY SERAD: It was?

ALAN GREENBERG: It's really stupid business practices, but legitimate, as far as I can tell. [laughing] But the world is a weird place.

Thank you very much for coming.

This session is not over. Please don't leave yet.

UNIDENTIFIED FEMALE: [inaudible]

ALAN GREENBERG: No, no, no.

Okay. We do have a few minutes left. We did have a session which we cancelled the other day which I would like to talk about just so people can think about it. We will follow up on a teleconference sometimes in the near future.

As many of you might have noticed, there was a flurry of e-mails on the At-Large list a little while ago of people saying, "Please unsubscribe me." There was an infinite amount of discussion about it. Every which one of them also was sent to the At-Large list, increasing other people who said, "Get me off this list."

[laughter]

Seun actually, I believe, moved part of the discussion onto one of the ALAC lists. Thank you.

The crux of the matter – just to recall the history of it – is that we have had a problem where we do not have the correct contact information for all of our ALS reps. Staff did a good job and found them and then subscribed them to the lists that they're supposed to be subscribed to, plus another one they didn't have to be subscribed to.

ALS representatives are supposed to be subscribed to the ALAC Announce list, which is for our official announcements, and to their appropriate RALO list. They were also subscribed to the At-Large list, which is in fact voluntary.

They all received messages saying, "You have been subscribed to this and this is how you unsubscribe." It turns out they're not supposed to unsubscribe themselves from the RALO list and the Announce list, but they weren't set up properly. So, they could have, if they had chosen to follow. "Just click on the link and follow the instructions.:

We send out a lot of messages and we send it out to multiple lists, so we often send something out to ALAC Announce and the RALO list because there are a lot of people on the RALO list who are not onF the Announce list. There are people who have self-subscribed to the Announce list who are not on the RALO lists. There are people like me who are on all the lists – you wouldn't believe how many copies I get – and a few others.

The real question is: do we need to take our ALS representatives and force them to be on multiple lists? Again, the crux of the problem, the core, is that we want to be so open and transparent that we tell people everything.

So, when the ALAC Chair nominations open, the ALAC Chair can only be nominated by an ALAC member, and the ALAC Chair has

to be an ALAC member. But we send the list out to hundreds and thousands – we send the message out – informing them that it's going on. That's transparency. Most of them don't care and they consider this spam or something close to it.

So, the real question is: do we need to send out all these messages and be open, and how many time and to how many places do we need to send them out to?

Again, we don't have the time for a proper discussion here. We will follow this up with information on exactly what lists we have, what class of people are on them, and what kind of messages we send there. If we can come up with an idea where we can reduce the number of required lists, reduce the numbers of copies people get, and stop sending out things to people in the name of transparency if nobody really cares, then I think we'll have a happier group of people out there.

I don't quite know what the answer is. This is not the first time we've discussed this. We have not come up with a better answer before. But it'll be on this schedule sometime soon, and I thought I'd do a brief summary of it right now.

Tijani does want to talk about it, as does Garth. So that's fine.

First Garth, then Tijani.

LIANNA GALSTYAN: [inaudible] Yeah.

ALAN GREENBERG: You want to go first? Why not?

LIANNA GALSTYAN: Thank you. Lianna Galstyan, ISOC Armenia, ALS from APRALO. Regarding your question, it's not like nobody cares. Actually, I read all these messages regarding the nomination of the ALAC Chair, and it was interesting. The only thing I need to know when I receive these messages is that that the voting is open only for ALAC members, but I keep the process reading on these messages.   about the processes] on these messages. This is important for ALs to know what's going on in ALAC meetings. I found really very good practice: that all members of ALS can participate in ALAC meetings, which is through Adobe remote participation. So, everybody can participate and raise their voice. I found this a really great experience. Thank you.

ALAN GREENBERG: We have what is getting to be a long list. I will point out we have a break coming up in 15 minutes – in about 6 minutes. And at the end of the break is the ccNSO, which has really fun meetings, so

we don't want to start late. Okay? So, I will keep the floor open until the official break comes up.

I will point out to Lianna: thank you very much. But I'll have to tell you that there are some ALS members/reps who don't care.

LIANNA GALSTYAN: Well, they can ignore it [inaudible] keeping [inaudible].

ALAN GREENBERG: Garth and then Tijani, and then we'll go down to the other people who have put their hands up.

GARTH BRUEN: Thank you. Just to touch on what Lianna said. When my group first became an ALS, I got constant e-mails about elections that I couldn't vote it. I finally got one about one that I was able to vote in, and I ignored it. [laughter]

So, you may think that people don't care, but it's a little more complicated than that. I'm going to suggest what I suggested on the list when this issue started. What we need to do is get rid of lists. We need a modern content system that allows us to collaborate and talk to each other in different channels and focus on the topics that we're interested in and work directly with the people that we're interested in on certain things

because I think we lose our effort in these e-mail trails. They're painful. We're wasting work in there.

ALAN GREENBERG: Forgive my flippant answer to Lianna, but there are all sorts of people between those who care and those who don't care.

Tijani?

TIJANI BEN JEMAA: Thank you very much, Alan. I think that it is, as Garth said, much more complicated than "People don't care." My point of view is that all those lists have to be reviewed. I think that we have to think about those lists. There are many duplications. There are also many [inaudible] messages going to people who don't care or who are not interested in them.

I am the Chair of the BMSPC, and each time we want to send a message, Ariel asks me to whom we need to send them. We spent time to select to which list we have to send them because we don't have to flood the mailboxes of people with something that people don't care about or is not of their interest at all.

So, I think that the lists should be thought about again from the beginning because, of course, it is an accumulation. We started with those lists and we added lists, so now we have something –

a very big number of lists – and there is not, if you want, a strategy for mailing. Thank you.

ALAN GREENBERG: Thank you. Yes, that is exactly what we're doing, but it's also what Garth is talking about. Maybe lists for some of these things are not the appropriate thing. But we also have people who have limited bandwidth and don't want fancier things.

But this is not the forum to try to resolve the issue, and I really didn't want any discussion. But we are clearly having something.

Andrei, Javier, Alberto, Seun – and then I'll close the list.

ANDREI KOLESNIKOV: Thank you. I think the good solution would be the digest. , you accumulate the things and send it weekly – this works. Also, Lianna, the emails on ISOC mailing list are every time duplicated with their platform. So, you have an e-mail and then the platform sends you a second one. That's the worst case, I think.

JAVIER RUA-JOVET: It was what Andrei said regarding the digest, but in Spanish we have a phrase – and maybe the translators can help me with this. We say in Spanish, "[Que no pagen justos por pequadores]". It's something like, "The innocents don't pay for the saints."

[SOs] are like this Republican thing of replacing Obamacare. "We know there's a problem, but let's not do anything because until we have a really, really good alternative.

Transparency is a good thing, and if we do extra things, it might cause some discomfort but it's information that's out there. Right now we're in this item review. We are very transparent and we're outreaching a lot. This is evidence of that.

Of course, there's redundancy and things like this. We can rationalize it, but it's not the end of the world.

So, you have this friend from ISOC Armenia here that got them and was happy to get them. Maybe that's the silent majority.

ALAN GREENBERG: Break starts in one minute. We have Alberto and Seun.

ALBERTO SOTO: I will be very brief. I send my messages into folders and then I read the messages. But that takes me one day. So I believe that one possible vertical solution would be to generate new mailing list by-groups. We know who the members of a group are, so we should have mailing lists per groups.

EN

If there are people who would like to be part of those groups, well, they should be added to that mailing list of the group. Then the old list will no longer exist.

This is a radical solution, but perhaps that would be a solution because many of us participate in many mailing lists and we need to be out of those mailing lists because we now have a problem. Thank you.

ALAN GREENBERG: Thank you. Of course, the problem with multiple small lists is that some people end up being on twelve of them. [laughter]

Seun?

SEUN OJEDEJI: I'm open for us to discuss what it is that we want to be sending to the list, but please don't disable mailing lists, please. Nothing is broken about the mailing lists. You can use digest You can actually change the settings of your mail [inaudible] to send you digest mails if you don't want to receive e-mails every day. I live on mails. Please.

And if I don't receive mails, then it's as good as useless for me, personally.

So it think there are people who value it; there are people who don't. And people who don't value it, let's provide ways by which they can actually get usefulness from it. Educate them on how to utilize "delete" in their boxes. Educate on them how to use digests and so on and so forth. Otherwise, I think the lists are useful. Let's make it more descriptive so people understand which one is for who so that they can be more effective when they receive mail. Overall, I think it's a very useful tool and I don't know any better ones for now. Thank you.

ALAN GREENBERG: Thank you. Again, we're into problem-solving mode and this is not the right forum for that. As you're thinking about it, however, there are tools where some people could use them as [pull] – they go into it and look. And other people get things automatically. There's all sorts of tools, some of which work well; some of which work really ugly.

We have a lot of people in our community with experience. We need to look at the lists and just make sure that, in some cases, we're not sending what are effectively trash messages.

And we'll send separate ones to Lianna to make sure she gets them all.

[laughter]

But it is serious problem. It's a problem we've had for years now. We've periodically tried to solve it. We've made little tweaks, and it's time to think about it again. So, just an introduction to it. We'll come back to that.

Thank you all. At 5:00 local time, or 1700, we meet with the ccNSO. That's about 14 minutes from now. Let's try not to be too late. Thank you.

If you want to sit at the table, you're going to have to come early because the ccNSO people will probably be here on time.

[END OF TRANSCRIPTION]